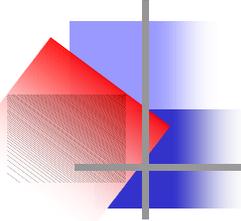


What Will Make Public Performance Reporting More Effective?

Judith Hibbard
University of Oregon

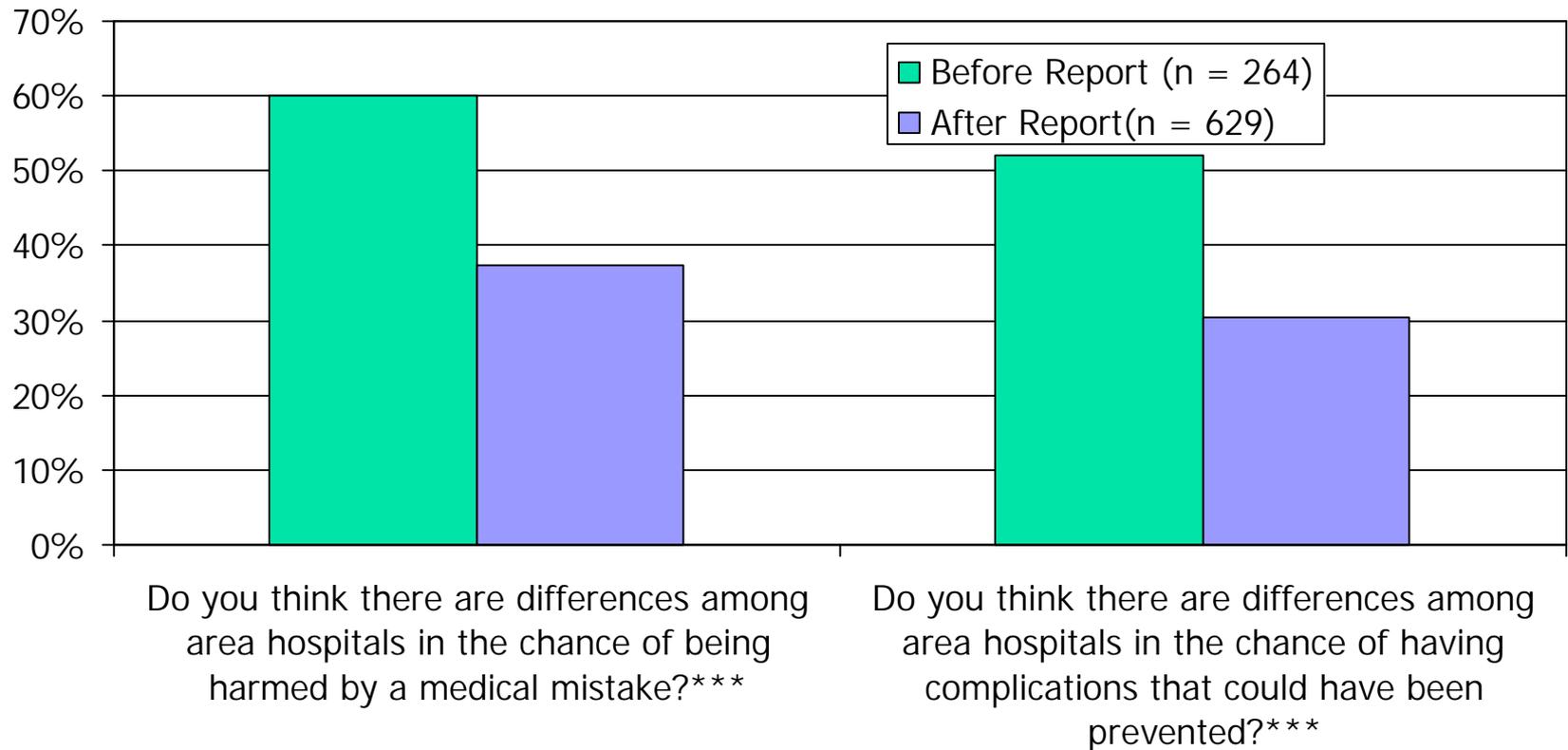
- 
- What will make hospital public performance reports more effective for consumers?
 - What will motivate hospitals to improve?



Key barriers for consumers

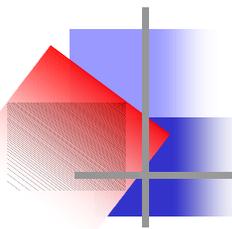
- The invisibility of the quality gap
- The difficulty of using performance reports to inform choice.

Belief that there are NO Differences Among Hospitals: Before and After Report



Negative framing – significantly increases:

- how well the comparative information is understood
- how much it is valued
- how much weight it receives in decisions



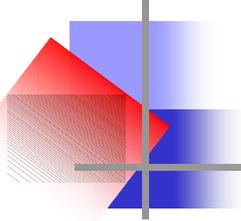
Using comparative information for choice is cognitively complex

- Processing many variables
- Differentially weighting factors
- Making trade-offs

Stroke – Non-Hemorrhagic

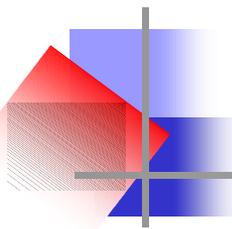
Hospital	Cases	Mortality Rating	Length of Stay	Short Length of Stay		Long Length of Stay		Readmissions		Average Charge
				%	Rating	%	Rating	% for Any Reason	% for Complication or Infection	
Methodist Division/TJUH	97	⊖	6.3	2.2	⊖	13.3	●	17.2	6.2	\$28,516
Montgomery Hosp	146	⊖	4.6	6.5	⊖	3.6	⊖	17.3	5.2	\$14,420
Nazareth	292	⊖	6.2	1.4	⊖	5.0	⊖	16.5	5.0	\$25,127
North Penn	112	⊖	5.3	3.8	⊖	2.9	⊖	10.2	4.1	\$16,386
Palmerton	70	⊖	6.6	1.6	⊖	7.9	⊖	16.5	8.2	\$9,569
Parkview	60	⊖	6.0	5.4	⊖	5.4	⊖	28.4	8.3	\$25,048
Pennsylvania	83	⊖	5.7	8.9	⊖	7.6	⊖	10.8	4.6	\$29,486
Phoenixville	75	⊖	4.7	4.4	⊖	1.5	⊖	10.9	4.6	\$16,771
Pottstown Memorial	135	⊖	4.6	4.7	⊖	2.3	⊖	10.3	1.5	\$16,782
Pottsville Warne Clinic	100	⊖	7.6	4.7	⊖	18.6	●	15.1	8.6	\$10,115

● Significantly higher than expected, ⊖ Not significantly different than expected, ○ Significantly lower than expected



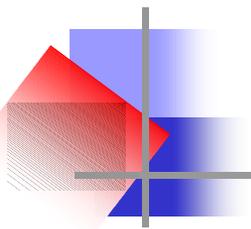
The dilemma

- Quality problem is invisible
- Using reports is hard work
- Why take the time and effort?



How to Make Reports More Effective?

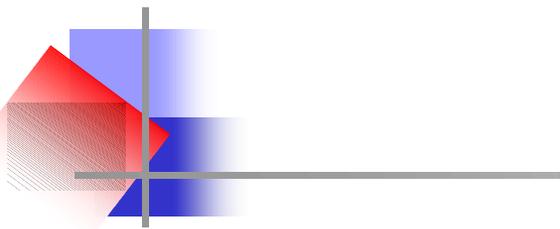
- Findings from controlled lab studies
- Applied those findings in designing a public report
- Evaluated the impact of the public report on consumers and Providers



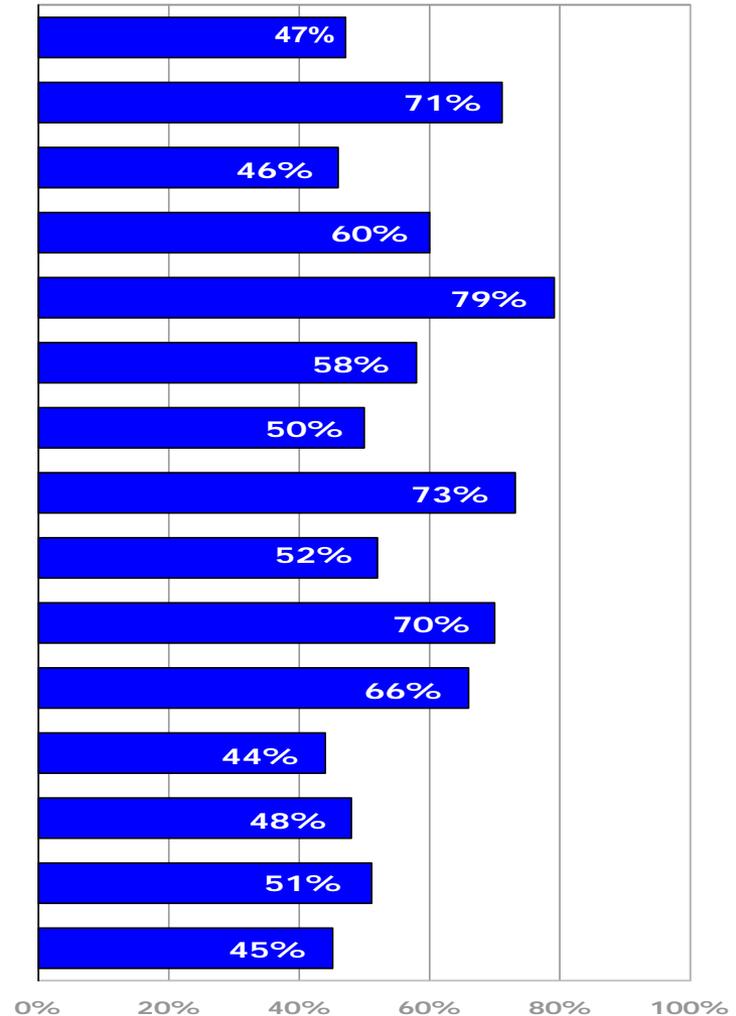
Tested the Effect of making data more evaluable: Does reducing the cognitive burden increase use of information?

- Evaluable: Information is more likely to be used if:
 - it is easier to map onto a good/bad scale.
 - better and worse options more obvious.
 - People don't have to work hard to figure out what the information means.

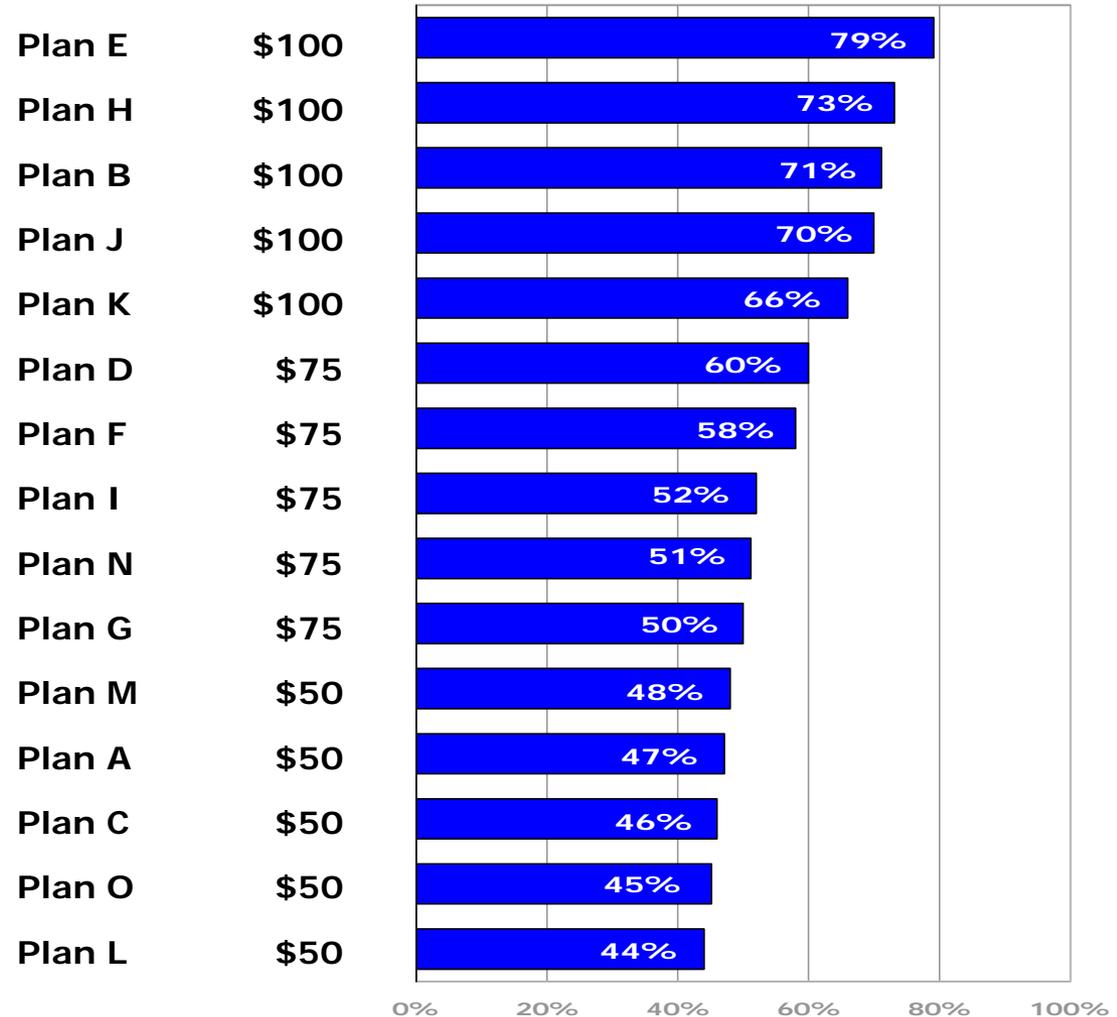
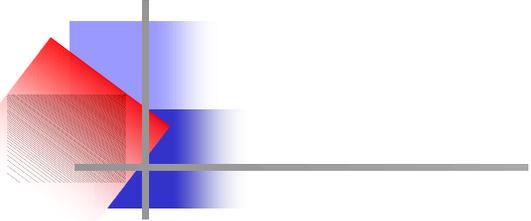
Consumer Satisfaction Ratings & Premium Cost

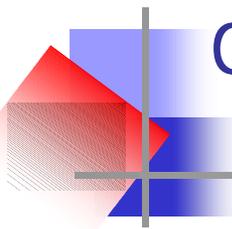


Plan A	\$50
Plan B	\$100
Plan C	\$50
Plan D	\$75
Plan E	\$100
Plan F	\$75
Plan G	\$75
Plan H	\$100
Plan I	\$75
Plan J	\$100
Plan K	\$100
Plan L	\$50
Plan M	\$50
Plan N	\$75
Plan O	\$50



Consumer Satisfaction Ratings & Premium Cost





Applying what we learned to the design of a Public Report

- The Alliance produced and disseminated a report on 24 hospitals in S. Central WI
- Report rated hospitals on complications and deaths
- administrative data-- risk adjusted by MedStat
- Public report widely disseminated Fall 2001.
 - Employees of The Alliance member companies
 - Inserted in Newspaper
 - Newspaper stories
 - Community groups/ library/Website

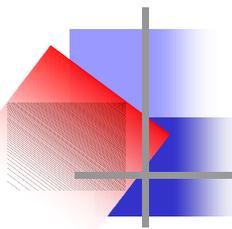
What the symbols mean:

⊕ Fewer mistakes, complications and deaths than expected

○ Average number of mistakes, complications and deaths

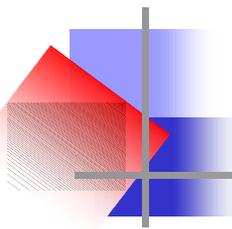
⊖ More mistakes, complications and deaths than expected

Regional Hospitals	Surgery	Non-Surgery	Hip/Knee	Cardiac	Maternity
Hospital A	⊕	⊕	⊕	⊕	○
Hospital B	⊕	⊕	⊕	○	○
Hospital C	⊕	⊕	⊕	○	⊖
Hospital D	⊕	⊖	⊕	⊖	*
Community Hospitals	Surgery	Non-Surgery	Hip/Knee	Cardiac	Maternity
Hospital F	⊕	⊕	⊕	○	⊕
Hospital G	⊕	⊕	⊕	⊕	○
Hospital H	⊕	⊕	⊕	○	○
Hospital I	⊕	⊕	⊕	○	○
Hospital J	⊕	⊕	⊕	○	○
Hospital K	⊕	⊕	⊕	○	○
Hospital L	⊕	⊕	⊕	⊕	⊖
Hospital M	⊕	⊕	○	○	*
Hospital N	⊕	⊕	⊕	○	⊖
Hospital O	⊕	⊕	⊕	⊖	○
Hospital P	○	⊕	⊕	○	*
Hospital Q	⊕	○	○	○	*



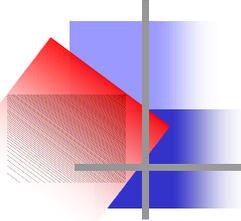
Evaluation of the impact of the report on consumers

- **Surveyed Prior to distribution of report:**
 - Alliance Member Employees
 - Community members (RDD sample)
- **Surveyed after the distribution of report:**
 - Employee panel
 - RDD panel
 - RDD post only



An evaluable report has the potential to create a viral effect:

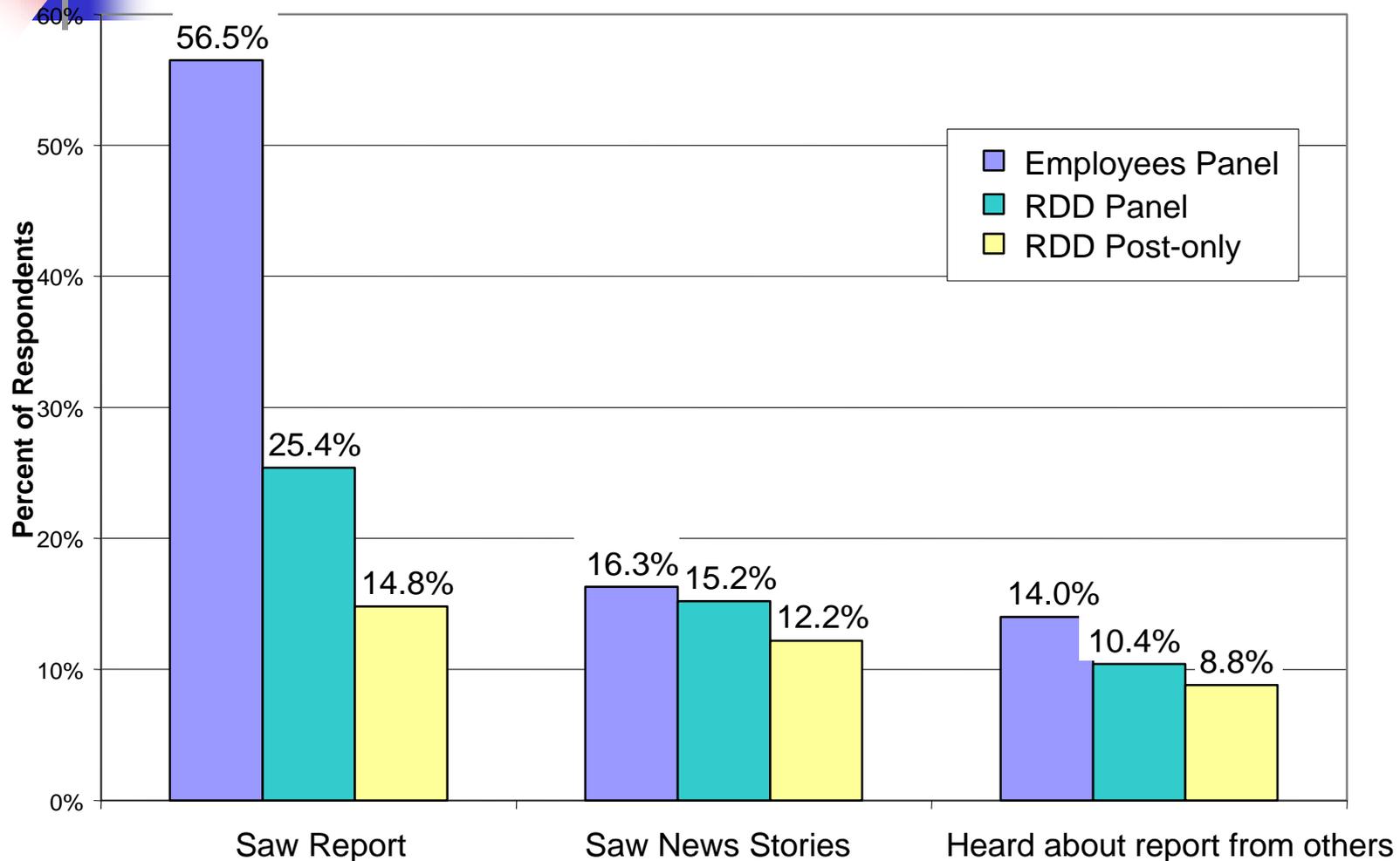
- Consumers may retain an impression of which are better and worse options
- Discuss impressions with others
- Make recommendations based on these new impressions
- Create a new shared view about better and worse hospitals



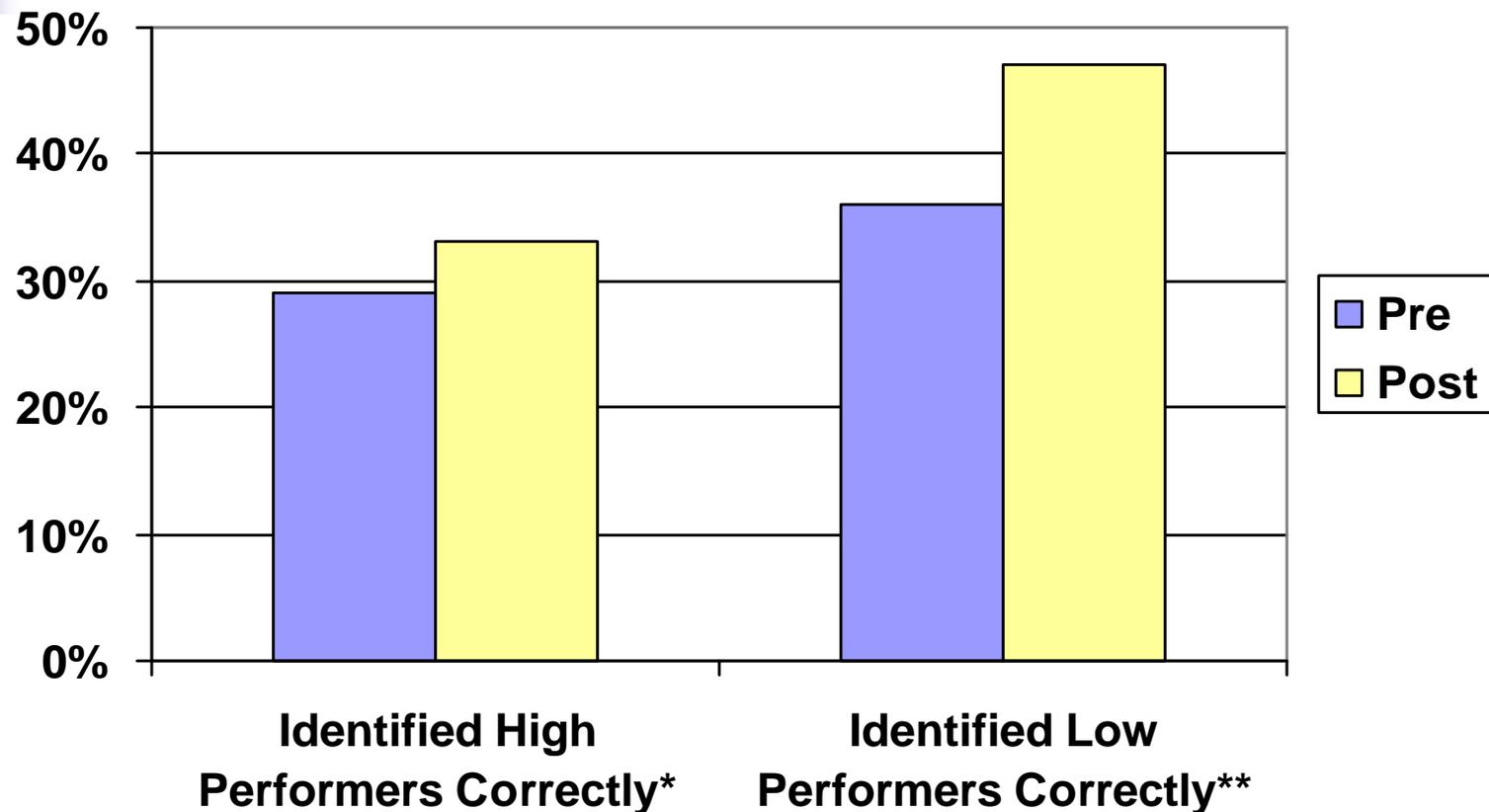
Questions

- Did consumers come away with:
- An overall impression that there are better and worse hospitals?
 - Are impressions about which hospitals are better remembered?
 - Did they discuss the report with others?

Percentage of Respondents Who Saw the Report, Saw News Stories about the Report, or Heard about the Report from Others.

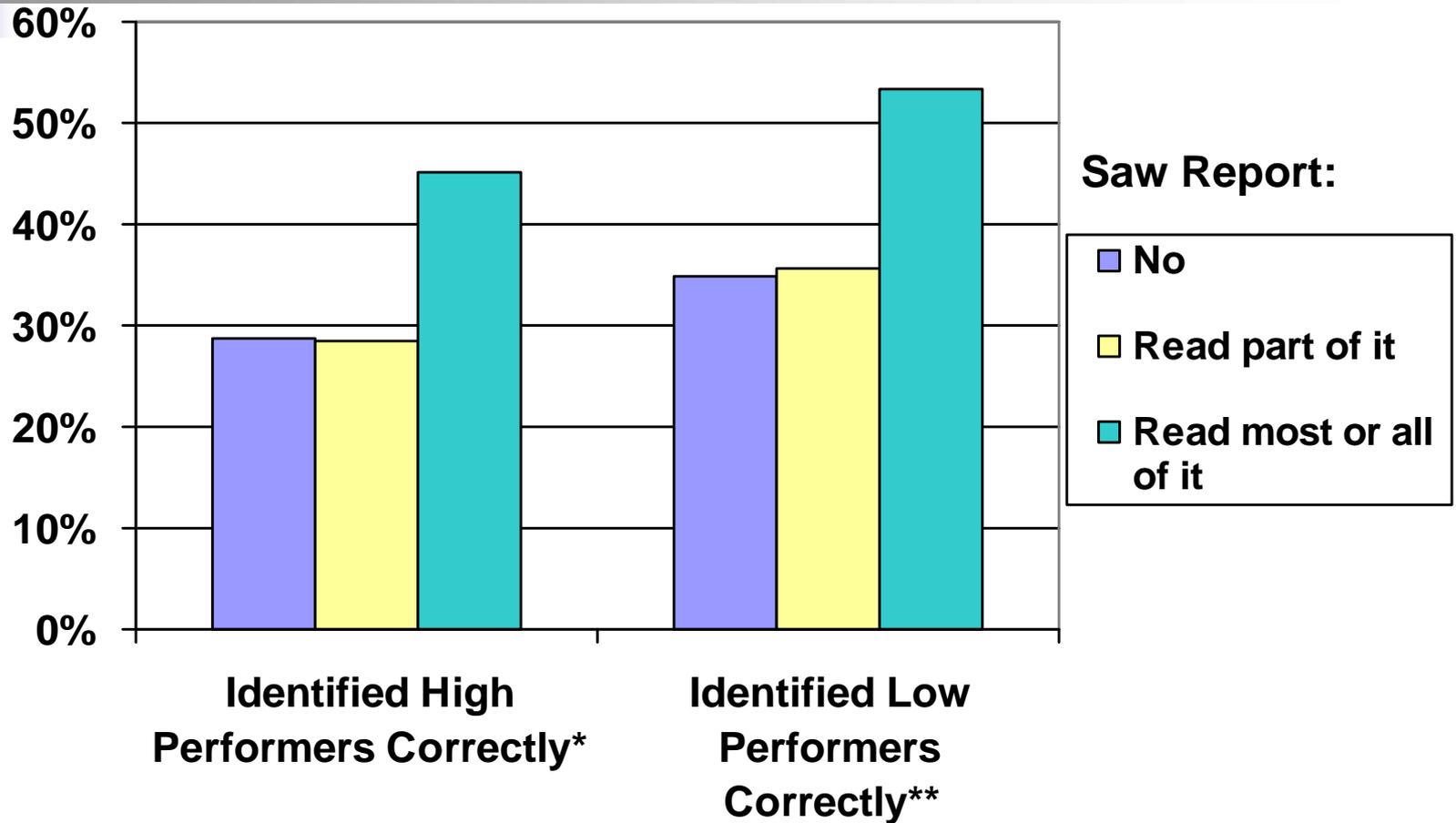


Consumers Identify Higher and Lower Performing Hospitals Prior to and After the Release of the Report



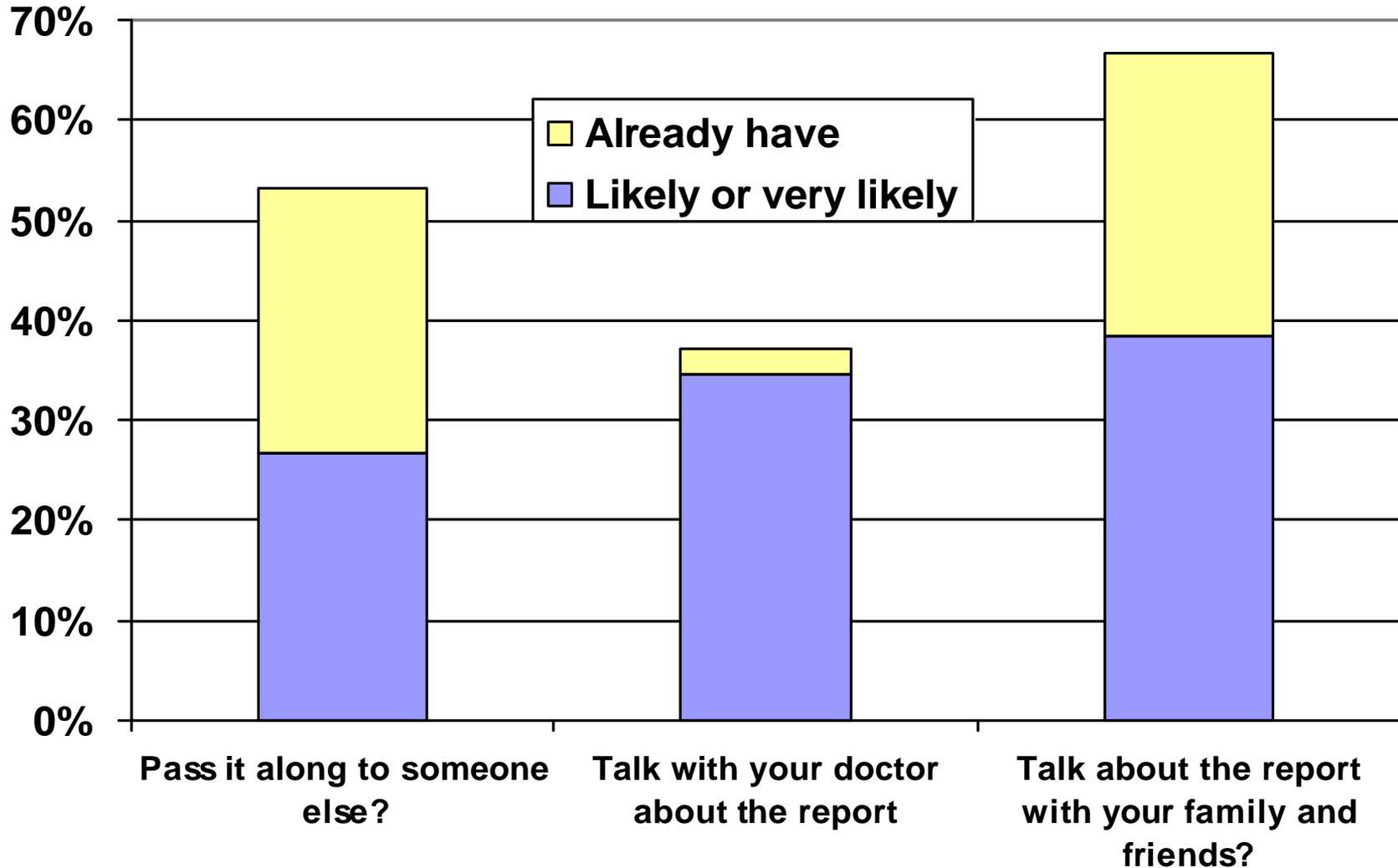
* $p < .05$, ** $p < .01$

Consumer Attention to Report and Their Ability to Identify High and Low Performing Hospitals at Post

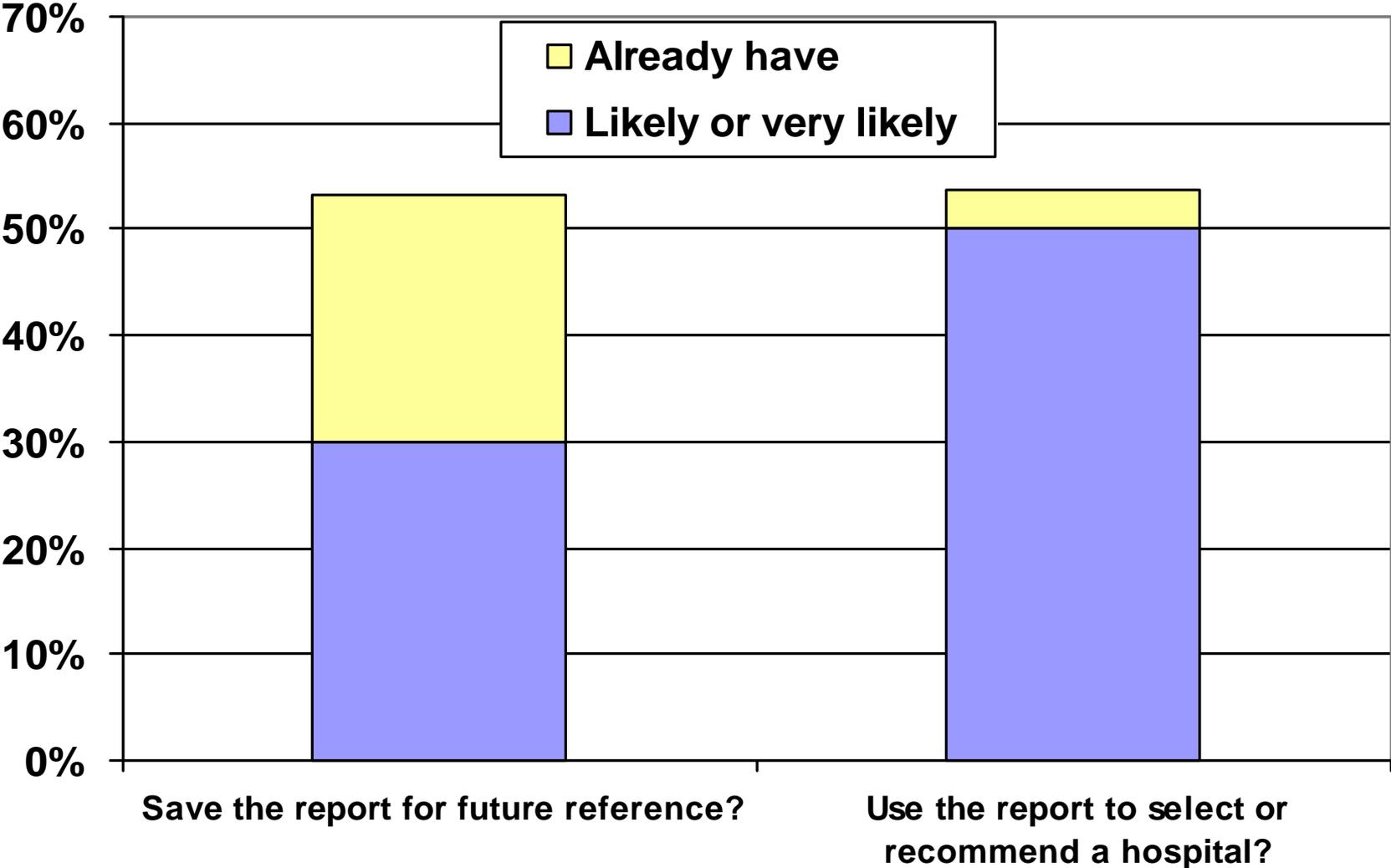


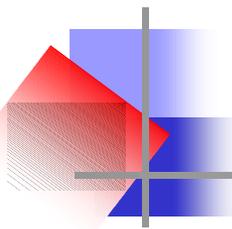
KEY: * $p < .05$, ** $p < .01$, $n = 160$

Discuss the Report with Others



How Consumers Who Saw the Report Plan to Use It





Impact of the Report on Consumers

- When the report was viewed it did influence consumer's views and behaviors
- Some evidence for a viral effect
- Also evidence the report increased hospital motivation to improve.

Impact of report on Hospitals: Experimental Design

115 Eligible Hospitals
in Wisconsin

24 Alliance service
area (Hospitals In
Public Report)

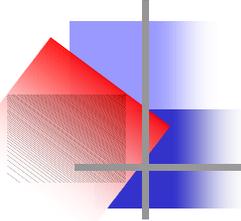
91 Non-Alliance
Hospitals

Random Assignment

46 No
Report
Hospitals

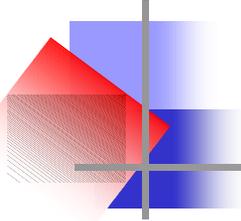
45 Private
Report
Hospitals*

* Three hospitals were lost to closure and two hospitals were ineligible due to overlapping administrative structures



Research Questions:

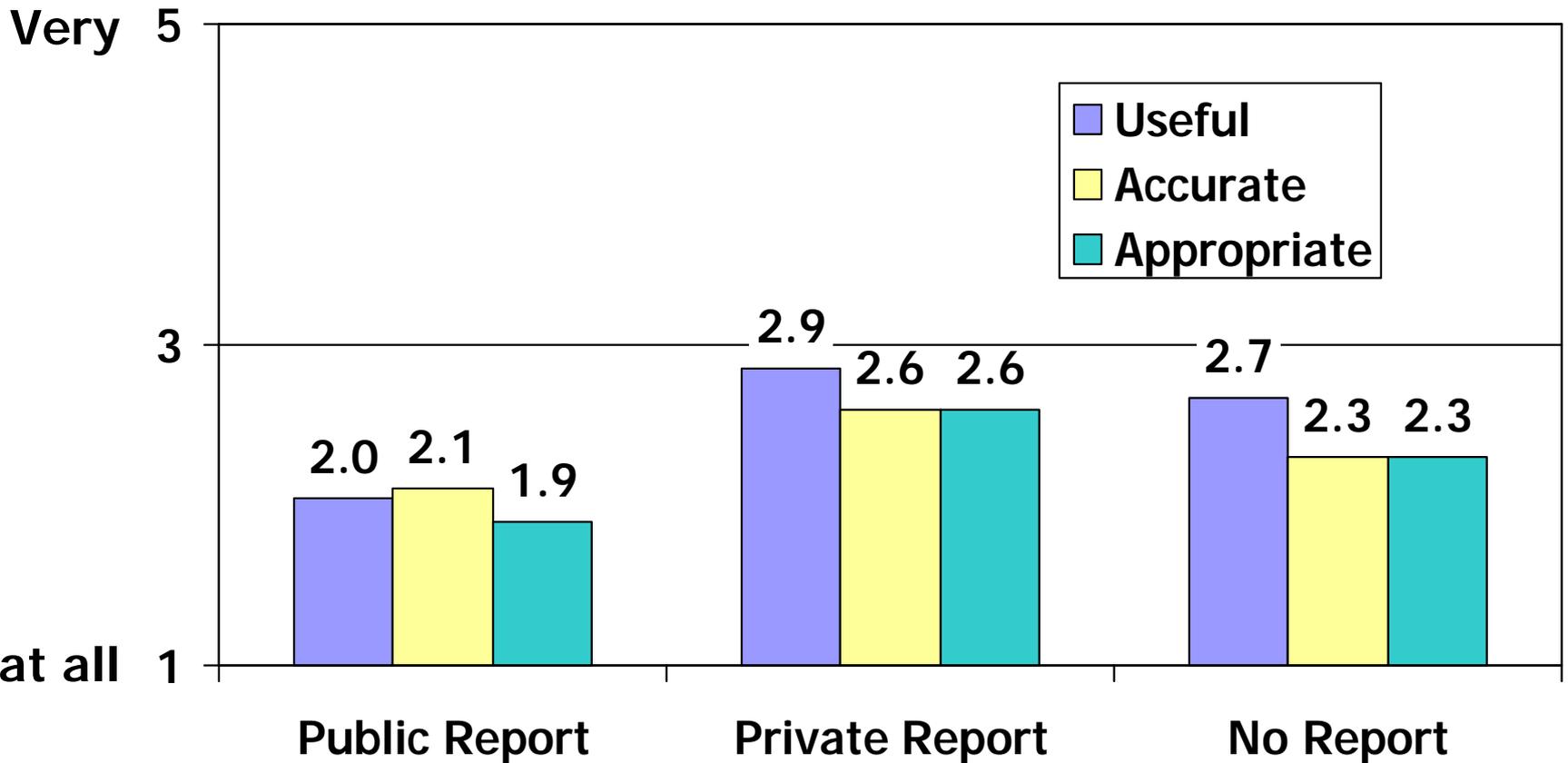
- Does Making Performance Public Increase:
 - Concerns about public image & Market share?
 - QI efforts within areas reported upon? Are QI efforts greatest among those with lower performance scores?
 - To what degree do 'private reports' stimulate QI activities?



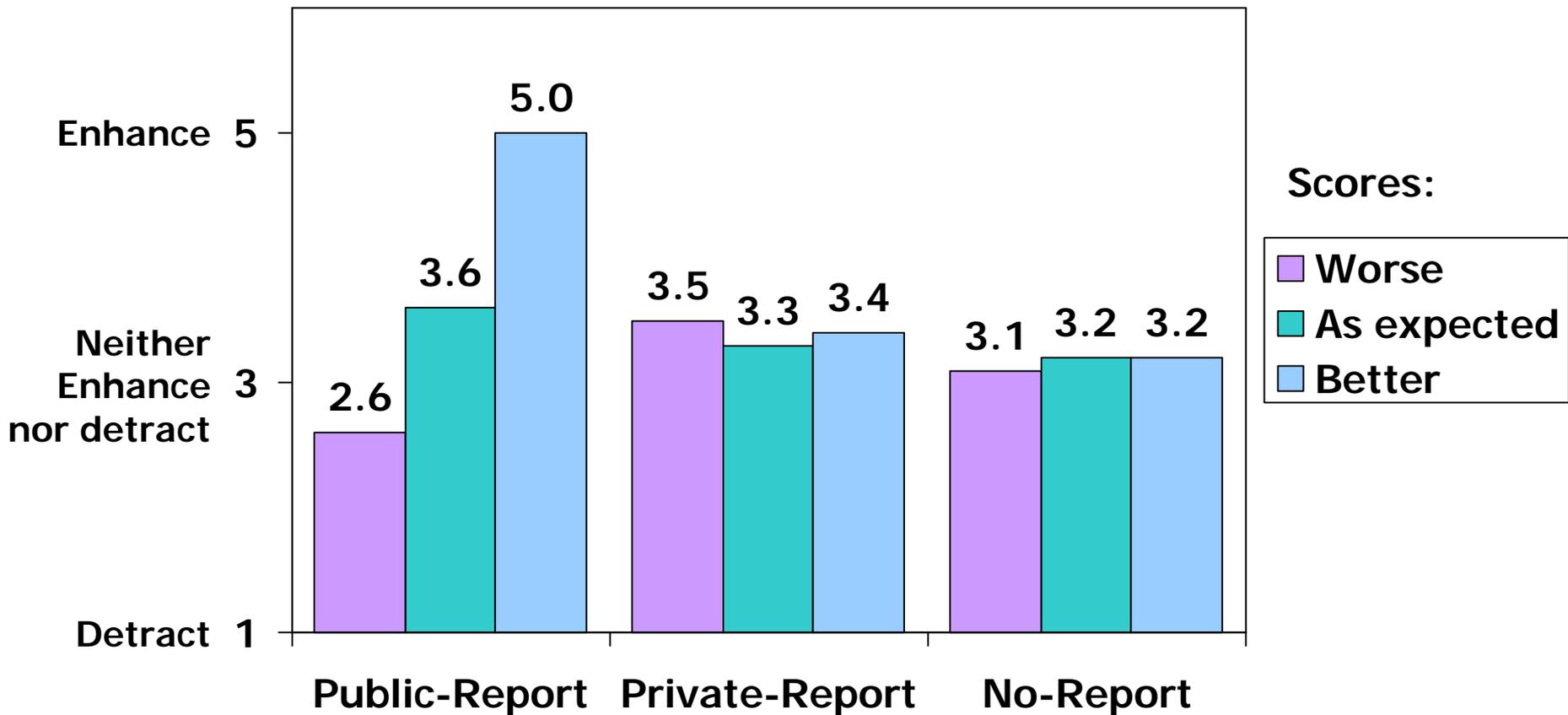
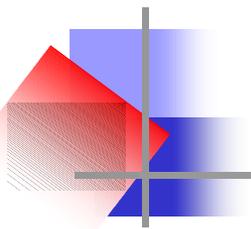
Survey of Hospitals May 2002

- Hospitals in all three conditions surveyed
- Web-based survey with phone follow-up
- Respondents were: CEO, Med Dir, QI Dir
- Respondents not in the public report hospitals were sent a copy of the report

Attitude: How useful, accurate or appropriate for public use is the information?

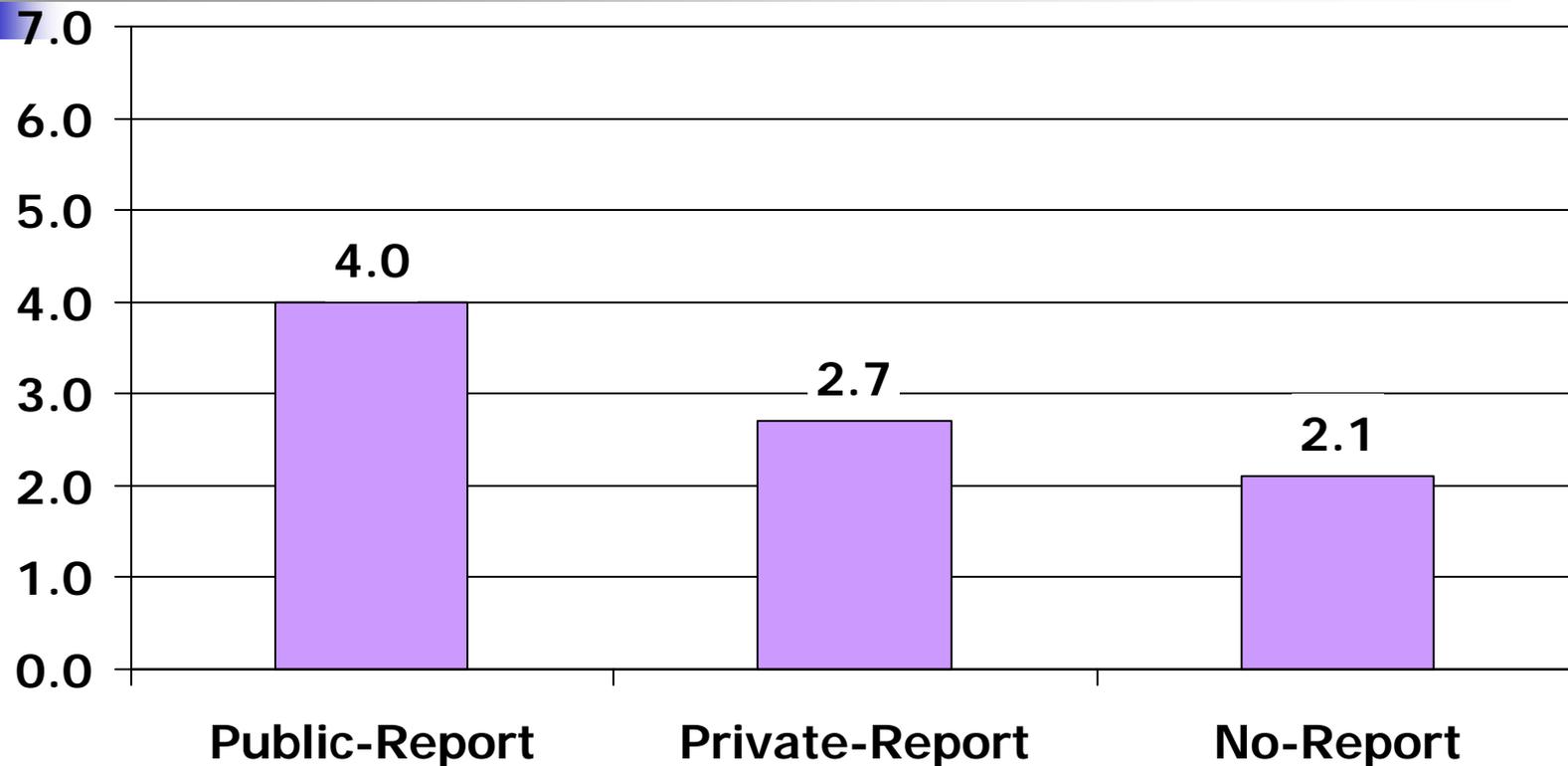


Belief: Likelihood that the report would affect their hospital's public image (N = 79)



Main effects, $p < .05$, interaction effects, $p < .05$

Average number of quality improvement activities to reduce obstetrical complications: **Public report group has more QUALITY IMPROVEMENT** ($p < .01$, $n = 93$)

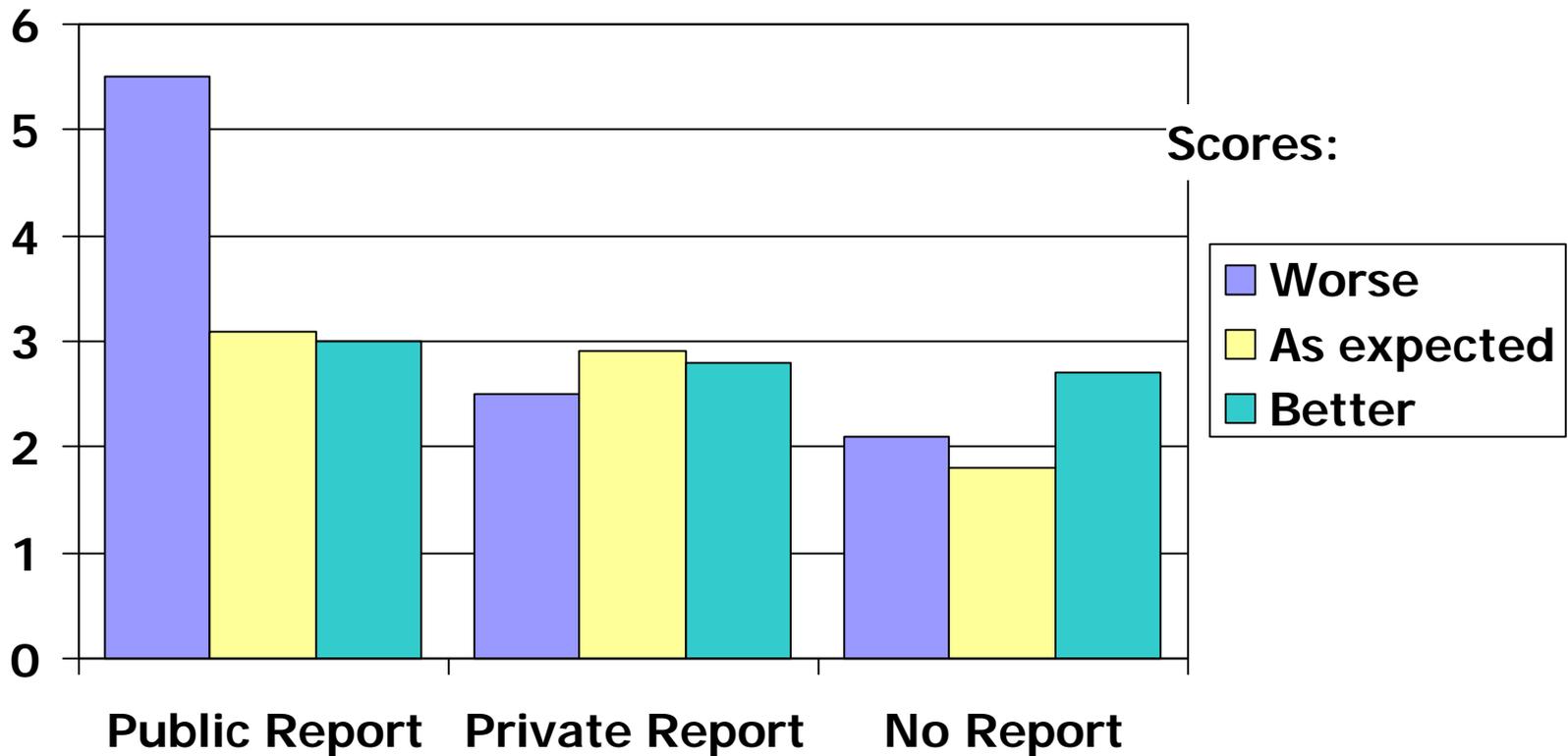


Best practices around c-sections
Best practices around v-bacs
Reducing 3rd or 4th degree laceration

Reducing hemorrhage
Reducing pre-natal complications
Reducing post-surgical complications
Other

Average number of OB QI activities:

Public report group with poor scores have significantly more QI activities (n = 93)

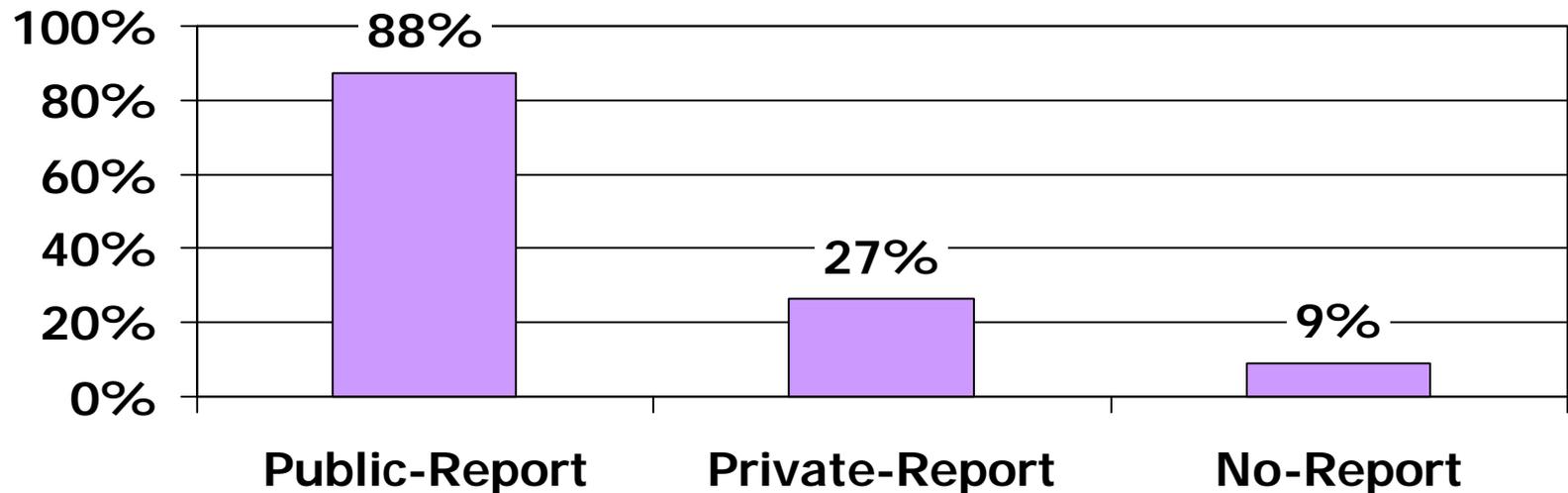


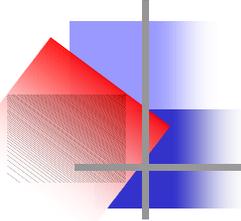
Main effect, $p < .01$, interaction, $p < .05$

Hospitals with poor OB score: **Public report**

group have more QI on reducing hemorrhage – a key factor in the poor scores ($p < .001$, $N=34$)

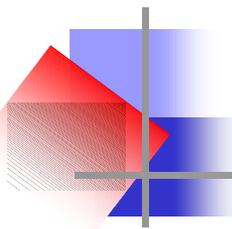
Percentage of hospitals with quality improvement activities in reducing hemorrhage





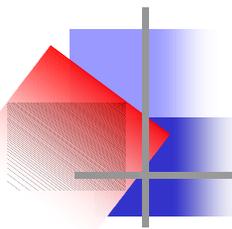
Making Performance Public:

- More QI is stimulated when reporting is public– *above what is stimulated by a private report.*



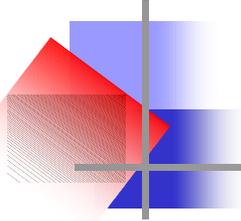
Hypothesized Essential Elements for an Effective Public Report

- Widely disseminated
- Awareness that there will be another public report in the future
- The report must be highly “evaluable”



Reports designed to be Evaluable:

- Raise provider concern about public image and are more likely to motivate providers to improve
- Increases the impact on consumers by making it easier to use information in choice and by creating a viral effect



Dilemma

- **What helps consumers the most—providers resist most strongly**
 - Evaluable reports
 - Negative framing
- As long as reporting is voluntary, providers will influence the way data is presented to consumers—making it less useful and less usable.