

- 1 **Supplementary table 1** Results of logistic univariate regression analysis examining the
 2 association between patient, hospital and general practice factors associated with unplanned
 3 30-day readmission to hospital (all variables)
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Variables	Crude OR	95% CI	p value	aOR	95% CI	p value
Comorbidities						
Arthritis	0.754	[0.291, 1.953]	0.561	0.755	[0.291, 1.962]	0.564
Osteoporosis	2.108	[0.787, 5.645]	0.138	2.04	[0.744, 5.592]	0.166
Asthma	0.762	[0.218, 2.669]	0.671	0.792	[0.225, 2.783]	0.716
COPD, ARDS, emphysema	1.188	[0.148, 9.544]	0.871	1.112	[0.138, 8.947]	0.921
Angina	1.000	-	-	1	-	-
Congestive heart failure (or heart disease)	6.540	[1.884, 22.698]	0.003	6.0339	[1.708, 21.312]	0.005
Heart attack	1.000	-	-	1	-	-
Neurological disease	1.367	[0.168, 11.127]	0.770	1.413	[0.171, 11.683]	0.748
Stroke/ TIA	1.536	[0.336, 7.020]	0.580	1.428	[0.301, 6.764]	0.654
Peripheral vascular disease	9.542	[2.134, 42.671]	0.003	8.772	[1.901, 40.481]	0.005
Diabetes	1.638	[0.531, 5.052]	0.391	1.595	[0.516, 4.931]	0.418
Upper GI disease	1.451	[0.620, 3.395]	0.391	1.482	[0.628, 3.499]	0.369
Depression	1.259	[0.484, 3.271]	0.637	1.326	[0.504, 3.491]	0.567

Anxiety or panic disorders	1.855	[0.658, 5.230]	0.243	2.187	[0.746, 6.406]	0.154
Visual impairment	2.348	[1.004, 5.490]	0.049	2.503	[0.984, 6.364]	0.054
Hearing impairment	1.276	[0.458, 3.553]	0.641	1.126	[0.381, 3.324]	0.83
Degenerative disc disease	0.824	[0.274, 2.485]	0.732	0.791	[0.261, 2.397]	0.679
Comorbidity scale	1.163	[0.858, 1.576]	0.332	1.148	[0.841, 1.566]	0.384
Self-rated health	0.603	[0.371, 0.977]	0.040	0.608	[0.376, 0.984]	0.043

Before you went to hospital

Invited to attend

session by surgeon	0.875	[0.358, 2.142]	0.770	0.921	[0.370, 2.293]	0.859
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Attended

information session	0.690	[0.310, 1.538]	0.365	0.647	[0.288, 1.453]	0.292
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Usefulness of the

information session	0.620	[0.248, 1.550]	0.307	0.618	[0.248, 1.543]	0.303
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Given information package or checklist	0.926	[0.116, 7.401]	0.942	1.048	[0.129, 8.528]	0.965
Use of information or checklist	1.000	-	-	1	-	-

In the hospital

Pain

Experienced pain

during hospital stay	1.131	[0.414, 3.091]	0.810	1.136	[0.415, 3.111]	0.804
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Worst Pain	1.383	[0.616, 3.106]	0.432	1.39	[0.618, 3.127]	0.426
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General level of pain in hospital	1.098	[0.488, 2.473]	0.821	1.109	[0.492, 2.503]	0.803
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Pain on discharge	0.513	[0.150, 1.752]	0.287	0.522	[0.152, 1.788]	0.301
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Medication for

pain control helped	0.293	[0.059, 1.455]	0.133	0.271	[0.053, 1.377]	0.115
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Ice to manage pain	0.844	[0.357, 1.995]	0.700	0.918	[0.379, 2.224]	0.849
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Breathing exercise	0.635	[0.286, 1.406]	0.263	0.634	[0.286, 1.408]	0.263
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Rest/ sleep

Single/ shared room	1.099	[0.449, 2.690]	0.836	1.028	[0.417, 2.532]	0.952
Quality of sleep	2.400	[1.082, 5.323]	0.031	2.431	[1.094, 5.405]	0.029
Medication for sleep	0.794	[0.312, 2.032]	0.633	0.794	[0.310, 2.033]	0.631
Feel rested when leaving hospital	3.105	[1.353, 7.127]	0.008	3.354	[1.454, 7.733]	0.005
Total sleep score	1.484	[1.016, 2.165]	0.041	1.487	[1.020, 2.167]	0.039
Diet						
Dietary requirement met	1.246	[0.411, 3.775]	0.698	1.221	[0.400, 3.728]	0.725
Water in reach	0.915	[0.116, 7.233]	0.933	1.026	[0.128, 8.215]	0.981
Quality of food in hospital	0.618	[0.141, 2.708]	0.523	0.605	[0.137, 2.664]	0.506
Total diet score	0.964	[0.525, 1.771]	0.906	0.966	[0.527, 1.772]	0.911
Public vs Private Hospital						
	1.651	[0.730, 3.734]	0.229	1.653	[0.729, 3.748]	0.229
Post-hospital syndrome						
	0.962	[0.751, 1.232]	0.760	0.973	[0.759, 1.246]	0.826
Discussions of medications with health care provider						
	0.952	[0.347, 2.612]	0.924	0.989	[0.351, 2.788]	0.983

Patient**medication****enablement**

Better understand use of medication	0.569	[0.156, 2.072]	0.393	0.562	[0.154, 2.052]	0.383
Feel more confident about taking medications	0.422	[0.132, 1.351]	0.146	0.416	[0.129, 1.342]	0.142
Take your medications	0.374	[0.128, 1.097]	0.073	0.372	[0.127, 1.092]	0.072
Total medication enablement	0.794	[0.509, 1.236]	0.306	0.789	[0.504, 1.233]	0.298

Patient**enablement**

Able to cope with life	0.737	[0.454, 1.199]	0.219	0.748	[0.460, 1.218]	0.243
Able to understand your condition	0.806	[0.491, 1.322]	0.393	0.812	[0.493, 1.338]	0.415
Able to cope with your condition	0.837	[0.498, 1.406]	0.501	0.84	[0.499, 1.413]	0.51
Able to keep yourself healthy	0.957	[0.577, 1.587]	0.865	0.962	[0.578, 1.602]	0.882

Confident about your health	0.797	[0.487, 1.303]	0.365	0.808	[0.493, 1.323]	0.397
Able to help yourself	0.685	[0.420, 1.117]	0.129	0.691	[0.422, 1.130]	0.141
Total enablement	0.741	[0.337, 1.630]	0.456	0.742	[0.335, 1.641]	0.461

**When you got
home from
hospital**

Recall being given information about who to contact	0.920	[0.303, 2.792]	0.883	0.986	[0.321, 3.030]	0.98
Who you were instructed to contact	0.938	[0.852, 1.033]	0.193	0.936	[0.849, 1.031]	0.18
Go to ED within 30 days of discharge	50.171	[19.089, 131.868]	0.000	47.948	[18.230, 126.113]	0

**General Practice
Questions**

Regular GP practice	0.253	[0.050, 1.281]	0.097	0.246	[0.048, 1.265]	0.093
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Sees the same doctor	1.000			1	-	-
Regular appointments with GP	1.067	[0.485, 2.344]	0.872	0.947	[0.419, 2.139]	0.896
Discussion of plan with GP	1.436	[0.582, 3.539]	0.432	1.38	[0.558, 3.412]	0.486
When were you advised to see GP next	0.626	[0.252, 1.553]	0.312	0.651	[0.262, 1.619]	0.356
Usual waiting time to see GP	0.995	[0.644, 1.539]	0.983	0.991	[0.642, 1.531]	0.969
How soon after surgery did you see GP	0.738	[0.560, 1.508]	0.738	0.912	[0.557, 1.493]	0.715
Did GP know you were in hospital	1.550	[0.198, 12.102]	0.676	1.465	[0.185, 11.608]	0.718
Attendance to rehab program	1.458	[0.569, 3.736]	0.432	1.53	[0.596, 3.927]	0.377
Attendance to rehab within 5 days	1.241	[0.729, 2.110]	0.426	0.874	[0.446, 1.71]	0.693

Length of attendance to rehab	0.894	[0.457, 1.749]	0.744	0.716	[0.529, 0.971]	0.031
BMI	1.527	[0.893, 2.611]	0.122	1.052	[1.002, 1.104]	0.042
Height	0.503	[0.018, 13.852]	0.685	0.476	[0.014, 16.283]	0.681
Weight	1.019	[0.999, 1.039]	0.059	1.022	[1.001, 1.043]	0.037
Living situation	0.805	[0.611, 1.062]	0.125	0.803	[0.602, 1.070]	0.134
Living alone	0.567	[0.245, 1.312]	0.185	0.561	[0.234, 1.346]	0.196

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6 **Supplementary table 2** Patients with the listed variable that were readmitted compared to

7 those that were not readmitted

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Variables	Yes but not readmitted		Readmitted	
	n=355	%	n=27	%
Comorbidities				
Arthritis	283	93.40	20	6.60
Osteoporosis	50	89.29	6	10.71
Asthma	61	95.31	3	4.69
COPD, ARDS, emphysema	12	92.31	1	7.69
Angina	9	100.00	0	0.00
Congestive heart failure (or heart disease)	10	71.43	4	28.57
Heart attack	9	100.00	0	0.00
Neurological disease	10	90.91	1	9.09
Stroke/ TIA	19	90.48	2	9.52
Peripheral vascular disease	5	62.50	3	37.50
Diabetes	37	90.24	4	9.76
Upper GI disease	95	91.35	9	8.65
Depression	69	92.00	6	8.00
Anxiety or panic disorders	42	89.36	5	10.64
Visual impairment	80	88.89	10	11.11
Hearing impairment	59	92.19	5	7.81
Degenerative disc disease	64	94.12	4	5.88

Comorbidity scale

0	40	93.02	3	6.98
1	188	95.43	9	4.57
2	88	88.89	11	11.11
3	25	89.29	3	10.71
4	11	91.67	1	8.33
5	1	100.00	0	0.00
6	1	100.00	0	0.00
11	1	100.00	0	0.00

Self rated health

Poor	3	0.85	0	0.00
Fair	48	13.56	7	25.93
Good	152	42.94	13	48.15
Very Good	128	36.16	7	25.93
Excellent	23	6.50	0	0.00

Before you went to hospital

Invited to attend session by surgeon	271	93.13	20	6.87
Attended information session	184	93.40	13	6.60

Usefulness of session for surgery**prep**

Not very useful	6	100.00	0	0.00
Moderately useful	42	87.50	6	12.50

Very useful	144	94.74	8	5.26
Given information package or checklist	337	92.84	26	7.16
Use of information or checklist	334	92.78	26	7.22
Pain				
Worst Pain (less than 6)	157	94.01	10	5.99
Worst Pain (6 or more)	193	91.90	17	8.10
General pain (less than 6)	224	92.95	17	7.05
General pain (6 or more)	120	92.31	10	7.69
Pain on discharge (less than 6)	283	92.18	24	7.82
Pain on discharge (6 or more)	69	95.83	3	4.17
Total pain score				
Medication for pain control helped	341	93.17	25	6.83
Ice to manage pain	256	93.09	19	6.91
Breathing exercise	182	94.30	11	5.70
Single room	267	93.03	20	6.97
Shared room	85	92.39	7	7.61
Quality of sleep (average or good)	264	94.62	15	5.38
Quality of sleep (poor)	88	88.00	12	12.00
Medication for sleep	93	93.94	6	6.06
Feel rested when leaving hospital	236	95.93	10	4.07
Total sleep score				

Dietary requirement met	308	93.05	23	6.95
Water in reach	333	92.76	26	7.24
Quality of food in hospital (average or good)	309	92.51	25	7.49
Quality of food in hospital (poor)	40	95.24	2	4.76
Total diet score				
Post-hospital syndrome				
0	2	100.00	0	0.00
1	25	89.29	3	10.71
2	30	93.75	2	6.25
3	64	91.43	6	8.57
4	95	95.96	4	4.04
5	64	90.14	64	9.86
6	61	93.85	61	6.15
7	14	93.33	14	6.67
Discussions of medications with health care provider				
Doctor	282	92.76	22	7.24
Nurse	43	93.48	3	6.52
Pharmacist	108	93.10	8	6.90
Pharmacist	9	90.00	1	10.00
Physiotherapist	1	100.00	0	0.00
More than one	114	92.68	9	7.32
Patient medication enablement				

Better understand use of medication	253	91.34	18	85.71
Feel more confident about taking medications	252	90.97	17	80.95
Take your medications	248	89.53	16	76.19
Total medication enablement				
Patient enablement				
Less enabled	163	91.57	15	8.43
More enabled	176	93.62	12	6.38
When you get home from hospital				
Recall being given information about who to contact	291	93.27	21	6.73
Who were you instructed to contact				
ED	52	17.93	5	21.74
ED, other	2	0.69	0	0.00
GP	93	32.07	9	39.13
GP, ED	22	7.59	4	17.39
GP, other	1	0.34	0	0.00
Nurse at hospital	26	8.97	0	0.00
Nurse at hospital, ED	3	1.03	0	0.00
Nurse at hospital, GP	2	0.69	0	0.00
Nurse at hospital, GP, ED	3	1.03	0	0.00
Nurse at hospital, GP, ED, Other	1	0.34	0	0.00

Other	6	2.07	0	0.00
Surgeon	40	13.79	3	13.04
Surgeon, ED	3	1.03	1	4.35
Surgeon, GP	8	2.76	1	4.35
Surgeon, GP, ED	9	3.10	0	0.00
Surgeon, GP, Other	1	0.34	0	0.00
Surgeon, Nurse at hospital	8	2.76	0	0.00
Surgeon, Nurse at hospital, ED	3	1.03	0	0.00
Surgeon, Nurse at hospital, GP	6	2.07	0	0.00
Surgeon, Nurse at hospital, GP, ED	1	0.34	0	0.00
Went to ED within 30 days of discharge				
	16	45.71	19	54.29
Reasons for going to the ED				
	37			
Wound problems	2	5.41	2	50.00
Pain	5	13.51	5	50.00
Other	11	29.73	12	52.17
General Practice Questions				
Regular GP practice	346	93.26	25	6.74
Sees the same doctor	338	92.60	27	7.40
Regular appointments with GP	191	92.72	15	7.28
Discussio of plan with GP	206	91.96	18	8.04

When were you advised to see GP**next**

1-6 weeks	269	93.40	19	6.60
Don't know	62	89.96	7	10.14

Usual waiting time to see GP

Same day	40	90.91	4	9.09
Within a couple of days	189	93.56	13	6.44
Within one week	75	94.94	4	5.06
1-2 weeks	37	88.10	5	11.90
>2 weeks	9	100.00	0	0.00

How soon after surgery did you**see GP?**

Within 1 week	134	91.78	12	8.22
2-3 weeks	130	94.89	7	5.11
4-6 weeks	34	89.47	4	10.53
Don't know	20	95.24	1	4.76

Did the GP know you were in

hospital	282	92.46	23	7.54
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Attendance to rehab program

within 5 days	125	91.91	11	8.09
within 2 weeks	116	93.55	8	6.45
within 4 weeks	16	88.89	2	11.11

don't know	5	100.00	0	0.00
Lenth of attendance to rehab				
One week	20	80.00	5	20.00
2 weeks	20	95.24	1	4.76
3 weeks	17	89.47	2	10.53
4 weeks	50	90.91	5	9.09
>4 weeks	128	95.52	6	4.48
BMI				
<21	19	95.00	1	5.00
21-25	85	96.59	3	3.41
26-40	205	90.71	21	9.29
41-60	12	85.71	2	14.29
Public vs Private Hospital				
Public	93	90.29	10	9.71
Private	261	93.88	17	6.12
Living situation				
Alone	78	89.66	9	10.34
Not alone	275	93.86	18	6.14

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