Corrigenda and Addenda

Correction: Access to Electronic Personal Health Records Among Patients With Multiple Chronic Conditions: A Secondary Data Analysis

Alexandra J Greenberg¹, MPH, PhD; Angela L Falisi², MPH; Lila J Finney Rutten¹, MPH, PhD; Wen-Ying Sylvia Chou², MPH, PhD; Vaishali Patel³, MPH, PhD; Richard P Moser², PhD; Bradford W Hesse², PhD

Corresponding Author:

Alexandra J Greenberg, MPH, PhD Mayo Clinic 200 First Street SW Rochester, MN, 55905 United States

Phone: 1 507 538 7388 Fax: 1 507 555 1212

Email: worisek.alexandra@gmail.com

Related Article:

Correction of: https://www.jmir.org/2017/6/e188/

(J Med Internet Res 2022;24(6):e39719) doi: 10.2196/39719

In "Access to Electronic Personal Health Records Among Patients With Multiple Chronic Conditions: A Secondary Data Analysis" (J Med Internet Res 2017;19(6):e188), the authors made the following updates.

The authors were notified of data errors in one of the Health Information National Trends Survey (HINTS) cycle datasets (HINTS 4, Cycle 4); the errors were in the weights provided for use in the analysis of these data [1]. Following the HINTS error notice [1], the authors reran analyses reported in Table 1 and Table 2. The originally published versions of these tables are in Multimedia Appendix 1 and Multimedia Appendix 2.

In rerunning analyses for Table 1, only one difference was found that resulted in a change in conclusion. Namely, the chi-squared analysis of "Confidence that PHI is safe" versus "Number of Chronic Conditions" was not significant in the updated analysis (*P*=.11). In the original analysis, the results were significant, with "Very Confident" more likely with two or more chronic conditions, and "Not Confident" more likely with no chronic conditions. Additionally, for "Accessed EHRs at least once" and "Frequency of EHR Access," the original table used column percentages instead of row percentages; this has been corrected in the updated table.

In section "Associations Between Patient Factors and Number of Chronic Conditions" in the *Results*, the fourth sentence in the first paragraph originally read as follows:

In general, having two or more chronic conditions was associated with being older, having health

insurance, having a regular provider, being less confident in taking care of themselves, reporting fair to poor health, being less inclined to use the Internet or to use a mobile phone/tablet, and in feeling more confident that their PHI is safe and controllable (Table 1).

It has been corrected as follows:

In general, having two or more chronic conditions was associated with being older, having health insurance, having a regular provider, being less confident in taking care of themselves, reporting fair to poor health, and being less inclined to use the Internet or to use a mobile phone/tablet (Table 1).

The following text from the *Discussion* was no longer accurate and has been removed from the corrected version of the article:

Additionally, HINTS included items addressing concerns about safety and privacy of electronic health information, which revealed that those with MCC reported slightly higher frequencies of believing that they were "very confident" in having control of the privacy of their records and that their PHI was safe with their providers. This could provide one explanation for the increased use of ePHR among those with MCC.

In rerunning analyses for Table 2, only one difference was found that resulted in a change in conclusion. Namely, for "Confidence that PHI is safe," a significant association was found for "Very Confident" (OR 2.00, 95% CI 1.21-3.31; *P*=.01) and "Somewhat



¹Mayo Clinic, Rochester, MN, United States

²Behavioral Research Program, National Cancer Institute, Bethesda, MD, United States

³Office of the National Coordinator, US Department of Health and Human Services, Washington, DC, United States

Confident" (OR 1.99, 95% CI 1.25-3.17) as compared to the reference of "Not Confident." In the original analysis, neither was statistically significant. This change does not affect any of the text within the body of the manuscript. But it is a notable

new conclusion, indicating that those who are more confident about the safety of their data are significantly more likely to use ePHR than those who are not confident about such security.

The corrected versions of Table 1 and Table 2 are below:



Table 1. Associations between patient characteristics, online characteristics, and attitudes with number of chronic conditions (N=3497).

Respondent characteristics	Number of chro	Number of chronic conditions, n (weighted %) ^a			P value
	0	1	≥2		
Overall	1050 (39.8)	892 (26.0)	1555 (34.1)		
Sex				5.5 (2)	.007
Female	624 (36.2)	543 (27.3)	920 (36.5)		
Male	420 (43.5)	344 (25.2)	605 (31.3)		
Age (years)				59.5 (8)	<.001
18-34	283 (64.6)	117 (25.4)	60 (10.0)		
35-49	322 (48.1)	200 (24.2)	188 (27.8)		
50-64	272 (30.9)	299 (28.9)	556 (40.3)		
65-74	72 (14.9)	149 (27.0)	349 (58.1)		
≥75	28 (6.3)	74 (21.4)	274 (72.2)		
Race/ethnicity				4.1 (8)	.001
Hispanic	185 (41.9)	132 (28.5)	194 (29.6)		
Non-Hispanic White	555 (38.7)	496 (26.1)	844 (35.2)		
Non-Hispanic Black	142 (39.9)	123 (24.0)	252 (36.1)		
Non-Hispanic other	94 (57.4)	56 (22.5)	85 (20.0)		
Missing	74 (28.9)	85 (26.9)	180 (44.2)		
Education				12.1 (6)	<.001
Less than high school	59 (27.5)	65 (27.0)	163 (45.6)		
High school graduate	171 (38.1)	140 (23.0)	323 (38.9)		
Some college	257 (34.9)	282 (27.0)	511 (38.1)		
College graduate	534 (49.6)	377 (26.7)	500 (23.7)		
ncome (US\$)				8.3 (8)	<.001
<\$20,000	163 (31.5)	182 (27.0)	442 (41.5)		
\$20,000 to <\$35,000	127 (29.1)	116 (22.1)	265 (48.8)		
\$35,000 to <\$50,000	145 (40.6)	139 (26.7)	220 (32.7)		
\$50,000 to <\$75,000	180 (38.2)	153 (26.7)	252 (35.0)		
≥\$75,000	421 (48.7)	295 (26.5)	349 (24.9)		
Health insurance				9.3 (2)	<.001
Yes	872 (38.3)	768 (25.8)	1397 (35.9)		
No	168 (51.6)	110 (27.2)	130 (21.2)		
Regular provider				50.1 (2)	<.001
Yes	548 (32.4)	612 (25.1)	1256 (42.5)		
No	494 (54.3)	266 (27.7)	268 (18.0)		
Self-reported ability to take care of own health				9.7 (4)	<.001
Completely confident/very confident	787 (42.9)	629 (27.2)	890 (29.8)	. ,	
Somewhat confident	224 (34.8)	231 (24.8)	518 (40.4)		
A little confident/not at all confident	36 (25.9)	29 (19.2)	137 (54.9)		
Self-reported general health	· · · /	,	· · · · · · · · · · · · · · · · · · ·	52.0 (4)	<.001
Excellent/very good	675 (53.3)	443 (26.4)	427 (20.3)	()	
Good	301 (31.5)	345 (28.8)	672 (39.7)		
Fair/Poor	69 (17.9)	97 (17.5)	443 (64.7)		



Respondent characteristics	Number of chro	onic conditions, n (we	eighted %) ^a	$\chi^2 (df)$	P value
	0	1	≥2		
Regular Internet use				35.9 (2)	<.001
Yes	923 (42.9)	709 (26.1)	1077 (31.0)		
No	123 (25.3)	173 (25.4)	455 (49.2)		
Accessed EHRs at least once				0.5 (2)	.61
Yes	284 (28.0)	250 (26.7)	371 (25.5)		
No	757 (72.0)	630 (73.3)	1158 (74.5)		
Frequency of EHR access				5.6 (8)	<.001
Never	757 (72.0)	630 (73.3)	1158 (74.5)		
1-2 times	158 (15.4)	124 (14.2)	153 (9.1)		
3-5 times	74 (7.5)	78 (7.4)	101 (7.6)		
6-9 times	24 (2.2)	30 (3.4)	57 (3.7)		
≥10 times	28 (2.9)	18 (1.6)	60 (5.1)		
Use a mobile phone or tablet				36.7 (2)	<.001
Yes	848 (44.9)	610 (26.0)	854 (29.1)		
No	185 (25.7)	256 (26.2)	638 (48.1)		
Use health-related mobile phone/tablet apps				0.7 (2)	.49
Yes	297 (46.0)	204 (24.4)	295 (29.6)		
No	522 (44.2)	388 (27.9)	516 (27.9)		
Exchanged emails with provider(s)				0.3 (2)	.76
Yes	246 (42.0)	206 (25.7)	331 (32.3)		
No	791 (39.6)	662 (26.1)	1179 (34.3)		
Confidence that PHI is safe				2.0(2)	.11
Very confident	207 (38.9)	178 (23.7)	389 (37.5)		
Somewhat confident	534 (38.3)	473 (27.4)	809 (34.3)		
Not confident	295 (44.4)	221 (24.9)	324 (30.8)		
Control privacy of records				3.3 (4)	.02
Very confident	255 (34.5)	246 (26.8)	487 (38.7)		
Somewhat confident	479 (39.2)	420 (26.0)	733 (34.7)		
Not confident	307 (47.6)	215 (25.2)	302 (27.1)		
Ever withheld information due to privacy concern				0.4(2)	.66
Yes	160 (43.0)	128 (24.4)	222 (32.6)		
No	882 (39.4)	754 (26.3)	1306 (34.2)		
Concerned about security of information when sent between providers				1.2 (4)	.32
Very concerned	226 (41.9)	191 (25.9)	338 (32.3)		
Somewhat concerned	510 (40.4)	431 (24.4)	756 (35.3)		
Not concerned	305 (37.9)	259 (28.9)	433 (33.2)		

^a Percentages are weighted.



Table 2. Weighted multivariate logistic regression model of predictors of using electronic personal health records among those reporting having Internet access or who own a mobile phone (n=2941).

Predictors of use of electronic personal health records	OR (95% CI)	Beta (SE)	Adj Wald F (df)	P value
Number of chronic conditions			4.51 (2)	.02
0	Ref	Ref		
1	0.98 (0.60-1.59)	-0.02 (0.24)		
≥2	1.88 (1.09-3.24)	0.63 (0.27)		
Sex			0.13 (1)	.72
Male	Ref	Ref		
Female	1.06 (0.77-1.45)	0.16 (0.16)		
Age (years)			2.05 (4)	.10
≥75	Ref	Ref		
65-74	1.80 (0.69-4.66)	0.59 (0.48)		
50-64	2.39 (1.01-5.67)	0.87 (0.43)		
35-49	2.68 (1.13-6.36)	0.98 (0.43)		
18-34	3.23 (1.24-8.41)	1.17 (0.47)		
Race/ethnicity			0.98 (4)	.43
Non-Hispanic White	Ref	Ref		
Hispanic	0.62 (0.31-1.26)	-0.47 (0.35)		
Non-Hispanic Black	0.90 (0.57-1.42)	-0.11 (0.23)		
Non-Hispanic other	1.34 (0.70-2.55)	0.29 (0.32)		
Missing	0.47 (0.14-1.54)	-0.76 (0.59)		
Education			1.35 (3)	.27
Less than high school	Ref	Ref		
High school graduate	1.22 (0.25-5.88)	0.20 (0.78)		
Some college	1.51 (0.35-6.52)	0.41 (0.73)		
College graduate	1.85 (0.41-8.31)	0.61 (0.75)		
Income (US\$)			3.04 (4)	.03
<\$20,000	Ref	Ref		
\$20,000 to <\$35,000	1.90 (0.81-4.47)	0.42 (-0.21)		
\$35,000 to <\$50,000	2.75 (1.25-6.08)	0.39 (0.22)		
\$50,000 to <\$75,000	1.89 (0.85-4.23)	0.40 (-0.16)		
≥\$75,000	3.17 (1.50-6.71)	0.37 (0.41)		
Health insurance			1.71 (1)	.20
No	Ref	Ref		
Yes	1.48 (0.81-2.71)	0.30 (-0.21)		
Regular provider			7.43 (1)	.01
No	Ref	Ref		
Yes	1.84 (1.17-2.88)	0.61 (0.22)		
Self-reported ability to take care of own health			0.21 (2)	.81
A little confident/not at all confident	Ref	Ref		
Somewhat confident	0.97 (0.40-2.34)	-0.03 (0.44)		
Completely confident/very confident	1.14 (0.54-2.39)	0.13 (0.37)		
Self-reported general health			1.71 (2)	.19



JOURNAL OF MEDICAL INTERNET RESEARCH

Greenberg et al

Predictors of use of electronic personal health records	OR (95% CI)	Beta (SE)	Adj Wald F (df)	P value
Excellent/very good	Ref	Ref	•	
Good	1.40 (0.94-2.09)	0.34 (0.20)		
Fair/Poor	1.04 (0.52-2.10)	0.04 (0.35)		
Confidence that PHI is safe			5.24 (2)	.01
Not confident	Ref	Ref		
Somewhat confident	1.99 (1.25-3.17)	0.69 (0.23)		
Very confident	2.00 (1.21-3.31)	0.69 (0.25)		

In addition, the corresponding author's email address has been changed to worisek.alexandra@gmail.com, as the author is no longer affiliated with Mayo Clinic College of Medicine and Science.

The correction will appear in the online version of the paper on the JMIR Publications website on June 20, 2022, together with the publication of this correction notice. Because this was made after submission to PubMed, PubMed Central, and other full-text repositories, the corrected article has also been resubmitted to those repositories.

Multimedia Appendix 1

Originally published Table 1.

[PDF File (Adobe PDF File), 69 KB-Multimedia Appendix 1]

Multimedia Appendix 2

Originally published Table 2.

[PDF File (Adobe PDF File), 47 KB-Multimedia Appendix 2]

Reference

1. HINTS Data Errors, Remediation, and Recommendations. Health Information National Trends Survey. URL: https://hints.cancer.gov/data/data-remediation.aspx [accessed 2022-05-19]

Abbreviations

HINTS: Health Information National Trends Survey

This is a non-peer-reviewed article. Submitted 20.05.22; accepted 20.05.22; published 20.06.22.

Please cite as:

Greenberg AJ, Falisi AL, Finney Rutten LJ, Chou WYS, Patel V, Moser RP, Hesse BW

Correction: Access to Electronic Personal Health Records Among Patients With Multiple Chronic Conditions: A Secondary Data Analysis

J Med Internet Res 2022;24(6):e39719 URL: https://www.jmir.org/2022/6/e39719

doi: <u>10.2196/39719</u>

PMID:

©Alexandra J Greenberg, Angela L Falisi, Lila J Finney Rutten, Wen-Ying Sylvia Chou, Vaishali Patel, Richard P Moser, Bradford W Hesse. Originally published in the Journal of Medical Internet Research (https://www.jmir.org), 20.06.2022. This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in the Journal of Medical Internet Research, is properly cited. The complete bibliographic information, a link to the original publication on https://www.jmir.org/, as well as this copyright and license information must be included.

