Improving 1st Appointment Visit for Newly Urgent Diabetes-Endocrine Cases Referred to the National Diabetes Center (NDC), Hamad General Hospital (HGH)

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Introduction and Background

Newly referred patients should be clinically prioritized and seen within the appropriate timeframe. The referral system is a complex process involving different facilities (Hamad Medical Corporation-HMC, Primary Health Care Corporation-PHCC, private organizations, and different government sectors). For a specialty that receives 450-950 new referrals monthly, more often, patients considered to have urgent conditions are not seen within the proper timespan. Hence, they are scheduled on the next available appointment. According to the Referral Booking Management System (RBMS) of HMC, the average appointment waiting time for new referrals in the Diabetes-Endocrine Clinic is 84 days. Any delay in patient management poses a great patient safety risk, especially for urgent cases.

HMC has a Referral Process Policy which states that urgent cases have to be seen within 7 days. A walk-in clinic was piloted. It is designed to ensure that newly referred patients considered to have urgent cases after physician's triage are seen without delay. The initiative promotes patient safety and is aligned with the HMC policy.

Aim

Team Aim: To improve the percentage of 1st visit appointment within 1 week after triage for indicated urgent newly referred patients at the Diabetes-Endocrine Clinic from 14% to 60% by May 2017.

Measures:

Process:

- Percentage of indicated urgent newly referred patients who attended their initial consultation visit at the Diabetes-Endocrine Walk-in Clinic within 1 week after triage
  - *Numerator:* total number of indicated urgent newly referred patients who attended their initial consultation visit at the Diabetes-Endocrine Walk-in Clinic within 1 week after triage
  - *Denominator:* total number of indicated urgent newly referred patients who confirmed their attendance at the Diabetes-Endocrine walk-in clinic within 1 week after triage
- Percentage of indicated urgent new referrals booked for an appointment within 1 week of the triaged period
  - *Numerator:* total number of indicated urgent new referrals booked for an appointment within 1 week of the triaged period
  - *Denominator:* total number of indicated urgent new referrals booked for appointment
- Number of indicated urgent cases' attendance based on frequency of calls to the patient
  - Number of indicated urgent new referrals who attended the walk-in clinic after receiving the 1st call
  - Number of indicated urgent new referrals who attended the walk-in clinic after receiving the 2nd call
  - Number of indicated urgent new referrals who attended the walk-in clinic after receiving the 3rd call

Outcome: Percentage of indicated urgent newly referred patients who attended their initial consultation visit at the Diabetes-Endocrine Walk-in Clinic

- *Numerator:* total number of indicated urgent newly referred patients who attended their initial consultation visit at the Diabetes-Endocrine Walk-in Clinic
- *Denominator:* total number of urgent newly referred patients who confirmed their attendance at the Diabetes-Endocrine walk-in clinic

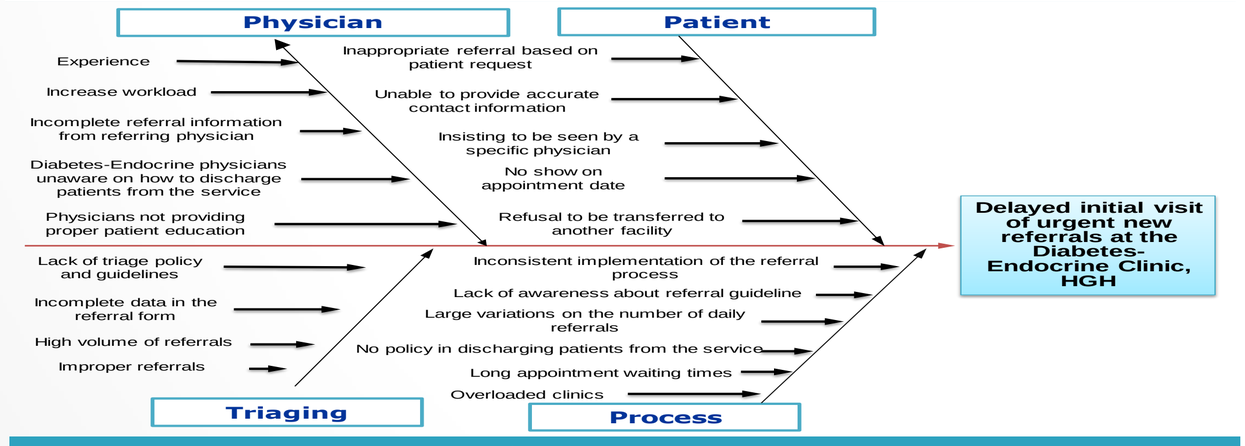
Methods

The team had observed a number of patient comments and suggestions regarding the long waiting time in booking an initial appointment for urgent cases. In addition, the physicians in the Endocrine Division also noticed discrepancies between the requested date during triage and the patient's appointment. A walk-in clinic exclusively for indicated urgent new referrals was piloted last December 2016.

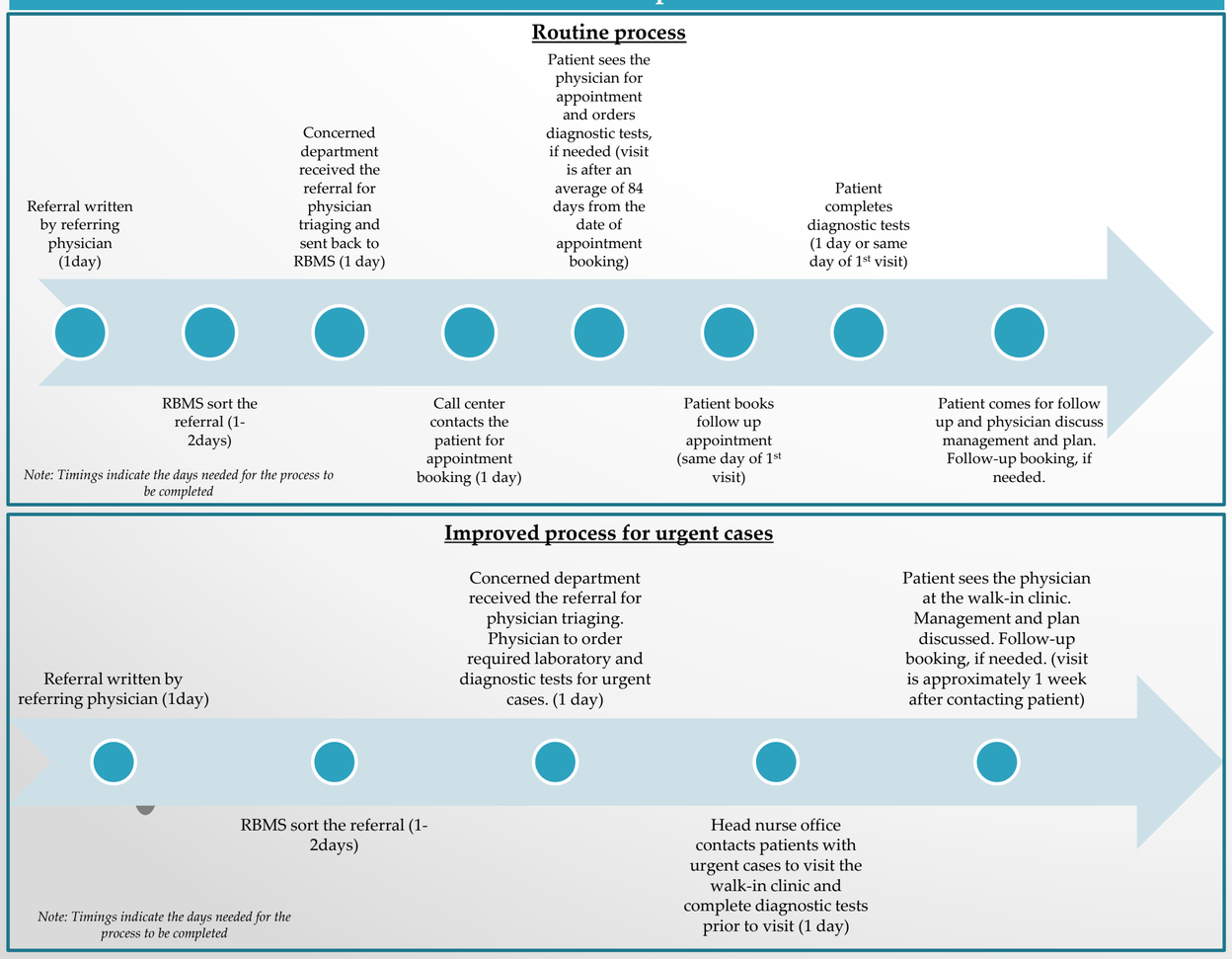
Urgent cases will be decided by the triaging physician using the following indications:

- Newly diagnosed moderate to severe hypothyroidism
- Newly diagnosed moderate to severe hyperthyroidism
- Diabetes mellitus type 2 with Hemoglobin A1c (HbA1c) ≥ 13%
- Newly diagnosed Diabetes mellitus type 1
- Suspected acromegaly
- Suspected Cushing's disease
- Suspected Conn's disease
- Moderate to severe hyperprolactinemia
- Highly suspicious thyroid nodule

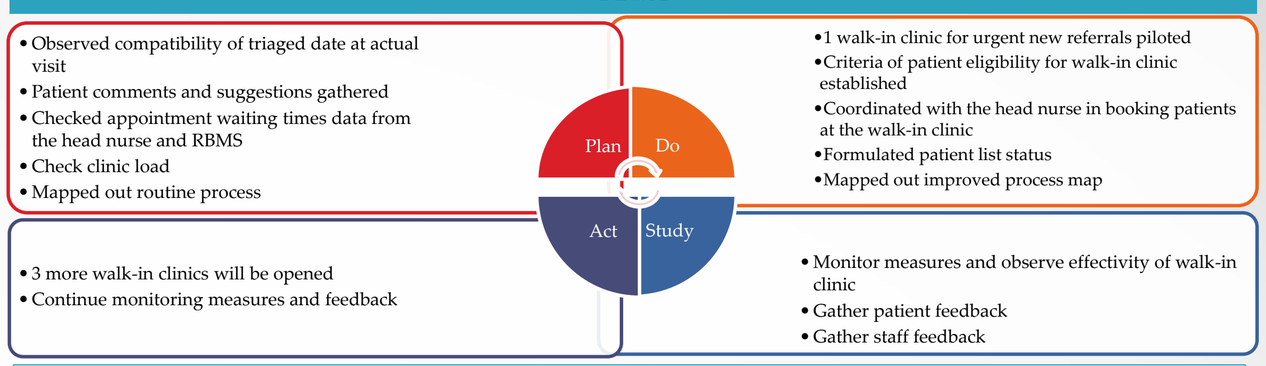
Fishbone Diagram



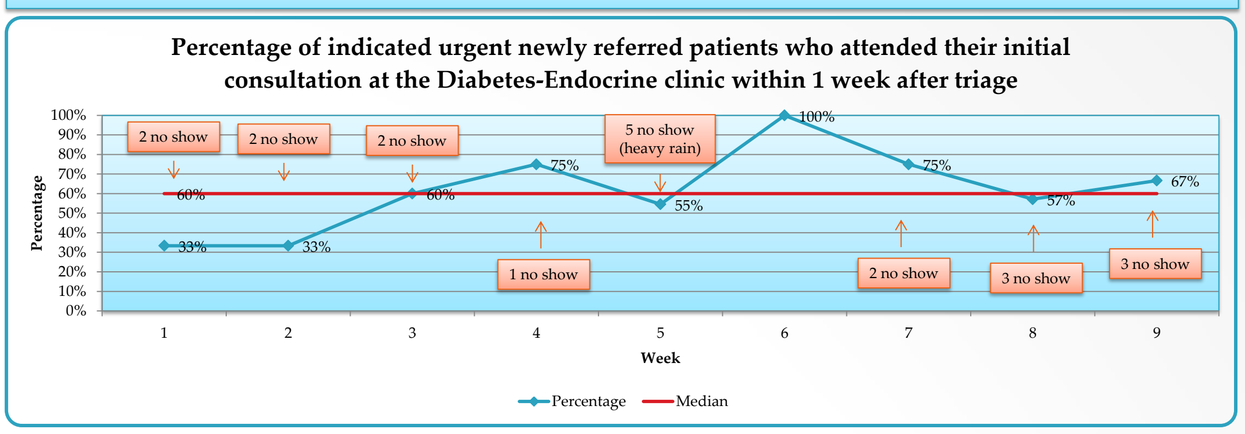
Timeline comparison

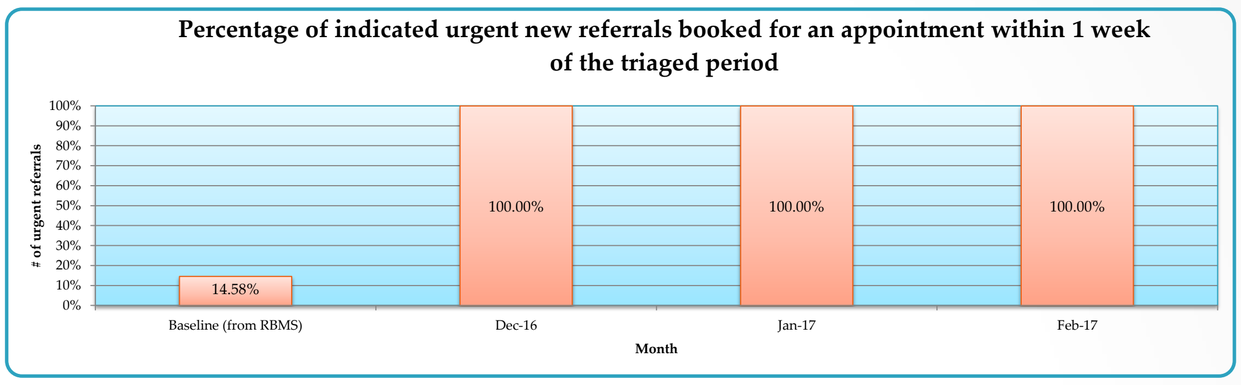


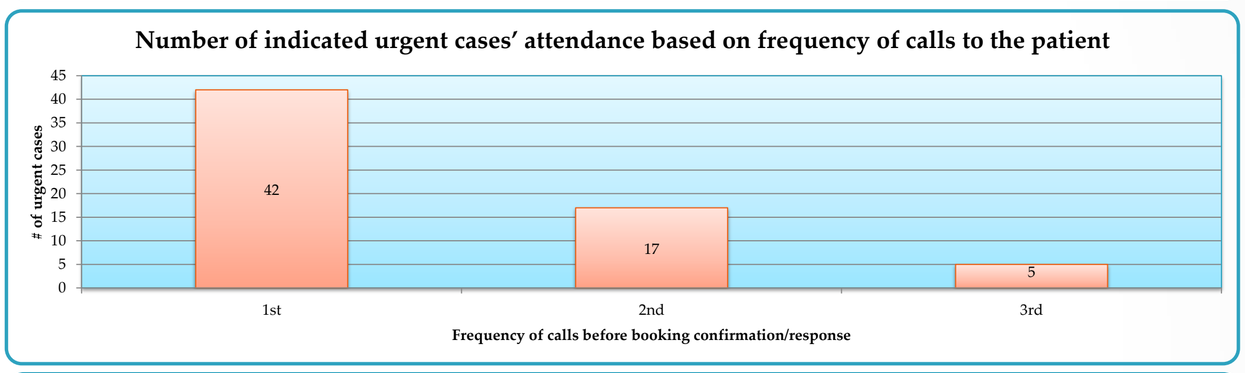
PDSA

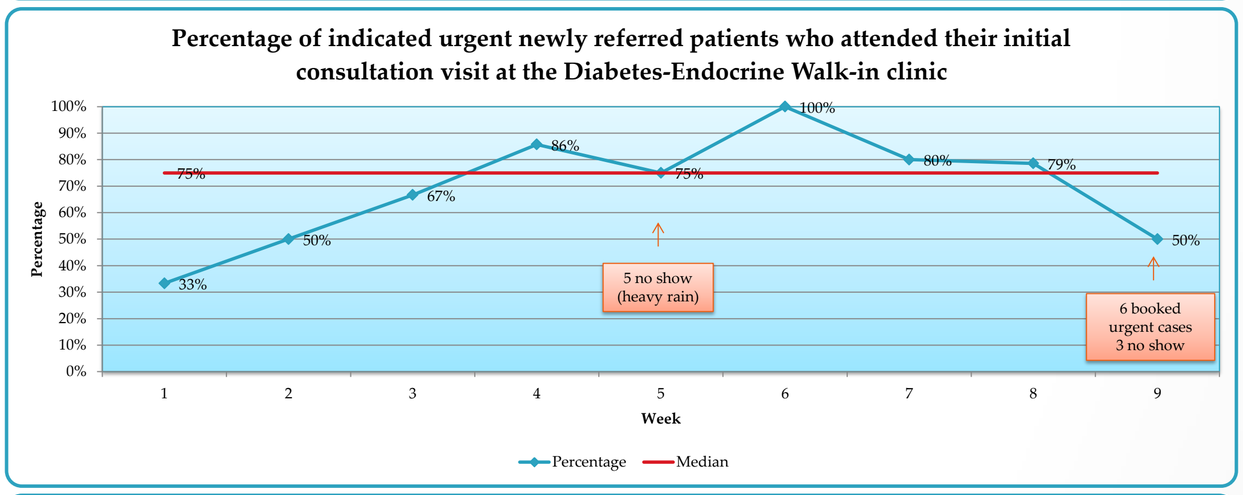


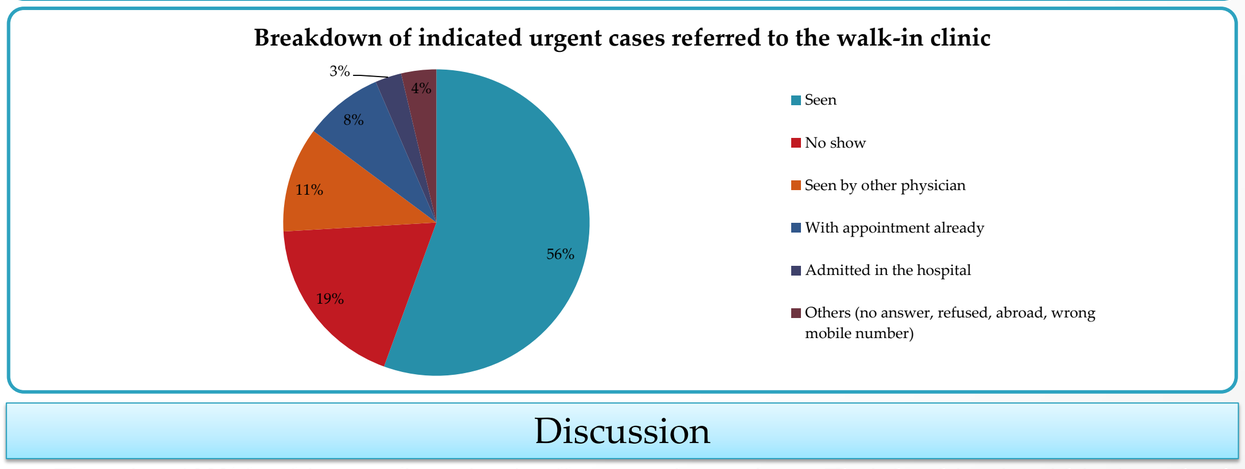
Results











Discussion

- There is a 100% booking confirmation in all responsive patients. Their booking is within 1 week of receiving the call. However, 25% of patients who confirmed their attendance to the walk-in clinic are no show.
- Patients will receive a maximum of 3 calls from the head nurse. After that, the list of unresponsive patients will be sent to RBMS.
- There is a marked improvement in booking appointments within the triaged period for indicated urgent new referrals.

Conclusion

- The number of indicated urgent newly referred cases varies daily. Regardless of the number, this does not undermine that delayed management of patients with urgent cases can cause significant consequences on their health.
- It is essential in patient safety to have a standard criteria in triaging patients. The number of new referrals identified as urgent cases decreased since the implementation of the standard.
- The initiative reduced the existing process by 3 steps and had minimized the appointment waiting times for indicated urgent cases.
- Ordering laboratory and diagnostic tests prior to the consultation will save 1 clinic appointment.
- The division has received excellent verbal feedbacks from patients and families.

Next Steps

- Additional 3 walk-in clinics will be opened.
- Continuous data gathering of measures for monitoring and improvement.
- To look into the reasons for no show.
- To provide the triaging physician an access in creating a patient encounter to be able to order laboratory work.
- Formulation of intra-division triaging policy.
- The team will be conducting a satisfaction survey from patients, families, and staff.