

PwC Health Research Institute
Recapturing the Vision*
June 13, 2007

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Report Background

How did we get here?

The pharmaceutical industry faces a crisis of trust.

This crisis has arisen as a result of a combination of missteps and failures by a number of pharmaceutical companies with the high visibility and scrutiny resulting from the industry's financial success.

Several pharmaceutical companies recognized that a continuation of this crisis could adversely affect the sustainability of the industry.

They asked PwC for advice on how to address the resulting reputational risk.

How did we get here?

“There is one great problem that seriously challenges the ability of America’s research-based pharmaceutical companies to continue doing what they do better than any other entity on the globe: research and develop new cures and treatments.

In a word, it is trust.”

Billy Tauzin, president and CEO,
Pharmaceutical Research and Manufacturers of America

How did we get here?

Issues that have hastened the downward trend in industry reputation in recent years include:

- High-profile safety-related product withdrawals and related lawsuits
- Well-publicized regulatory and legal action against manufacturers for fraudulent sales and marketing practices
- Increasing out-of-pocket spending on pharmaceuticals combined with industry profitability is leading to greater consumer demand for answers and accountability.
- Increased burden on government health funds and emerging ethical issues in Europe.
- Concerns over the R&D pipeline and a differing definition of innovation.

Our hypothesis

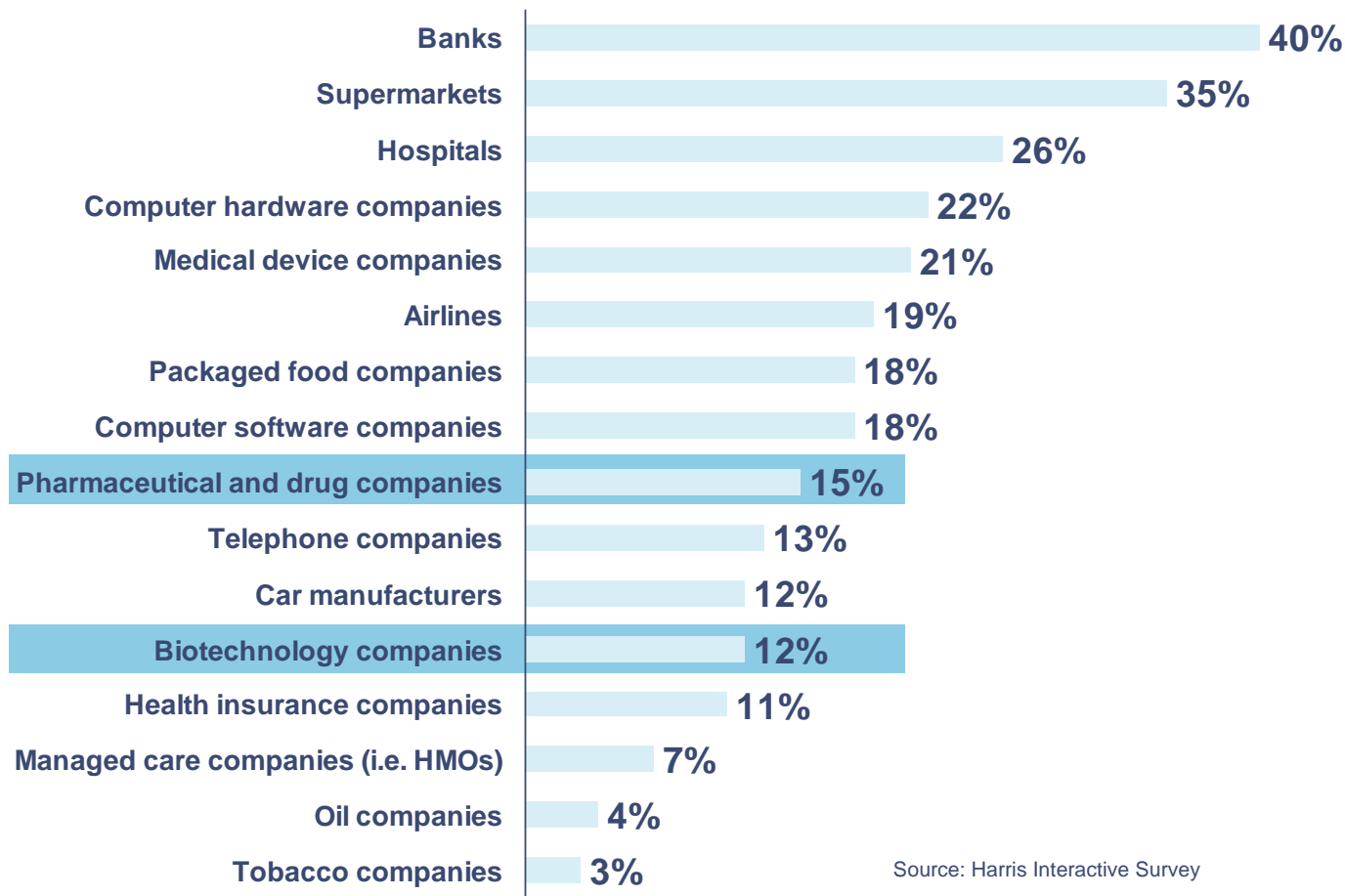
Pharmaceutical industry stakeholders and consumers have lost trust in the industry because they believe that financial success and subsequent pressures have blurred the industry's greater purpose of improving human health.

Reputation-related issues pose an increasingly significant threat to the industry

- Established financial link between reputation and market value
- Danger to the business model due to regulatory and public relations backfire.
- The rise in consumerism in the U.S.

Customer trust is very low on percentage basis...

Percentage of consumers rating each of the following industries as 'honest and trustworthy':



Report Background

...and has declined steadily in absolute terms.

% of those surveyed who think industry serves its customers well

	1997 %	1998 %	1999 %	2001 %	2002 %	2003 %	2004 %	Change since '97
Supermarkets	N/A	N/A	N/A	N/A	N/A	85	87	N/A
Packaged food companies	N/A	N/A	N/A	N/A	N/A	75	77	N/A
Banks	75	72	68	71	74	72	73	-2
Airlines	N/A	78	71	51	63	64	74	-4
Computer hardware companies	80	78	80	78	59	71	73	-7
Computer software companies	80	77	80	80	60	70	72	-8
Hospitals	77	73	71	67	73	73	70	-7
Car manufacturers	70	69	70	67	64	64	68	-2
Telephone companies	80	76	67	61	58	57	56	-24
Life insurance	64	63	61	60	55	56	55	-9
Pharmaceutical and drug companies	79	73	66	57	59	49	44	-35
Oil companies	59	64	55	27	38	42	32	-27
Health insurance companies	55	48	41	38	51	40	36	-19
Managed care companies	51	45	34	29	33	30	30	-21
Tobacco companies	34	32	31	28	25	30	30	-4

Source: Harris Interactive Survey

Our Survey

Population

- Pharmaceutical industry executives
- Consumers
- Industry stakeholders
 - Doctors in physician groups
 - Researchers in academia
 - Former health policy makers
 - Hospital executives
 - Managed care organization executives
 - Employer executives

Focus areas

- Research and Development
- Sales and Marketing
- Product Pricing
- Finance
- Ethics

Note: Given that the trust issue is currently most acute in the US, the survey population is comprised of US residents.

Survey Results

- Strongly supported our hypothesis
- Found significant strategic, reputational, and operational gaps between the pharmaceutical industry's perspectives and priorities and those of the industry's stakeholders.
- Also found that the respondents had incorrect information about a number of key data points that is contributing to the reputation issue.

Survey Findings

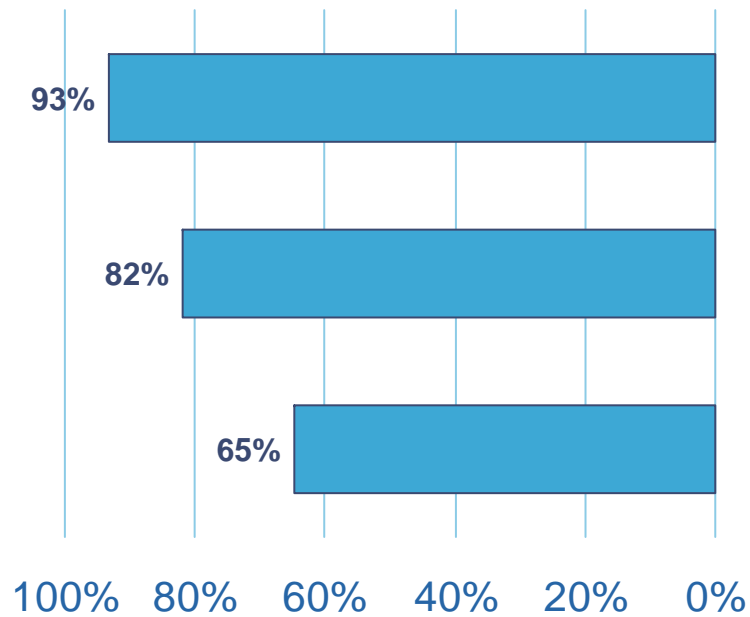
Survey Findings

Stakeholders and consumers have strong negative views of industry activities which differed sharply from those of industry.

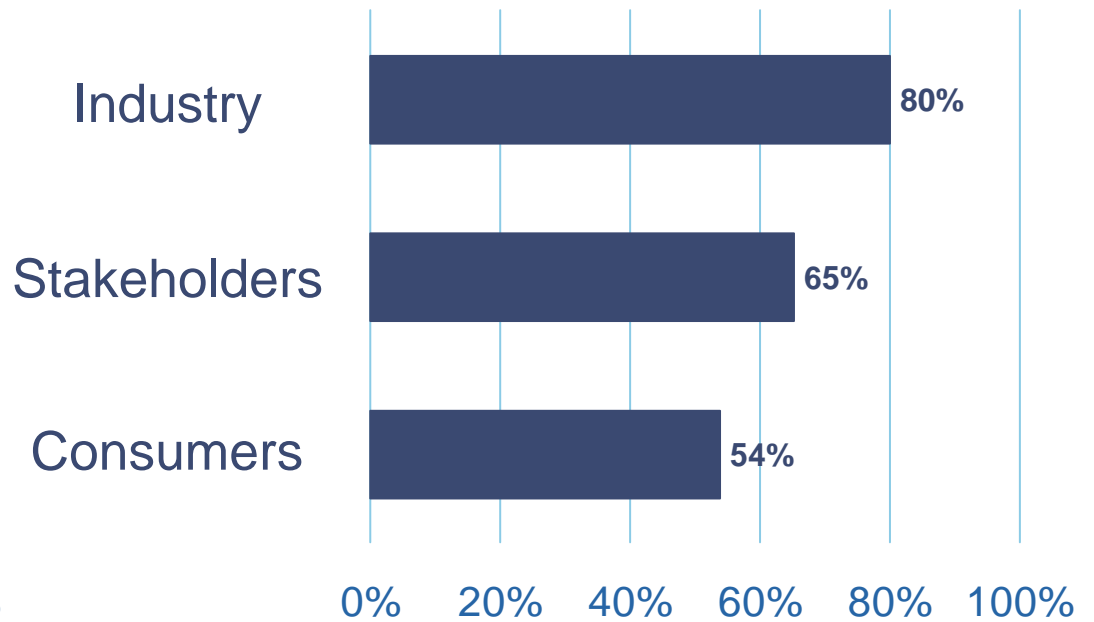
- Largest sales and marketing areas with negative views included the nature and extent of DTC advertising, the focus and cost of marketing to physicians and the influence on prescription decisions, and off-label promotion.
- From the clinical side, the concerns were over completeness of disclosure of clinical trials, and the belief that unmet medical need plays a lesser role in drug development decisions.
- Conflicts and deals with generic manufacturers have raised concerns over brand manufacturer motives.

Overall Industry Ethics

Respondents who agreed that the pharmaceutical industry complies with the **letter** of laws and regulations governing its activities:



Respondents who agreed that the pharmaceutical industry complies with the **spirit** of laws and regulations governing its activities:

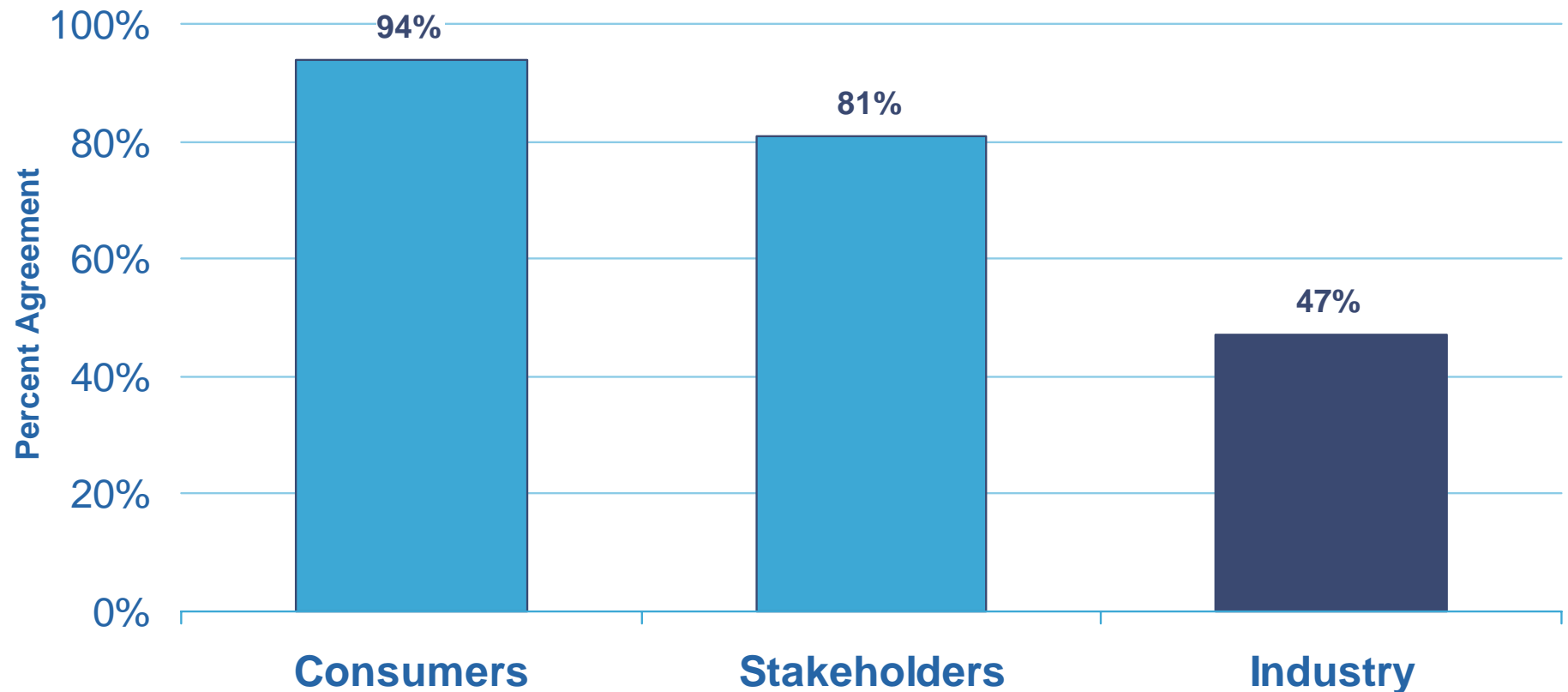


Source: PwC HRI Survey, December 2005

Survey Findings

Beliefs about Marketing Practices

Percent Agreement that Drug Companies Can Be Too Aggressive in Promoting Unapproved Uses

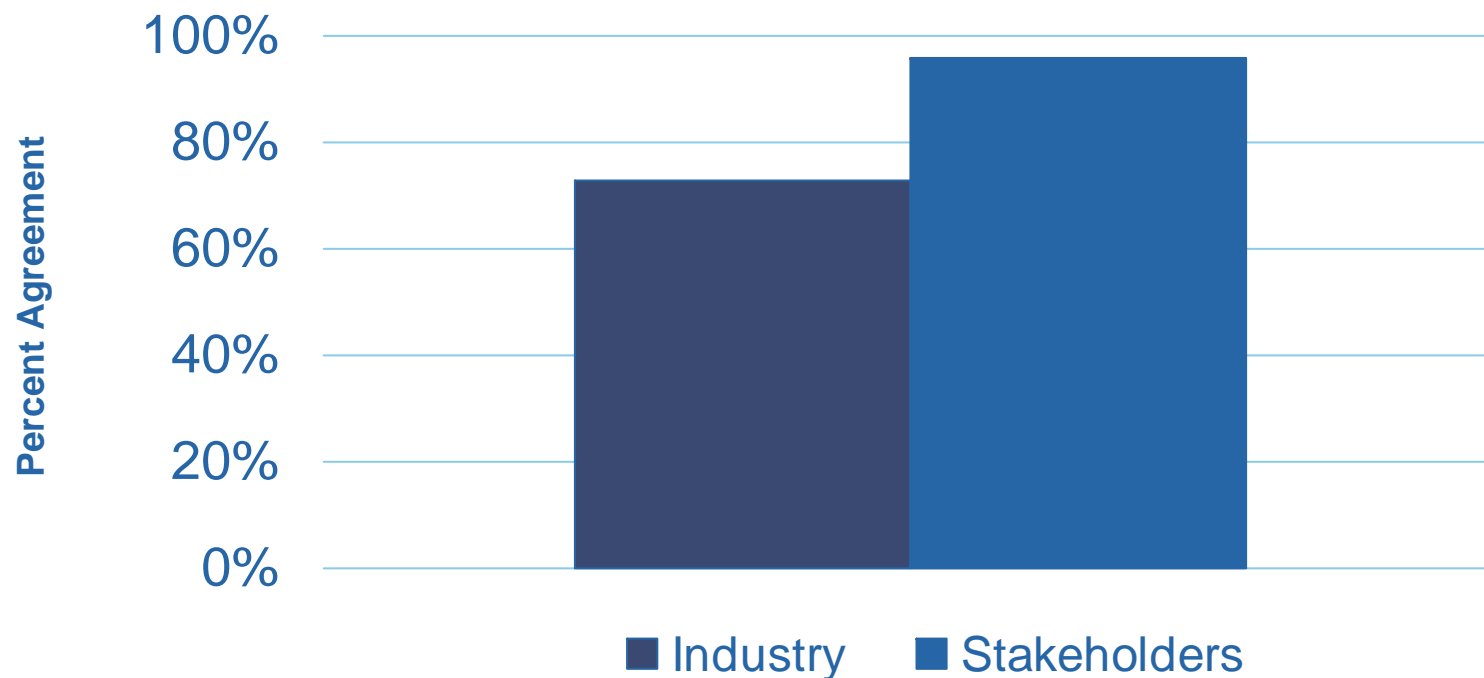


Source: PwC HRI Survey, December 2005

Our Perspective

Beliefs about Research and Development

“Drug companies need to improve transparency in reporting clinical trial results.”

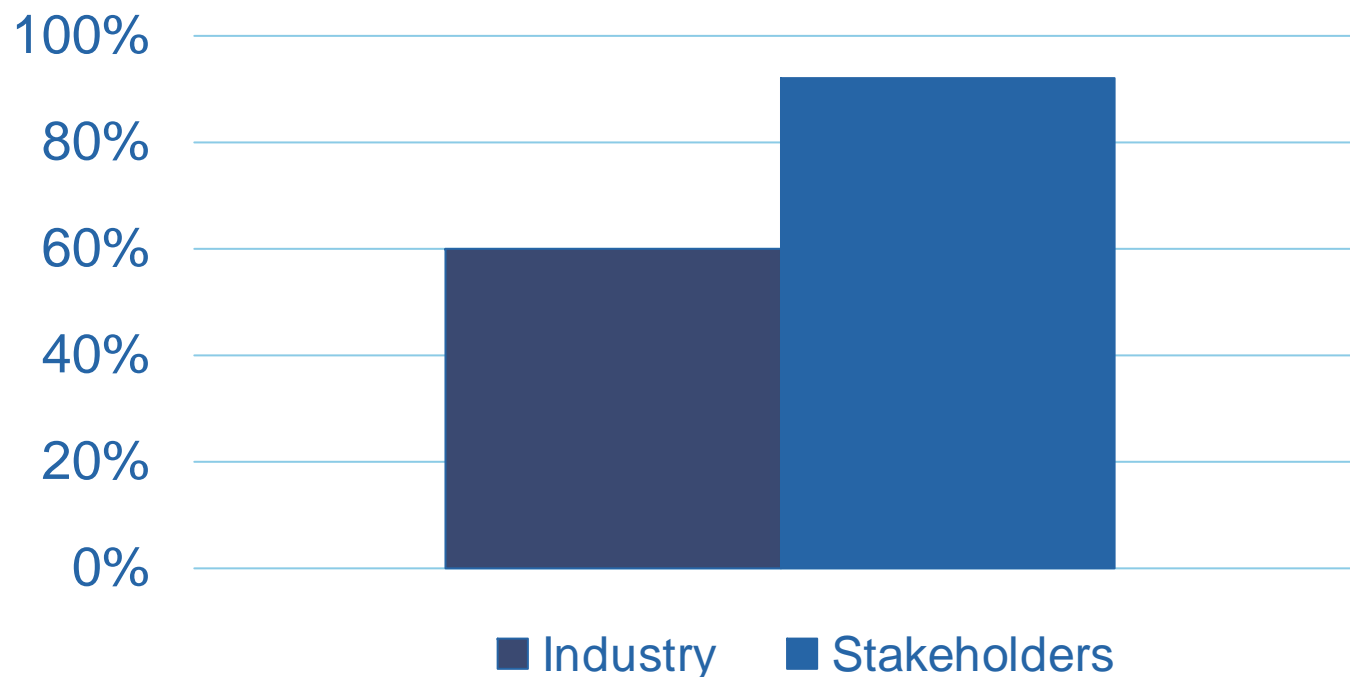


Source: PwC HRI Survey, December 2005

Survey Findings

Beliefs about Research and Development

“Drug companies need to do more to ensure that clinical trial outcomes are reported accurately and completely.”



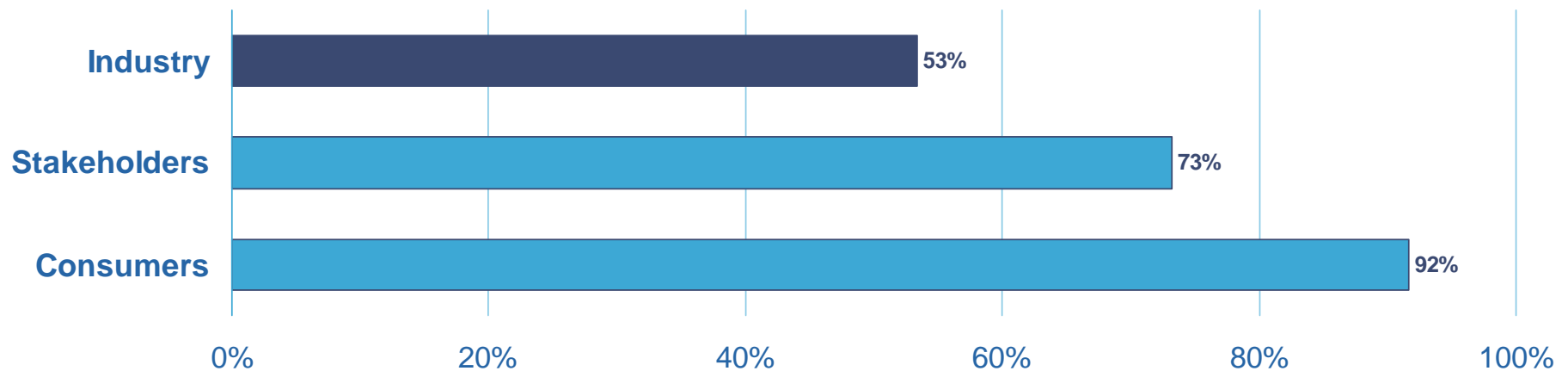
Source: PwC HRI Survey, December 2005

Survey Findings

Interactions with Generic Manufacturers

- Over 7 of 10 stakeholders agree that drug companies expend too many resources in attempts to block generic drugs from competing with their branded products
- Over 9 of 10 consumers agree that drug companies should work with generic drug manufacturers to make generics available at the end of a drug's patent.

Percent Agreement that drug companies spend too much money and effort on attempts to block generic drugs from competing with their branded products



Source: PwC HRI Survey, December 2005

Survey Findings

Misinformation exists in the public which is contributing to the negative image of the industry.

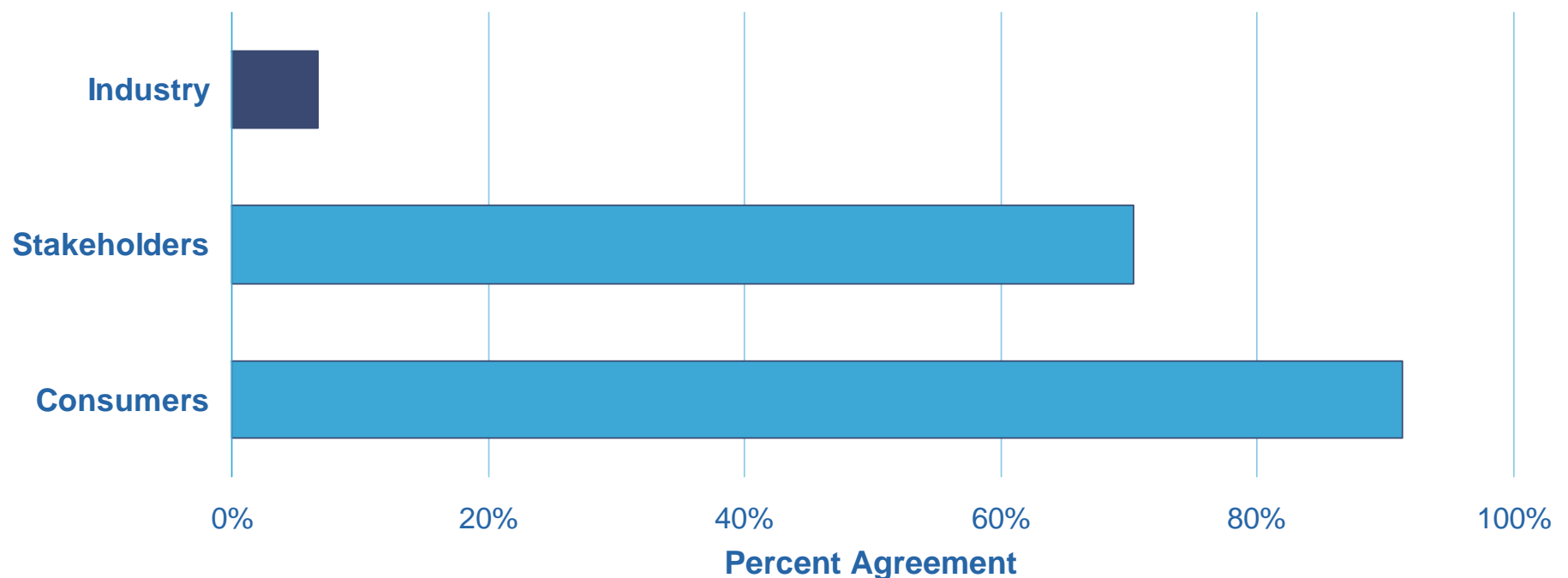
- Significant **under**estimates of cost to bring a new medicine to market.
- Significant **over**estimate of the share of the pharmaceutical cost as a percentage of total healthcare cost.

Survey Findings

Beliefs about Prescription Drug Costs

Over 70% stakeholders and 90% of consumers agree that pharmaceuticals represent too large a percentage of overall US healthcare costs;

13 of 15 Industry execs disagreed, and one industry respondent said s/he “Doesn’t Know.”

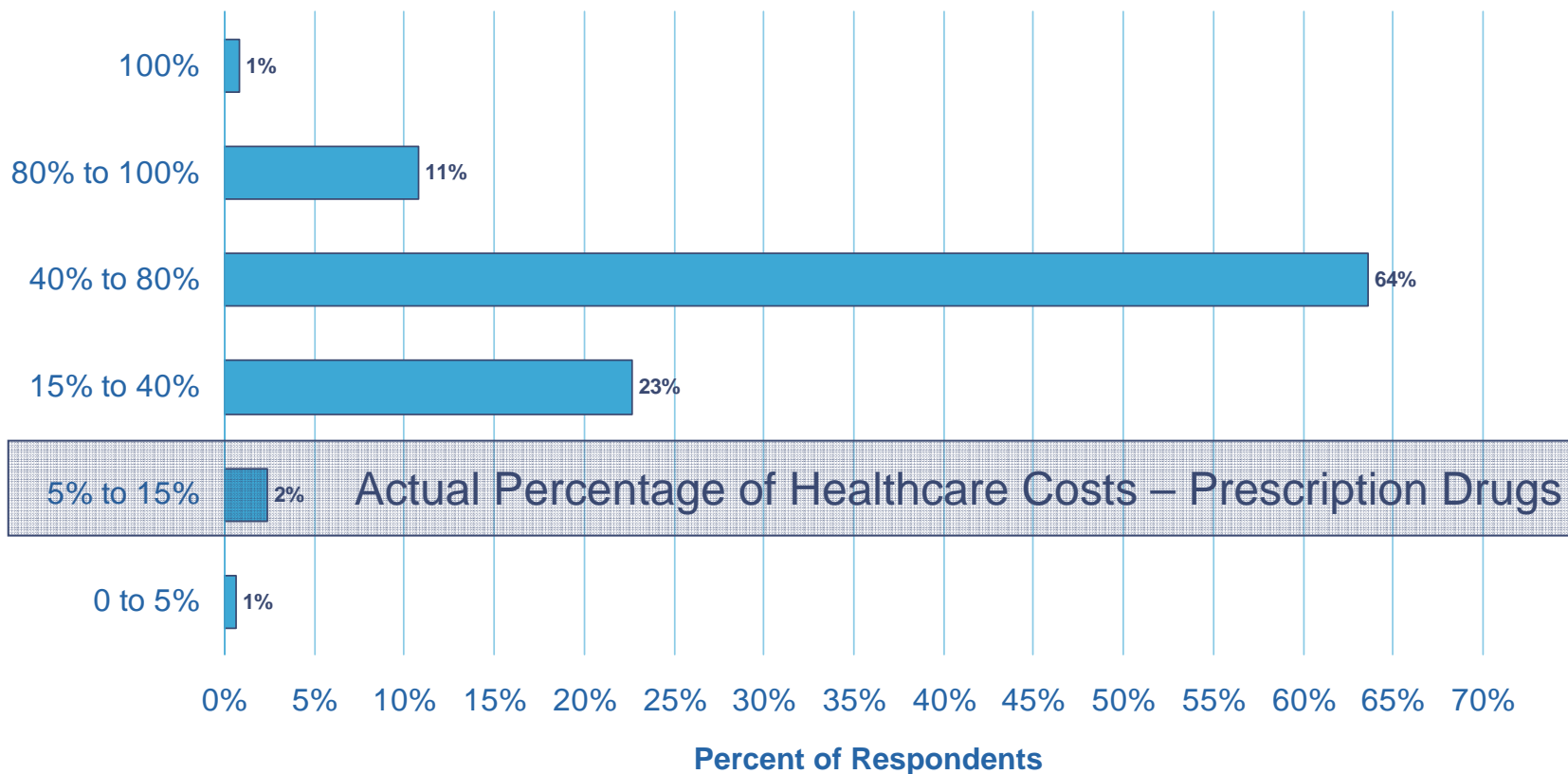


Source: PwC HRI Survey, December 2005

Survey Findings

Beliefs about Prescription Drug Costs

Consumers' Estimates of the Percentage of U.S. Healthcare Spending on Prescription Drugs



Source: PwC HRI Survey, December 2005

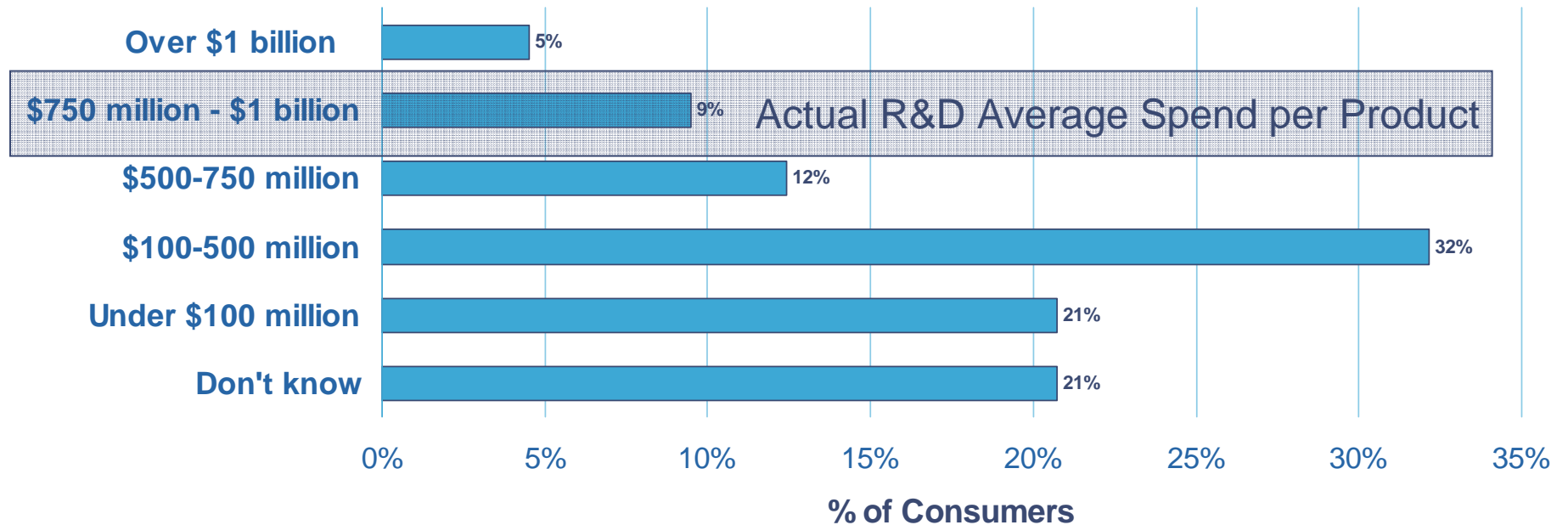
Survey Findings

Beliefs about Research and Development

86% of consumers don't understand the costs of developing a drug:

- 65% of consumers underestimate the R&D spend per product brought to market
- 21% responded that they don't know at all

Consumer Estimates of Cost to Bring Average Drug to Market



Source: PwC HRI Survey, December 2005

Survey Findings

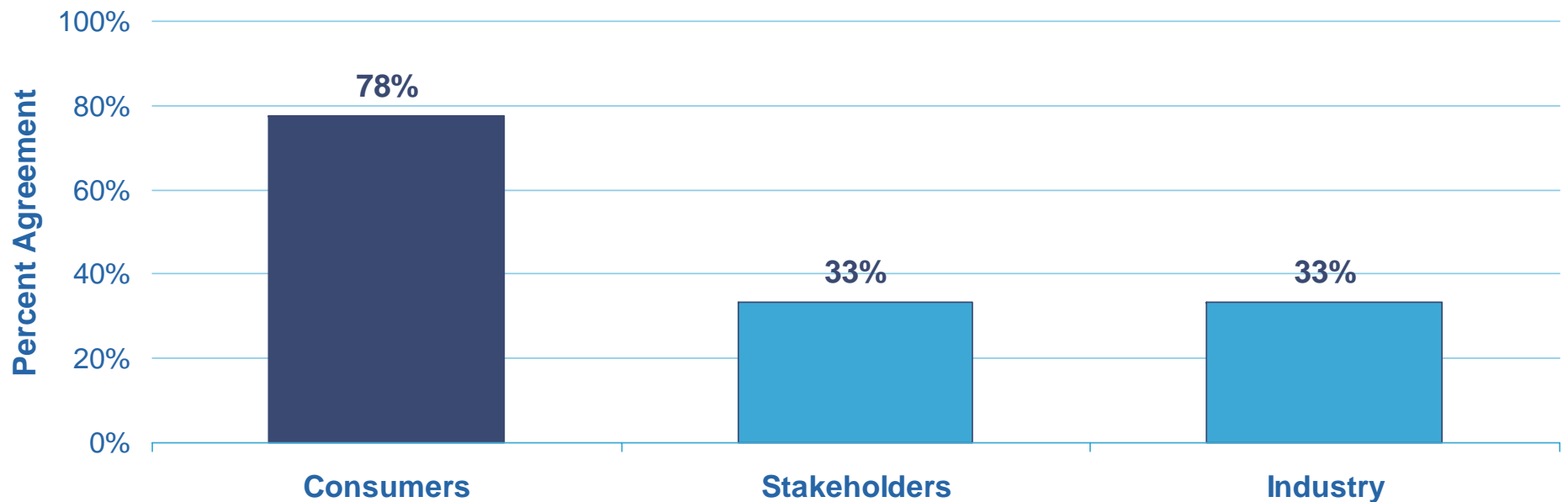
Pharmaceutical company reputation will play a larger role in patient decisions on which treatment to accept.

- Almost 80% of responses indicated that the reputation of the pharmaceutical company plays a significant role in determining whether to accept one company's medicine over another.
- The increasing role of consumer-driven healthcare and transparency of pharmaceutical cost will render this finding more important in the future.

Survey Findings

Consideration of Reputation

Percent Agreement that Consumers Consider a Drug Company's Reputation when Making Drug Treatment Decisions



Source: PwC HRI Survey, December 2005

Survey Findings

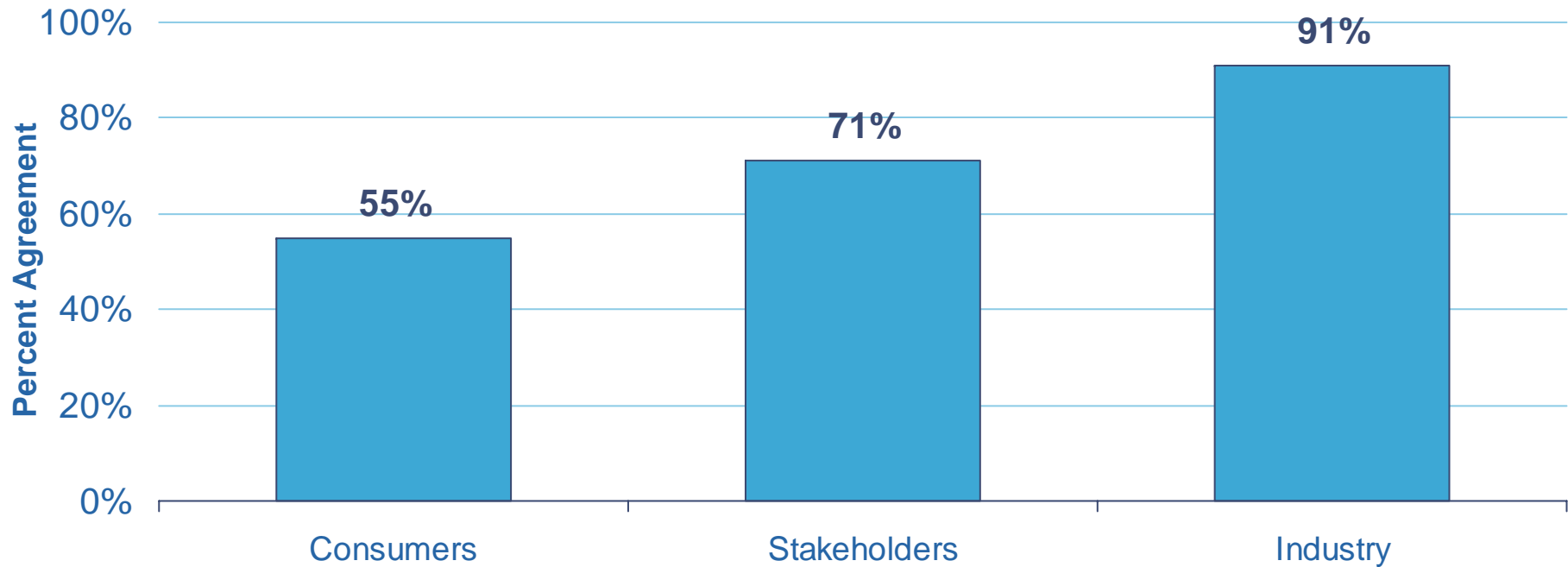
Stakeholders/Consumers and pharmaceutical companies differ on the definition of innovation

- Lack of recognition of innovation in new products (even if incremental innovation)
- Public looking for more dramatic innovation as justification for drug pricing.
- Skepticism at incremental innovation performed for the purpose of extending patent life on an existing medicine.
- Affects the value proposition made by the pharmaceutical industry.

Survey Findings

Innovation and Unmet Medical Need

Percent Agreement that Drug Companies make Drug Development Decisions Based on Unmet Medical Need



Source: PwC HRI Survey, December 2005

Our Perspective

Our Perspective

Public needs greater confidence that pharmaceutical company focus is balanced between improving public health and financial results.

- Common definition of innovation needed, including right-sizing public expectations.
- Confidence that prescription decision is based on right choice for patient, not physician-pharmaceutical company relationship.
- Focus on improving outcomes.
- Effective and responsive pharmacovigilance function.
- Acceptance of the role of generics

Our Perspective

Greater transparency is required.

- The development process, drug risk and benefit information, and drug cost and value data are all key areas where greater transparency is desired.
- The industry should highlight its role in improving human health and promote programs already in place that help indigent patients could also improve the industry's image
- Key areas for transparency from the study include:
 - Clinical: drug development decisions, results of clinical trials, risks and benefits of medicines.
 - Economic: Pricing decisions and value-for-money justification

Our Perspective

“Transparency is key, and it works... If we are being ethical and the information is not competitively sensitive, why shouldn't we be transparent?”

Lori Queisser

Vice President and Chief Compliance Officer

Eli Lilly and Company

Conclusion of Findings and Analysis

- If unaddressed, the concerns raised could threaten the patent and pricing franchises granted to pharmaceutical companies and therefore the long-term sustainability of the industry.
- We believe that the issue can be reversed, and reputation restored.
 - Action needed on the part of individual pharmaceutical companies and the industry organization.
 - Actions will vary by company based on their own reputational profile. There is no one cure.
 - No overnight solutions – will require a long-term effort.

Recommended Actions: Research and Development

Restore trust in the company's choices and processes regarding drug discovery and clinical development.

1. Communicate to stakeholders the differences between chemical and biological innovation and educate stakeholders about the difficulties and nuances of fostering breakthrough medical products.
2. Address consumer misconceptions about the costs and risks of pharmaceutical product development.
3. Understand the most effective channels for the accurate and complete reporting of clinical trial outcomes by collaborating closely with healthcare workers and patient groups and establish links so information can be provided for relevant stakeholders.

Recommended Actions: Sales and Marketing

Refocus sales and marketing activities on improving the efficacy, safety and compliance of patient treatment.

1. Ensure that marketing practices and promotional activities focus on improving the treatment of diseases, as well as—in light of the trend toward consumerism—the cost-benefit ratio of treatments and communications around safety profiles.
2. Partner with healthcare professional associations such as medical or advisory societies and physician groups to pursue mutually beneficial activities that improve patient outcomes by improving the prescribing habits of educated healthcare professionals.
3. Work with health plans and pharmacy benefit managers (PBMs) to develop incentive arrangements that contribute to clinical preventive treatment goals—that is, cost-sharing and performance incentives that reward preventive treatment plan compliance—thereby ultimately saving on hospital costs for payors.

Recommended Actions: Sales and Marketing (cont'd)

Refocus sales and marketing activities on improving the efficacy, safety and compliance of patient treatment.

4. Differentiate the corporate brand with communications that feature improved, cutting-edge pharmacovigilance activities.
5. Ensure that company culture and incentives promote compliance with sales and marketing policies and controls.
6. Work with state pharmaceutical distribution licensing agencies, enforcement agencies, and wholesalers to strengthen controls over the integrity of the pharmaceutical supply chain.

Summary

- Restore trust in discovery and development
- Explain the broader benefits of the medicines the industry delivers
- Redirect marketing and sales activities toward more effective, safer, and more compliant patient treatment
- Foster a culture of compliance and patient-focused behavior
- Educate the public

Questions?

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