Enhancing the Efficiency of Operating Theatre Turnaround Time via Process Mapping and Multi-Discipline Collaboration

Quality and Safety Workgroup, Operating Theatre, North District Hospital.
Background

- Turnaround Time (TAT) of Operating Theatre (OT) plays a major role in the effective utilization of OT.
- In the past, the average of overall TAT in NDH was below HA’s mean.
- In order to shorten TAT, Process Mapping and Multi-disciplinary Collaboration were applied to identify areas for improvement.
Objectives

- To reduce TAT between surgical cases
- To enhance the utilization of theatres for elective lists
Methodology

- Reviewed & analyzed the data to evaluate the effectiveness of the new implemented strategy
- Collected comments
- Compared TAT among different specialties to identify room for further improvement
- Performed process mapping to identify areas for improvement
- Multi-discipline collaboration and staff engagement
- Established a taskforce workgroup for the TAT project
- Communicated with multi-discipline about the improvement project

### Sample sizes

<table>
<thead>
<tr>
<th>Year</th>
<th>Caseload</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3994</td>
</tr>
<tr>
<td>2018</td>
<td>4018</td>
</tr>
</tbody>
</table>

### Target groups

- All elective cases performed in NDH OT
Process Mapping: New Workflow for TAT

- Operation finished
- Assist Anesthetist to reverse patient
- Transport the patient to PACU/ICU & handover the patient
- Counting of used instrument & send back to SSD
- Return unused items & the previous equipment
- Call cleansing team to cleanse the theatre
- Prepare theatre for the next patient
- Check next patient
- Transfer next patient in

Designated Nurse act as a coordinator
- Relocate PCA to help with logistic tasks
- Call cleansing team to cleanse the theatre
- Check next patient & hand the patient over to theatre nurses

A patient leaving theatre

Turnaround Time (5 to 60 minutes)
The results further prove that the new workflow for TAT and multi-discipline collaboration could shorten the TAT effectively.