

01. Objective

Objective: The Hospital does not have a helipad and would like to investigate the opportunity of adding one. How to transport patients from roof helipad to emergency department.

Stakeholders: doctors, nurses, patients, company board of directors, regulator agencies, local community

Collaborators: Doanh Do

02. Alternatives

- New elevator adjacent to existing elevator
- New elevator located West of stair 3
- New elevator adjacent to screen wall
- Modernize existing elevator and raise penthouse roof
- Replace existing elevator

03. Factors & Criteria

Factor	Must Criteria	Want Criteria
Amount of structural modifications required		
Amount of days elevator will be down		
Length of access path required to elevators		
Amount of spaces affected on 5th floor		
Revisions to existing roof		
Zoning & FAA requirements	must meet requirements	
Require life safety modifications on 6th floor		
Structural analysis required		
Amount of above ceiling modifications needed on 5/6 floor		

04. Analysis

Importance of Advantages vs. Cost Graph



Alternative	Importance of Advantages	Life Cycle Cost
1 New elevator adjacent to existing elevator	119	\$2,300,000.00
2 New elevator located West of stair 3	207	\$2,390,000.00
3 New elevator adjacent to screen wall	257	\$2,200,000.00
4 Modernize existing elevator and raise penthouse roof	353	\$2,350,000.00
5 Replace existing elevator	Does not meet must criteria	--

05. Decision

Selected Alternative	Importance of Advantages	Life Cycle Cost
Modernize existing elevator and raise pentho...	353	\$2,350,000.00