10 - Point System

Dr Tsui, Ping Tim, Ms Au, Yeuk Fei, Ms Cheung, Wai Ying

Cardiac Intervention Centre
Princess Margaret Hospital
<table>
<thead>
<tr>
<th>Official Working Hour</th>
<th>9am-5pm (Mon-Fri)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Nursing Manpower</td>
<td>4.5</td>
</tr>
<tr>
<td>Cases Category</td>
<td>Emergency, Urgent, Elective</td>
</tr>
</tbody>
</table>
Old Booking and Scheduling System

Guideline

As many as possible
First come first serve
No hard and fast rule
No agreement on priority
Old Booking and Scheduling System

Effective ???

??? Flexible
Before implementation of 10 Points System

![Bar chart showing weekly distribution of Emergency, Urgent, and Elective cases.]

- **Emergency**
  - Monday: 12 cases
  - Tuesday: 8 cases
  - Wednesday: 6 cases
  - Thursday: 4 cases
  - Friday: 2 cases

- **Urgent**
  - Monday: 4 cases
  - Tuesday: 8 cases
  - Wednesday: 4 cases
  - Thursday: 2 cases
  - Friday: 0 cases

- **Elective**
  - Monday: 4 cases
  - Tuesday: 4 cases
  - Wednesday: 4 cases
  - Thursday: 4 cases
  - Friday: 12 cases
Elective cases fill up most of time slots
Whose patient first?

I want to add a case, please!

I want to add a case, too!
Oh, Sorry!
We have to finish booked cases first

May I do my case first as he has been on standby for days??

Is first come first serve the best booking system?
Sorry! Your operation has to be postponed. I am starved to death, you should have told me earlier.

Result of Unrealistic Overbooking!
Real Situation

Big differences from case to case

Time consuming
Complexity
Urgency
Late Comer ≠ Least Urgent
Complexity / Number of cases
Procedures are of different complexities

Booking system cannot just count the number of cases
Chronic Total Occlusion (CTO)

Difficult to be opened by angioplasty

Time consuming stable case

Benefits to be done at once??
10 Points System
Point = Complexity

One point = one hour operation time

6 points AM 4 points in PM
## 10 Points System Definition

<table>
<thead>
<tr>
<th>Emergency</th>
<th>Urgency</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI within 24 hours</td>
<td>Must done within index admission</td>
<td>Stable</td>
</tr>
<tr>
<td>Non-stop VT/VF</td>
<td>High TIMI risk score after MI</td>
<td>Low TIMI risk score</td>
</tr>
<tr>
<td>Cardiogenic Shock</td>
<td>Delayed case due to overflow in previous OT date</td>
<td>Asymptomatic but with positive functional test</td>
</tr>
<tr>
<td>0.5 point</td>
<td>Coro, Temp. Pacing, Loop Recorder, IVC filter, R heart biopsy, Device extraction, IABP, Pericardial tapping, Pocket revision</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>1 point</td>
<td>R+L heart cath, ECMO, Lead Repositioning, Pacemaker/ICD replacement</td>
<td></td>
</tr>
<tr>
<td>1.5 points</td>
<td>Coro+/-PCI, PCI, Permanent Pacemaker VT study, EPS, PTMC, ASD VSD PDA LAA Occluder, Coro+/-EPS, PTA, Pulmonary Embolectomy, ICD implant, Coil embolisation</td>
<td></td>
</tr>
<tr>
<td>2.5 points</td>
<td>CRTD, CRTP</td>
<td></td>
</tr>
<tr>
<td>3.0 points</td>
<td>EPS+/-AB, AF AB, CTO, ENSITE, CARTOS</td>
<td></td>
</tr>
</tbody>
</table>
10 Points System Booking Principle

- Book less elective cases to allow more urgent cases
- Find urgent cases if case load < 10 points
- Cancel cases if case load > 10 points
- Cancelled cases get first priority
- First priority to all emergency cases
How to facilitate
10 Points System

Better Communication

Act fast and be flexible
Better communication, Less complaint

During pre-procedure assessment

Possibility of postponement or advancement should be informed if there be emergency or cancelled cases respectively.

Explain the cancellation in person or by phone before patient was discharged home.
Act fast and be flexible

During Procedure Day

Reschedule the appointment as soon as possible for all cancelled cases

Operators should not deviate too much from the expected procedural time

Consider staged procedure for complex intervention
After implementation of 10 Points System
Elective cases no more fill up most of time slots
Don’t worry, priority of next time slot will be given to cancelled case.

I have to cancel my last case as an emergency is pending.

Everybody follows a structured and mutually agreed booking and scheduling system.
Throughput (units) per 10 working day

Before: 45
After: 69

Before vs After
Cases Postponed per 100 Working Day

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>
Nursing Staff Overtime (minutes) per one working day

Before: 53 minutes
After: 43 minutes
Higher output

Finish on time

Happy Staff