

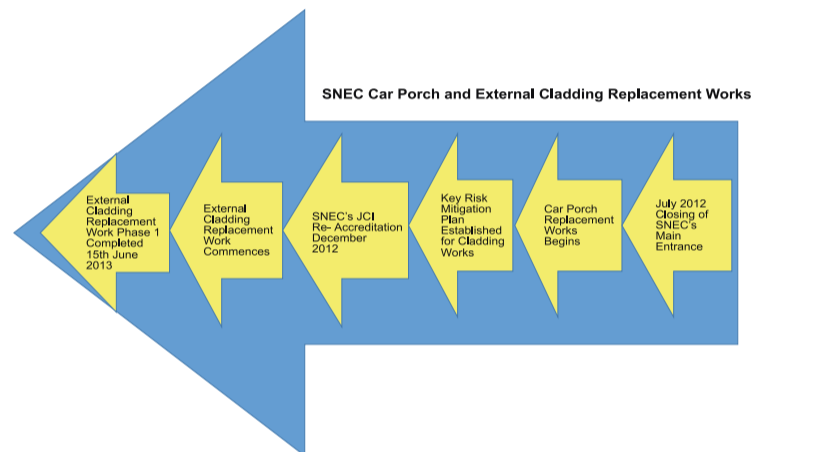
AIM

To showcase SNEC's proactive risk management effort in carrying out the building's external façade cladding replacement project and ensuring timely completion of project with zero adverse event, maintaining quality workmanship and no disruption to patient care.

BACKGROUND

The existing aluminum cladding of SNEC's podium block, installed in year 1990, has deteriorated over the years and required replacement.

This project had to be carried out from August 2012 to Dec 2013 and the project team faced several operating constraints during this project period: - 1) The SNEC's main entrance driveway had been scheduled for replacement and expansion from July to December 2012; 2) JCI accreditation audit scheduled in December 2012; 3) Major international conference co-hosted by SNEC scheduled in July 2013. The project team had to therefore tightly plan and schedule the sequence of all the main entrance expansion works as well as the cladding replacement works in order to ensure that the timeline was met with minimum interruptions / inconvenience to patients and staff as well as meeting SNEC's and JCI's quality and safety standards.



METHODOLOGY

Using the risk management process, a cross-functional team comprising representatives from SNEC Operations Department, SNEC Procurement Department, SingHealth Facilities Development and Campus Development was formed to proactively discuss, identify and assess potential risks prior to the start of the project.

Risks that would impact safety, project timeline and budget were thoroughly considered, these risks ranged from regulation compliance, safety, technical design, environmental control, patient service, financial, to SNEC's reputation.



Evaluating Risks	Strategic Risks	Likelihood	Severity	Impact	Accountability	Strategies
<ul style="list-style-type: none"> Compliance Objectives Operational Objectives Financial Objectives Reputational Objectives Reporting Objectives 	<p>Other risks to describe the events that can prevent accomplishment of objectives</p> <p>Existing building facade will look shoddy compared to new centers / competitors</p> <p>Building can no longer meet their intended functions of being a centre of excellence with secure our buildings and building walls.</p>	<p>Possible</p> <p>Possible</p>	<p>Moderate</p> <p>Major</p>	<p>Other risks to describe what would happen if the above risk actually occurred</p> <p>Poor image and lower competitive advantage</p> <p>Financial costs required to repair the facade will be high and disruptions to site of practice will be frequent</p>	<p>Operations Director (Albert Tan)</p> <p>Operations Director (Albert Tan)</p>	<p>Other risks to describe the control activities prescribed by management</p> <p>Develop well planned pre-process analysis</p> <p>Develop well-planned pre-process analysis</p>
<p>Strategic Objectives</p> <p>1. To create a stronger identity with our patients through an excellent exterior design of SNEC building.</p> <p>2. To ensure our external facade cladding is safe and effective in keeping heat and rain out of the building.</p> <p>3. To complete or measure our external facade in accordance with our external facade.</p> <p>4. To ensure the use of construction materials.</p>						
<p>Risks</p> <p>1. Existing building facade will look shoddy compared to new centers / competitors.</p> <p>2. Building can no longer meet their intended functions of being a centre of excellence with secure our buildings and building walls.</p> <p>3. Incomplete or measure our external facade in accordance with our external facade.</p> <p>4. Poor inference of construction materials.</p>						
<p>Current Management and Mitigation</p> <p>Developed a well planned pre-process analysis. Tender includes a valid & design concept. Engage SingHealth Top Mgr who is trained as Architect as Project Manager.</p> <p>Tender includes a valid & design concept. Engage SingHealth Top Mgr who is trained as Architect as Project Manager.</p> <p>Strongest appointment of competent QA.</p> <p>Includes in the tender specification that price performance of construction materials under contractor's control.</p>						
<p>Risk Rating with Current Controls</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p>						
<p>Changes to Controls</p> <p>No Change</p> <p>No Change</p> <p>No Change</p> <p>No Change</p>						
<p>Changes to Control Objectives</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p>						
<p>Risk Rating after Changes to Controls</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p> <p>Adaptively controlled</p>						
<p>Accountability</p> <p>Operations Director (Albert Tan)</p> <p>Operations Director (Albert Tan)</p> <p>Quantity Surveyor (Jim Kim Hock)</p> <p>Purchasing (Mik Pul Tan)</p> <p>Purchasing (Mik Pul Tan)</p>						

The risks were then assessed and evaluated based on their existing controls. For risks that were deemed to be under-controlled, additional controls were identified and incorporated in the risk treatment plan. For example, interruption to project schedule due to insufficient amount of skilled labour on site resulting in poor workmanship and not completing the project on time. Additional measures taken to address this included factoring contingency plans to prioritise work and daily reporting of manpower deployment. Actions in the risk treatment plans were then implemented before or during the project. Parameters for assessing the effectiveness of these treatment plans were also determined for monitoring purpose.

RESULT

The external cladding replacement project was completed ahead of schedule. Patient care was not compromised throughout the entire execution process and there was no adverse site incident throughout the project period. Good feedback was received both on the expanded main entrance driveway and the external cladding works.

Despite the closure of the main entrance and the ongoing construction works, SNEC successfully completed the JCI audit and attained re-accreditation in December 2012.



CONCLUSION

This project demonstrated how key risk mitigation tools could be used to manage renovation projects to prevent adverse or unanticipated events and achieve set targets and safety goals. It also showed that managing risk should not be a silo effort but achievable through collaboration among the various teams within the institution and SingHealth Cluster especially for challenging multi-faceted projects.

