STANFORD UNIVERSITY MEDICAL NETWORK | RISK AUTHORITY

The A-B-Cs of Making a Business Case for SPH in Your Organization

October 17, 2013

Today's Speaker

Edward Hall
Chief Operating Officer
Stanford Risk Authority

"15 Years of Work in 15 Minutes"

Our Story:

A. Assemble your data

B. Build a financial projection

C. Consider other benefits, costs, and alternatives

Learning Objectives:

A. What data to **A**ssemble and how to do it

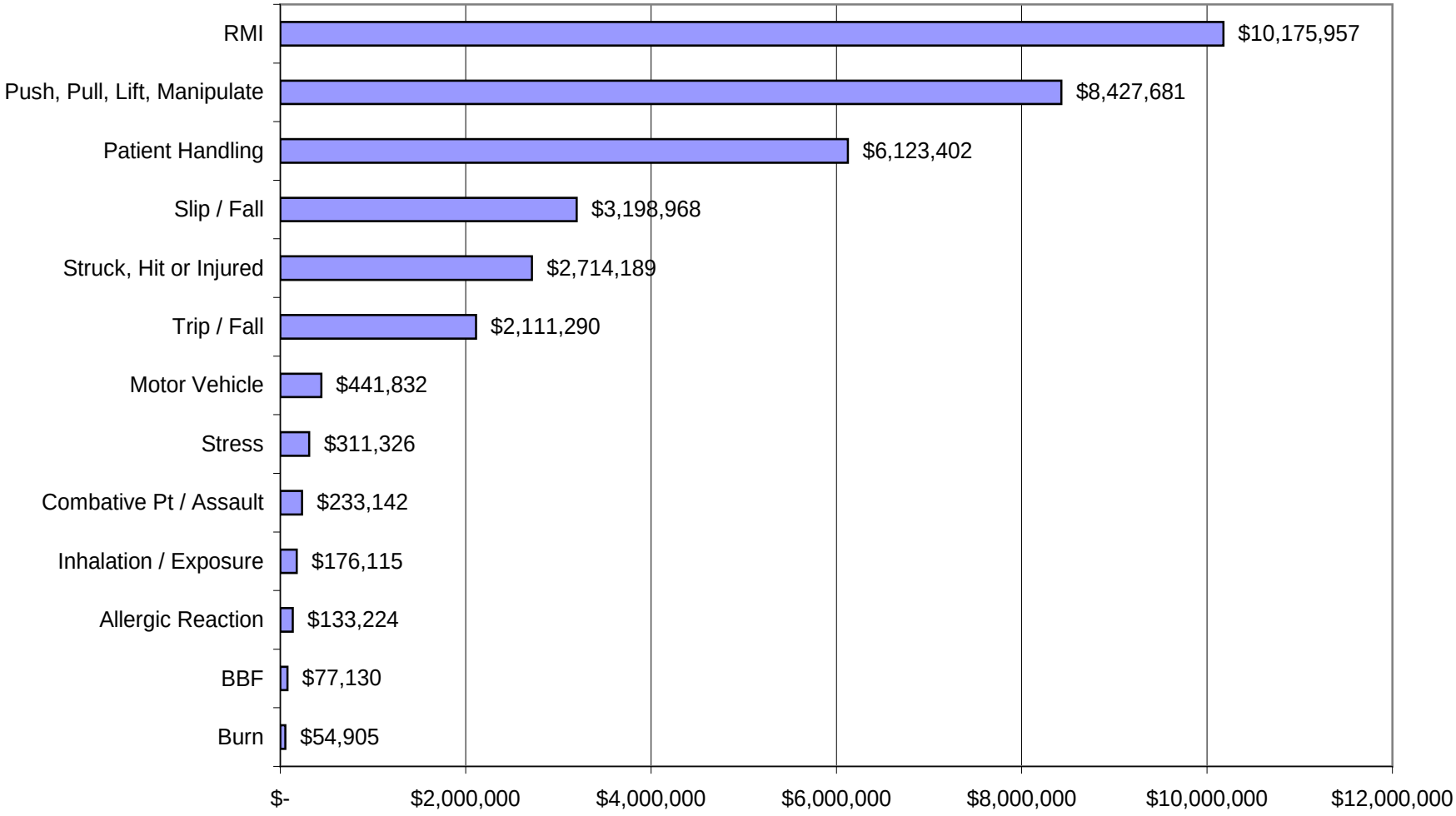
B. How to **B**uild a financial projection

C. How to **C**onsider other benefits, costs and alternatives

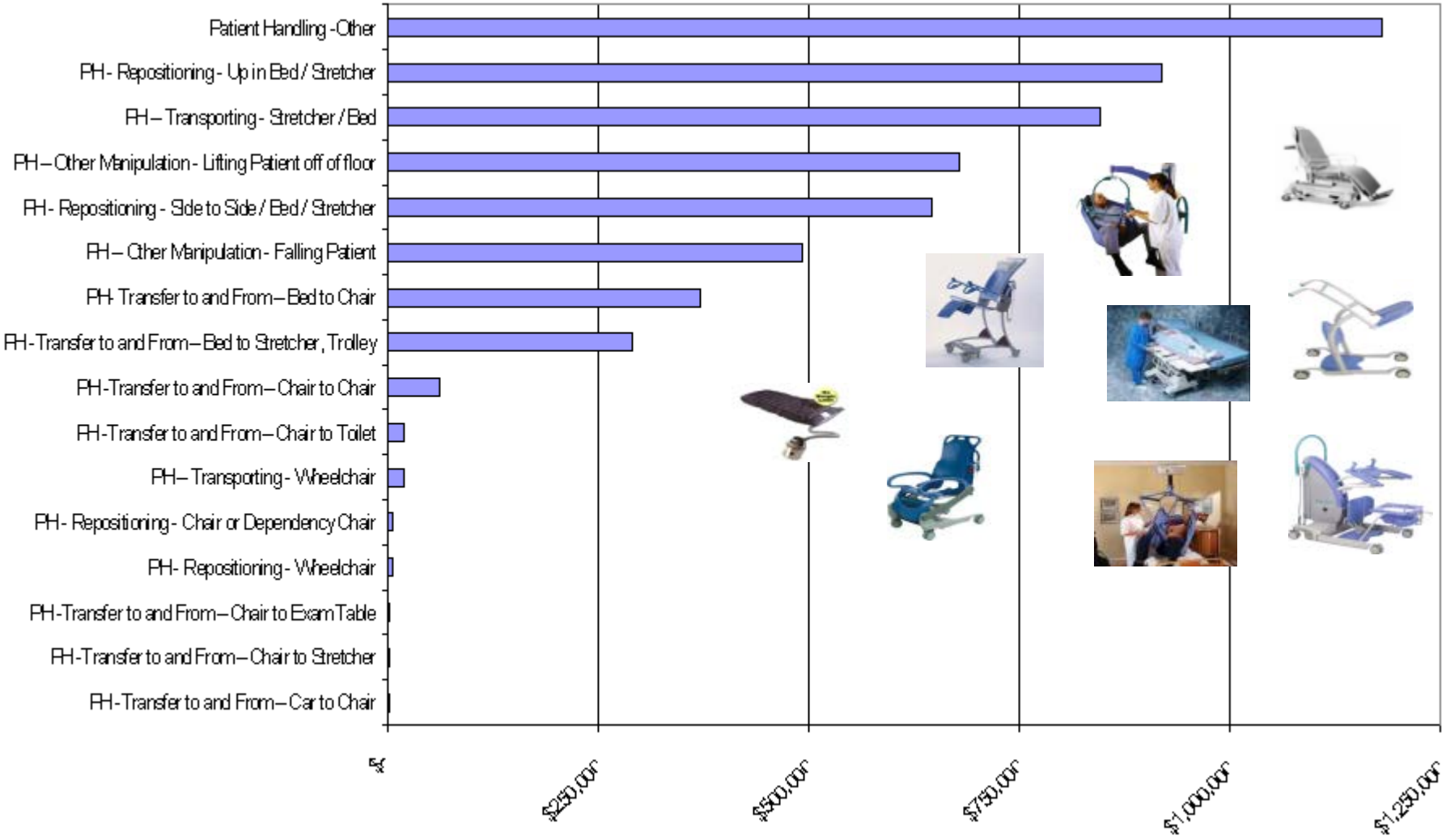
Historically USA Data has Focused on the Following:

- Workers' compensation costs for injuries due to patient handling
- Lost and restricted days for staff injured handling patients
- Costs to implement SPH, including:
  - Initial equipment costs
    - Δ Purchase
    - Δ Installation
  - Ongoing costs
    - Δ Sling laundering
    - Δ Sling replacement
  - Training costs
    - Δ Initial training
    - Δ Ongoing training

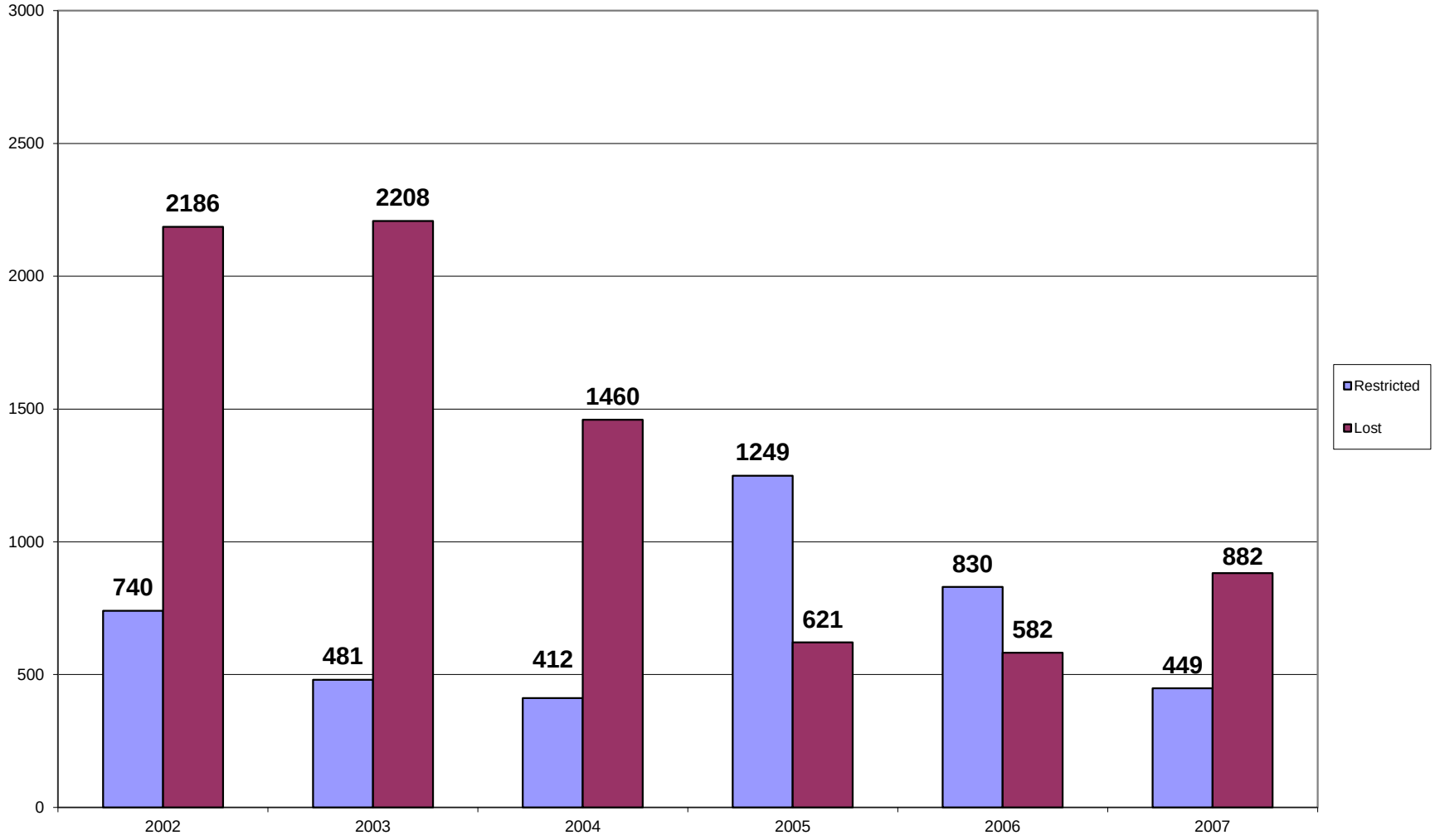
SHC
Aggregate Claims Costs
Each Cause Group
2001 - 2008



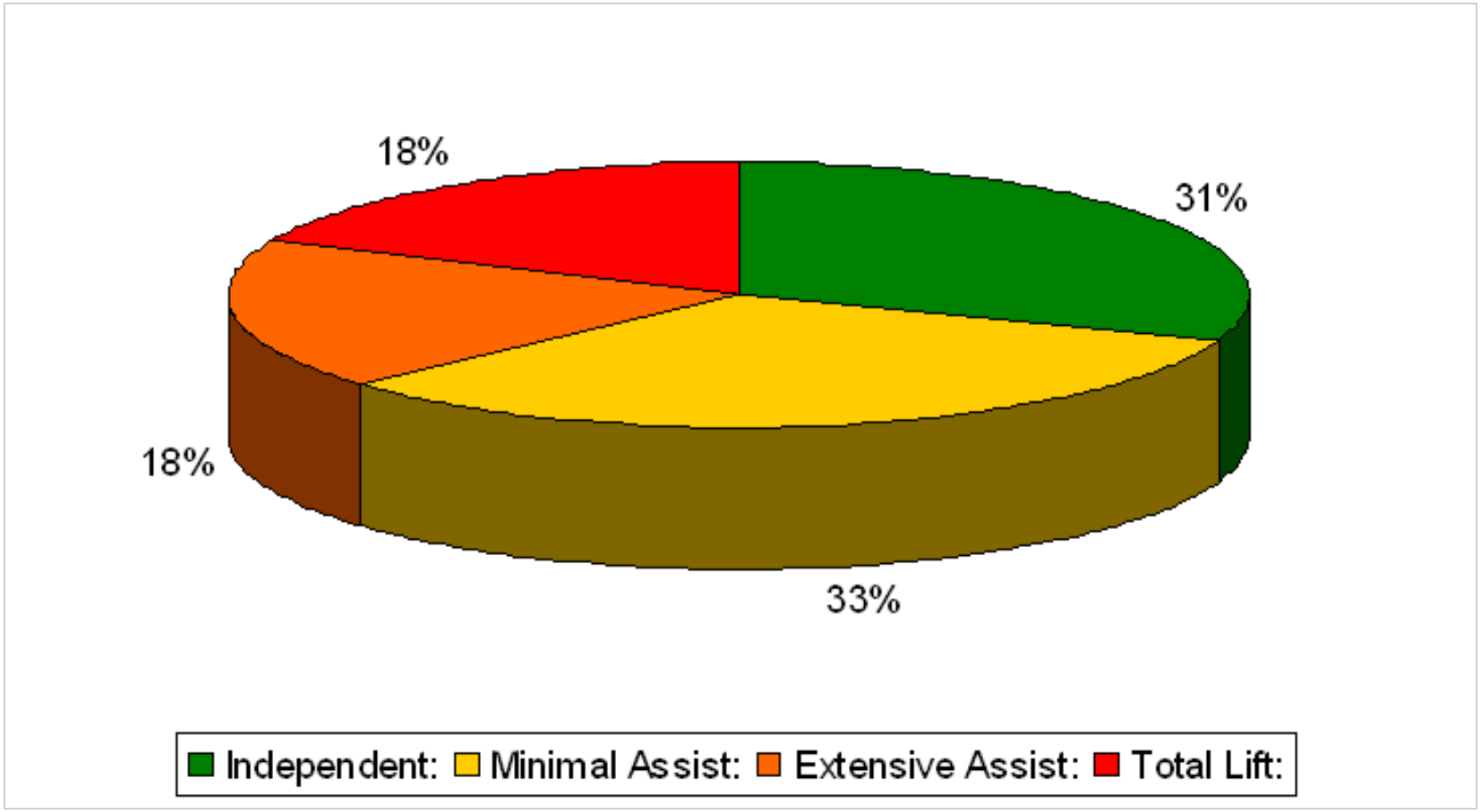
SHC Aggregate Claims Costs- Patient Handling Injuries 2001-2008



SHC Patient Handling Injuries
Days Restricted Duty & Days Absent
2002 - 2007



Assess Needs and Provide Initial Installation and Training Estimates.



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To Build a Financial Projection, You Need to:

- Project total program costs and benefits over a chosen time period, such as 5 years.
- Costs are total program costs (installation, ongoing, training, etc.)
- Benefits are how much you'll save by implementing the program.
  - Once fully implemented, you can probably save 60-80% of the workers comp costs from injuries handling patients.
  - You can save a similar amount in lost & restricted days
- The financial value of the program is the benefits minus the costs in each year
  - It's usually convenient to convert the year-by-year results to a net present value (NPV) or return on investment (ROI).

Program Costs:

Category	Cost
Clinical training and consultation	• Two years, estimated at $150k total
Labor training	• $700k
Equipment	• $800k
Ongoing program expenses	• Patient-specific slings estimated at $25k per year • Recurrent staff and coach training estimated at $6k–$8k per year (2 coach days, 4 staff training days)

STANFORD UNIVERSITY MEDICAL CENTER
Stanford Hospital & Clinics

Project Title	Safe Patient Handling
Preparer's name	Forte, Joan
Cost Center	83802 - Clincal Equipment

TOTAL		$	825,675
SHC	100%	$	825,675
LPCH		$	-
SSOM		$	-
OTHER		$	-
IRR =			27%

SAMPLE

CATEGORY (Required)	CLASSIFICATION (Required)	JUSTIFICATION (Required)
Necessary	Hospital	New Service

Market Analysis / Competitor

Extensive evaluation was done of the two main vendors. Equipment fairs and RFPs were done. The vendor demonstrated the best value and price.

Conflict of Interest (Required. See Instructions)

None

Detailed Description of the Project

This is the equipment for the Safe Patient Handling Initiative, previously presented. The program involves new equipment and extensive education with a resulting significant drop in worker injury. Most organizations see at least a 60% return in year 1.

(SAVINGS)/COST ESTIMATES

	FY 2009	FY 2010	FY2011	FY2012	FY2013	TOTAL
REVENUES($) (Incremental)						
Projected Volume Increases						
Projected Charge						
Projected Gross Revenues	-	-	-	-	-	
Collection Rate Assumption						
Projected Net Revenues:	-	-	-	-	-	
OPERATING EXPENSE($) (positive)						
Salaries	(63,247)	(126,494)	(126,494)	(126,494)	(126,494)	(569,223)
Benefits (34% of Salaries)	(21,504)	(43,008)	(43,008)	(43,008)	(43,008)	(193,536)
Supplies						
Maintenance						
Other	512,860	(436,801)	(499,301)	(499,301)	(499,301)	(1,421,864)
Total Operating Cost/(Savings)	**428,099**	**(606,303)**	**(668,803)**	**(668,803)**	**(668,803)**	**(2,184,613)**
Total Capital Cost (positive)	**825,675**	-	-	-	-	**825,675**
Net Savings (Cost)	**(1,253,774)**	**606,303**	**668,803**	**668,803**	**668,803**	**1,358,938**
FTE (Reductions) Additions						

Note: Additional operating expenses must be approved through the operating budget process.

Signatures to be obtained by Capital Assets Department

Authorization

CEO/COO Date | VP or Department Chair Date | Chair Finance Committee Date

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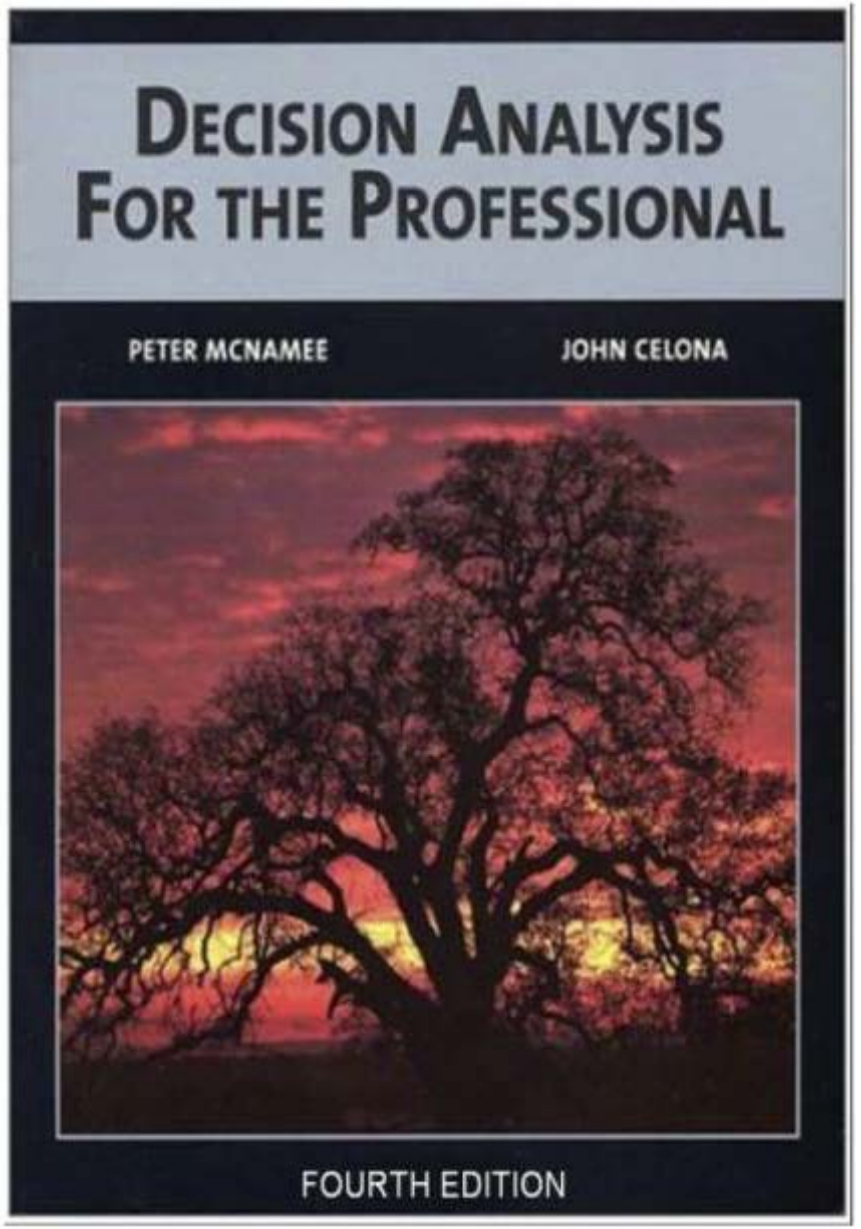
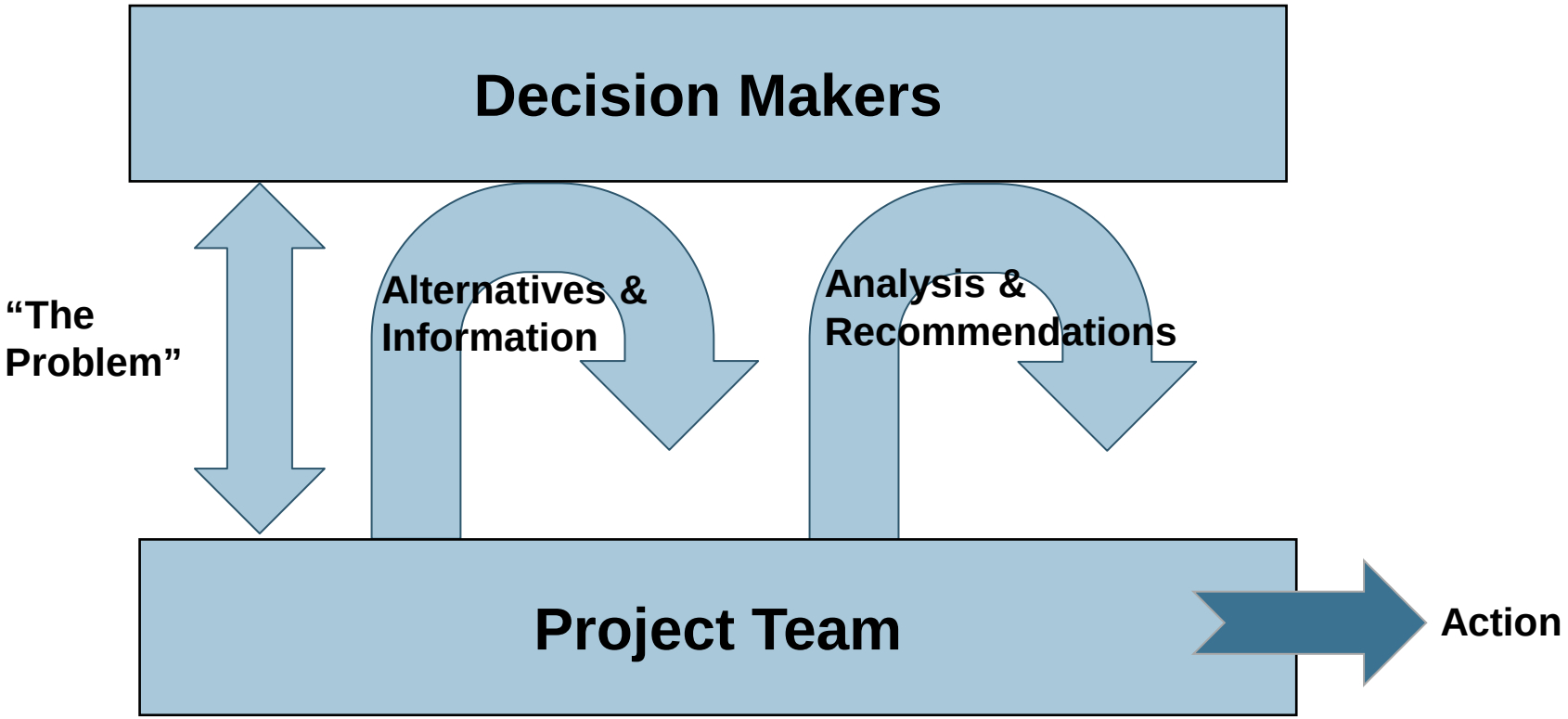
Why Consider Other Costs or Benefits?

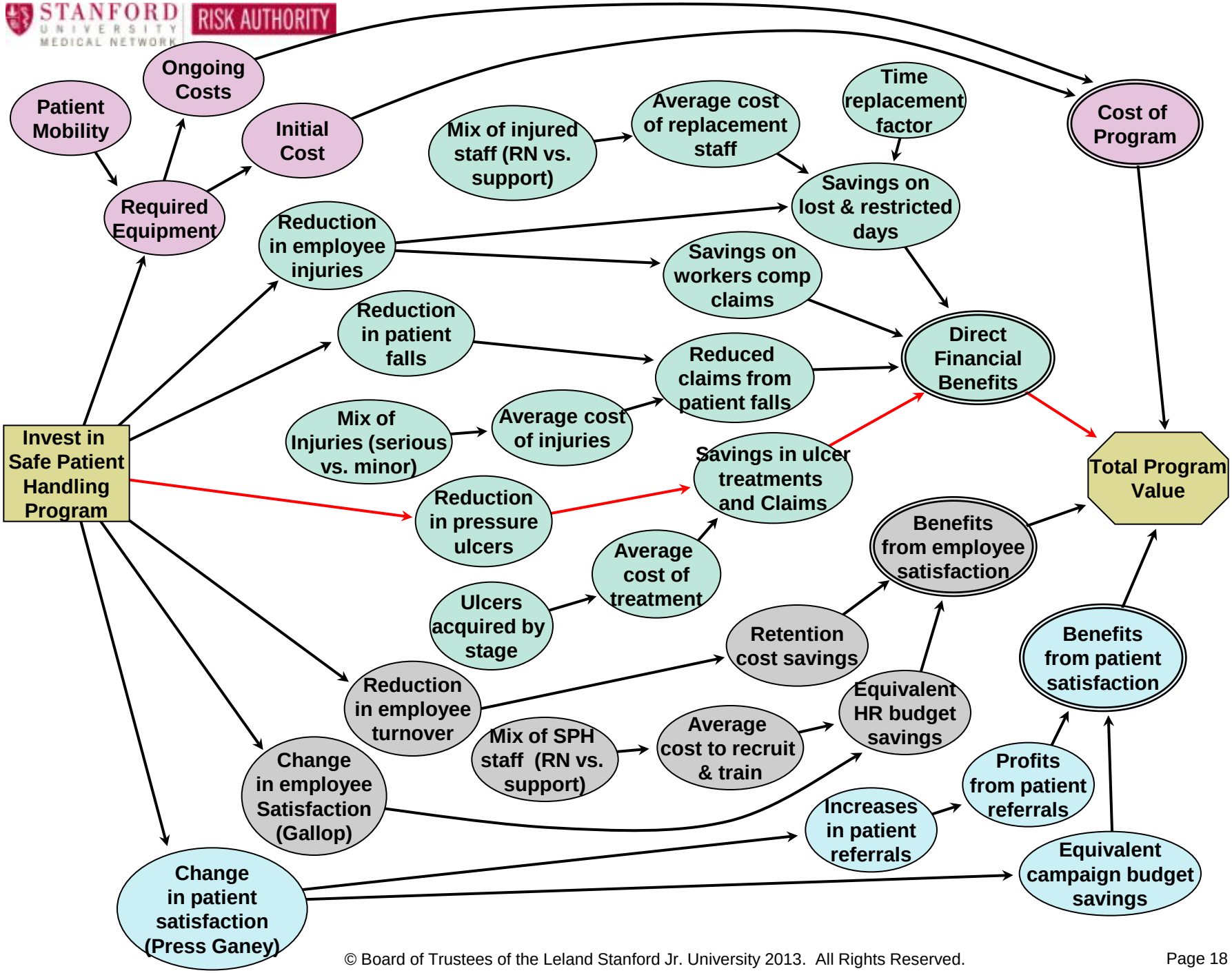
- The regulatory mandate is not enough and you need to show the business case for the program.
- You're considering a program more expensive than what can be justified just based on savings in workers' compensation or lost & restricted days, such as:
  - Installing overhead lifts rather than portables
  - Installing in care areas with higher mobility scores
- For some other reason, your program is complex (many facilities, many care areas, mix of retrofits and new construction, etc.)

For Any Decision Involving Complexity and/or Uncertainty, We Use Decision Analysis:

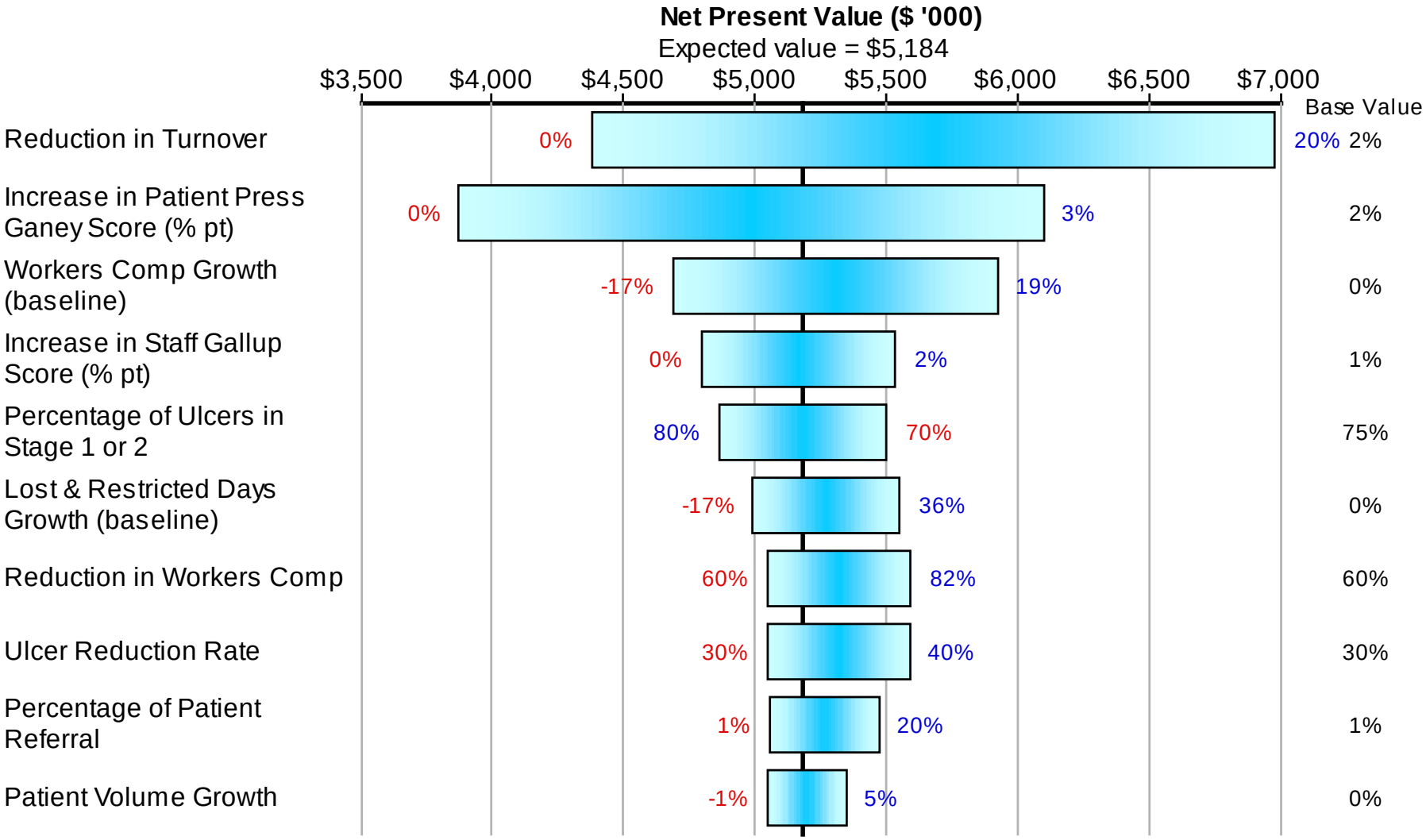


The Dialogue Decision Process Gets Everyone "On the Same Team" to Find the Best Answer.

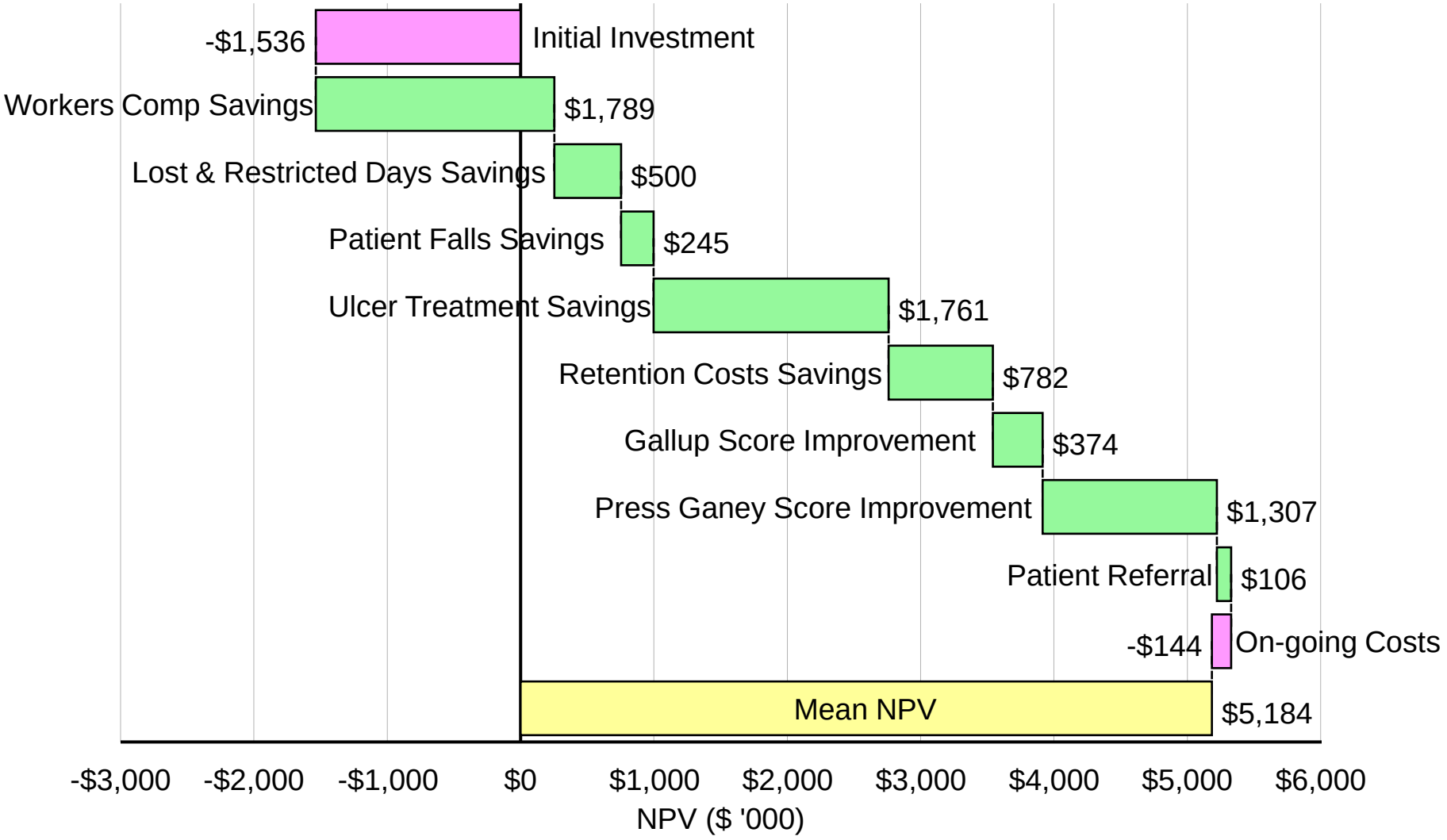




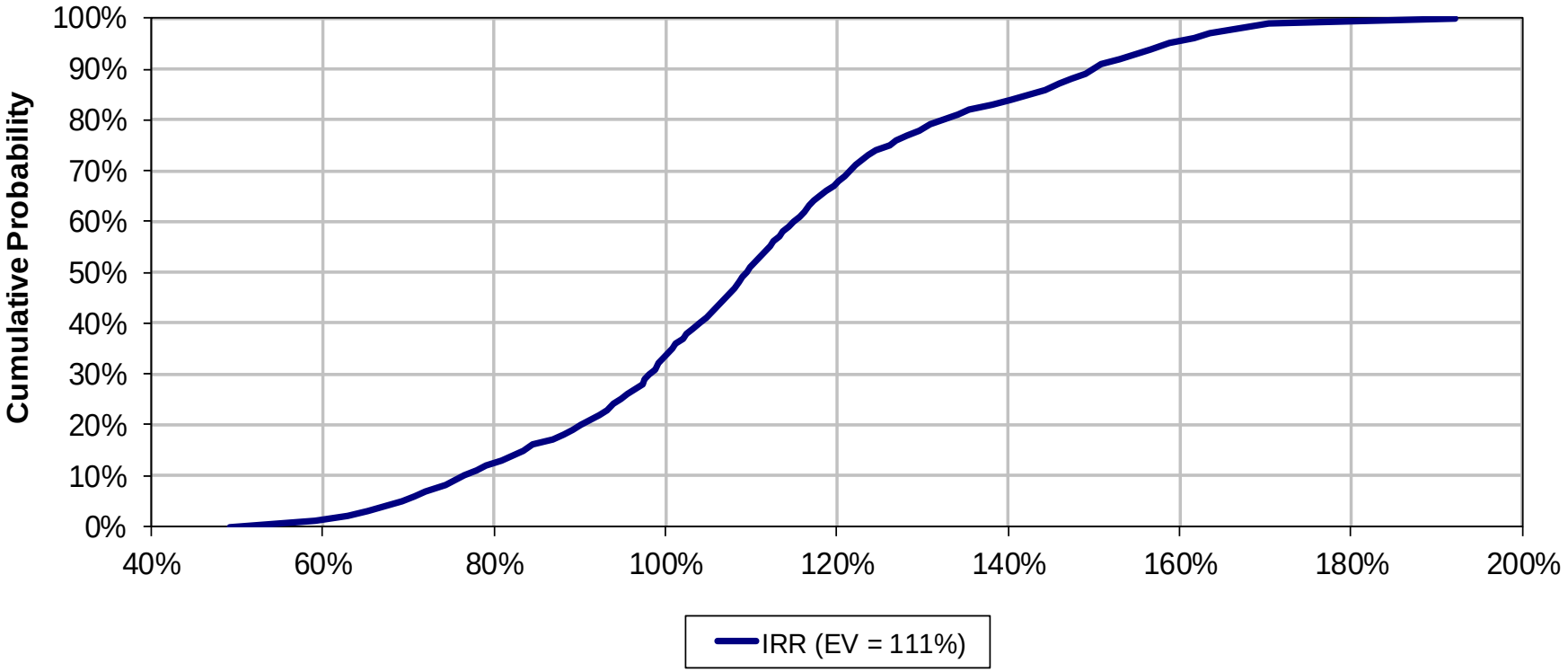
The Tornado Chart Shows the Key Drivers for Total Value.



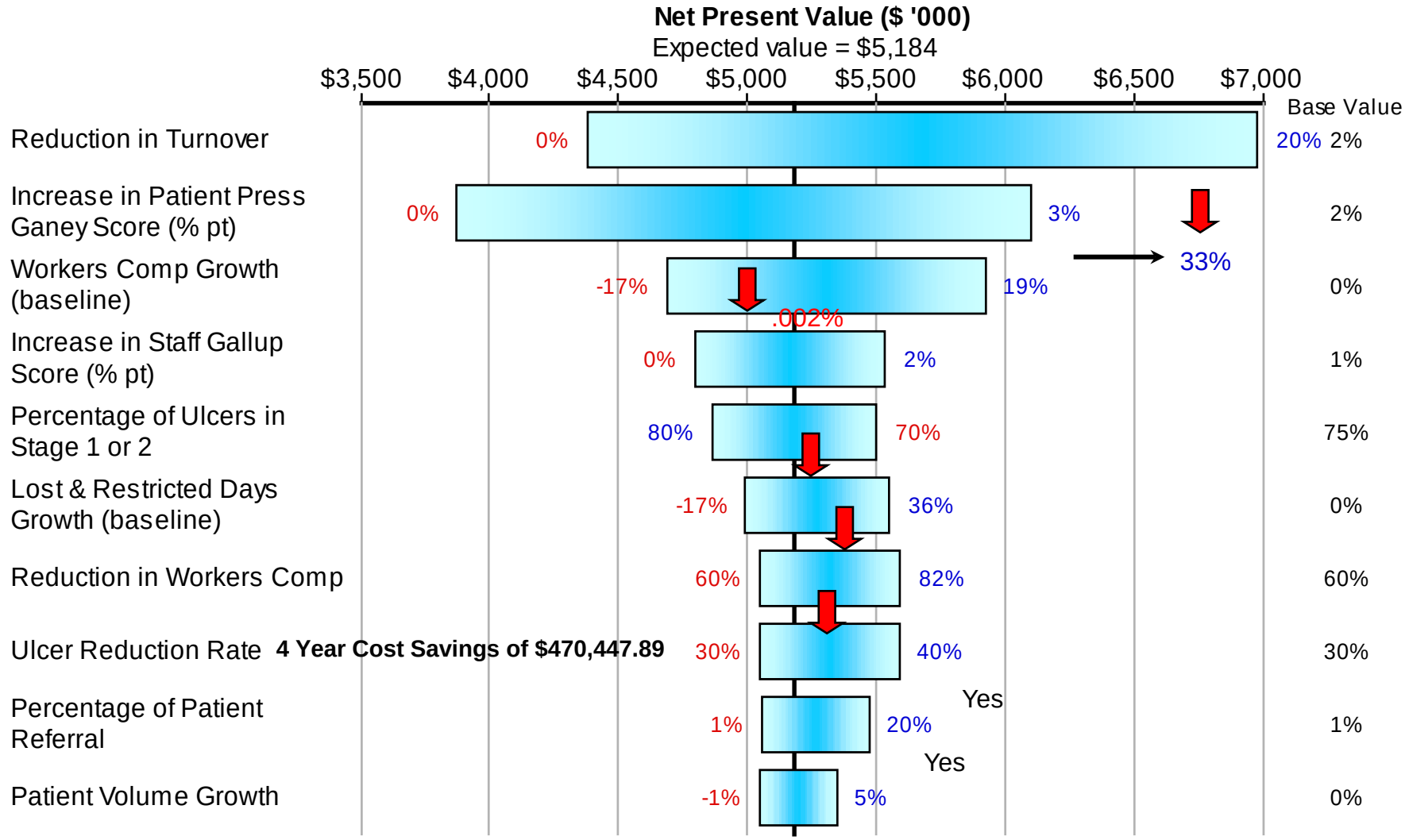
The Waterfall Chart Shows the Breakdown Among Cost and Value Components.



We Look at the Uncertainty in Rate of Return

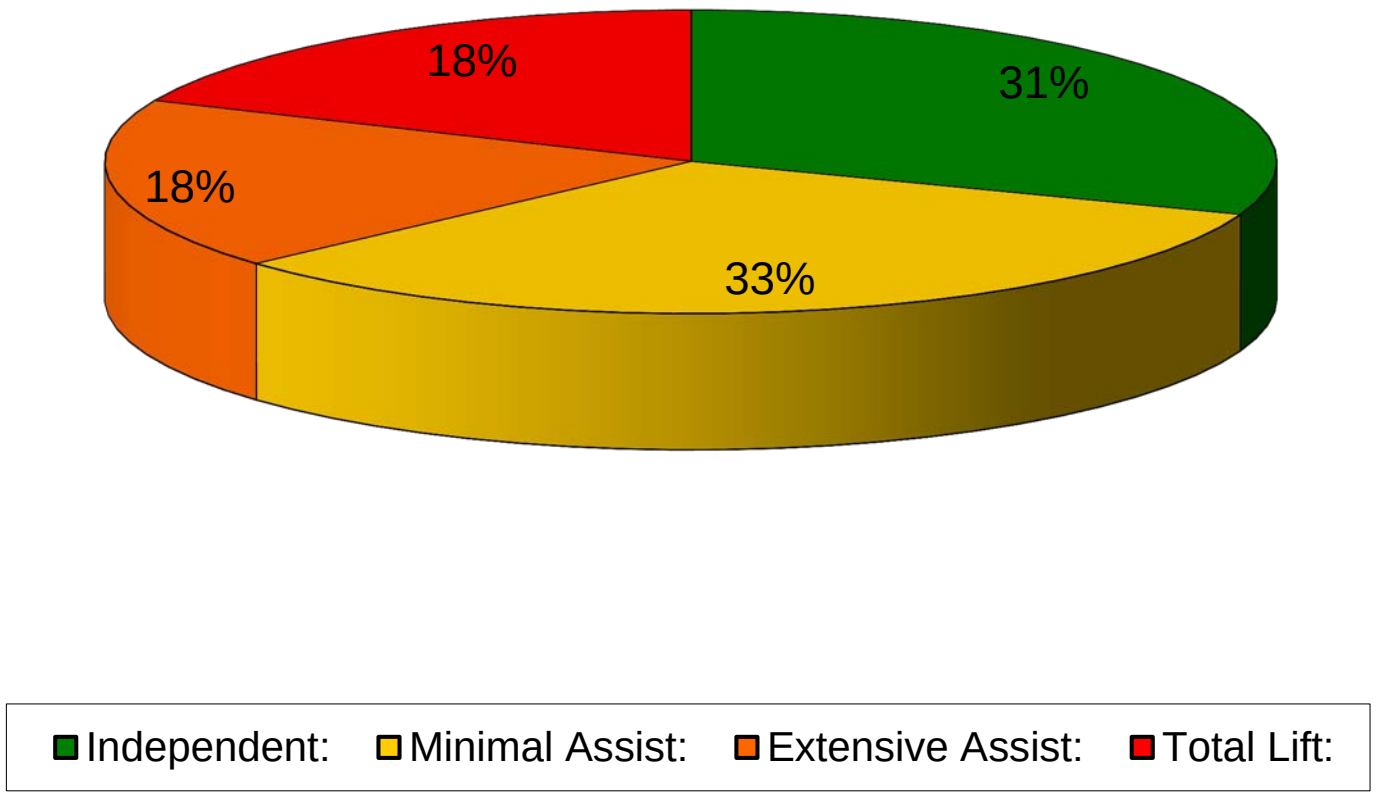


Staff Had to Monitor and React When Results Were Out of Range

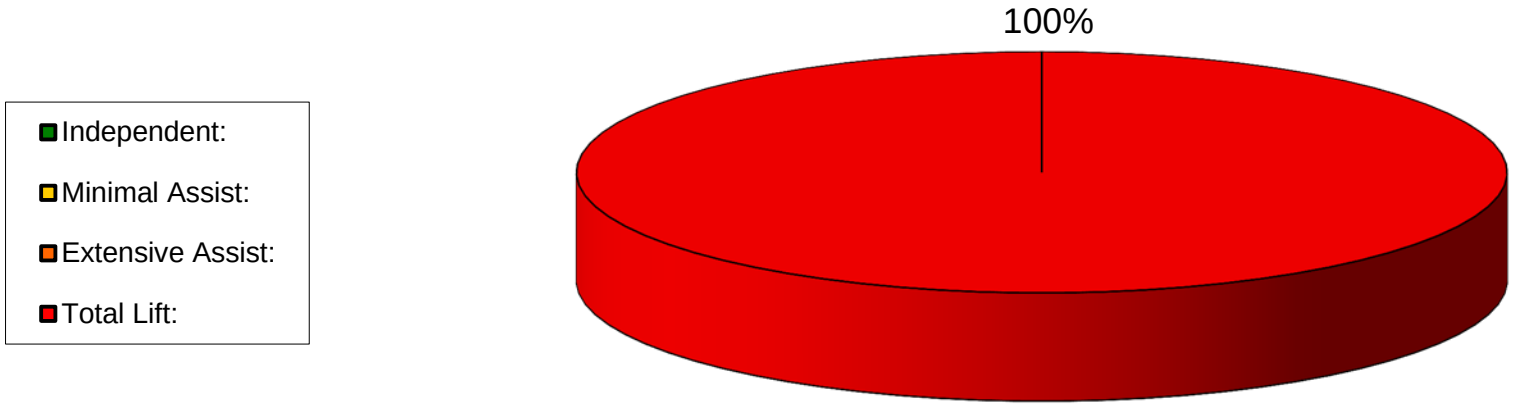


We Needed to Look for Additional Sources of Value When Budget for Ceiling Lifts in the New Stanford Hospital was Slated to be Cut.

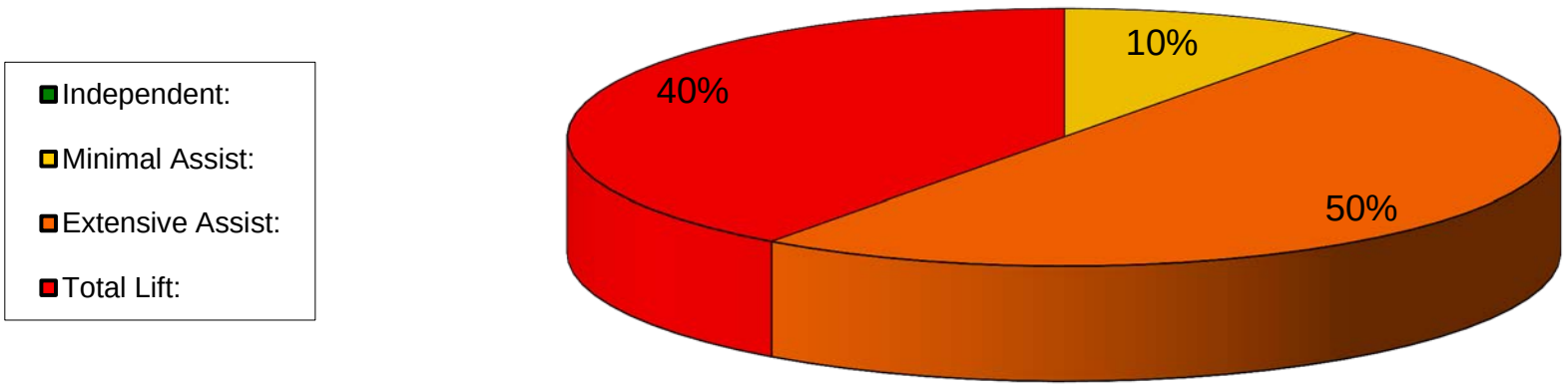
Diligent Mobility Assessments- All SHC



Diligent Inpatient Unit Assessment in E2 ICU



Diligent Inpatient Unit Assessment in North ICU



STANFORD HOSPITAL & CLINICS
Stanford University Medical Center

Patient Lift System - Estimate for Stanford's New Hospital

High Risk Area Coverage	Coverage of ICU beds Only

Number of Beds Room Type
122 ICU Beds

Typical Patient Lift System Cost

$6,500	Traverse Lift System
$4,500	Budget for Installation of Lift System and supports
$6,400	Budget for Structural Engineering and Supplemental Steel
$17,400	

122 Rooms x $17,400 =	$2,122,800	
Sling Budget =	$500,000	
Mobile Lifts =	$116,000	Sit to Stands (29 @ $4,000 ea.)
	$148,200	Total Lifts (26 @ $5,700 ea.)
Total =	$2,887,000	

Assume 2 mobile lifts for every 10 non-ICU beds, 3 sit to stands for ICU.

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Patient Lift System - Estimate for Stanford's New Hospital

High Risk and Expanded Coverage	100% ICU Coverage and 50% of swing beds

Number of Beds	Room Type
122	ICU Beds
132	Acute Care Universal Beds (M/S or IICU)

Typical Patient Lift System Cost

$6,500	Traverse Lift System
$4,500	Budget for Installation of Lift System and supports
$6,400	Budget for Structural Engineering and Supplemental Steel
$17,400	

254 Rooms x $17,400 =	$4,419,600	
Sling Budget =	$500,000	
Mobile Lifts =	$84,000	Sit to Stands (21 @ $4,000 ea.)
	$102,600	Total Lifts (18 @ $5,700 ea.)
Total =	$5,106,200	

Assume 2 mobile lifts for every 10 non-ICU beds, 3 sit to stands for ICU, and 2 for every 30 covered by overhead lifts.

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Patient Lift System - Estimate for Stanford's New Hospital

Optimal Risk Reduction	100% coverage of inpatient beds

Number of Beds	Room Type
122	ICU Beds
264	Acute Care Universal Beds (M/S or IICU)

Typical Patient Lift System Cost

$6,500	Traverse Lift System
$4,500	Budget for Installation of Lift System and supports
$6,400	Budget for Structural Engineering and Supplemental Steel
$17,400	

386 Rooms x $17,400 =	$6,716,400.00	
Sling Budget =	$500,000	
Mobile Lifts =	$48,000	Sit to Stands (12 @ $4,000 ea.)
	$51,300	Total Lifts (9 @ $5,700 ea.)
	$7,315,700	

Assume 2 mobile lifts for every 10 non-ICU beds, 3 sit to stands for ICU, and 2 for every 30 covered by overhead lifts.

This Approach Has Been Widely Heralded.

Incorporated in the *2010 Guidelines for the Design and Construction of Health Care Facilities* published by the American Society of Healthcare Engineers (ASHE)
http://www.fgiguidelines.org/interim_pubs.html

Safe Patient Handling Best Practices Award - 2010

Value-Driven ERM: Making ERM an Engine for Simultaneous Value Creation and Value Protection

Published in American Society for Healthcare Risk Management Monograph - October 2010

Risk & Insurance Innovator of the Year - 2010

Melinda S. Mitchell, Service and Quality Award - November 2010

Links for more information:

- Write-up in the health care facilities design guidelines: http://www.fgiguidelines.org/interim_pubs.html
- New certificate in Strategic Decisions and Risk Management with an emphasis in health care: http://scpd.stanford.edu/landing/sdrm_health.jsp
- New Stanford Center for Professional Development course in Strategic Risk Management for Health Care: http://scpd.stanford.edu/search/publicCourseSearchDetails.do?method=load&courseId=8160621