

# Medical Trust: Concepts and Data

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# Why Trust Matters

**Instrumental Value:** Trust affects many important behaviors and attitudes:

- Seek care            - Reveal confidences
- Comply with treatment   -Participate in Research

**Moral Value:** Basic underpinning of medical relationships and thus fundamental source of professional duties, ethics.

# *What* is Trust?

“Willingness to be vulnerable, with the expectation that the care-taker intends to and will protect the patient’s interests.”

# Trust is more than just predicting positive results....

Arises from inherent *vulnerability*

Strong *emotive/affective* component

Closer to *faith* (blind T) than to *confidence* (calculative T)

# Concepts related to trust:

Trustworthiness: purely normative

## Distrust

1. absence of trust (agnosticism).
2. opposite of trust: anxious or pessimistic views of motivation and expected results.
3. complement to trust: wariness that generates caution and verification (“*trust but verify*”).

# Psychometric properties:

Medical Trust is measurable (alpha = .8-.9)

Consists of

- Fidelity
- Competence
- Honesty

But is Not multidimensional

Each component of trust is relevant, but they all move together: global trust

# Objects of Trust: Distinct but Interrelated

	<b>Individual</b>	<b>System</b>
<b>Personal</b>	My Dr.	Drs. in general
<b>Institutional</b>	My hospital, HMO Research team	Hospitals, HMOs, Researchers generally

# Trust Can Be Counterintuitive

“Many truisms about trust are simply false” (Heimer)

- Medical trust remains remarkably high
- Conflicts of interest don't matter much to pts.
- COI disclosures can improve trust
  - “It looks like he'd have a real incentive for this thing to go well, [which is] all to the good”
- Disclosures possibly reduce trust *worthiness*

# Disclosing HMO Incentives

Randomized controlled trial of disclosures in capitated and withhold plans (n=1918).

- No negative effects on either physician trust or insurer trust
- Small positive effect (1.4%) on physician trust in the capitated plan
- Withhold disclosure had a small positive effect (1.3%) on physician trust for subjects with high trust at baseline

# Disclosing COIs in Research (COINS)

- Two randomized controlled studies with disease groups
  - Web-based survey (N = 3623)
  - Mock consent over phone (N = 470)
- Disclosure did not substantially effect overall willingness to participate
  - COI disclosure was least important factor in decision
  - Baseline trust in medical research was strong predictor
- But, varied and skewed reactions
  - Per capita payments had least impact, actually increased trust slightly for one group of patients
  - More negative reactions to equity relationship

# Other Studies

- Kao et al: No relation btw. capitation & T
- Pearson & Levinson: Disclosure of managed care payments *increased* trust
- Braunstein & Powe (abstract): “patients don’t really care about” COIs in research
- Hampson & Grady (NIH): for most pts., disclosure has no impact on willingness to participate in research; for some, disclosure increased trust.

# Conclude

- Medical Trust is resilient: it can tolerate financial impurity
  - But broken trust is very difficult to rebuild
  - And COIs are highly relevant to some people
- But disclosure alone is not enough protection
- Empirical positions need clear differentiation from normative ones.

# Conclusion

- Disclosure of specific COIs does not seem to affect most people
  - General trust in research more important
  - Unknown what influences general trust (i.e., how will repeated scandals effect people's general trust?)
  - MARK: Note that we have never evaluated the effect of disclosures on general trust, just specific (investigator, sponsor, institution)
- Minority of people are upset by disclosed COIs
  - Partially justifies disclosure (i.e., makes a difference to some people)

# Backup Slides

# JGIM Study

Weinfurt KP, Hall MA, Dinan MA, DePuy V, Friedman JY, Allsbrook JS, Sugarman S. Effects of disclosing financial interests on attitudes toward clinical research. *J Gen Intern Med* 2008 Jun;23(6):860-6.

# Importance of Factors for Decision to Participate (N = 3623)

<b>Factor</b>	<b>Mean</b>	<b>Standard Deviation</b>
Possible health benefits to me	4.02	0.90
Possible health risks to me	4.08	0.97
The convenience of participating	3.31	0.99
The possibility that the investigator might benefit financially from this medical research study	<b>2.44</b>	<b>1.28</b>
The possibility of helping other patients in the future	4.07	0.87
The reasons why the medical research study is being conducted	3.91	0.90

Importance rating = 1 (Not important) to 5 (Very important)

# Changes in Trust in Researchers by Type of Financial Disclosure (N = 3623)

Type of Financial Disclosure	Mean (SE)
Generic	3.35 (0.03)
Per capita payments	3.15 (0.03)
Money outside of the study	3.43 (0.03)
Researcher owns equity	3.51 (0.03)
Institution owns equity	3.39 (0.03)

**$d = 0.52$  SDs**

1 (Increased trust) to 3 (No change in trust) to 5 (Decreased trust)

# Vignette Study

Weinfurt KP, Hall MA, Friedman JY, Hardy NC, Fortune-Greeley AK, Lawlor JS, Allsbrook JS, Lin L, Schulman KA, Sugarman J. Effects of disclosing financial interests on participation in medical research: a randomized vignette trial. *Under review.*

## Participant Characteristics

<b>Characteristic</b>	<b>All Participants (N = 470)</b>	<b>No Disclosure (N = 141)</b>	<b>Per capita payments (N = 160)</b>	<b>Equity (N = 169)</b>
Male, n (%)	347 (73.8)	101 (71.6)	116 (72.5)	130 (76.9)
Age, mean (SD), y	66.9 (11.1)	67.1 (11.6)	66.7 (11.5)	66.8 (10.4)
Race/ethnicity, n (%)				
Black	30 (6.4)	9 (6.4)	13 (8.1)	8 (4.7)
Hispanic	6 (1.3)	2 (1.4)	1 (<1.0)	3 (1.8)
White	426 (90.6)	129 (91.5)	143 (89.4)	154 (91.1)
Other	7 (1.5)	3 (2.1)	-----	4 (2.4)
No answer	1 (0.2)	-----	1 (<1.0)	-----

## Participant Characteristics (cont)

<b>Characteristic</b>	<b>All Participants (N = 470)</b>	<b>No Disclosure (N = 141)</b>	<b>Per capita payments (N = 160)</b>	<b>Equity (N = 169)</b>
Education level, n (%)				
Grade 8 or lower	6 (1.3)	3 (2.1)	1 (<1.0)	2 (1.2)
Some high school	25 (5.3)	5 (3.6)	4 (2.5)	16 (9.5)
High school diploma or equivalent	73 (15.5)	21 (14.9)	28 (17.5)	24 (14.2)
Business, technical, or vocational school after high school	13 (2.8)	2 (1.4)	5 (3.1)	6 (3.6)
Some college	84 (17.9)	27 (19.2)	37 (23.1)	20 (11.8)
Two-year college or associate's degree	28 (6.0)	7 (5.0)	11 (6.9)	10 (5.9)
Four-year college degree	99 (21.1)	34 (24.1)	31 (19.4)	34 (20.1)
Some graduate or professional school	18 (3.8)	4 (2.8)	7 (4.4)	7 (4.1)
Graduate or professional degree	123 (26.2)	37 (26.2)	36 (22.5)	50 (29.6)
Don't know	1 (0.2)	1 (<1.0)	-----	-----

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Ever been in a research study, n (%)				
Yes	157 (33.4)	46 (32.6)	56 (35.0)	55 (32.5)
No	306 (65.1)	94 (66.7)	101 (63.1)	111 (65.7)
Unsure	7 (1.5)	1 (<1.0)	3 (1.9)	3 (1.8)
Previous study was heart-related, n (%)				
Yes	86 (54.8)	23 (50.0)	30 (53.6)	33 (60.0)
No	67 (42.7)	22 (47.8)	25 (44.6)	20 (36.4)
Unsure	4 (2.5)	1 (2.2)	1 (1.8)	2 (3.6)

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Annual household income, n (%)				
< \$15 000	28 (6.0)	10 (7.1)	6 (3.8)	12 (7.1)
\$15 000-\$29 999	53 (11.3)	16 (11.4)	21 (13.1)	16 (9.5)
\$30 000-\$44 999	60 (12.8)	16 (11.4)	23 (14.4)	21 (12.4)
\$45 000-\$59 999	59 (12.6)	20 (14.2)	18 (11.3)	21 (12.4)
\$60 000-\$99 999	124 (26.4)	42 (29.8)	45 (28.1)	37 (21.9)
≥ \$100 000	106 (22.6)	29 (20.6)	31 (19.4)	46 (27.2)
Don't know/unsure	15 (3.2)	5 ( 3.6)	4 ( 2.5)	6 (3.6)
No answer	25 (5.3)	3 (2.1)	12 (7.5)	10 (5.9)

**Table 2. Responses by Experimental Group and Relationship With Trust in Medical Research**

Outcome	Disclosure Type			<i>P</i> Value*	Semipartial <i>r</i> †
	No Disclosure (n = 141)	Per Capita Payments (n = 160)	Equity (n = 169)		
Willingness to participate	3.50 (1.29)	3.51 (1.30)	3.20 (1.32)	.02	0.22
Importance for decision					
Potential financial benefit for investigator‡	—	1.97 (1.24)	2.65 (1.59)	< .001§	
Health benefit	3.59 (1.18)	3.59 (1.09)	3.56 (1.07)	.93	
Health risk	3.67 (1.16)	3.75 (1.17)	3.65 (1.15)	.80	
Convenience	3.10 (1.10)	3.02 (1.13)	2.98 (1.15)	.63	
Helping others	3.87 (1.01)	4.14 (0.95)	4.01 (1.02)	.04	0.18
Trust in investigator	3.77 (0.82)	3.88 (0.82)	3.60 (1.01)	.001	0.38
Trust in research sponsor	3.14 (0.95)	3.19 (0.86)	3.07 (1.08)	.21	0.35
Trust in research institution	4.01 (0.80)	4.14 (0.76)	4.05 (0.85)	.15	0.37

\**P* values are from a general linear model that included the Trust in Medical Research score as a covariate.

†Values are semipartial correlations between the outcome variable and the Trust in Medical Research score, with adjustment for differences by disclosure group.

‡Participants in the no disclosure group were not asked about the importance of potential financial benefit.

§*P* value is from an independent-samples *t* test.

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§P value is from an independent-samples t test.

**1 = Disagree, 5 = Agree**

**Table 3. Spontaneous, Qualitative Reactions to the Possibility of Financial Benefit by Disclosure Group**

Remark	Disclosure Type			Exact <i>P</i> Value*
	None (n = 141)	Per capita payments (n = 160)	Equity (n = 169)	
Clearly positive	0	3 (1.9)	4 (2.4)	.23
Clearly negative	0	10 (6.3)	32 (18.9)	< .001
Refuse to participate	2 (1.4)	1 (0.6)	9 (5.3)	.01