## Lowering No-Show rates – a Six Sigma Project



KK Women's and Children's Hospital SingHealth



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## 1. Define

Problem:	•	A 20% no-show rate translates to a manpower loss of 3-4 full- time therapists a month. Potential and capacity to attend to 700 more patients in a month
Goal:	•	Reduce % of no-shows from 20% to 10% in KKH Rehabilitation department
Project outcome	•	Optimise professional manpower utilization Improves care to patients due to shorter waiting periods during scheduled appointment Cost savings of at least \$30,000 per month Additional 360 man-hours per month

Singapore Healthcare

Management **2013** 

## 2. Analyse

Variables	No-show rate	Defect rate	Cancellation rate
Distance	×	×	×
Age	1	<i>✓</i>	×
Payment Type	1	<i>✓</i>	×
Department Type	1	×	1

## 4. Improve

Appointment System	<ul> <li>Change in appointment cards</li> <li>Encourage cancellations 3 days before</li> <li>Hire additional staff for appointment calls</li> <li>Deposit fee</li> </ul>
Staff Training	<ul> <li>Clinical staff to remind patient of the option to cancel</li> <li>Stronger emphasis on consistent Rehab sessions</li> </ul>
Additional Solutions	<ul> <li>Name List (waiting list)</li> <li>Reduce defects</li> <li>Therapists schedule appointments</li> <li>Transportation arrangements</li> </ul>

#### Overview of appointment process



# 3. Measure

In order to know how much to improve, we calculated the current of No-shows to establish the base case scenario



## 5. Control

Once the improvement plan is in place, we proceeded to implement control plans to make sure we retain the improvements in the future!

		LSL	What needs to be done	Frequency	Upper Specification Limit	Person Responsible
Control plan	Specification limits	Defect Rate = 50% Cancellation Rate = 30% USL Defect Rate = 50% Cancellation Rate = 40%	<ul> <li>Monitor Defect, Cancellation and No- show</li> </ul>	Monthly	50%, 40%, 10%	Process owner
			Monitor no. of voicemails to Rehab department	Weekly	Less than 5 a day	Counter Staff