Supplementary eMaterials (online Appendix)
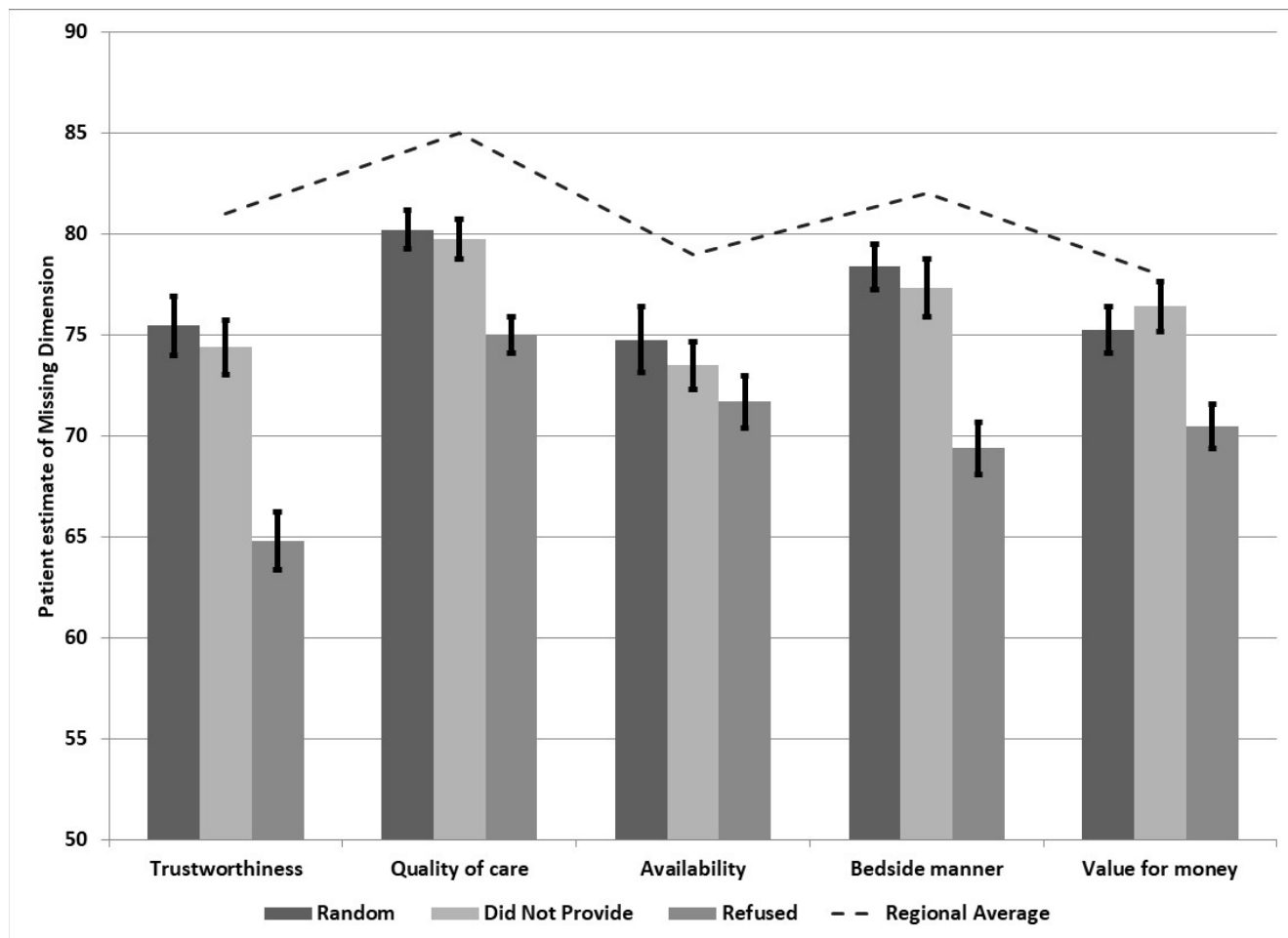
Supplement to: Mind The (Information) Gap: Strategic Non-Disclosure by Marketers and Interventions to Increase Consumer Deliberation

Contents

Experiment 1: Comparing Non-Deliberate and Deliberate Non-Disclosure

eFigure 1: Estimates for each of the five missing dimensions

Note: Error bars are ± 1 Standard Error. The dashed line shows the average regional value that was given to participants.

Note that average estimates of the missing rating are consistently below this regional average, with a mean of 6.61 below (*SD* = 7.89).

Experiment 2: Breakeven Point for Non-disclosure:

eFigure 2: Experiment 2 stimuli

Doctor Green

Doctor Green graduated from George Washington University Hospital in 2004, and has worked in your region ever since.

Dimensions of care

All doctors in your region obtain ratings on five dimensions of medical care from their patients. These ratings are given using a scale from 0-100, where 0 is extremely poor, and 100 is outstanding.

Below are the average evaluations for Doctor Green on the dimensions of medical care, as provided by Doctor Green.

The range of evaluations for doctors in your region are included next to each dimension label. For example, doctors have received average evaluations on Quality of Care as low as 50, and as high as 100. Doctor Green has received an 85.

Dimension (rating range in your area)	Dr. Green's rating
Quality of Care (50-100)	85
Availability (35-98)	83
Bedside Manner (40-100)	74
Value for Money (30 - 92)	71
Trustworthiness (51 - 99)	

Note: This profile reflects the Blank framing condition in Experiment 1.

Experiment 2: Coding and analyses of written explanations for choice likelihood estimates

Participants provided written explanations of their likelihood to choose the doctor. We coded each written explanation by whether it mentioned the absence of the physician's trustworthiness rating (1= Mentioned; 0 = Not Mentioned; intercoder reliability Kappa = .96). We expected those who mentioned the absence of the trustworthiness rating to be less likely to choose Dr. Green. Moreover, as the salience of non-disclosure framing increased (from *Absent* through *Refused*), we expected participants to be both more likely to mention the missing trustworthiness rating and less likely to choose Dr. Green. Given the charitability effect, however, we predicted that even after controlling for those who mentioned the missing trustworthiness rating, participants would still not consider Dr. Green as the worst possible.

In total, 23% ($n = 222/978$) of consumers in the four non-disclosure framing conditions mentioned the absent trustworthiness rating when explaining how likely they were to choose Dr. Green. Only one of these was in the *Absent* framing condition so we excluded this condition from further analysis. In the remaining three non-disclosure framing conditions (*Blank, Not Provided,* and *Refused*), approximately 30% ($n = 221/735$) of participants mentioned a missing trustworthiness rating. This low proportion demonstrates both strategic naiveté and charitability. As eFigure 3 shows, however, the increasing salience framing of the missing dimension substantially increased the likelihood that it would be mentioned: about 50% of those with the *Refused* framing mentioned it; this dropped to 31% with the *Not Provided* framing, and to only 9% with the *Blank* framing.

We conducted a logistic regression predicting the proportion of respondents who mentioned the missing rating with Non-disclosure Framing Salience (*Blank, Not Provided* and *Refused*) and Timing as independent variables. Timing was included because we hypothesized

that providing trustworthiness estimates before choice likelihoods would further increase the salience of missing trustworthiness ratings. The model was significant, $\chi^2(3) = 109.60, p < .001$, with a modest Nagelkerke's R^2 of .20. There was a marginal and small effect of Timing, $\chi^2(1) = 3.82, p = .051,$[1] and a significant effect for Non-disclosure Framing, $\chi^2(2) = 81.44, p < .001$: Contrasts revealed that participants were significantly more likely to mention trustworthiness with the *Not Provided*, $\chi^2(1) = 31.79, p < .001$, and *Refused,* $\chi^2(1) = 79.47, p < .001$, framings, than with the *Blank* framing.

We next examined whether mentioning the absence of trustworthiness ratings was (negatively) related to choosing Dr. Green. We conducted a 2 (Mentioned trustworthiness: Yes vs. No) by 3 (Non-disclosure Framing: Blank vs. Not Provided vs. Refused) ANOVA. There was a main effect of mentioning trustworthiness, $F(1, 729) = 55.37, p < .001, \eta_P^2 = .07$, such that those who did so were less likely to choose Dr. Green (44% of those who mentioned that the trustworthiness rating was missing vs. 65% of those who did not mention the missing rating). There was also a main effect of Framing, $F(2, 729) = 14.97, p < .001, \eta_P^2 = .04$: the more salient the non-disclosure framing, the less likely participants were to choose Dr. Green (*Blank*: 66%; *Not Provided*: 60%; *Refused*: 49%). There was an interaction between mentioning trustworthiness and non-disclosure framing, $F(2, 729) = 4.53, p = .01, \eta_P^2 = .01$. For those who did not mention trustworthiness, the likelihood of choosing Dr. Green differed only slightly from those with the *Absent* framing ($M = 68.19, SD = 18.13$); only the *Refused* framing ($M = 60.64, SD = 22.66$) was significantly lower than the other non-disclosure conditions (as evident in eFigure 4). For those who mentioned trustworthiness, the likelihood of choosing Dr. Green

---

[1] This effect, which was not in the predicted direction, may reflect respondents' belief that mentioning trustworthiness as an explanation was less necessary if they had provided an estimate for the missing dimension first.

decreased as the salience of the non-disclosure increased. Those with the *Refused* framing who mentioned the missing rating provided likelihood ratings close to (and not significantly different from) the low-trustworthiness-rating subgroup in the Full Disclosure condition.

eFigure 3. Proportion of respondents who mentioned the missing trustworthiness estimate.
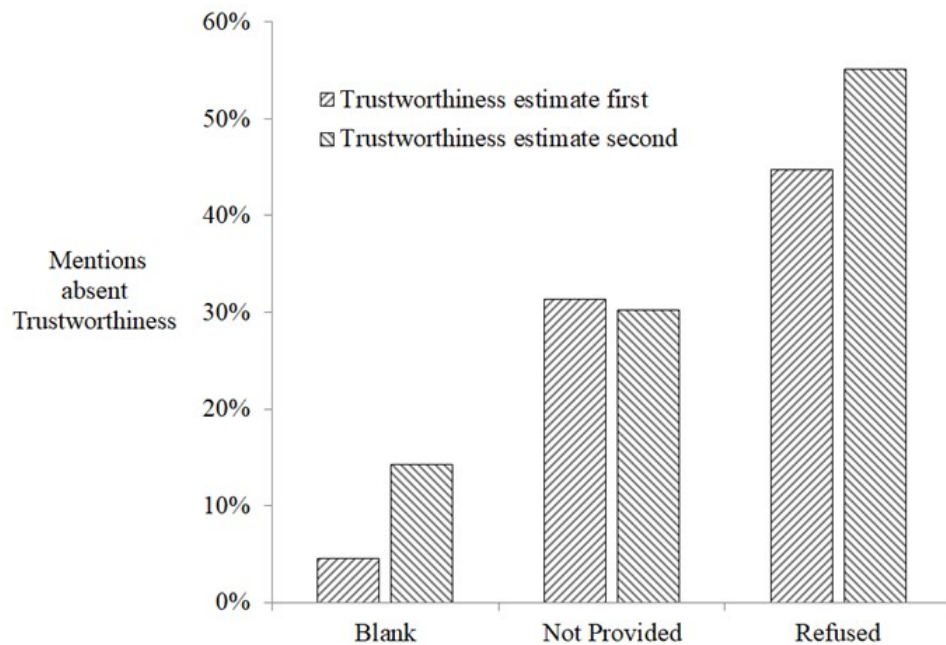
eFigure 4. Likelihood of choosing Dr. Green by non-disclosure salience and by whether the missing rating is mentioned
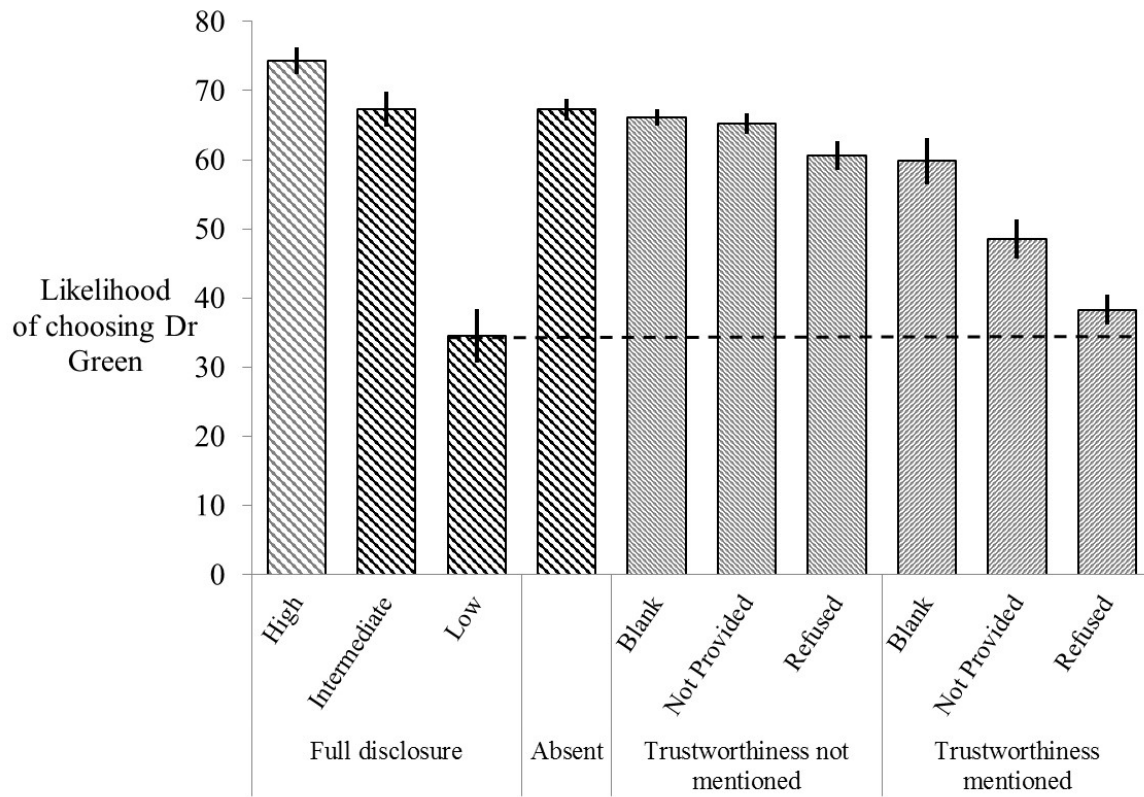
Note: Error bars are ± 1 SE. The dotted line indicates the unraveling prediction.

eFigure 5: Experiment 3 stimuli

All doctors in a region are rated by their patients. The average rating that each doctor receives from all their patients is referred to as the **Patient Satisfaction Rating**.

The Patient Satisfaction Rating is given using a scale ranging from 1 to 5 stars, which can be interpreted as follows:

Star rating	Rating description
★	Very poor
★ ★	Poor
★ ★ ★	Satisfactory
★ ★ ★ ★	Very good
★ ★ ★ ★ ★	Excellent

Every doctor has an average of these Patient Satisfaction Ratings (rounded to the nearest half star). You can think of the Patient Satisfaction Rating as the equivalent of a Yelp or TripAdvisor score to help patients choose a doctor.

Doctors in your region have Patient Satisfaction Ratings that range from as low as 1 star (very poor) and as high as 5 stars (excellent). The average Rating is 3.5 stars.

On the next page you will see the online profile of one doctor. Please read that profile carefully and answer the questions that follow.

Doctor Green

Doctor Green

Doctor Green is currently working in your region.

Doctors have the option to release their Patient Satisfaction Ratings but are not required to do so.

Doctor Green did not provide [declined to include] the Patient Satisfaction Rating on the Profile

Name	Dr. Green
Type of Specialist	Internal Medicine
Admitting Hospital(s)	Georgetown Hospital, D.C.
Board Certification(s)	Internal Medicine
Latest Certification Date(s)	2005
Obtained Medical Degree From	University of Washington
Residency(ies)	Duke University (2003- 2005)
Conflict of Interest Disclosures	None
Patient Satisfaction Rating	Did not Provide [Declined to Provide]

eFigure 6: Experiment 4 design

		Four physician profiles – within subjects. All subjects saw these four profiles in a randomized order but could go back and forth between them.			
		Full disclosure Doctor (baseline) **Doctor W**	**Doctor of Interest** **Doctor X**	**Comparison Doctor** **Doctor Y**	**Comparison Doctor** **Doctor Z**
		T - random* COI - random*	**T – 50** **COI - Strong**	T -70 COI – none*	T – 80* COI - Minor
Four between subject conditions	**Full Disclosure**	T - random COI - random	**T – 50** **COI – Strong**	T – 70 COI – none	T – 80 COI – Minor
	Absent (Low Salience): No label and no information	T - random COI - random		COI – none	T – 80
	Blank (Moderate Salience): Label only and no information	T - random COI - random	**T –** **COI –**	T – COI – none	T – 80 COI –
	Declined (High Salience): Declined to disclose	T - random COI - random	**T – Declined to disclose** **COI – Declined to disclose**	T – Declined to disclose COI – none	T – 80 COI – declined to disclose

Note: Asterisks note information that was always disclosed. Based on the physician profiles, in Experiment 1, trustworthiness could range from low (50), moderate (70) to high (80), and conflict of interest could range from none, minor to strong.

Abbreviations: T = trustworthiness; COI = Conflict of interest. Abbreviations are shown here for simplicity; the full label was given in the physician profiles.

eFigure 7: Experiment 5 stimuli

DOCTOR PROFILE

Page 1

Type of Specialist*   **Internist**

Admitting Hospital(s)*   **George Washington University Hospital**
                                                       (High performing in 4 specialties)

Board Certification(s)*   **Internal Medicine**
Latest Certification Date(s)*   *2005*

Obtained Medical Degree From*   **University of Pennsylvania, 2003**

Residency(ies)   **Internist**
                                                       Duke Medical Center, 2003-3005

Faculty Appointment*   **Associate Professor**
                                                       Medicine
                                                       George Washington University

                                                       [*No Competing Interests;*

Conflict of Interest Disclosures   *Financial Competing Interests*
(None, Minor, or Strong)   *Received $1,000 from Wyeth in 2010;*

                                                       Financial Competing Interests
                                                       Received over $500,000 from Pfizer in 2010, 2011 and 2012]

Note: The information marked with an asterisk* had to be included in the doctor's profile. Residency and

conflict of interest disclosures were optional.

Information in square parentheses and in italics (for conflict of interest disclosures) show three options,

one of which was displayed randomly.

Page 2

Patient evaluations

All doctors are given an evaluation by their patients on scales from 0-100, where 0 is extremely poor, and 100 is outstanding. Your average evaluations are shown below.

 Also shown is the range of evaluations amongst all doctors in your region.

	Your office	**Your rating**
Office environment (Range 22-81)		81
Office friendliness (Range 30 - 86)		80
	About You	
Quality of care provided* (Range 50-83)		75
Availability* (Range 35-77)		63
Bedside Manner* (Range 40-66)		64
Value for Money* (Range 38 - 66)		61
Trustworthiness (Range 30 - 90)		[*50, 70, 80*]

Note: The information marked with an asterisk* had to be included in the doctor's profile. Office

environment, office friendliness and trustworthiness disclosures were optional.

Information in square parentheses and in italics (for trustworthiness) show three options, one of which

was displayed randomly.

eFigure 8: Experiment 5

**Percentage of providers disclosing their trustworthiness (upper panel)
and conflict of interests (lower panel)**