# Technical Appendix to "A pragmatic randomized controlled trial of a cardiac hospital-to-home transitional care program in a Singapore academic medical center"

This technical appendix reports the results for the full specification of the regressions reported in Tables 3 and 4 of the main paper.

## Full Regression Specification for Main Results

Table A1: Effect of CareHub on Key Outcomes

			Outcome	variables		
	(1)	(2)	(3)	(4)	(5)	(6)
Independent	No. of	Total days	No. of	Total days	Outpatient	Emergency
variables	readmissions	readmitted	readmissions	readmitted	specialist	department
	(cardiac &	(cardiac &	(cardiac)	(cardiac)	visits	visits
	unplanned)	unplanned)			(cardiac)	
CareHub	-0.234**	-2.241**	-0.196	-2.017*	0.328	-0.0702
	(0.114)	(1.120)	(0.119)	(1.184)	(0.384)	(0.218)
Male	0.152	-0.538	0.128	-0.304	0.605	0.357*
	(0.119)	(1.071)	(0.123)	(1.116)	(0.372)	(0.209)
Age	-0.00273	-0.127	-0.00399	-0.0497	-0.201	0.0205
	(0.0265)	(0.389)	(0.0296)	(0.399)	(0.243)	(0.0608)
Age-squared	4.51e-05	0.000986	4.05e-05	0.000313	0.00137	-0.000133
	(0.000204)	(0.00311)	(0.000222)	(0.00318)	(0.00170)	(0.000435)
Ethnicity:						
Malay	0.0160	-1.612	0.0464	-2.000	0.0944	0.369
	(0.149)	(1.416)	(0.160)	(1.462)	(0.468)	(0.298)
Ethnicity:						
Indian	0.136	-0.863	0.109	-0.414	-0.574	0.528
	(0.259)	(1.264)	(0.260)	(1.603)	(0.599)	(0.641)
Ethnicity:						
Others	0.0687	1.660	0.0298	1.235	-0.611	0.0899
	(0.218)	(2.928)	(0.222)	(2.959)	(0.549)	(0.321)
Marital status:						
Married	0.161	2.341*	0.121	2.494*	1.580**	-0.0620
	(0.237)	(1.348)	(0.256)	(1.460)	(0.749)	(0.629)
Marital status:			0.00-0.0			0.5.4
Missing value	0.0526	1.853	-0.00501	2.255	1.152	-0.361
	(0.241)	(1.583)	(0.265)	(1.740)	(0.796)	(0.585)
Ward C	0.0713	0.329	0.0639	-0.117	-0.374	0.167

	(0.119)	(1.262)	(0.128)	(1.371)	(0.413)	(0.260)
Index adm in						
Aug 2016	-0.818	-2.224	-0.981	-4.348	-1.086	-2.256
	(0.748)	(2.811)	(0.754)	(3.861)	(0.936)	(2.102)
Index adm in						
Sep 2016	-0.920	-3.455	-1.040	-5.520	-1.638	-2.060
	(0.721)	(2.750)	(0.731)	(3.847)	(0.997)	(2.027)
Index adm in	0.765	1.010	0.001	2 201	1 104	2 201
Oct 2016	-0.765	-1.810	-0.881	-3.301	-1.134	-2.381
	(0.716)	(2.976)	(0.726)	(4.052)	(1.012)	(2.014)
Index adm in	0.060	1.205	0.070	0.551	1.205	2 202
Nov 2016	-0.869	-1.295	-0.978	-2.551	-1.305	-2.203
	(0.708)	(2.903)	(0.718)	(4.019)	(0.940)	(1.985)
Index adm in	0.025	2.507	0.001	5 401	2 002**	2 220
Dec 2016 <sup>4</sup>	-0.825	-3.507	-0.981	-5.491	-2.092**	-2.230
ъ :	(0.729)	(2.934)	(0.738)	(3.966)	(0.969)	(2.024)
Previous						
myocardial infarction	0.174*	1.827	0.163	2.015*	-0.371	0.242
marction	$(0.174^{\circ})$	(1.108)	(0.112)	2.015*	(0.395)	(0.192)
Camahanasaaaslaa	(0.103)	(1.106)	(0.112)	(1.199)	(0.393)	(0.192)
Cerebrovascular / peripheral						
vascular disease	0.216	1.926	0.237	1.609	-0.751*	0.547
vasculai discasc	(0.160)	(1.338)	(0.164)	(1.367)	(0.414)	(0.392)
Diabetes	0.201*	1.407	0.205*		-0.268	0.232
Diabetes				1.148		
C	(0.107)	(0.990)	(0.112)	(1.112)	(0.413)	(0.224)
Congestive heart failure	0.117	1.548	0.0893	1.487	0.579	-0.182
neart ranure	(0.117)	(1.072)	(0.129)	(1.135)	(0.413)	(0.262)
Chamin	(0.123)	(1.072)	(0.129)	(1.133)	(0.413)	(0.202)
Chronic						
pulmonary disease	0.316**	1.911	0.305*	1.788	-0.636*	0.142
discase	(0.150)	(1.551)	(0.157)	(1.589)	(0.347)	(0.288)
Liver or renal	(0.150)	(1.331)	(0.137)	(1.50))	(0.547)	(0.200)
failure	-0.0763	0.854	-0.108	0.417	-0.479	-0.351
Turiure	(0.133)	(1.409)	(0.137)	(1.465)	(0.381)	(0.285)
Connective	(0.100)	(11.05)	(0.157)	(11.50)	(0.001)	(0.200)
tissue disease	-0.0727	-1.367	-0.114	-1.786	-0.186	-0.0133
tissue disease	(0.213)	(2.330)	(0.225)	(2.483)	(0.602)	(0.351)
Other diseases <sup>5</sup>	0.165	0.499	0.143	0.542	-0.738	0.380
Other diseases	(0.137)	(0.915)	(0.143)	(1.001)	(0.451)	(0.297)
No. of pre-	(0.137)	(0.913)	(0.143)	(1.001)	(0.431)	(0.297)
index inpatient						
visits	0.205	0.339	0.234	0.289	0.210	0.349
* 151tb	(0.160)	(1.157)	(0.165)	(1.172)	(0.315)	(0.403)
No. of pre-	(0.100)	(1.157)	(0.103)	(1.1/2)	(0.313)	(0.403)
index inpatient						
days	0.00939	0.295	0.00598	0.290	0.000450	0.00145
auys	0.00737	0.273	0.00570	0.270	0.000+30	0.00173

No. of pre-	(0.0159)	(0.270)	(0.0165)	(0.273)	(0.0277)	(0.0265)
index outpatient specialist visits	-0.0264 (0.0188)	-0.119 (0.149)	-0.0226 (0.0191)	-0.0876 (0.153)	0.141*** (0.0528)	-0.0378 (0.0472)
No. of pre- index emergency department						
visits	-0.0586	-0.555	-0.0834	-0.578	-0.351	0.366**
	(0.0917)	(0.799)	(0.0956)	(0.805)	(0.214)	(0.180)
Observations	270	270	270	270	270	270
R-squared	0.229	0.198	0.210	0.171	0.156	0.392

<sup>&</sup>lt;sup>1</sup> Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>2</sup> Estimates of the effect of CareHub are from a regression model that includes controls for demographics, co-morbidities, and healthcare utilization in the 6 months before the index visit.

<sup>&</sup>lt;sup>3</sup> For the outcome variables "total days readmitted" in columns (2) and (4), patients without any readmissions are assigned a value of 0. These outcome variables thus capture effects due to reduced readmissions as well as reduced length of stay for patients who are readmitted.

<sup>&</sup>lt;sup>4</sup> Admission dates were shifted to mask confidential information. Therefore, our data includes admissions dated in December 2016, even though the last patient for our study was recruited in November 2016.

<sup>&</sup>lt;sup>5</sup> Other diseases include AIDS, cancer, and dementia.

# Full Regression Specification for Heterogeneity Analyses

Table A2.1: Heterogeneity Analyses by total days spent in hospital before index visit

Independent variables	(1) No. of readmissions (cardiac & unplanned)	Outcome (2) Total days readmitted (cardiac & unplanned)	variables (3) No. of readmissions (cardiac)	(4) Total days readmitted (cardiac)
CareHub	0.0383	0.802	0.0729	0.992
	(0.116)	(1.426)	(0.123)	(1.515)
CareHub × total days	-0.0560***	-0.625	-0.0553***	-0.618
	(0.0190)	(0.393)	(0.0195)	(0.399)
Male	0.175	-0.282	0.151	-0.0504
	(0.120)	(1.065)	(0.124)	(1.105)
Age	-0.00228	-0.122	-0.00355	-0.0448
	(0.0240)	(0.366)	(0.0273)	(0.376)
Age-squared	4.41e-05	0.000974	3.94e-05	0.000301
	(0.000186)	(0.00292)	(0.000205)	(0.00299)
Ethnicity: Malay	-0.0271	-2.094	0.00379	-2.476
	(0.141)	(1.442)	(0.155)	(1.502)
Ethnicity: Indian	0.0699	-1.596	0.0445	-1.138
	(0.256)	(1.448)	(0.259)	(1.830)
Ethnicity: Others	-0.0291	0.568	-0.0668	0.156
	(0.156)	(1.949)	(0.161)	(1.973)
Marital status: Married	0.170	2.451*	0.131	2.603*
	(0.228)	(1.355)	(0.247)	(1.458)
Marital status: Missing value	0.0597	1.932	0.00198	2.333
	(0.230)	(1.604)	(0.253)	(1.746)
Ward C	-0.0206	-0.698	-0.0269	-1.132
	(0.110)	(0.991)	(0.121)	(1.120)
Index adm in Aug 2016	-0.636	-0.194	-0.801	-2.341
	(0.735)	(3.277)	(0.743)	(4.211)
Index adm in Sep 2016	-0.744	-1.487	-0.866	-3.574
	(0.710)	(3.122)	(0.721)	(4.116)
Index adm in Oct 2016	-0.680	-0.858	-0.797	-2.358
	(0.709)	(3.300)	(0.719)	(4.294)
Index adm in Nov 2016	-0.806	-0.589	-0.916	-1.853
	(0.704)	(3.190)	(0.714)	(4.227)
Index adm in Dec 2016 <sup>4</sup>	-0.770	-2.893	-0.926	-4.884
	(0.727)	(3.296)	(0.737)	(4.230)
Previous myocardial infarction	0.121	1.238	0.111	1.433

	(0.0994)	(0.893)	(0.107)	(1.000)
Cerebrovascular / peripheral				
vascular disease	0.199	1.739	0.220	1.424
	(0.153)	(1.177)	(0.158)	(1.217)
Diabetes	0.193*	1.317	0.197*	1.059
	(0.108)	(1.019)	(0.114)	(1.147)
Congestive heart failure	0.117	1.549	0.0894	1.488
	(0.123)	(1.039)	(0.127)	(1.098)
Chronic pulmonary disease	0.227	0.916	0.217	0.804
	(0.139)	(1.133)	(0.145)	(1.159)
Liver or renal failure	-0.0453	1.201	-0.0775	0.760
	(0.129)	(1.416)	(0.133)	(1.474)
Connective tissue disease	-0.0884	-1.543	-0.129	-1.959
	(0.205)	(2.347)	(0.218)	(2.487)
Other diseases <sup>5</sup>	0.166	0.505	0.144	0.548
	(0.128)	(1.066)	(0.134)	(1.113)
No. of pre-index inpatient				
visits	0.165	-0.105	0.195	-0.150
	(0.152)	(1.360)	(0.157)	(1.376)
No. of pre-index inpatient				
days	0.0464**	0.709	0.0425*	0.698
	(0.0215)	(0.474)	(0.0223)	(0.482)
No. of pre-index outpatient	0.0200	0.4.70	0.00.51	0.125
specialist visits	-0.0299	-0.159	-0.0261	-0.127
N. C . 1	(0.0190)	(0.163)	(0.0193)	(0.166)
No. of pre-index emergency	0.00110	0.0050	0.0267	0.0550
department visits	-0.00119	0.0859	-0.0267	0.0558
	(0.0746)	(0.660)	(0.0784)	(0.674)
Observations	270	270	270	270
R-squared	0.298	0.299	0.274	0.262
<b>J</b>	0.270	U.=//	V.=/ 1	J.202

Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>2</sup> Estimates of the effect of CareHub are from a regression model that includes controls for demographics, co-morbidities, and healthcare utilization in the 6 months before the index visit.

<sup>&</sup>lt;sup>3</sup> For the outcome variables "total days readmitted" in columns (2) and (4), patients without any readmissions are assigned a value of 0. These outcome variables thus capture effects due to reduced readmissions as well as reduced length of stay for patients who are readmitted.

<sup>&</sup>lt;sup>4</sup> Admission dates were shifted to mask confidential information. Therefore, our data includes admissions dated in December 2016, even though the last patient for our study was recruited in November 2016.

<sup>&</sup>lt;sup>5</sup> Other diseases include AIDS, cancer, and dementia.

Table A2.2: Heterogeneity analyses by ward class

	Outcome variables				
Independent variables	(1) No. of readmissions (cardiac & unplanned)	(2) Total days readmitted (cardiac & unplanned)	(3) No. of readmissions (cardiac)	(4) Total days readmitted (cardiac)	
CareHub	0.116	-1.024	0.208	-0.813	
	(0.162)	(1.611)	(0.182)	(1.929)	
CareHub × ward C	-0.545**	-1.897	-0.631***	-1.878	
	(0.227)	(1.674)	(0.241)	(2.017)	
Male	0.0997	-0.719	0.0682	-0.483	
	(0.115)	(1.055)	(0.120)	(1.098)	
Age	-0.00807	-0.146	-0.0102	-0.0681	
	(0.0270)	(0.389)	(0.0299)	(0.399)	
Age-squared	7.87e-05	0.00110	7.93e-05	0.000429	
	(0.000209)	(0.00312)	(0.000226)	(0.00318)	
Ethnicity: Malay	-0.0125	-1.711	0.0134	-2.098	
	(0.145)	(1.411)	(0.156)	(1.460)	
Ethnicity: Indian	0.108	-0.960	0.0772	-0.509	
	(0.251)	(1.234)	(0.253)	(1.620)	
Ethnicity: Others	0.0377	1.552	-0.00600	1.129	
	(0.212)	(2.939)	(0.217)	(2.971)	
Marital status: Married	0.199	2.474*	0.166	2.626*	
	(0.241)	(1.335)	(0.257)	(1.439)	
Marital status: Missing value	0.0939	1.996	0.0427	2.397	
	(0.246)	(1.578)	(0.266)	(1.716)	
Ward C	0.351*	1.302	0.387**	0.846	
	(0.184)	(1.615)	(0.184)	(1.738)	
Index adm in Aug 2016	-0.810	-2.195	-0.971	-4.319	
	(0.731)	(2.739)	(0.731)	(3.777)	
Index adm in Sep 2016	-0.900	-3.386	-1.017	-5.452	
	(0.702)	(2.677)	(0.706)	(3.756)	
Index adm in Oct 2016	-0.775	-1.844	-0.892	-3.334	
	(0.703)	(2.921)	(0.705)	(3.991)	
Index adm in Nov 2016	-0.867	-1.288	-0.976	-2.544	
	(0.694)	(2.848)	(0.697)	(3.955)	
Index adm in Dec 2016 <sup>4</sup>	-0.792	-3.394	-0.943	-5.380	
	(0.706)	(2.848)	(0.709)	(3.854)	
Previous myocardial					
infarction	0.182*	1.856*	0.173	2.044*	
	(0.104)	(1.105)	(0.111)	(1.198)	
Cerebrovascular / peripheral vascular disease	0.226	1.963	0.249	1.646	

	(0.160)	(1.337)	(0.163)	(1.368)
Diabetes	0.215**	1.455	0.221**	1.196
	(0.107)	(0.989)	(0.112)	(1.122)
Congestive heart failure	0.118	1.552	0.0908	1.491
	(0.125)	(1.072)	(0.128)	(1.135)
Chronic pulmonary disease	0.298**	1.848	0.285*	1.726
1 ,	(0.149)	(1.557)	(0.155)	(1.591)
Liver or renal failure	-0.0876	0.815	-0.121	0.378
	(0.134)	(1.421)	(0.137)	(1.478)
Connective tissue disease	-0.0945	-1.443	-0.139	-1.861
	(0.210)	(2.320)	(0.224)	(2.472)
Other diseases <sup>5</sup>	0.165	0.498	0.143	0.541
	(0.133)	(0.910)	(0.139)	(0.990)
No. of pre-index inpatient				
visits	0.192	0.296	0.220	0.246
	(0.156)	(1.167)	(0.159)	(1.183)
No. of pre-index inpatient				
days	0.00749	0.289	0.00378	0.283
	(0.0160)	(0.271)	(0.0165)	(0.274)
No. of pre-index outpatient				
specialist visits	-0.0287	-0.128	-0.0254	-0.0957
	(0.0190)	(0.148)	(0.0192)	(0.152)
No. of pre-index emergency				
department visits	-0.0401	-0.490	-0.0620	-0.514
	(0.0900)	(0.807)	(0.0930)	(0.818)
Observations	270	270	270	270
R-squared	0.244	0.200	0.229	0.173
. 4	0.211	0.200	0.22)	0.175

Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>2</sup> Estimates of the effect of CareHub are from a regression model that includes controls for demographics, co-morbidities, and healthcare utilization in the 6 months before the index visit.

<sup>&</sup>lt;sup>3</sup> For the outcome variables "total days readmitted" in columns (2) and (4), patients without any readmissions are assigned a value of 0. These outcome variables thus capture effects due to reduced readmissions as well as reduced length of stay for patients who are readmitted.

<sup>&</sup>lt;sup>4</sup> Admission dates were shifted to mask confidential information. Therefore, our data includes admissions dated in December 2016, even though the last patient for our study was recruited in November 2016.

<sup>&</sup>lt;sup>5</sup> Other diseases include AIDS, cancer, and dementia.

Table A2.3: Heterogeneity analyses by gender

	Outcome variables			
Independent variables	(1) No. of readmissions (cardiac & unplanned)	(2) Total days readmitted (cardiac & unplanned)	(3) No. of readmissions (cardiac)	(4) Total days readmitted (cardiac)
CareHub	-0.231	-1.056	-0.226	-1.020
	(0.154)	(1.021)	(0.159)	(1.233)
CareHub × female	-0.00748	-2.768	0.0698	-2.329
	(0.246)	(3.186)	(0.253)	(3.332)
Male	0.148	-2.015	0.165	-1.547
	(0.185)	(2.257)	(0.186)	(2.321)
Age	-0.00275	-0.135	-0.00380	-0.0563
	(0.0265)	(0.385)	(0.0296)	(0.396)
Age-squared	4.54e-05	0.00109	3.80e-05	0.000397
	(0.000204)	(0.00307)	(0.000222)	(0.00315)
Ethnicity: Malay	0.0160	-1.599	0.0461	-1.989
	(0.149)	(1.402)	(0.160)	(1.452)
Ethnicity: Indian	0.136	-0.788	0.107	-0.351
	(0.258)	(1.262)	(0.258)	(1.606)
Ethnicity: Others	0.0686	1.625	0.0307	1.206
	(0.217)	(2.883)	(0.223)	(2.913)
Marital status: Married	0.160	2.005	0.130	2.212
	(0.240)	(1.283)	(0.258)	(1.390)
Marital status: Missing value	0.0521	1.649	0.000120	2.084
	(0.245)	(1.577)	(0.266)	(1.737)
Ward C	0.0719	0.527	0.0590	0.0494
	(0.119)	(1.348)	(0.129)	(1.466)
Index adm in Aug 2016	-0.818	-2.075	-0.985	-4.223
	(0.754)	(2.859)	(0.759)	(3.869)
Index adm in Sep 2016	-0.920	-3.479	-1.039	-5.541
	(0.722)	(2.790)	(0.731)	(3.860)
Index adm in Oct 2016	-0.765	-1.767	-0.882	-3.264
	(0.719)	(3.027)	(0.728)	(4.071)
Index adm in Nov 2016	-0.870	-1.535	-0.972	-2.753
	(0.704)	(2.930)	(0.713)	(4.047)
Index adm in Dec 2016 <sup>4</sup>	-0.825	-3.780	-0.974	-5.721
	(0.724)	(3.006)	(0.733)	(4.023)
Previous myocardial infarction	0.174*	1.819*	0.164	2.008*
	(0.105)	(1.099)	(0.112)	(1.190)
Cerebrovascular / peripheral vascular disease	0.216	1.892	0.238	1.581

	(0.161)	(1.308)	(0.164)	(1.339)
Diabetes	0.201*	1.485	0.203*	1.214
	(0.105)	(0.987)	(0.110)	(1.115)
Congestive heart failure	0.117	1.533	0.0897	1.475
	(0.126)	(1.085)	(0.129)	(1.146)
Chronic pulmonary disease	0.317**	2.090	0.301*	1.939
1 2	(0.157)	(1.692)	(0.163)	(1.734)
Liver or renal failure	-0.0758	1.036	-0.113	0.570
	(0.140)	(1.566)	(0.144)	(1.616)
Connective tissue disease	-0.0726	-1.352	-0.114	-1.773
	(0.213)	(2.321)	(0.226)	(2.474)
Other diseases <sup>5</sup>	0.165	0.494	0.143	0.538
	(0.137)	(0.929)	(0.143)	(1.010)
No. of pre-index inpatient				
visits	0.206	0.643	0.227	0.545
	(0.157)	(1.125)	(0.161)	(1.144)
No. of pre-index inpatient				
days	0.00937	0.287	0.00619	0.283
	(0.0156)	(0.260)	(0.0163)	(0.264)
No. of pre-index outpatient				
specialist visits	-0.0264	-0.122	-0.0226	-0.0902
	(0.0188)	(0.153)	(0.0192)	(0.157)
No. of pre-index emergency				
department visits	-0.0592	-0.803	-0.0771	-0.786
	(0.0929)	(0.936)	(0.0965)	(0.949)
Observations	270	270	270	270
R-squared	0.229	0.203	0.211	0.174

Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>2</sup> Estimates of the effect of CareHub are from a regression model that includes controls for demographics, co-morbidities, and healthcare utilization in the 6 months before the index visit.

<sup>&</sup>lt;sup>3</sup> For the outcome variables "total days readmitted" in columns (2) and (4), patients without any readmissions are assigned a value of 0. These outcome variables thus capture effects due to reduced readmissions as well as reduced length of stay for patients who are readmitted.

<sup>&</sup>lt;sup>4</sup> Admission dates were shifted to mask confidential information. Therefore, our data includes admissions dated in December 2016, even though the last patient for our study was recruited in November 2016.

<sup>&</sup>lt;sup>5</sup> Other diseases include AIDS, cancer, and dementia.

Table A2.4: Heterogeneity analyses by age

	Outcome variables			
	(1)	(2)	(3)	(4)
Independent variables	No. of	Total days	No. of	Total days
	readmissions	readmitted	readmissions	readmitted
	(cardiac &	(cardiac &	(cardiac)	(cardiac)
	unplanned)	unplanned)		
CareHub	-0.796	0.151	-0.703	0.431
	(0.586)	(4.532)	(0.650)	(5.030)
CareHub × age	0.00812	-0.0346	0.00731	-0.0354
· ·	(0.00813)	(0.0705)	(0.00892)	(0.0757)
Male	0.157	-0.563	0.133	-0.329
	(0.120)	(1.082)	(0.124)	(1.125)
Age	-0.00740	-0.107	-0.00821	-0.0293
7160	(0.0272)	(0.363)	(0.0297)	(0.372)
A ga sayarad			` '	
Age-squared	4.85e-05	0.000972	4.35e-05	0.000298
E4 - 1 - 1 - 1 - 1	(0.000210)	(0.00308)	(0.000227)	(0.00315)
Ethnicity: Malay	0.0150	-1.608	0.0455	-1.995
	(0.148)	(1.419)	(0.159)	(1.464)
Ethnicity: Indian	0.145	-0.901	0.117	-0.453
	(0.261)	(1.296)	(0.262)	(1.646)
Ethnicity: Others	0.0531	1.726	0.0158	1.303
	(0.220)	(2.924)	(0.224)	(2.952)
Marital status: Married	0.158	2.350*	0.119	2.503*
	(0.238)	(1.343)	(0.259)	(1.455)
Marital status: Missing value	0.0603	1.820	0.00191	2.222
	(0.245)	(1.584)	(0.271)	(1.738)
Ward C	0.0725	0.324	0.0650	-0.122
	(0.120)	(1.265)	(0.128)	(1.374)
Index adm in Aug 2016	-0.813	-2.245	-0.976	-4.370
•	(0.743)	(2.819)	(0.750)	(3.870)
Index adm in Sep 2016	-0.918	-3.464	-1.038	-5.529
1	(0.718)	(2.757)	(0.728)	(3.856)
Index adm in Oct 2016	-0.769	-1.796	-0.884	-3.285
mach adm m oct 2010	(0.715)	(2.991)	(0.725)	(4.066)
Index adm in Nov 2016	-0.864	` ,	-0.974	
mack adm in 1407 2010	(0.703)	-1.317 (2.896)	(0.714)	-2.573 (4.020)
Index adm in Dec 2016 <sup>4</sup>				
muex adm m Dec 2010	-0.813	-3.556	-0.970 (0.732)	-5.541 (2.071)
D	(0.721)	(2.933)	(0.732)	(3.971)
Previous myocardial	0.170	1 042	0.160	2.020*
infarction	0.170 (0.105)	1.842	0.160	2.030*
Comphanyon ouler /	(0.103)	(1.116)	(0.112)	(1.204)
Cerebrovascular / peripheral	0.224	1 947	0.254	1 520
vascular disease	0.234	1.847	0.254	1.528

	(0.166)	(1.320)	(0.169)	(1.351)
Diabetes	0.207*	1.382	0.210*	1.123
	(0.108)	(0.973)	(0.114)	(1.097)
Congestive heart failure	0.123	1.520	0.0952	1.458
	(0.124)	(1.067)	(0.128)	(1.132)
Chronic pulmonary disease	0.311**	1.934	0.301*	1.812
	(0.152)	(1.555)	(0.160)	(1.592)
Liver or renal failure	-0.0753	0.850	-0.107	0.413
	(0.132)	(1.411)	(0.136)	(1.467)
Connective tissue disease	-0.0718	-1.371	-0.113	-1.790
	(0.214)	(2.331)	(0.227)	(2.483)
Other diseases <sup>5</sup>	0.163	0.507	0.141	0.551
	(0.135)	(0.925)	(0.142)	(1.009)
No. of pre-index inpatient				
visits	0.193	0.389	0.224	0.340
	(0.157)	(1.180)	(0.162)	(1.198)
No. of pre-index inpatient				
days	0.00916	0.296	0.00577	0.291
	(0.0159)	(0.270)	(0.0165)	(0.274)
No. of pre-index outpatient				
specialist visits	-0.0246	-0.127	-0.0210	-0.0953
	(0.0184)	(0.152)	(0.0188)	(0.156)
No. of pre-index emergency				
department visits	-0.0491	-0.595	-0.0748	-0.619
	(0.0902)	(0.805)	(0.0949)	(0.816)
Observations	270	270	270	270
R-squared	0.232	0.199	0.212	0.172
K-squarou	0.232	0.177	0.212	0.172

Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>2</sup> Estimates of the effect of CareHub are from a regression model that includes controls for demographics, co-morbidities, and healthcare utilization in the 6 months before the index visit.

<sup>&</sup>lt;sup>3</sup> For the outcome variables "total days readmitted" in columns (2) and (4), patients without any readmissions are assigned a value of 0. These outcome variables thus capture effects due to reduced readmissions as well as reduced length of stay for patients who are readmitted.

<sup>&</sup>lt;sup>4</sup> Admission dates were shifted to mask confidential information. Therefore, our data includes admissions dated in December 2016, even though the last patient for our study was recruited in November 2016.

<sup>&</sup>lt;sup>5</sup> Other diseases include AIDS, cancer, and dementia.