

## Supplementary file 1

**Table S1.** Timing of non-consultant hospital doctors' migration plans

Variable	Timing	Go before specialist training ** No. (%)	Go during specialist training No. (%)	Go after specialist training No. (%)	TOTAL No. (100%)	P value
<b>TOTAL</b>		122 (21%)	122 (21%)	338 (58%)	582	<0.001
<b>Nationality</b>						
Irish		54 (14%)	88 (22%)	256 (64%)	398	
Other EU		2 (10%)	10 (48%)	9 (43%)	21	
Non-EU		47 (45%)	14 (13%)	44 (42%)	105	<0.001*
<b>Age:</b>						
< 30 years		64 (27%)	61 (26%)	111 (47%)	236	
≥ 30 < 35		33 (15%)	38 (18%)	145 (67%)	216	
≥ 35 < 40		5 (9%)	11 (20%)	39 (71%)	55	
≥ 40		4 (19%)	2 (10%)	15 (71%)	21	<0.001*
<b>Gender</b>						
Male		55 (19%)	62 (22%)	167 (59%)	284	
Female		57 (22%)	49 (19%)	153 (59%)	259	0.6
<b>Marital status</b>						
Married/co-habiting		49 (17%)	55 (20%)	177 (63%)	281	
Single		61 (23%)	59 (23%)	140 (54%)	260	0.08
<b>Entry route</b>						
DEM		51 (16%)	74 (23%)	203 (62%)	328	
GEM		16 (16%)	16 (16%)	68 (68%)	100	
Not applicable		27 (29%)	18 (19%)	48 (52%)	93	0.02
<b>Training status</b>						
Trainee		36 (9%)	88 (21%)	286 (70%)	410	
Non-trainee		86 (50%)	34 (20%)	52 (30%)	172	<0.001
<b>Training level</b>						
BST		34 (22%)	49 (31%)	75 (47%)	158	
HST		0 (0%)	33 (20%)	133 (80%)	166	
Run through		2 (2%)	6 (7%)	78 (91%)	86	<0.001
<b>Specialty</b>						
GP		1 (4%)	1 (4%)	26 (93%)	28	
Surgery		27 (20%)	22 (16%)	87 (64%)	136	
Medicine		84 (29%)	77 (27%)	129 (44%)	290	
Anaesthesia		3 (4%)	8 (10%)	66 (86%)	77	
Psychiatry		7 (14%)	14 (28%)	29 (58%)	50	<0.001

Abbreviations: DEM, direct entry medicine; GEM, graduate entry medicine; BST, Basic Specialist Training; HST, Higher Specialist Training; EU, European Union; GP, general practitioner.

\* Fisher test used as chi square approximation is not appropriate.

For the reported p values the null hypothesis is  $H_0$ : the timing of emigration is independent of the variable categorisations/levels for each variable of interest.

**Table S2.** Associations of demographic and training characteristics with preferred destination countries

Destination Country	UK	Australia	Canada	USA	NZ	Country Other	TOTAL	P value *
Variable	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)		
<b>TOTAL</b>	154 (27%)	131 (23%)	125 (22%)	54 (9%)	44 (8%)	64 (11%)	572	<0.001
<b>Nationality</b>								
Irish	87 (22%)	102 (26%)	95 (24%)	44 (11%)	35 (9%)	26 (7%)	389	
Other EU	7 (33%)	2 (10%)	6 (29%)	0 (0%)	1 (5%)	5 (24%)	21	
Non EU	44 (42%)	10 (10%)	10 (10%)	6 (6%)	6 (6%)	28 (27%)	124	<0.001**
<b>Age:</b>								
< 30 years	53 (23%)	68 (30%)	50 (22%)	22 (10%)	21 (9%)	14 (6%)	228	
≥ 30 < 35	65 (30%)	41 (19%)	53 (25%)	18 (8%)	9 (4%)	29 (13%)	215	
≥ 35 < 40	15 (26%)	7 (12%)	7 (12%)	8 (14%)	10 (18%)	10 (18%)	57	
≥ 40	6 (27%)	5 (23%)	2 (9%)	1 (5%)	1 (5%)	7 (32%)	22	<0.001**
<b>Gender</b>								
Female	76 (27%)	64 (23%)	74 (27%)	24 (9%)	21 (8%)	18 (6%)	277	
Male	68 (26%)	56 (22%)	43 (17%)	26 (10%)	22 (9%)	42 (16%)	257	0.003
<b>Marital status</b>								
Married/co-hab	83 (30%)	50 (18%)	63 (23%)	21 (8%)	21 (8%)	40 (14%)	278	
Single	57 (23%)	72 (28%)	53 (21%)	28 (11%)	22 (9%)	21 (8%)	253	0.009
<b>Entry route</b>								
DEM	75 (23%)	85 (27%)	82 (26%)	33 (10%)	23 (7%)	22 (7%)	320	
GEM	16 (16%)	22 (22%)	26 (26%)	13 (13%)	14 (14%)	8 (8%)	99	
Not applicable	39 (42%)	10 (11%)	11 (12%)	4 (4%)	6 (6%)	23 (25%)	93	<0.001
<b>Training status</b>								
Non -Trainee	72 (42%)	30 (18%)	12 (7%)	12 (7%)	17 (10%)	28 (16%)	171	
Trainee	82 (20%)	101 (25%)	113 (28%)	42 (10%)	27 (7%)	36 (9%)	401	<0.001
<b>Training level</b>								
BST	24 (16%)	46 (30%)	32 (21%)	19 (12%)	17 (11%)	15 (10%)	153	
HST	46 (28%)	27 (16%)	56 (34%)	18 (11%)	4 (2%)	13 (8%)	164	
Run through	12 (14%)	28 (33%)	25 (30%)	5 (6%)	6 (7%)	8 (10%)	84	<0.001
<b>Specialty</b>								
GP	1 (4%)	7 (26%)	16 (59%)	0 (0%)	2 (7%)	1 (4%)	27	
Surgery	39 (28%)	33 (24%)	16 (12%)	16 (12%)	12 (9%)	21 (15%)	137	
Medicine	80 (28%)	59 (21%)	70 (25%)	29 (10%)	20 (7%)	24 (9%)	282	
Anaesthesia	26 (34%)	24 (31%)	7 (9%)	4 (5%)	7 (9%)	9 (12%)	77	
Psychiatry	8 (17%)	8 (17%)	16 (33%)	4 (8%)	3 (6%)	9 (19%)	48	<0.001**

Abbreviations: DEM, direct entry medicine; GEM, graduate entry medicine; BST, Basic Specialist Training; HST, Higher Specialist Training; EU, European Union; GP, general practitioner.

\* The P values here represent the probability of the observed data given the assumption of independence of career intentions and demographic variables.

\*\* Fisher exact test used as chi-square approximation is not appropriate.

**Table S3.** Associations of training and working experiences with migration plans: Remain versus Leave

<b>Training and working experiences</b>	<b>Better No. (%)</b>	<b>Worse No. (%)</b>	<b>New to post No. (%)</b>	<b>Same No. (%)</b>	<b>TOTAL No. (100%)</b>	<b>P value</b>
<b>1. Training costs</b>						
Remain Ireland	49 (10)	200 (39)	92 (18)	167 (33)	508	
Leave Ireland	28 (5)	272 (47)	73 (13)	203 (35)	576	<0.001
<b>2. Protected training</b>						
Remain Ireland	118 (23)	145(28)	77(15)	169(33)	509	
Leave Ireland	97 (17)	206(36)	57(10)	216(38)	576	<0.001
<b>3. Supervision</b>						
Remain Ireland	161 (32)	90 (18)	73 (14)	184 (36)	508	
Leave Ireland	130 (23)	118 (20)	61 (11)	268 (46)	577	<0.001
<b>4. Mentoring supports</b>						
Remain Ireland	168 (33)	86 (17)	84 (17)	171 (34)	509	
Leave Ireland	152 (26)	126 (22)	65 (11)	234 (41)	577	<0.001
<b>5. Non-core tasks</b>						
Remain Ireland	107 (21)	137 (27)	54 (11)	213 (42)	511	
Leave Ireland	109 (19)	167 (29)	44 (8)	252 (44)	572	0.28
<b>6. Stress levels</b>						
Remain Ireland	100 (20)	205 (40)	42 (8)	161 (32)	508	
Leave Ireland	75 (13)	287 (50)	32 (6)	182 (32)	576	0.001
<b>7. Bullying</b>						
Remain Ireland	126 (25)	81 (16)	63 (12)	238 (47)	508	
Leave Ireland	111 (19)	124 (22)	51 (9)	290 (50)	576	0.007
<b>8. Staffing levels</b>						
Remain Ireland	93 (18)	208 (41)	41 (8)	167 (33)	509	
Leave Ireland	72 (12)	283 (49)	38 (7)	183 (32)	576	0.01

\* totals for each row = 100%

**Table S4.** Associations of training and working experiences with migration plans: Go but Return Versus Go and Not Return

<b>Migration level 1</b>	<b>Better No. (%)</b>	<b>Worse No. (%)</b>	<b>New to post No. (%)</b>	<b>Same No. (%)</b>	<b>TOTAL No. (100%)</b>	<b>P value</b>
<b>1. Training costs</b>						
Go but Return	18 (5)	175 (45)	55 (14)	140 (36)	388	0.31
Go Not Return	10 (5)	97 (52)	18 (10)	63 (34)	188	
<b>2. Protected training</b>						
Go but Return	74(19)	116(30)	42(11)	156(40)	407	<0.001
Go Not Return	3(12)	90(48)	15(8)	60(32)	191	
<b>3. Supervision</b>						
Go but Return	90 (23)	57 (15)	47 (12)	194 (50)	388	<0.001
Go Not Return	40 (21)	61 (32)	14 (7)	74 (39)	189	
<b>4. Mentoring supports</b>						
Go but Return	114 (29)	51 (13)	49 (13)	174 (45)	388	<0.001
Go Not Return	38 (20)	75 (40)	16 (8)	60 (32)	189	
<b>5. Non-core tasks</b>						
Go but Return	84 (22)	97 (25)	33 (9)	172 (45)	386	0.006
Go Not Return	25 (13)	70 (38)	11 (6)	80 (43)	186	
<b>6. Stress levels</b>						
Go but Return	59 (15)	169 (44)	25 (6)	134 (35)	387	<0.001
Go Not Return	16 (8)	118 (62)	7 (4)	48 (25)	189	
<b>7. Bullying</b>						
Go but Return	81 (21)	64 (17)	38 (10)	204 (53)	387	<0.001
Go Not Return	30 (16)	60 (32)	13 (7)	86 (46)	189	
<b>8. Staffing levels</b>						
Go but Return	49 (13)	184 (48)	28 (7)	126 (33)	387	0.66
Go Not Return	23 (12)	99 (52)	10 (5)	57 (30)	189	

**Table S5.** Multivariable model odds ratios for ‘leave’ (quit) versus ‘continue’ in medicine’

<b>Variable</b>	<b>Odds ratio</b>	<b>Confidence 2.5%</b>	<b>Intervals 97.5%</b>	<b>P value</b>
Baseline	1.08	0.04	29.5	= 0.965
Age > 30 years	0.88	0.79	0.97	= 0.014
<b>Relationship Status:</b> Single				
Married/ Co-habiting	2.98	1.3	8.82	= 0.01
<b>Mentoring:</b> Remains the same				
New to post	0.65	0.13	3.16	= 0.596
Has become worse	4.55	1.92	10.74	= 0.001
Is better	0.61	0.18	2.06	= 0.429

*Footnote: The baseline reference individual is a 30 years or younger doctor who is single and who reported the quality of mentoring as having stayed the same.*