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BACKGROUND

Diabetes and Metabolism Centre (DMC) serves a daily average of 500-600 patients with chronic conditions like chronic kidney diseases, hypertension, diabetes and endocrinology diseases. This group of patients requires long term medication and follow ups with specialists' care. In order to assist with the cost of their long term medication and consultation, the government has provided financial assistance schemes like Medisave for Chronic Disease Management Programme (CDMP), Medifund, Medication Assistance Fund (MAF) to subsidise patients who are heavily burdened by long term medical cost.

As a new centre, DMC aims to make use of Info technology to improve on efficiency. With a revised workflow, the centre incorporates 1 Queue 1 Payment (1Q1P) into the centre's process. The targeted result of using the online queue system is to reduce patient's waiting time at individual service points for payment and allow them to do a one time payment at the end of their patient journey.

With that in mind, the Centralised Payment Counters located at the Bowyers' Block Clinical Laboratary and Pharmacy begin operations to serve patients for payment at the end of their journey and patients who are doing their pre-consultation tests and collection of medication.

As a result of multiple payment modes and the volume of patients, the waiting time for payment at the Centralised Payment Counters can be up to 1.5 to 2 hours during peak hours. The centre receives an average about 2 feedback a day from patients who expressed that the waiting time is too long. Patients also expressed unwillingness to wait if theirs' are straightforward payments. In order to reduce the waiting time for patients at the centralised payment counter, a project was started to analyse the bottlenecks leading to the long waiting time.

AIMS

- 1. improve the efficiency of cashiers assigned to Centralised Payment Counters
- 2. Reduce waiting time and improve experience for patients waiting for payment

METHODOLOGY

Analyse the types of payment that patients make at the centralised payment counters

As most of our patients require financial assistance, they often make use of various schemes from government and/or the hospital for their payment. Patients may also use a combination of 2 or more payment schemes depending on the types of coverage they get and the medication they are taking. As a result, some of their payment transactions may take longer compared to straightforward payment transactions.

The types of payment modes and schemes include: Cash, NETS, Credit Card, Medisave for Chronic Disease Management, Medifund, Medication Assistance Fund (MAF) and other third party schemes.

Analyse the time taken for each type of payment transaction

A study was done to evaluate the average time for each staff to complete each type of transaction. The results are as follows:

TYPES OF PAYMENT MODE/SCHEME	TIME TAKEN
Cash/NETS/Credit Cards (Without using other financial assistance	5 – 10 minutes
Medisave for chronic disease management	15 – 20 minutes
Medifund/MAF	5 – 10 minutes
Third Party Schemes	5 – 10 minutes

The results show that Medisave transactions are the potential bottle necks that snowball the waiting time for the patients.

Evaluate the competency of staff assigned at Centralised Payment counters on processing various payment methods

The cashiers at the centralised payment counters are Patient Service Associates (PSA) from various clinics. Their previous competency for payment was limited to straightforward and third party transactions for consultations only.

Prior to operations at DMC Central Payment counter, the PSAs were given theory and practical training for the various payment competency. However, the training is inadequate in preparing them for exceptional scenarios resulting in more time taken to turnover each patient as they need to verify the eligibility and entitlement before processing the payment in the system.

The competency for each cashier was re-evaluated to find out their weaknesses so that targeted training can be provided to improve on their payment collection competency.

Interview patients to get feedback on waiting time

queue.

After reviewing the various feedbacks given by patients through feedback forms on the waiting time at the centralised payment counters, we interviewed 20 patients and concluded the following:

- 1. Patients who require financial assistance are more willing to wait compared to patients who are not using any form of financial assistance.
 - Patients who require financial assistance cited acceptable waiting time as 30 to 45 mins Patients who do not require financial assistance cited acceptable waiting time as 15 – 30 minutes
- 2. Patients get impatient because they are afraid that their queue number is not in the system as there is no physical
- 3. Patients who are there for ancillary services (eg: buying of medication, blood tests) are less willing to wait than patients who are there for consultation.

SOLUTIONS

Deployment of experienced cashier to the Centralised Cashier Counter

To immediately cut down on bottle necks caused by centralised cashiers trying to process exceptional cases, experienced cashiers from other centres are deployed on site for a period of one month. The deployed cashiers assist in managing the queries of the cashiers on site for any of the payment processes they are handling.

Sharing of these cases are done end of day to ensure that the team learn from the cases that each individual experiences and hence, be equipped with the knowledge to manage if they come across similar cases in future.

Cut down the time taken for respective payment methods by various cashiers

After the re-evaluation of competency of each individual cashier, targeted training was given to each of them in areas they were least confident in. Re-training and re-attachment are provided for each cashier to enable them to cut down on the time taken for each transaction.

After the re-training, the cashiers performed each transaction 2-3 minutes faster on average in areas they were not confident in.

Streamlining the counters to specific payment functions

As results have shown that Medisave payments are the bottle necks for increasing the overall waiting time of patients and interviews with patients have also shown that patients who require financial subsidy are more willing to wait for payment, one counter was dedicated to manage non-medisave payment.

This allows patients who are making straightforward payment to be served faster.

The separate counter also prevents patients who are just buying medication from having to wait with the volume of patients who may have extensive payment items after visiting various service stations.

With the rest of the counters focusing on Medisave transactions which take longer, their efficiency and competency in handling the transactions also improved over time.

Training of Health Attendant to manage the waiting patients

To better manage the patients at the final stop of the patient journey, our health attendants stationed at the centralised cashier area are trained to check the queue for patients to ensure their queue have been transferred to payment. They also help to advise patients on waiting time and pre-empt the cashiers if there are any potential unhappy patients. This helps to reassure patients that they are in line prevents them from fearing they may be missed out.

RESULTS

V Overall time taken for transactions reduced

Based on 600 transactions a day, time saved per day by the cashiers by improving efficiency will be:

$600 \times 2 \text{ minutes} = 1200 \text{ minutes (approx.} 20 \text{ man-hours)}$

The man-hours saved from the team of cashiers per day can be deployed to backend cashier work and individual assignments.

√ Shorter waiting time

With the streamlining of counters to specific functions, waiting time for patients who are only taking blood or collecting medication dropped from 1.5 hour to less than 30 minutes during peak hours and less than 15 minutes during non-peak hours.

For patients who pay by Medisave or other financial subsidy schemes, wait time is maintained at 45 mins during peak hours and less than 30 minutes during non-peak hours

V Lesser need of service recovery

Number of negative feedback and hence service recovery required on a weekly basis dropped by 1 to 2 a day to just 1 to 2 a week.

CONCLUSION

By streamlining the counters into specific functions, cashiers are more certain of their function at the respective counter. This improves efficiency and enables patients who are there for ancillary purposes to be served faster, which enhances overall patient experience