Multimedia Appendix 10: Respondents' concern about scenarios described in vignettes with a focus on study disease and entity that monitors social media user activity.

CONCERN EXPRESSED IN RESPONSE TO VIGNETTES		N (%)
Cancer vignette: A cancer research team at a major research university is looking for participants to take part in a clinical trial. They use a software tool that automatically search the past 2 years of Twitter activity to locate accounts that mentioned "cancer" anywhere within the text of a Twitter message. Once a relevant message is identified, the research team sends a public "@reply" to the original message, asking if the user is interested in participating in the clinical trial.		of Twitter activity to locate accounts relevant message is identified, the
Concern about users' Twitte above for the purpose of rec	r activity being monitored as described ruitment into a clinical trial	
	Very concerned	110 (18.2%)
	Somewhat concerned	190 (31.5%)
	Not too concerned	181 (30.0%)
	Not concerned at all	102 (16.9%)
	Don't know	20 (3.3%)
Factors that most impacted (respondents could select up t	level of concern about the above scenario	
	Nature of the disease/medical condition being monitored for	163 (27.0%)
	Whether the text of a Twitter message was monitored vs. a hashtag	152 (25.2%)
	How far back in your Twitter history the researchers might look	167 (27.7%)
	Who is doing the research	284 (47.1%)
	Whether a human being or a computer program is analyzing your Twitter messages	148 (24.5%)
	Use of Twitter as a method in which the	162 (26.9%)

	researchers contacted you	
Comfort level if a researcher approached them in person at a relevant medical facility		
	More comfortable in-person	176 (29.2%)
	Neither more or less comfort	209 (34.7%)
	Less comfortable in-person	137 (22.8%)
	Don't know	81 (13.4%)

Obesity vignette: *Scientists at a pharmaceutical company* are looking for participants to take part in a clinical trial to test a drug designed to treat *obesity*. They use a software tool that allows them to automatically search the past 6 months of Twitter activity to locate accounts that mentioned "obesity", "overweight" or "lose weight" within the text of a Twitter message. Once a relevant message is identified, the scientists send a public "@reply" to the original message, asking if the user is interested in participating in the clinical trial.

Concern about users' Twitter activity being monitored as described above for the purpose of recruitment into a clinical trial		
	Very concerned	112 (18.6%)
	Somewhat concerned	187 (31.0%)
	Not too concerned	181 (30.0%)
	Not concerned at all	99 (16.4%)
	Don't know	24 (4.0%)
Factors that most impacted level of concern about the above scenario (respondents could select up to 2)		
	Nature of the disease/medical condition being monitored for	169 (28.0%)
	Whether the text of a Twitter message was monitored vs. a hashtag	149 (24.7%)
	How far back in your Twitter history the researchers might look	147 (24.4%)
	Who is doing the research	286 (47.4%)

	Whether a human being or a computer program is analyzing your Twitter messages	123 (20.4%)
	Use of Twitter as a method in which the researchers contacted you	187 (31.0%)
Comfort level if a researcher approached them in person at a relevant medical facility		
	More comfortable in-person	161 (26.7%)
	Neither more or less comfort	225 (37.3%)
	Less comfortable in-person	144 (23.9%)
	Don't know	73 (12.1%)

HPV vignette: A health officer at a state public health office is looking for participants to take part in a study to understand adoption of the HPV vaccination against cervical cancer. The health officer uses a software tool that allows them to search 2 years of Twitter activity to locate accounts that ever included the hashtag "#HPV" or "#HPVvaccine" or "cervical cancer prevention" in a Twitter message. Once identified, the health officer sends a public "@reply" to the original message, asking if the user is interested in participating in the clinical trial.

Concern about users' Twitter activity being monitored as described above for the purpose of recruitment into a clinical trial		
	Very concerned	123 (20.4%)
	Somewhat concerned	175 (29.0%)
	Not too concerned	175 (29.0%)
	Not concerned at all	101 (16.8%)
	Don't know	29 (4.8%)
Factors that most impacted level of concern about the above scenario (respondents could select up to 2)		
	Nature of the disease/medical condition being monitored for	202 (33.5%)
	Whether the text of a Twitter message was monitored vs. a hashtag	162 (26.9%)
	How far back in your Twitter history the	126 (20.9%)

	researchers might look	
	Who is doing the research	271 (44.9%)
	Whether a human being or a computer program is analyzing your Twitter messages	122 (20.2%)
	Use of Twitter as a method in which the researchers contacted you	173 (28.7%)
Comfort level if a researche medical facility	er approached them in person at a relevant	
	More comfortable in-person	169 (28.0%)
	Neither more or less comfort	233 (38.6%)
	Less comfortable in-person	136 (22.6%)
	Don't know	65 (10.8%)
Concern about users' Twitt	original message, asking if the user is interested in	participating in the clinical trial.
	er activity being monitored as described cruitment into a clinical trial	
		174 (28.9%)
	cruitment into a clinical trial	174 (28.9%) 175 (29.0%)
	Very concerned	
	Very concerned Somewhat concerned	175 (29.0%)
	Very concerned Somewhat concerned Not too concerned	175 (29.0%) 132 (21.9%)
Factors that most impacted (respondents could select up	Cruitment into a clinical trial Very concerned Somewhat concerned Not too concerned Not concerned at all Don't know Level of concern about the above scenario	175 (29.0%) 132 (21.9%) 96 (15.9%)
	Cruitment into a clinical trial Very concerned Somewhat concerned Not too concerned Not concerned at all Don't know Level of concern about the above scenario	175 (29.0%) 132 (21.9%) 96 (15.9%)

	monitored vs. a hashtag	
	How far back in your Twitter history the researchers might look	133 (22.1%)
	Who is doing the research	250 (41.5%)
	Whether a human being or a computer program is analyzing your Twitter messages	127 (21.1%)
	Use of Twitter as a method in which the researchers contacted you	190 (31.5%)
Comfort level if a researcher approached them in person at a relevant medical facility		
	More comfortable in-person	174 (28.9%)
	Neither more or less comfort	213 (35.3%)
	Less comfortable in-person	156 (25.9%)
	Don't know	60 (10.0%)

Smoking vignette: A health officer at a local public health office is looking for participants to take part in a study to understand the smoking habits of local citizens. The health officer uses a software tool that allows them to search the past 2 years of Twitter activity to locate accounts that mentioned words such as "smoking", "cigarette", "e-cigarette" or "vaping" within the text of a Twitter message. Once a relevant Twitter message is identified, the health officer sends a public "@reply" to the original message, asking if the user is interested in participating in the clinical trial.

Concern about users' Twitter activity being monitored as described above for the purpose of recruitment into a clinical trial		
	Very concerned	91 (15.1%)
	Somewhat concerned	164 (27.2%)
	Not too concerned	190 (31.5%)
	Not concerned at all	142 (23.6%)
	Don't know	16 (2.7%)
Factors that most impacted level of concern about the above scenario (respondents could select up to 2)		

	Nature of the disease/medical condition being monitored for	163 (27.0%)
	Whether the text of a Twitter message was monitored vs. a hashtag	146 (24.2%)
	How far back in your Twitter history the researchers might look	143 (24.7%)
	Who is doing the research	269 (44.6%)
	Whether a human being or a computer program is analyzing your Twitter messages	123 (20.4%)
	Use of Twitter as a method in which the researchers contacted you	173 (28.7%)
Comfort level if a researcher approached them in person at a relevant medical facility		
	More comfortable in-person	161 (26.7%)
	Neither more or less comfort	267 (44.3%)
	Less comfortable in-person	122 (20.3%)
	Don't know	52 (8.4%)