A COMPUTERISED QUEUE MANAGEMENT SYSTEM IN THE OUTPATIENT PHARMACEUTICAL CARE UNIT OF A HOSPITAL PHARMACY SERVICE

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BACKGROUND

Large number of patients who dispenses medication in our Hospital Pharmacy Service

Queue management systems (QMS) are hospital information systems that organise patients in outpatient consulting waiting rooms (OCR)

Chronos

OBJECTIVES

- To describe and analyze “Chronos”
- To present the results after 2 years of implementation

MATERIALS & METHODS

Setting and Method

Retrospective cohort study.
Cohort A & B: consultations made before and after the QMS implementation
Study period: 1 month/cohort

Statistical analysis

Student’s T-test or chi-squared test

Main outcome measures

- General Data (GD)
- Activity record (AR)
- Patient consultation (PC)
- Average waiting time (WT)
- Appointment compliance (AC)

Variables analysed

Activity
Patient arrivals
Waiting times
Appointment compliance

RESULTS

The reader confirms their arrival and prints out a ticket

Patients Health Card

OCR PHARMACY SERVICE

The reader confirms their arrival and prints out a ticket

PATIENTS BY APPOINTMENT

The reader confirms their arrival and prints out a ticket

Patients Card

OCR PHARMACY SERVICE

The reader confirms their arrival and prints out a ticket

Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cohort A</th>
<th>Cohort B</th>
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<tbody>
<tr>
<td>GD</td>
<td>2046</td>
<td>1760</td>
</tr>
<tr>
<td>AR by pharmacist</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Unprogrammed patient consultation (p&lt;0.0001)</td>
<td>7/day</td>
<td>2/day</td>
</tr>
<tr>
<td>Average WT (p&lt;0.0001) [minutes]</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>AC (p&lt;0.0001)</td>
<td>61%</td>
<td>81%</td>
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CONCLUSIONS

1. ADVANTAGES IN HOSPITAL
Eliminates manual system for registering activity
Production of applications and statistics.
Provide information of:
- opening and closing time
- pharmacist who dealt with each patient
- follow-up consultations
- reasons for not attending

2. ADVANTAGES IN PHARMACY SERVICE
- Eliminates FIFO queue
- Provides real time information on the patients in the waiting room (arrival time, advances or delays in relation to their appointment time)
- Increase compliance with appointments

3. ADVANTAGES IN PATIENT
- More orderly access to OCR
- Improve arrival flows
- Reduce check-in of unprogrammed patients
- Reduction in waiting times