Managing Hospital-Wide Mobile Assets Centrally with Real Time Location System (RTLS)

By centrally managing hospital-wide mobile assets with RTLS, the hospital aims to:

- **Optimise assets** by driving higher utilization with reduced asset numbers.
- **Deploy assets efficiently** to handle fluctuating operational needs.
- **Enable nurses to spend more time on patient care duties** by relieving them of having to spend time searching for, or sighting assets.

**Equipment**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infusion pumps</td>
<td>168</td>
</tr>
<tr>
<td>Syringe pumps</td>
<td>300</td>
</tr>
<tr>
<td>Patient transfer trolleys</td>
<td>38</td>
</tr>
<tr>
<td>Wheelchairs</td>
<td>293</td>
</tr>
</tbody>
</table>

**Total reduction of about $ 900k**

**Preventive Maintenance Time Saved**

- **Maintenance Engineers** 896 hrs/yr
- **Nursing** 938 hrs/yr

**Method**

- **Asset Tracking**
  Central Asset Management (CAM) tags the assets with active RFID (Radio-Frequency identification) tags to track and identify the whereabouts of these assets.

- **Centralised Ownership Model**
  Hospital-wide mobile assets such as wheelchairs, patient transfer trolleys, hospital beds, infusion and syringe pumps, are owned and centrally managed by CAM.

- **Automated Corrective Maintenance Process**
  A press button on the RTLS allows users to indicate that Corrective Maintenance is required; it will trigger asset location information for porters to pick-up and deliver the asset to the workshop.

- **Dynamic Asset Deployment**
  CAM is able to deploy the assets to the desired hospital locations based on minimum and maximum par level configurations.

**Results**

- **A 30% reduction** in asset numbers (wheelchairs, patient transfer trolleys and pumps).
- **Nurses' and Maintenance Engineers' time** saved as **less effort is spent** in locating/maintaining these equipment.
- **With CAM managing these assets centrally, there is no need to return the items** to asset owners during patient transfer, resulting in efficient deployment of equipment and personnel. The model of operations has enabled the hospital to provide **seamless patient care**, by not having to change equipment for the patient throughout his patient journey in SKH.

**Conclusion**

With a centralised asset management model using RTLS, CAM is able to deploy assets optimally and efficiently, according to patient needs. This has led to better patient care through the re-channelling of staff time and effort to more critical needs, such as clinical care.