Supplementary Table i Final reasons for PLOS.

	Reasons for PLOS	Patients, n (%)	Sum Excess Bed Days, n (%)	Range (days)
1	Social Services	171 (21.2)	1,224 (49.2)	1-39
2	Non-DOSA	282 (34.9)	283 (11.4)	1-2
3	Slow to Mobilise	111 (13.8)	261 (10.5)	1-6
4	Re-Warfarinisation	26 (3.2)	139 (5.6)	1-12
5	Waiting on OT/OT equipment	26 (3.2)	74 (3.0)	1-5
6	Hyponatremia	33 (4.1)	74 (3.0)	1-6
7	Deranged Bloods	22 (2.7)	62 (2.5)	1-14
8	Infection	13 (1.6)	46 (1.9)	1-5
9	Wound Problems	9 (1.1)	40 (1.6)	2-14
10	No Reason in Notes	23 (2.9)	40 (1.6)	1-2
11	Gastrointestinal	16 (2.0)	37 (1.5)	1-6
12	Pyrexia	9 (1.1)	26 (1.0)	1-5
13	Pulmonary Embolus	7 (0.9)	25 (1.0)	2-7
14	Blood Transfusion	12 (1.5)	23 (0.92)	1-4
15	Non-Medical Reasons†	8 (1.0)	19 (0.76)	1-5
16	Post-Operative Fracture	2 (0.2)	15 (0.60)	2-13
17	Missing Data*	3 (0.37)	14 (0.56)	1-5
18	Atrial Fibrillation	3 (0.37)	12 (0.48)	2-5
19	Chest Pains	3 (0.37)	11 (0.44)	1-7
20	Patient Issues‡	7 (0.9)	10 (0.40)	1-3
21	Urology	2 (0.25)	9 (0.36)	4-5
22	Light-head	4 (0.5)	8 (0.32)	1-3
23	Transport	3 (0.37)	7 (0.28)	2-3
24	CTPA Requested	2 (0.25)	6 (0.24)	1-5
25	Post-Operative Delirium	3 (0.37)	6 (0.24)	1-3
26	Decreased Saturations	2 (0.25)	6 (0.24)	2-4
27	Atelectasis	1 (0.12)	6 (0.24)	-
28	Transferred Out	2 (0.25)	4 (0.16)	1-3
29	Return to Theatre	1 (0.12)	2 (0.08)	-
	Overall	806 (100)	2489 (100)	1-39

OT; Occupational Therapy. \*Missing data; clinical notes for these patients could not be audited. †Non-medical reasons included; lack of communication, waiting on an interpreter and patient ready for home, however, family refuse to take patient home. ‡Patient Issues include; patient request social services, however, services were refused and patient requested OT equipment but not seen by OT.

**Supplementary Table ii** Final reasons for PLOS – sex.

Reason	Male, n (%)	Female, n (%)	All, n (%)
Social Services	47 (27.5)	124 (72.5)	171 (21.2)
Non-DOSA	102 (36.2)	180 (63.8)	282 (34.9)
Slow to Mobilise	34 (30.6)	77 (69.4)	111 (13.8)
Re-Warfarinisation	16 (61.5)	10 (38.5)	26 (3.2)
Waiting on OT/OT equipment	13 (50.0)	13 (50.0)	26 (3.2)
Hyponatremia	6 (18.2)	27 (81.8)	33 (4.1)
Deranged Bloods	8 (36.4)	14 (63.6)	22 (2.7)
Infection	7 (53.8)	6 (46.2)	13 (1.6)
Wound Problems	5 (55.6)	4 (44.4)	9 (1.1)
No Reason in Notes	8 (34.8)	15 (65.2)	23 (2.9)
Gastrointestinal	6 (37.5)	10 (62.5)	16 (2.0)
Pyrexia	5 (55.6)	4 (44.4)	9 (1.1)
Pulmonary Embolus	4 (57.10	3 (42.9)	7 (0.9)
Blood Transfusion	2 (16.7)	10 (83.3)	12 (1.5)
Non-Medical Reasons†	4 (50.0)	4 (50.0)	8 (1.0)
Post-Operative Fracture	-	2 (100)	2 (0.2)
Missing Data*	1 (33.3)	2 (66.7)	3 (0.37)
Atrial Fibrillation	2 (66.7)	1 (33.3)	3 (0.37)
Chest Pains	1 (33.3)	2 (66.7)	3 (0.37)
Patient Issues‡	3 (42.9)	4 (57.1)	7 (0.9)
Urology	2 (100)	-	2 (0.25)
Light-head	-	4 (100)	4 (0.5)
Transport	2 (66.7)	1 (33.3)	3 (0.37)
CTPA Requested	0	2 (100)	2 (0.25)
Post-Operative Delirium	2 (66.7)	1 (33.3)	3 (0.37)
Decreased Saturations	-	2 (100)	2 (0.25)
Atelectasis		1 (100)	1 (0.12)
Transferred Out	2 (100)	-	2 (0.25)
Return to Theatre	1 (100)	-	1 (0.12)
Overall	283 (35.1)	523 (64.9)	806 (100)

OT; Occupational Therapy. \*Missing data; clinical notes for these patients could not be audited. †Non-medical reasons included; lack of communication, waiting on an interpreter and patient ready for home, however, family refuse to take patient home. ‡Patient Issues include; patient request social services, however, services were refused and patient requested OT equipment but not seen by OT.

**Table 5** Final reasons for PLOS – primary hip and knee arthroplasty.

Reason	Hip	Knee	All
Social Services	98 (57.3)	73 (42.7)	171 (21.2)
Non-DOSA	131 (46.5)	151 (53.5)	282 (34.9)
Slow to Mobilise	28 (25.2)	83 (74.8)	111 (13.8)
Re-Warfarinisation	9 (34.6)	17 (65.4)	26 (3.2)
Waiting on OT/OT equipment	19 (73.1)	7 (26.9)	26 (3.2)
Hyponatremia	14 (42.4)	19 (57.6)	33 (4.1)
Deranged Bloods	7 (31.8)	15 (68.2)	22 (2.7)
Infection	4 (30.8)	9 (69.2)	13 (1.6)
Wound Problems	3 (33.3)	6 (66.7)	9 (1.1)
No Reason in Notes	7 (30.4)	16 (69.6)	23 (2.9)
Gastrointestinal	10 (62.5)	6 (37.5)	16 (2.0)
Pyrexia	2 (22.2)	7 (77.8)	9 (1.1)
Pulmonary Embolus	3 (42.9)	4 (57.1)	7 (0.9)
Blood Transfusion	9 (75.0)	3 (25.0)	12 (1.5)
Non-Medical Reasons†	6 (75.00	2 (25.0)	8 (1.0)
Post-Operative Fracture	1 (50.0)	1 (50.0)	2 (0.2)
Missing Data*	3 (100)	-	3 (0.37)
Atrial Fibrillation	-	3 (100)	3 (0.37)
Chest Pains	1 (33.3)	2 (66.7)	3 (0.37)
Patient Issues‡	3 (42.9)	4 (57.1)	7 (0.9)
Urology	1 (50.0)	1 (50.0)	2 (0.25)
Light-head	2 (50.0)	2 (50.0)	4 (0.5)
Transport	1 (33.3)	2 (66.7)	3 (0.37)
CTPA Requested	2 (100)	-	2 (0.25)
Post-Operative Delirium	2 (66.7)	1 (33.3)	3 (0.37)
Decreased Saturations	1 (50.0)	1 (50.0)	2 (0.25)
Atelectasis	-	1 (100)	1 (0.12)
Transferred Out	-	2 (100)	2 (0.25)
Return to Theatre	-	1 (100)	1 (0.12)
Overall	367 (45.5)	439 (54.5)	806 (100)

OT; Occupational Therapy. \*Missing data; clinical notes for these patients could not be audited. †Non-medical reasons included; lack of communication, waiting on an interpreter and patient ready for home, however, family refuse to take patient home. ‡Patient Issues include; patient request social services, however, services were refused and patient requested OT equipment but not seen by OT.