

Multimedia Appendix 2

Table 5. Results of chi-squared independent tests for the digital divide in DMS

Demographics		Digital Medical Service (DMS)		
		Awareness H1	Want H2	Adoption H3
Gender	Chi-squared	.41	.02	3.99
	df	1	1	1
	P-value	.524	.889	.046*
Age Group	Chi-squared	182.88	113.05	58.51
	df	5	5	5
	P-value	<.001*	<.001*	<.001*
Educational Level	Chi-squared	222.63	169.38	140.66
	df	5	5	5
	P-value	<.001*	<.001*	<.001*
Marital Status	Chi-squared	195.65	113.76	60.03
	df	2	2	2
	P-value	<.001*	<.001*	<.001*
Living Area	Chi-squared	62.20	37.39	124.60
	df	5	5	7
	P-value	<.001*	<.001*	<.001*
Personal monthly Income	Chi-squared	198.37	119.17	117.89
	df	7	7	8
	P-value	<.001*	<.001*	<.001*
Family Monthly Income	Chi-squared	135.86	133.92	23.78
	df	8	8	5
	P-value	<.001*	<.001*	<.001*
Computer owned	Chi-squared	204.77	184.64	60.88
	df	1	1	1
	P-value	<.001*	<.001*	<.001*
Internet Access	Chi-squared	125.25	177.90	149.83
	df	1	1	1
	P-value	<.001*	<.001*	<.001*

Data resource: This research

P-value means the p value of the Fisher's exact test or of Pearson Chi-squared test.

H1, H2, H3 are alternative hypotheses. H1: There exists an awareness divide in e-health services across certain demographic variables, computer ownership, and internet access. H2: There exists a want divide in e-health services across certain demographic variables, computer ownership, and internet access. H3: There exists an adoption divide in e-health services across certain demographic variables, computer ownership, and internet access.

Table 6. Results of chi-squared independent tests for the digital divide in DHCS

Demographics		Digital Home Care Service (DHCS)		
		Awareness H1	Want H2	Adoption H3
Gender	Chi-squared	5.99	.01	2.74
	df	1	1	1
	P-value	.014*	.920	.098
Age Group	Chi-squared	48.03	69.92	5.19
	df	5	5	5
	P-value	<.001*	<.001*	.394
Educational Level	Chi-squared	91.67	93.92	7.84
	df	5	5	5
	P-value	<.001*	<.001*	.165
Marital Status	Chi-squared	37.50	70.88	5.65
	df	2	2	2
	P-value	<.001*	<.001*	.059
Living Area	Chi-squared	17.94	31.55	6.51
	df	5	5	5
	P-value	.003*	<.001*	.259
Personal monthly Income	Chi-squared	72.11	67.13	14.17
	df	7	7	7
	P-value	<.001*	<.001*	.048*
Family Monthly Income	Chi-squared	64.08	68.00	21.08
	df	8	8	8
	P-value	<.001*	<.001*	.007*
Computer owned	Chi-squared	47.46	133.49	5.17
	df	1	1	1
	P-value	<.001*	<.001*	.023*
Internet Access	Chi-squared	57.75	98.20	13.19
	df	1	1	1
	P-value	<.001*	<.001*	<.001*

Data resource: This research

P-value means the p value of the Fisher's exact test or of Pearson Chi-squared test.

H1, H2, H3 are alternative hypotheses. H1: There exists an awareness divide in e-health services across certain demographic variables, computer ownership, and internet access. H2: There exists a want divide in e-health services across certain demographic variables, computer ownership, and internet access. H3: There exists an adoption divide in e-health services across certain demographic variables, computer ownership, and internet access.

Table 7. P-values of the paired proportion tests for H4, H5, and H6 in DMS

Demographics			Digital Medical Service (DMS)		
			H4	H5	H6
Variables	ID	Items	P-value	P-value	P-value
Total	T		<.001	<.001	<.001
Gender	G1	Male	<.001	<.001	<.001
	G2	Female	<.001	<.001	<.001
Age Level	A1	15–24	<.001	<.001	<.001
	A2	25–34	<.001	<.001	<.001
	A3	35–44	<.001	<.001	<.001
	A4	45–54	<.001	<.001	<.001
	A5	55–64	<.001	<.001	<.001
	A6	over 65	<.001	<.001	<.001
Educational Level	E1	Below primary school	<.001	<.001	.105
	E2	Junior high school	<.001	<.001	<.001
	E3	Senior high school	<.001	<.001	<.001
	E4	Junior college	<.001	<.001	<.001
	E5	University	<.001	<.001	<.001
	E6	Graduate and above	<.001	<.001	.339
Marital Status	M1	Single	<.001	<.001	<.001
	M2	Married or Cohabiting	<.001	<.001	<.001
	M3	Other*	<.001	<.001	.100
Living Area	L1	Northern Area	<.001	<.001	<.001
	L2	Central Area	<.001	<.001	<.001
	L3	Southern Area	<.001	<.001	<.001
	L4	Eastern Area	<.001	<.001	.657
	L5	Taipei City	<.001	<.001	<.001
	L6	Kaohsiung City	<.001	<.001	.003
Personal Monthly Income	P1	Less than US\$450	<.001	<.001	.001
	P2	US\$451~ US\$650	<.001	<.001	.004
	P3	US\$651~ US\$950	<.001	<.001	<.001
	P4	US\$951~ US\$1,250	<.001	<.001	<.001
	P5	US\$1,251~ US\$1,550	<.001	<.001	.001
	P6	US\$1,551~ US\$2,250	<.001	<.001	<.001
	P7	Above US\$2,251	<.001	<.001	.002
	P8	DK or RA**	<.001	<.001	<.001
Family Monthly Income	F1	No income or Unstable	<.001	<.001	.001
	F2	Less than US\$650	<.001	<.001	.030
	F3	US\$651~ US\$1,250	<.001	<.001	<.001
	F4	US\$1,251~ US\$1,850	<.001	<.001	<.001
	F5	US\$1,851~ US\$2,450	<.001	<.001	<.001
	F6	US\$2,451~ US\$3,050	<.001	<.001	.003
	F7	US\$3,051~ US\$4,650	<.001	<.001	<.001
	F8	Above US\$4,651	<.001	<.001	.005
	F9	DK or RA**	<.001	<.001	<.001
Computer Ownership	C1	Own	<.001	<.001	<.001
	C2	Didn't own	<.001	<.001	<.001
Internet Access	I1	Yes	<.001	<.001	<.001
	I2	No	<.001	<.001	<.001

Data resource: This research

* Including divorced, separated, widower, or widow

**DK or RA' represents "do not know" or "refuse to answer."

H4, H5, H6 are alternative hypotheses. H4: The adoption rate of a given e-health service is bound to consumers' corresponding awareness rate. H5: The adoption rate of a given e-health service is bound to consumers' corresponding want rate. H6: The want rate for a given e-health service is not necessarily bound to consumers' corresponding awareness rate.

Table 8. P-values of the paired proportion tests for H4, H5, and H6 in DHCS

Demographics			Digital Home Care Service (DHCS)		
			H4	H5	H6
Variables	ID	Items	P-value	P-value	P-value
Total	T		<.001	<.001	<.001
Gender	G1	Male	<.001	<.001	<.001
	G2	Female	<.001	<.001	<.001
Age Level	A1	15–24	<.001	<.001	<.001
	A2	25–34	<.001	<.001	<.001
	A3	35–44	<.001	<.001	<.001
	A4	45–54	<.001	<.001	<.001
	A5	55–64	<.001	<.001	<.001
	A6	over 65	<.001	<.001	<.001
Educational Level	E1	Below primary school	<.001	<.001	<.001
	E2	Junior high school	<.001	<.001	<.001
	E3	Senior high school	<.001	<.001	<.001
	E4	Junior college	<.001	<.001	<.001
	E5	University	<.001	<.001	<.001
	E6	Graduate and above	<.001	<.001	.028
Marital Status	M1	Single	<.001	<.001	<.001
	M2	Married or Cohabiting	<.001	<.001	<.001
	M3	Other*	<.001	<.001	.005
Living Area	L1	Northern Area	<.001	<.001	<.001
	L2	Central Area	<.001	<.001	<.001
	L3	Southern Area	<.001	<.001	<.001
	L4	Eastern Area	<.001	<.001	<.001
	L5	Taipei City	<.001	<.001	<.001
	L6	Kaohsiung City	<.001	<.001	<.001
Personal Monthly Income	P1	Less than US\$450	<.001	<.001	<.001
	P2	US\$451~ US\$650	<.001	<.001	.003
	P3	US\$651~ US\$950	<.001	<.001	<.001
	P4	US\$951~ US\$1,250	<.001	<.001	<.001
	P5	US\$1,251~ US\$1,550	<.001	<.001	.003
	P6	US\$1,551~ US\$2,250	<.001	<.001	<.001
	P7	Above US\$2,251	<.001	<.001	.015
	P8	DK or RA**	<.001	<.001	<.001
Family Monthly Income	F1	No income or Unstable	<.001	<.001	.001
	F2	Less than US\$650	<.001	<.001	.004
	F3	US\$651~ US\$1,250	<.001	<.001	<.001
	F4	US\$1,251~ US\$1,850	<.001	<.001	<.001
	F5	US\$1,851~ US\$2,450	<.001	<.001	<.001
	F6	US\$2,451~ US\$3,050	<.001	<.001	<.001
	F7	US\$3,051~ US\$4,650	<.001	<.001	<.001
	F8	Above US\$4,651	<.001	<.001	.001
Computer Ownership	C1	Own	<.001	<.001	<.001
	C2	Didn't own	<.001	<.001	.009
Internet Access	I1	Yes	<.001	<.001	<.001
	I2	No	<.001	<.001	<.001

Data resource: This research

* Including divorced, separated, widower, or widow

**DK or RA' represents "do not know" or "refuse to answer."

H4, H5, H6 are alternative hypotheses. H4: The adoption rate of a given e-health service is bound to consumers' corresponding awareness rate. H5: The adoption rate of a given e-health service is bound to consumers' corresponding want rate. H6: The want rate for a given e-health service is not necessarily bound to consumers' corresponding awareness rate.

Table 9. P-values of the two independent proportion tests for H7, H8, and H9 in DMS

Demographics/ Computer ownership/ Internet access		Digital Medical Service								
		H7			H8			H9		
		Want rate (%)		P-value	Adoption rate (%)		P-value	Awareness rate (%)		P-value
		Given unaware	Given Aware		Given Unwanted	Given wanted		Given Unwanted	Given wanted	
Total		46.65	82.52	<.001	9.83	54.49	<.001	68.22	92.05	<.001
Gender	Male	51.30	81.55	<.001	10.99	51.90	<.001	71.95	91.50	<.001
	Female	42.37	83.47	<.001	8.68	57.01	<.001	64.53	92.59	<.001
Age Level	15–24	60.87	83.09	<.001	8.61	44.87	<.001	61.80	83.64	<.001
	25–34	61.01	86.05	.002	16.92	62.33	<.001	83.17	95.12	.003
	35–44	78.48	83.03	.572	6.07	58.66	<.001	93.65	95.19	.529
	45–54	65.96	81.80	.021	15.99	50.04	<.001	83.22	92.00	.021
	55–64	42.83	81.19	<.001	10.65	47.72	<.001	69.77	93.01	<.001
	over 65	16.02	76.95	<.001	4.58	60.92	<.001	40.28	92.19	<.001
	Educational Level	Below primary school	22.09	75.30	<.001	4.12	53.16	<.001	39.04	87.32
Junior high school		44.28	78.11	<.001	3.51	40.11	<.001	54.17	84.15	<.001
Senior high school		57.46	77.96	<.001	9.22	47.35	<.001	78.31	90.44	<.001
Junior college		69.91	86.78	.096	16.56	57.15	<.001	88.28	95.51	.095
University		65.98	86.46	.001	18.22	61.89	<.001	83.26	94.24	.002
Graduate and above		77.43	95.76	.500	20.10	68.40	.008	86.87	97.75	.424
Marital Status	Single	62.24	84.10	<.001	12.22	51.16	<.001	72.48	89.42	<.001
	Married or Cohabiting	46.86	82.09	<.001	9.54	57.55	<.001	74.93	93.95	<.001
	Other*	13.60	71.01	<.001	5.18	24.50	.004	23.11	82.38	<.001
Living Area	Northern Area	49.65	83.25	<.001	10.73	54.22	<.001	73.26	93.25	<.001
	Central Area	57.73	79.20	<.001	9.89	50.90	<.001	74.73	89.18	<.001
	Southern Area	46.65	82.94	<.001	9.44	56.55	.002	65.62	91.39	<.001
	Eastern Area	76.29	85.90	.407	10.41	47.58	.002	79.78	88.19	.407
	Taipei City	46.03	85.98	.001	15.12	60.93	<.001	78.93	96.42	.002
	Kaohsiung City	18.06	81.50	<.001	4.29	52.89	<.001	37.17	92.20	<.001
Personal monthly Income	Less than US\$450	50.81	78.43	<.001	8.19	52.75	<.001	63.53	85.98	<.001
	US\$451~ US\$650	47.32	81.10	.001	4.77	54.78	<.001	68.27	91.13	.006
	US\$651~ US\$950	64.49	84.32	.015	4.73	56.84	<.001	83.35	93.68	.016
	US\$951~ US\$1,250	82.52	85.26	.736	14.08	56.89	<.001	94.55	95.51	.736
	US\$1,251~ US\$1,550	75.12	85.87	.332	23.70	58.71	<.001	89.30	94.38	.324
	US\$1,551~ US\$2,250	56.12	88.42	.432	33.80	73.38	<.001	94.72	99.08	.341
	Above US\$2,251	76.07	88.82	.487	27.39	46.59	.135	95.34	98.08	.487
	DK or RA**	30.35	77.11	<.001	6.33	43.18	<.001	49.37	88.29	<.001
Family Monthly Income	No income or Unstable	50.55	70.00	.134	5.62	53.54	<.001	77.39	88.65	.176
	Less than US\$650	40.94	75.84	<.001	1.88	48.96	<.001	57.72	86.07	.001
	US\$651~ US\$1,250	43.42	78.50	<.001	6.65	48.84	<.001	65.37	89.98	<.001
	US\$1,251~ US\$1,850	69.36	83.92	.022	8.52	53.84	<.001	81.28	90.92	.022
	US\$1,851~ US\$2,450	61.70	86.95	.007	11.60	61.00	<.001	80.97	94.62	.008
	US\$2,451~ US\$3,050	70.45	88.01	.111	16.59	61.49	<.001	85.47	94.77	.110
	US\$3,051~ US\$4,650	77.18	86.41	.313	26.60	60.53	<.001	91.58	95.34	.414
	Above US\$4,651	43.38	89.29	.042	33.81	61.10	.020	77.41	97.39	.051
DK or RA**	29.32	76.09	<.001	7.35	43.78	<.001	51.00	88.87	<.001	
Computer Ownership	Own	58.59	83.64	<.001	12.46	54.85	<.001	77.21	92.45	<.001
	Didn't own	16.72	66.01	<.001	0.82	48.27	<.001	37.44	85.28	<.001
Internet Access	Yes	62.73	86.38	<.001	14.88	58.58	<.001	79.15	93.47	<.001
	No	32.71	71.71	<.001	4.87	41.56	<.001	57.50	87.58	<.001

Data resource: This research

* Including divorced, separated, widower, or widow

**DK or RA' represents "do not know" or "refuse to answer."

H7, H8, H9 are alternative hypotheses. H7: Want rate, given awareness for each consumer segment, is higher than want rate with unawareness. H8: Adoption rate, given want for each consumer segment, is higher than adoption rate without want. H9: Awareness rate, given want for each consumer segment, is higher than awareness rate without want.

Table 10. P-values of the two independent proportion tests for H7, H8, and H9 in DHCS

Demographics/ Computer ownership/Internet access		Digital Home Care Service								
		H7			H8			H9		
		Want rate		P-value	Adoption rate		P-value	Awareness rate		P-value
		Given unaware	Given aware		Given Unwanted	Given wanted		Given Unwanted	Given wanted	
Total		64.15	74.86	<.001	1.21	6.48	<.001	42.06	54.71	<.001
Gender	Male	62.34	75.86	<.001	1.11	7.43	<.001	42.07	57.95	.001
	Female	65.77	73.81	.001	1.32	5.55	<.001	42.06	51.56	<.001
Age Level	15–24	69.67	74.31	.244	1.85	7.73	.001	44.93	50.69	.244
	25–34	65.96	75.50	.009	2.03	6.35	.006	42.99	54.53	.009
	35–44	69.73	75.87	.104	0.55	5.26	<.001	49.84	57.56	.104
	45–54	76.72	76.35	.919	2.10	4.71	.108	59.55	59.05	.919
	55–64	61.39	73.47	.103	1.15	5.52	.013	38.09	51.73	.013
	over 65	42.89	71.18	<.001	0.00	11.08	<.001	24.40	51.49	<.001
Education Level	Below primary school	41.05	73.29	<.001	0.00	7.74	<.001	17.13	44.88	<.001
	Junior high school	53.54	71.06	.004	0.58	4.64	.032	34.40	52.78	.004
	Senior high school	67.66	72.41	.100	0.97	5.83	<.001	47.34	52.99	.099
	Junior college	75.56	76.41	.841	1.77	5.41	.044	59.56	60.67	.840
	University	72.04	77.70	.059	2.84	7.65	.002	47.61	55.14	.058
	Graduate and above	78.34	77.12	.868	0.00	7.40	.003	67.00	65.43	.868
Marital Status	Single	67.56	75.99	.002	1.94	7.28	<.001	43.29	53.71	.002
	Married or Cohabiting	66.66	74.22	<.001	1.00	6.08	<.001	46.33	55.42	<.001
	Other*	24.01	75.68	<.001	0.00	4.68	.130	9.70	51.41	<.001
Living Area	Northern Area	69.33	72.15	.334	1.32	7.09	<.001	49.12	52.53	.334
	Central Area	66.09	75.42	.005	2.23	7.31	.001	46.36	57.65	.005
	Southern Area	59.30	74.56	<.001	0.99	6.03	<.001	37.31	54.49	<.001
	Eastern Area	80.76	80.41	.967	3.31	3.46	.976	52.67	52.11	<.001
	Taipei City	67.65	79.93	.008	0.00	3.56	.002	40.76	56.72	.957
	Kaohsiung City	44.51	74.90	<.001	0.00	8.98	<.001	22.73	52.25	.007
Personal monthly Income	Less than US\$450	57.97	74.10	<.001	0.65	7.53	<.001	31.41	48.72	<.001
	US\$451~ US\$650	65.84	71.53	.377	3.36	7.48	.190	51.03	57.59	.377
	US\$651~ US\$950	65.33	77.17	.003	0.39	6.50	<.001	41.19	55.69	.003
	US\$951~ US\$1,250	74.81	78.37	.384	2.93	6.10	.140	48.93	53.88	.384
	US\$1,251~ US\$1,550	70.30	76.17	.291	2.21	6.34	.091	57.33	64.47	.282
	US\$1,551~ US\$2,250	84.91	78.91	.257	3.40	6.84	.412	69.02	59.71	.260
	Above US\$2,251	80.48	79.16	.865	0.00	10.98	<.001	68.00	66.19	.856
	DK or RA**	54.52	67.85	.001	0.45	3.86	.001	35.46	49.17	.001
Family Monthly Income	No income or Unstable	48.34	72.91	.011	0.00	1.02	.507	24.56	48.35	.012
	Less than US\$650	44.10	76.44	<.001	0.98	4.74	.143	25.85	58.91	<.001
	US\$651~ US\$1,250	65.97	73.29	.083	1.40	6.61	.002	38.15	46.62	.083
	US\$1,251~ US\$1,850	66.86	79.63	1<.001	0.00	6.29	<.001	44.90	61.23	.001
	US\$1,851~ US\$2,450	71.91	73.88	.642	2.18	7.98	.004	53.48	55.95	.642
	US\$2,451~ US\$3,050	73.50	76.05	.603	4.14	5.94	.545	51.63	55.00	.603
	US\$3,051~ US\$4,650	80.81	77.39	.487	2.56	8.91	.022	65.56	60.74	.487
	Above US\$4,651	65.53	78.53	.077	0.00	10.94	<.001	44.41	60.58	.072
	DK or RA**	54.11	66.52	0.003	0.50	3.74	.005	34.50	47.01	.003
Computer Ownership	Own	69.71	75.31	0.001	1.39	6.56	<.001	47.76	54.78	.001
	Didn't own	26.93	67.58	<.001	0.45	5.03	.033	16.91	53.50	<.001
Internet Access	Yes	72.86	76.67	0.044	2.10	7.04	<.001	51.59	56.59	.044
	No	48.86	69.08	<.001	0.00	4.74	<.001	29.06	48.93	<.001

Data resource: This research

* Including divorced, separated, widower, or widow

**DK or RA' represents "do not know" or "refuse to answer."

H7, H8, H9 are alternative hypotheses. H7: Want rate, given awareness for each consumer segment, is higher than want rate with unawareness. H8: Adoption rate, given want for each consumer segment, is higher than adoption rate without want. H9: Awareness rate, given want for each consumer segment, is higher than awareness rate without want.