

1 Supplementary Materials 6: Tables of results for evidence from the UK

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Table 1. Data for clinical outcomes for each study trialling an ERP intervention to improve recovery following colorectal surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Anderson 2003 ¹	LOS (days)	14	4.0	1.77	10	7.0	2.07			-1.60 (-2.54 to -.66)	-3.0 (-4.66 to -1.40)	<.001
Anderson 2003 ¹	Readmissions (n)	14	0		11	0						
Anderson 2003 ¹	Mortality (n)	14	0		11	1						.25
Anderson 2003 ¹	Patients with postop complications (n)	14	4		11	5				OR: 0.48 (0.09 to 2.52)		.38
Gatt 2005 ²	GP assessments <30 days (%)	19	5.2		20	0						.30
Dhruva Rao ³	Postop LOS (days)	282	5 (median)	1 to 60 (range)	224	6 (median)	2 to 61 (range)					
Dhruva Rao ³	Minor complications %	282	8.8		224	13.8				-.53 (-.71 to -.35)	-6.0 (-7.99 to -4.01)	.07
Dhruva Rao ³	Major complications: (%)	282	3.9		224	5.8				-.41 (-.59 to -.24)	-2.0 (-2.85 to -1.15)	.32
Dhruva Rao ³	Mortality <30 days (%)	282	1.4		224	4				-1.75 (-1.96 to -1.54)	-5.0 (-5.50 to -4.50)	.07
Khan 2013 ⁴	Complications (n)	42	3		41	4				OR: 0.71 (0.15 to 3.4)		.67
Khoo 2007 ⁵	Postop LOS (days)	35	5 (median)	3 to 37 (range)	35	7 (median)	4 to 63 (range)					
Khoo 2007 ⁵	Postop stay including readmissions (days)	35	5 (median)	3 to 37 (range)	35	7 (median)	4 to 63 (range)					
Khoo 2007 ⁵	GP advice sought: outcome = advice only (n)	35	4		35	7				OR: 0.48 (0.13 to 1.82)		.27

Study	Outcome (units)	Intervention			Comparator			Intervention		Comparator		p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)	d or OR (95% CI)	Mean change (95% CI)	
Khoo 2007 ⁵	GP advice sought: outcome = prescription given (n)	35	4		35	3				OR: 1.29 (0.27 to 6.26)		.75
Khoo 2007 ⁵	GP advice sought: outcome = readmitted (n)	35	3		35	3				OR: 1.0 (0.19 to 5.33)		1.0
Khoo 2007 ⁵	Patient called ward for advice (n)	35	4		35	4				OR: 1.0 (0.23 to 4.36)		1.0
Khoo 2007 ⁵	Mortality (n)	35	0		35	2						.15
Khoo 2007 ⁵	Total number of complications (n)	35	9		35	18				OR: 0.33 (0.12 to 0.89)		<.05
King 2006 ⁶	Postop LOS (days)	60	5.8		86	10.7						
King 2006 ⁶	Re-operations <30 days (n)	60	5		86	9				OR: 0.78 (0.25 to 2.45)		.67
King 2006 ⁶	Readmissions <30 days (n)	60	7		86	8				OR: 1.29 (0.44 to 3.76)		.64
King 2006 ⁶	Major complications (n)	60	11		86	24				OR: 0.58 (0.26 to 1.3)		.18
King 2006 ⁶	Number of 30 day and in hospital deaths	60	2		86	6				OR: 0.46 (0.09 to 2.36)		.34
King 2006 ⁶	Postop LOS - stoma (days)	60	8.3		86	12.6						
King 2006 ⁶	Postop LOS – non-stoma (days)	60	4.8		86	9.1						
King 2006 ⁶	Postop + convalescent stay (days)	60	5.9		86	12.4						
King 2006 ⁶	Postop + convalescent stay + readmission	60	6.3		86	12.9						

Study	Outcome (units)	Intervention			Comparator			Intervention Imputed Mean (SD)	Comparator Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
	stay (days)											
Lidder 2013 ⁷	Actual postop discharge day (days)	27	7 (median)	5 to 10 (IQR)	30	8.5 (median)	6 to 13.3 (IQR)	7.3 (3.9)	9.3 (5.7)	-.39 (-.92 to .13)	-1.93 (-4.55 to .69)	.13
Lidder 2013 ⁷	Total number of complications by POD5 (n)	27	15		30	20				OR: 0.63 (0.21 to 1.83)		.39
Lidder 2013 ⁷	Patients with complications by POD5 (n)	27	10		30	13				OR: 0.77 (0.27 to 2.23)		.63
Lidder 2013 ⁷	Total number of complications by day 30 (n)	27	15		30	27				OR: 0.14 (0.03 to 0.57)		<.01
Lidder 2013 ⁷	Patients with complications by day 30 (n)	27	10		30	15				OR: 0.59 (0.2 to 1.7)		.33

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of stay; OR=Odds Ratio; SE=Standard Error; IQR=Interquartile range; POD=Post-operative day; SD=Standard deviation; CI=Confidence interval; Postop=Postoperative; n=sample size

Table 2. Data for patient-reported outcomes for each study trialling an ERP intervention to improve recovery from colorectal surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Anderson 2003 ¹	Return of gastrointestinal function (postop hours)	14	48 (median)	33 to 55 (IQR)	11	76	70 to 110 (IQR)	45.3 (18.1)	85.3 (33.9)	-1.53 (-2.43 to -.66)	-40.0 (-61.8 to -18.2)	<.001
Anderson 2003 ¹	Walked to toilet unaided (postop hours)	14	46 (median)	37 to 54 (IQR)	11	69 (median)	44 to 121 (IQR)	45.7 (14.0)	78.0 (65.3)	-.65 (-1.46 to .16)	-32.3 (-69.3 to 4.6)	.08
Gatt 2005 ²	Time out of bed on POD1 (mins)	19	105 (median)	34 to 225 (range)	20	8 (median)	0 to 38 (range)					
Khoo 2007 ⁵	Tolerating solid diet (POD)	35	1 (median)	0 to 6 (range)	35	4 (median)	2 to 9 (range)					
Khoo 2007 ⁵	Independent mobility (POD)	35	2 (median)	1 to 10 (range)	35	4 (median)	2 to 32 (range)					
Khoo 2007 ⁵	Passage of first stool (POD)	35	3 (median)	1 to 5 (range)	35	5 (median)	0 to 23 (range)					
Khoo 2007 ⁵	Patient felt they would benefit from longer stay (n)	35	3		35	24				OR: 0.1 (0.01 to 0.79)		<.05
Lidder 2013 ⁷	Fit for discharge (POD)	27	7 (median)	5 to 10 (IQR)	30	8 (median)	6 to 13 (IQR)	7.3 (3.9)	9.0 (5.5)	-.35 (-.87 to .17)	-1.67 (-4.21 to .88)	.19

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs, imputed where necessary. P-values are from independent samples t-tests. SD=Standard Deviation; CI=Confidence Interval; POD=Postoperative Day; IQR=Interquartile Range; postop=Postoperative; n=sample size

Table 3. Data for clinical outcomes for each study trialling an ERP intervention to improve recovery from lower limb arthroplasty in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Dwyer 2012 ⁸	LOS (days)	64	5.3		63	8.3						
Dwyer 2012 ⁸	LOS: preoperative Hb levels ≥ 14g/dl (days)	64	4.37		63	6.6						
Dwyer 2012 ⁸	LOS: preoperative Hb levels ≤ 14g/dl (days)	64	6.02		63	9.16						
Dwyer 2012 ⁸	LOS: preadmission scores (AMA): 1 or 2 (days)	64	4.72		63	7.86						
Dwyer 2012 ⁸	LOS: preadmission scores (AMA): 3 (days)	64	6.79		63	9.46						
Dwyer 2012 ⁸	LOS: BMI preadmission scores < 30 (days)	64	4.8		63	8.6						
Dwyer 2012 ⁸	LOS: BMI preadmission scores > 30 (days)	64	6.3		63	7.7						
Dwyer 2012 ⁸	Readmissions (n)	64	4		63	5				OR: 0.77 (0.2 to 3.02)		.71
Gordon 2011 ⁹ ,	LOS: Knee and Hips combined	278	7.3	6.4	266	9.6	8.1			-0.32 (-.49 to -.15)	-2.3 (-3.53 to -1.07)	<.001

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
ERP	(days)											
Gordon 2011 ⁹ , ERP+JRS	LOS: Knee and Hips combined (days)	303	6.3	5.8	266	9.6	8.1			-.47 (-.64 to -.31)	-3.3 (-4.45 to -2.15)	<.001
Gordon 2011 ⁹ , ERP	LOS: Knees only (days)	132	5.75	3.9	147	8.5	7.5			-.45 (-.69 to -.22)	-2.75 (-4.18 to -1.32)	<.001
Gordon 2011 ⁹ , ERP+JRS	LOS: Knees only (days)	168	5.9	5.1	147	8.5	7.5			-.41 (-.63 to -.19)	-2.6 (-4.01 to -1.19)	<.001
Gordon 2011 ⁹ , ERP	LOS: Hips only (days)	146	8.7	7.7	119	11.0	8.5			-.29 (-.53 to -.04)	-2.3 (-4.26 to -.34)	<.05
Gordon 2011 ⁹ , ERP+JRS	LOS: Hips only (days)	135	6.4	6.6	119	11.0	8.5			-.61 (-.86 to -.36)	-4.6 (-4.67 to -2.73)	<.001
Harari 2007 ¹⁰	LOS (days)	54	11.5	5.2	54	15.8	13.2			-.43 (-.81 to -.05)	-4.3 (-8.13 to -.47)	<.05
Harari 2007 ¹⁰	Delayed discharge due to all reasons (%)	54	24.1		54	70.4				OR: 0.13 (0.06 to 0.31)		<.001
Harari 2007 ¹⁰	Delayed discharge due to medical complication (%)	54	13		54	37				OR: 0.25 (0.1 to 0.67)		<.01
Harari 2007 ¹⁰	Delayed discharge due to slow rehabilitation (%)	54	7.4		54	13				OR: 0.53 (0.15 to 1.95)		.34

Study	Outcome (units)	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)			
Harari 2007 ¹⁰	Delayed discharge due to wait for OT and/or equipment (%)	54	3.7		54	20.4				OR: 0.15 (0.03 to 0.71)		<.01
Harari 2007 ¹⁰	Complications (including multidisciplinary issues) (n)	54	47		54	159						<.001
Harari 2007 ¹⁰	Complications (excluding multidisciplinary issues) (n)	54	22		54	70						<.001
Harari 2007 ¹⁰	Readmission <28 days (%)	54	3.7		54	3.7				OR: 1 (0.14 to 7.38)		1.0
Harari 2007 ¹⁰	Death <30 days (%)	54	0		54	1.9						.31
Hunt 2009 ¹¹ , BEL v LIV	Postop LOS (days)	316	3 (median)	1 to 49 (range)	87	6 (median)	3 to 19 (range)					
Hunt 2009 ¹¹ , BEL v SWLEOC	Postop LOS (days)	316	3 (median)	1 to 49 (range)	119	5 (median)	1 to 13 (range)					
Khan 2014 ¹²	LOS (days)	2680	3 (median)	0 to 82 (range)	2639	6 (median)	1 to 125 (range)					
Khan 2014 ¹²	Readmissions (%)	2680	4.6		2639	4.7				OR: 0.98 (0.76 to 1.26)		.86
Khan 2014 ¹²	Return to theatre (%)	2680	1.3		2639	2				OR: 0.65 (0.42 to 0.99)		<.05
Khan 2014 ¹²	Stroke <30 days (%)	2680	0.2		2639	0.5				OR: 0.4 (0.15 to 1.09)		.06

Study	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p	
	Outcome (units)	n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)				Imputed Mean (SD)
Khan 2014 ¹²	Gastrointestinal bleed (%)	2680	0.4		2639	0.6				OR: 0.67 (0.31 to 1.45)		.30
Khan 2014 ¹²	Myocardial infarction (%)	2680	0.4		2639	0.9				OR: 0.44 (0.21 to 0.91)		<.05
Khan 2014 ¹²	DVT <60 days (%)	2680	0.5		2639	0.8				OR: 0.62 (0.31 to 1.24)		.17
Khan 2014 ¹²	Pulmonary Embolism (%)	2680	1.1		2639	1.2				OR: 0.92 (0.55 to 1.52)		.73
Khan 2014 ¹²	Pneumonia <30 days (%)	2680	1.2		2639	0.9				OR: 1.34 (0.78 to 2.28)		.28
Khan 2014 ¹²	Death <30 days (%)	2680	0.2		2639	0.5				OR: 0.4 (0.15 to 1.09)		.06
Khan 2014 ¹²	Death <90 days (%)	2680	0.5		2639	0.8				OR: 0.62 (0.31 to 1.24)		.17
Maempel 2015 ¹³	Postop LOS (days)	84	3 (median)	2 to 14 (range)	81	4 (median)	2 to 16 (range)					
Maempel 2015 ¹³	Patients developing postoperative complication within 6 months (n)	84	3		81	6				OR: 0.46 (0.11 to 1.92)		.28
Maempel 2015 ¹³	Manipulation under anaesthesia within 1 year (n)	84	5		81	1				OR: 5.06 (0.58 to 44.32)		.11
Maempel 2015 ¹³	Number of blood transfusions (n)	84	4		81	4				OR: 0.96 (0.23 to 3.99)		.96
Maempel 2016 ¹⁴	Postop LOS (days)	550	3 (median)	2 to 4 (IQR)	608	5 (median)	4 to 6 (IQR)	3.0 (1.5)	5.0 (1.5)	-1.35 (-1.47 to -1.22)	-2.0 (-2.17 to -1.83)	<.001
Maempel 2016 ¹⁴	Dislocation: 1 year follow up	611	0.91		582	1.03				OR: 0.79 (0.24 to 2.61)		.70

Study	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
	Outcome (units)	n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)			
	(%)										
Maempel 2016 ¹⁴	Death: 1 year follow up (%)	522	0.6		605	1.5			OR: 0.38 (0.1 to 1.42)		.14
Malviya 2011 ¹⁵	Death <30 days (n)	1500	1		3000	15			OR: 0.13 (0.02 to 1.01)		<.05
Malviya 2011 ¹⁵	Death <90 days (n)	1500	3		3000	25			OR: 0.24 (0.07 to 0.79)		<.05
Malviya 2011 ¹⁵	LOS (days)	1500	4.8		3000	8.5					
Malviya 2011 ¹⁵	Readmissions (n)	1500	72		3000	140			OR: 1.03 (0.77 to 1.38)		.84
Malviya 2011 ¹⁵	Complications (n)	1500	69		3000	191			OR: 0.71 (0.53 to 0.94)		<.05
Mertes 2013 ¹⁶	Total LOS: Hips (days)	138	5.52	3.11	170	6.94	3.33		-0.44 (-0.67 to -.21)	-1.42 (-2.15 to -.69)	<.001
Mertes 2013 ¹⁶	Postop LOS: Hips (days)	138	5.34	3	170	5.92	3.35		-0.18 (-0.41 to .04)	-0.58 (-1.30 to .41)	.11
Mertes 2013 ¹⁶	Total LOS: Knees (days)	137	5.64	2.72	162	6.44	2.65		-0.3 (-0.53 to -.07)	-0.8 (-1.41 to -.19)	<.05
Mertes 2013 ¹⁶	Postop LOS: Knees (days)	137	5.24	2.67	162	5.43	2.64		-0.07 (-0.3 to .16)	-0.19 (-0.80 to .42)	.54
Reilly 2005 ¹⁷	LOS (days)	21	1.5	0.7	20	4.3	1.3		-3.00 (-3.91 to -2.10)	-2.8 (-3.46 to -2.14)	<.001
Reilly 2005 ¹⁷	Patients who developed complications post discharge (n)	21	3		20	1			OR: 3.17 (0.3 to 33.31)		.32
Reilly 2005 ¹⁷	Major complications	32	2		20	1			OR: 0.95 (0.06 to 16.29)		.97

Study	Intervention			Comparator			Intervention Imputed Mean (SD)	Comparator Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
	Outcome (units)	n	Estimate	Variance	n	Estimate					
	(n)										
Starks 2014 ¹⁸	LOS: Hips, >85yrs (days)	61	5		71	9					
Starks 2014 ¹⁸	LOS: Knees, >85yrs (days)	55	5		63	8					
Starks 2014 ¹⁸	Long LOS: Hips & Knees (%)	2128	4.4		2065	20.0			OR: 0.18 (0.15 to 0.23)		<.001
Starks 2014 ¹⁸	Long LOS: Hips & Knees, >85 (%)	116	13.8		134	54.5			OR: 0.13 (0.07 to 0.25)		<.001
Starks 2014 ¹⁸	Emergency readmissions <30 days: Hips & Knees (%)	2128	4.7		2065	5.5			OR: 0.85 (0.64 to 1.12)		.24
Starks 2014 ¹⁸	Emergency readmissions <30 days: Hips & Knees, >85 (%)	116	5.2		134	6			OR: 0.86 (0.29 to 2.55)		.78
Starks 2014 ¹⁸	Mortality within 30 days (%)	2128	0		2065	0.10					
Starks 2014 ¹⁸	Mortality within 30 days, >85 (%)	116	0		134	0					

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of stay; OR=Odds Ratio; SD=Standard deviation; CI=Confidence interval; BEL=Belfast; LIV=Liverpool; SWLEOC=South West London Elective Orthopaedic Centre; IQR=Interquartile Range; DVT=Deep Vein Thrombosis; BMI=Body Mass Index; AMA=American Association of Anaesthesiologists; n=sample size

Table 4. Data for patient-reported outcomes for each study trialling an ERP intervention to improve recovery from lower limb arthroplasty in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Hunt 2009, ¹¹ BEL v LIV	Oxford Hip Score (raw score)	316	26.5	25.7 to 27.3 (95% CI)	87	31.6	29.6 to 33.5 (95% CI)	26.5 (7.2)	31.6 (9.1)	-.66 (-.91 to -.42)	-5.1 (-6.93 to -3.27)	<.001
Hunt 2009, ¹¹ BEL v LIV	WOMAC Pain (raw score)	316	4.4	4.0 to 4.8 (95% CI)	87	5.3	4.3 to 6.3 (95% CI)	4.4 (3.6)	5.3 (4.7)	-.23 (-.47 to .01)	-.9 (-1.82 to .02)	.06
Hunt 2009, ¹¹ BEL v LIV	WOMAC Stiffness (raw score)	316	2.7	2.5 to 2.9 (95% CI)	87	3	2.6 to 3.4 (95% CI)	2.7 (1.8)	3 (1.9)	-.16 (-.4 to .07)	-.3 (-.73 to .13)	.17
Hunt 2009, ¹¹ BEL v LIV	WOMAC Function (raw score)	316	23.5	21.9 to 25.1 (95% CI)	87	24	21.4 to 26.6 (95% CI)	23.5 (14.5)	24 (12.2)	-.04 (-.27 to .2)	-.5 (-3.83 to 2.83)	.77
Hunt 2009, ¹¹ BEL v LIV	SF-12 (raw score)	316	38	36.8 to 39.2 (95% CI)	87	36.2	34.4 to 38 (95% CI)	38 (10.8)	36.2 (8.4)	.17 (-.06 to .41)	1.8 (-.67 to 4.27)	.15
Hunt 2009, ¹¹ BEL v LIV	SF-12 (raw score)	316	49.9	48.7 to 51.1 (95% CI)	87	49.5	47.1 to 51.9 (95% CI)	49.9 (10.8)	49.5 (11.3)	.04 (-.2 to .27)	.4 (-2.20 to 3.00)	.76
Hunt 2009, ¹¹ BEL v LIV	EuroQol Index (raw score)	316	0.72	0.7 to 0.74 (95% CI)	87	0.7	0.66 to 0.74 (95% CI)	0.7 (0.2)	0.7 (0.2)	.11 (-.13 to .35)	.02 (-.02 to .06)	.37
Hunt 2009, ¹¹ BEL v LIV	EuroQol VAS (raw score)	316	72	70.2 to 73.8 (95% CI)	87	70.1	66 to 74.2 (95% CI)	72 (16.3)	70.1 (19.2)	.11 (-.13 to .35)	1.9 (-2.13 to 5.93)	.35

Study	Outcome (units)	Intervention			Comparator			Intervention Imputed Mean (SD)	Comparator Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Hunt 2009, ¹¹ BEL v SWLEOC	Oxford Hip Score (raw score)	316	26.5	25.7 to 27.3 (95% CI)	119	29.8	28.2 to 31.4 (95% CI)	26.5 (7.2)	29.8 (8.8)	-.43 (-.64 to -.22)	-3.3 (-4.93 to -1.67)	<.001
Hunt 2009, ¹¹ BEL v SWLEOC	WOMAC Pain (raw score)	316	4.4	4 to 4.8 (95% CI)	119	4.7	3.9 to 5.5 (95% CI)	4.4 (3.6)	4.7 (4.4)	-.08 (-.29 to .13)	-.3 (-1.11 to .51)	.41
Hunt 2009, ¹¹ BEL v SWLEOC	WOMAC Stiffness (raw score)	316	2.7	2.5 to 2.9 (95% CI)	119	2.4	2.2 to 2.6 (95% CI)	2.7 (1.8)	2.4 (1.1)	.18 (-.03 to .39)	.3 (-.05 to .65)	.09
Hunt 2009, ¹¹ BEL v SWLEOC	WOMAC Function (raw score)	316	23.5	21.9 to 25.1 (95% CI)	119	20.3	18.1 to 22.5 (95% CI)	23.5 (14.5)	20.3 (12.1)	.23 (.02 to .44)	3.2 (.27 to 6.12)	<.05
Hunt 2009, ¹¹ BEL v SWLEOC	SF-12 (raw score)	316	38	36.8 to 39.2 (95% CI)	119	36.6	35 to 38.2 (95% CI)	38 (10.8)	36.6 (8.8)	.14 (-.08 to .35)	1.4 (-.78 to 3.58)	.20
Hunt 2009, ¹¹ BEL v SWLEOC	SF-12 (raw score)	316	49.9	48.7 to 51.1 (95% CI)	119	50.3	48.3 to 52.3 (95% CI)	49.9 (10.8)	50.3 (11)	-.04 (-.25 to .17)	-.4 (-2.70 to 1.90)	.73
Hunt 2009, ¹¹ BEL v SWLEOC	EQ-5D Index (raw score)	316	0.72	0.7 to 0.74 (95% CI)	119	0.74	0.7 to 0.78 (95% CI)	0.7 (0.2)	0.7 (0.2)	-.1 (-.31 to .11)	-.02 (-.06 to .02)	.33
Hunt 2009, ¹¹ BEL v SWLEOC	EQ-5D VAS (raw score)	316	72	70.2 to 73.8 (95% CI)	119	73.9	71.1 to 76.7 (95% CI)	72 (16.3)	73.9 (15.4)	-.12 (-.33 to .09)	-1.9 (-5.29 to 1.49)	.27
Salmon 2013, ^{11, 19} BEL v LIV	EoHAQ: Care Problems = None (%)	316	65.2		125	46.4				OR: 0.44 (0.28 to 0.69)		<.001

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Salmon 2013, ^{11, 19} BEL v LIV	EoHAQ: Care Problems => 1 (n)	316	34.8		125	53.6				OR: 0.16 (0.1 to 0.27)		<.001
Salmon 2013, ^{11, 19} BEL v LIV	EoHAQ: Recovery Problems = 0 (n)	316	13.0		125	11.2				OR: 0.44 (0.19 to 1)		<.05
Salmon 2013, ^{11, 19} BEL v LIV	EoHAQ: Recovery Problems => 1 (n)	316	87.0		125	88.8				OR: 0.15 (0.1 to 0.24)		<.001
Salmon 2013, ^{11, 19} BEL v SWLEOC	EoHAQ: Care Problems = None (n)	316	65.2		119	38.7				OR: 0.54 (0.34 to 0.86)		<.01
Salmon 2013, ^{11, 19} BEL v SWLEOC	EoHAQ: Care Problems => 1 (n)	316	34.8		119	61.3				OR: 0.12 (0.07 to 0.19)		<.001
Salmon 2013, ^{11, 19} BEL v SWLEOC	EoHAQ: Recovery Problems = 0 (n)	316	13.0		119	13.4				OR: 0.34 (0.15 to 0.75)		<.01
Salmon 2013, ^{11, 19} BEL v SWLEOC	EoHAQ: Recovery Problems => 1 (n)	316	87.0		119	86.6				OR: 0.14 (0.09 to 0.23)		<.001
Maempel 2015 ¹³	Change in AKSK functioning (raw score)	83	52.8 (median)	-3 to 86.6 (range)	78	57 (median)	-25.4 to 85 (range)					
Maempel 2015 ¹³	Change in ROM (degrees)	83	5.8	19.2	78	6.5	19.5			-0.04 (-.35 to .27)	-0.7 (-6.73 to 5.33)	.82
Maempel 2015 ¹³	Change in AKSF functioning: Mean improvement (raw score)	45	5.9	21.6	55	6.9	18.2			-0.05 (-.44 to .34)	-1.0 (-8.90 to 6.90)	.80

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Maempel 2016 ¹⁴	Harris Hip Score (raw score)	483	95 (median)	86 to 99 (IQR)	548	94 (median)	86 to 99 (IQR)	93.3 (9.7)	93 (9.7)	.03 (-.09 to .16)	.33 (-.85 to 1.52)	.58
Reilly 2005 ¹⁷	Oxford Knee Assessment (raw score)	21	43.7	3.7	20	42.2	7.1			.27 (-.35 to .88)	1.5 (-2.05 to 5.05)	.40
Reilly 2005 ¹⁷	AKSS Objective (raw score)	21	88.4	10.4	20	89.4	17.5			-.07 (-.68 to .54)	-1.0 (-10.0 to 8.04)	.82
Reilly 2005 ¹⁷	AKSS Functional (raw score)	21	90.9	11.7	20	90	13.3			.07 (-.54 to .68)	.9 (-7.00 to 8.80)	.81
Reilly 2005 ¹⁷	Knee flexion ROM (degrees)	21	124.7	5.5	20	119.8	6.8			.79 (.16 to 1.43)	4.9 (1.0 to 8.8)	<.05
Reilly 2005 ¹⁷	Knee extension ROM (degrees)	21	-3.10	3.5	20	-2.3	3.5			-.23 (-.84 to .39)	-.8 (-3.01 to 1.41)	.47

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). OR=Odds Ratio; SD=Standard Deviation; CI=Confidence Interval; BEL=Belfast; LIV=Liverpool; SWLEOC=South West London Elective Orthopaedic Centre; IQR=Interquartile Range; ROM=Range of Movement; AKSS=American Knee Society Score; AKSF=American Knee Society Functioning; WOMAC=Western Ontario and McMaster Universities Osteoarthritis Index; SF-12=Short Form 12; EoHAQ=Experience of Hip Arthroplasty Questionnaire; n=sample size

Table 5. Data for all effectiveness outcomes for each study trialling a Prehabilitation intervention to improve recovery from lower limb arthroplasty in the UK. Mean and standard deviation (SD) are presented throughout (there was no requirement to impute data).

Study, intervention	Outcome (units)	Intervention			Comparator			<i>d</i> (95% CI)	Mean difference (95% CI)	p
		n	Mean	SD	n	Mean	SD			
McGregor 2004 ²⁰	LOS (days)	19	15		20	18				
McGregor 2004 ²⁰	Pain (VAS 1-10)	19	7.8	1.5	20	7.6	2.0	.11 (-.52 to .74)	.2 (-.95 to 1.35)	.73
McGregor 2004 ²⁰	WOMAC Pain (raw score)	19	10.2	2.7	20	10.3	4.1	-.03 (-.66 to .60)	-.1 (-2.37 to 2.17)	.93
McGregor 2004 ²⁰	WOMAC Stiffness (raw score)	19	4.3	1.3	20	4.1	1.7	.13 (-.50 to .76)	.2 (-.79 to 1.19)	.68
McGregor 2004 ²⁰	WOMAC Function (raw score)	19	35.8	12.0	20	41.0	10	-.47 (-1.11 to .17)	-5.2 (-12.4 to 1.95)	.15
McGregor 2004 ²⁰	Harris Hip score (raw score)	19	45.4	11.5	20	43.2	16.2	.16 (-.47 to .78)	2.2 (-6.96 to 11.4)	.63
McGregor 2004 ²⁰	Barthel ADL (raw score)	19	19.2	1.3	20	19.0	1.3	.15 (-.48 to .78)	.2 (-.64 to 1.04)	.64
Williamson 2007 ²¹	LOS (days)	60	6.5	1.99	61	6.6	2.62	-.04 (-.40 to .31)	-.11 (-.95 to .73)	.81
Williamson 2007 ²¹	Oxford Knee Score (raw score)	60	28.3	9.78	61	26.7	7.45	.18 (-.17 to .54)	1.6 (-1.53 to 4.73)	.31
Williamson 2007 ²¹	Time to walk 50 m (s)	60	46.6	11.4	61	44.1	6.91	.27 (-.09 to .62)	2.5 (-.89 to 5.89)	.15
Williamson 2007 ²¹	Pain (VAS 1-10)	60	3.9	2.59	61	3.95	2.59	-.04 (-.39 to .32)	-.09 (-1.02 to .84)	.92
Williamson 2007 ²¹	WOMAC (raw score)	60	26	17.7	61	24.6	16.8	.08 (-.27 to .44)	1.4 (-4.81 to 7.61)	.66
Williamson 2007 ²¹	HADS Anxiety (raw score)	60	4.3	4.04	61	2.4	2.39	.58 (.21 to .94)	1.84 (.65 to 3.03)	<.01
Williamson 2007 ²¹	HADS Depression (raw score)	60	3.43	2.54	61	3.68	2.93	-.11 (-.47 to .25)	-.25 (-1.24 to .74)	.62

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs. P-values are from independent samples t-tests. HADS=Hospital Anxiety and Depression Scale; m=metres; VAS=Visual Analogue Scale; WOMAC=Western Ontario and McMaster Universities Osteoarthritis Index; Barthel ADL=Barthel Activities of Daily Living; LOS=Length of Stay; n=sample size

Table 6. Data for all effectiveness outcomes for the study trialling a Rehabilitation intervention to improve recovery from lower limb arthroplasty in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Pengas 2015 ²²	LOS: Hips (days)	114	4.95	0.14 (SE)	353	5.22	0.09 (SE)	4.9 (1.5)	5.2 (1.7)	-.17 (-.38 to .05)	-.28 (-.63 to .08)	.12
Pengas 2015 ²²	LOS: Knees (days)	78	5.04	0.19 (SE)	243	5.45	0.11 (SE)	5 (1.7)	5.5 (1.6)	-.25 (-.51 to .0)	-.42 (-.84 to .01)	.05
Pengas 2015 ²²	Day to mobilise with two sticks: Hips	113	3.11	0.13 (SE)	357	3.53	0.08 (SE)	3.1 (1.4)	3.5 (1.5)	-.29 (-.51 to -.08)	-.42 (-.73 to -.12)	<.01
Pengas 2015 ²²	Day to mobilise with two sticks: Knees	77	3.29	0.13 (SE)	240	3.87	0.10 (SE)	3.3 (1.1)	3.9 (1.5)	-.41 (-.67 to -.15)	-.58 (-.94 to -.22)	<.01
Pengas 2015 ²²	Time to achieve 90 degrees flexion : Knees (days)	NR	2.49		NR	2.99						
Pengas 2015 ²²	Days to achieve straight leg raise (Hips and Knees)	NR	2.49		NR	2.75						
Pengas 2015 ²²	Knee ROM on discharge: Knees (degrees)	NR	86.19		NR	87.72						

Standardised (Cohen's *d*) and non-standardised mean differences with 95% confidence intervals were calculated from means and SDs (imputed where necessary). P-values are from independent samples t-tests. LOS=Length of Stay; SE=Standard Error CI=Confidence Interval; ROM=Range of Movement; NR=Not Reported; n=sample size

Table 7. Data for all effectiveness outcomes for the study trialling a Specialist Ward intervention to improve recovery from lower limb arthroplasty in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Barlow 2013 ²³	LOS: Hips (days)	91	5.88	5.35 to 6.41 (95% CI)	114	7.50	6.96 to 8.04 (95% CI)	5.9 (2.2)	7.5 (2.9)	-1.03 (-1.32 to -.74)	-1.62 (-2.34 to -.90)	<.001
Barlow 2013 ²³	LOS: Knees (days)	100	5.48	4.90 to 6.06 (95% CI)	108	7.72	6.95 to 8.49 (95% CI)	5.5 (2.9)	7.7 (4.0)	-1.02 (-1.31 to -.73)	-2.24 (-3.21 to -1.27)	<.001

Standardised (Cohen's *d*) and non-standardised mean differences with 95% confidence intervals were calculated from means and SDs (imputed where necessary). P-values are from independent samples t-tests. LOS=Length of Stay; CI=Confidence Interval; n=sample size

Table 8. Data for clinical outcomes for studies trialling Prehabilitation interventions to improve recovery after cardiac surgery in in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Furze 2009 ²⁴	LOS (days)	100	7.61	2.69	104	8.24	4.96			-0.16 (-.43 to .12)	-.63 (-1.74 to .48)	.26
Furze 2009 ²⁴	Non-fatal cardiac events (n)	100	1		104	2				OR: 0.52 (0.05 to 5.77)		.58
Furze 2009 ²⁴	Deaths (n)	100	1		104	1				OR: 1.04 (0.06 to 16.86)		.98
Furze 2009 ²⁴	No. of visits to NHS GP during 8 week follow up = 3 or above (%)	100	4		104	2.9				OR: 1.4 (0.31 to 6.43)		.66
Furze 2009 ²⁴	No. admissions to NHS hospital during 8 week follow up = 0 (%)	100	99		104	97.1				OR: 2.94 (0.3 to 28.75)		.33
Furze 2009 ²⁴	No. admissions to NHS hospital during 8 week follow up = 1 (%)	100	1		104	2.9				OR: 0.34 (0.03 to 3.33)		.33
Furze 2009 ²⁴	QALY*	88	0.109	0.003	94	0.103	0.003			-2.0 (-2.36 to -1.64)	.006 (.005 to -.007)	<.001
Furze 2009 ²⁴	Cardiac Depression Scale (raw score)	100	81.69		104	93.37						
Furze 2009 ²⁴	CLASP Mobility subscale (raw score)	100	8.1		104	9.05						
Goodman 2008 ²⁵	LOS (days)	91	8.5 (median)	6.88 to 10.13 (IQR)	90	9 (median)	7.5 to 10.5 (IQR)	8.5 (2.4)	9 (2.3)	-0.21 (-.5 to .08)	-0.50 (-1.19 to .19)	.16

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of stay; OR=Odds Ratio; SD=Standard deviation; CI=Confidence interval; ICU=Intensive Care Unit; IQR=Interquartile range; *Quality Adjusted Life Years: Calculated using EQ-5D questionnaire using area under the curve method; CLASP=Cardiovascular Limitations and Symptoms Profile; n=sample size

Table 9. Data for all effectiveness outcomes reported by studies trialling Specialist Ward and ERP interventions to improve recovery from cardiac surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Fleming 2016 ²⁶ , ERP	LOS (days)	52	6 (median)	4 to 7 (IQR)	53	6 (median)	5 to 9 (IQR)	5.7 (2.3)	6.7 (3.0)	-.37 (-.76 to .02)	-1.0 (-2.04 to .04)	.06
Fleming 2016 ²⁶ , ERP	Patients with complications (n)	52	10		53	27				OR: 0.23 (0.1 to 0.55)		<.01
Fleming 2016 ²⁶ , ERP	Mortality (n)	52	1		53	2				OR: 0.5 (0.04 to 5.69)		.57
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral solids: Cumulative number by POD1	52	42		53	29						
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral solids: Cumulative number by POD2	52	47		53	39						
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral solids: Cumulative number by POD3	52	51		53	47						
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral liquids: Cumulative number by POD1	52	50		53	48						

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral liquids: Cumulative number by POD2	52	51		53	50						
Fleming 2016 ²⁶ , ERP	First postoperative intake of enteral liquids: Cumulative number by POD3	52	52		53	51						
Fleming 2016 ²⁶ , ERP	Bowels opening: Cumulative number by POD1	52	0		53	3						
Fleming 2016 ²⁶ , ERP	Bowels opening: Cumulative number by POD2	52	12		53	13						
Fleming 2016 ²⁶ , ERP	Bowels opening: Cumulative number by POD3	52	35		53	30						
Fleming 2016 ²⁶ , ERP	Pain Day 1 (Score 0 to 3)	52	1.1	0.9	53	1.7	0.9			-0.67 (-1.06 to -.27)	-0.6 (-.95 to -.25)	<.001
Fleming 2016 ²⁶ , ERP	Pain Day 2 (Score 0 to 3)	52	0.9	0.6	53	1.3	0.8			-0.56 (-.96 to -.17)	-0.4 (-.67 to -.13)	<.01
Fleming 2016 ²⁶ , ERP	Pain Day 3 (Score 0 to 3)	52	0.4	0.7	53	0.9	0.8			-0.66 (-1.06 to -.27)	-0.5 (-.79 to -.21)	<.001
Fleming 2016 ²⁶ , ERP	Nausea: Day 1 (n)	52	22		53	26						
Fleming 2016 ²⁶ , ERP	Nausea: Day 2 (n)	52	11		53	20						
Fleming 2016 ²⁶ , ERP	Nausea: Day 3 (n)	52	9		53	22						

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Fleming 2016 ²⁶ , ERP	Vomiting: Day 1 (n)	52	12		53	14						
Fleming 2016 ²⁶ , ERP	Vomiting: Day 2 (n)	52	4		53	7						
Fleming 2016 ²⁶ , ERP	Vomiting: Day 3 (n)	52	1		53	5						
Salhiyyah 2011 ²⁷ , SW	Total LOS (days)	84	8.47	4.69	52	8.22	2.55			.06 (-.28 to .41)	.25 (-1.15 to 1.65)	.72
Salhiyyah 2011 ²⁷ , SW	Cardiac intensive care unit stay (h)	84	8.61	31.24	52	26.79	11.58			-.71 (-1.07 to -.35)	-18.2 (-27.1 to -9.24)	<.001
Salhiyyah 2011 ²⁷ , SW	Theatre recovery unit stay (h)	84	5.77	1.46	52	0	0					
Salhiyyah 2011 ²⁷ , SW	Total intensive care unit stay (h)	84	14.38	31.23	52	26.79	11.58			-.48 (-.84 to -.13)	-12.4 (-21.3 to -3.48)	<.01
Salhiyyah 2011 ²⁷ , SW	Progressive care unit stay (h)	84	23.92	14.32	52	8.49	15.72			1.04 (.67 to 1.41)	15.4 (10.2 to 20.6)	<.001
Salhiyyah 2011 ²⁷ , SW	Ward stay (h)	84	137.95	62.51	52	138.9	62.26			-.02 (-.36 to .33)	-.95 (-22.7 to 20.8)	.93
Salhiyyah 2011 ²⁷ , SW	Total complications (n)	84	81		52	49				OR: 1.65 (0.32 to 8.51)		.54

Standardised (Cohen's *d*) and non-standardised mean differences with 95% confidence intervals were calculated from means and SDs (imputed where necessary). P-values are from independent samples t-tests. ERP=Enhanced Recovery Protocol; SW=Specialist Ward; POD=Postoperative day; LOS=Length of Stay; CI=Confidence Intervals; OR=Odds Ratio; n=sample size

Table 10. Data for clinical outcomes for each study trialling an ERP intervention for recovery from upper abdominal surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Abu Hilal 2013 ²⁸	Postop LOS: all patients (days)	20	8.5 (median)	7 to 13 (IQR)	24	13 (median)	10.5 to 20.5 (IQR)	9.5 (4.8)	14.7 (7.9)	-0.78 (-1.39 to -.16)	-5.17 (-9.24 to -1.10)	<.05
Abu Hilal 2013 ²⁸	Postop LOS: patients without complications (days)	20	8 (median)	7 to 10.5 (IQR)	24	12 (median)	10.5 to 13.5 (IQR)	8.5 (2.8)	12.0 (2.4)	-1.36 (-2.02 to -.7)	-3.5 (-5.07 to -1.93)	<.001
Abu Hilal 2013 ²⁸	Complications (n)	20	8		24	16				OR: 0.33 (0.1 to 1.14)		.08
Abu Hilal 2013 ²⁸	Readmission <30 days (n)	20	1		24	2				OR: 0.58 (0.05 to 6.9)		.66
Abu Hilal 2013 ²⁸	Mortality <90 days (n)	20	0		24	0						
Dasari 2015 ²⁹	LOS (days)	91	6 (median)	5 to 7 (IQR)	93	6 (median)	5 to 8 (IQR)	6.0 (1.5)	6.3 (2.3)	-0.17 (-.46 to .12)	-.33 (-.89 to .23)	.24
Dasari 2015 ²⁹	Readmissions <30 days (n)	91	9		93	12				OR: 0.58 (0.05 to 6.9)		.66
Dasari 2015 ²⁹	Complications (n)	91	30		93	32				OR: 0.94 (0.51 to 1.73)		.84
Jones 2013 ³⁰	Postop LOS (days)	46	4 (median)	3 to 5 (IQR)	45	7 (median)	6 to 8 (IQR)	4.0 (1.5)	7.0 (1.5)	-1.96 (-2.46 to -1.46)	-3.0 (-3.64 to -2.36)	<.001
Jones 2013 ³⁰	Readmissions (n)	46	2		45	0						.16
Jones 2013 ³⁰	Mortality (n)	46	1		45	1						1.0
Jones 2013 ³⁰	Total liver complications (n)	46	10		45	8				OR: 1.28 (0.46 to 3.62)		.64
Jones 2013 ³⁰	Patients with liver complications	46	15		45	11				OR: 1.43 (0.41 to 4.91)		.57

Study	Outcome (units)	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)			
	(%)											
Jones 2013 ³⁰	Number of general complications (n)	46	4		45	20				OR: 0.12 (0.04 to 0.39)		<.001
Jones 2013 ³⁰	Patients with general complications (n)	46	3		45	12				OR: 0.2 (0.05 to 0.75)		<.05
Richardson 2015 ³¹	LOS (days)	22	3 (median)	3 to 4 (IQR)	44	6 (median)	5 to 10 (IQR)	3.3 (0.8)	7.0 (3.8)	-1.16 (-1.71 to -.61)	-3.67 (-5.32 to -2.01)	<.001
Richardson 2015 ³¹	Complications: C-D Grade 3b, 4, 5 (n)	22	0		44	0						
Richardson 2015 ³¹	Complications: Overall (n)	22	6		44	17				OR: 0.6 (0.19 to 1.82)		.36
Richardson 2015 ³¹	Readmissions <30 days	22	2		44	8				OR: 0.45 (0.09 to 2.33)		.33
Sutcliffe 2015 ³²	Readmissions <30 days (n)	63	5		60	9				OR: 0.49 (0.15 to 1.55)		.22
Sutcliffe 2015 ³²	LOS (days)	65	9 (median)	4 to 70 (range)	65	10 (median)	4 to 114 (range)					
Sutcliffe 2015 ³²	Mortality <30 days (n)	65	2		65	2				OR: 1 (0.14 to 7.32)		1.0
Sutcliffe 2015 ³²	Mortality <60 days (n)	65	2		65	3				OR: 0.66 (0.11 to 4.06)		.65

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of stay; OR=Odds Ratio; SD=Standard deviation; CI=Confidence interval; PD=Pancreaticoduodenectomy; C-D=Clavien-Dindo; n=sample size

Table 11. Data for patient-reported outcomes for each study trialling an ERP intervention to improve recovery after upper abdominal surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Intervention Imputed Mean (SD)	Comparator Imputed Mean (SD)	<i>d</i> (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Abu Hilal 2013 ²⁸	Days to remove nasogastric tube	20	5 (median)	4 to 6 (IQR)	24	7 (median)	6 to 12 (IQR)	5.0 (1.6)	8.3 (4.7)	-.91 (-1.54 to -.29)	-3.33 (-5.57 to -1.10)	<.01
Abu Hilal 2013 ²⁸	Days to remove naso-jejunal tube	20	0 (median)		24	7 (median)	6 to 10.5 (IQR)	0.0 (0)	7.8 (3.5)	+	-7.83 (-9.44 to -6.23)	<.001
Abu Hilal 2013 ²⁸	Days to start liquid diet	20	2 (median)	2 to 3.5 (IQR)	24	5 (median)	4 to 7 (IQR)	2.5 (1.2)	5.3 (2.4)	-1.47 (-2.14 to -.8)	-2.83 (-4.01 to -1.66)	<.001
Abu Hilal 2013 ²⁸	Days to start solid food	20	4 (median)	3 to 5.5 (IQR)	24	9 (median)	6 to 12 (IQR)	4.2 (2.0)	9.0 (4.7)	-1.29 (-1.94 to -.64)	-4.83 (-7.12 to 2.54)	<.001
Abu Hilal 2013 ²⁸	Days to pass stool	20	6 (median)	4.5 to 7 (IQR)	24	7 (median)	6 to 10 (IQR)	5.8 (2.0)	7.7 (3.2)	-.68 (-1.29 to -.07)	-1.83 (-3.48 to -.19)	<.05
Dasari 2015 ²⁹	Time to discharge criteria (days)	91	5 (median)	4 to 7 (IQR)	93	5 (median)	4 to 7 (IQR)	5.3 (2.3)	5.3 (2.3)	.0 (-.29 to .29)	0.0 (-.66 to .66)	1.0
Jones 2013 ³⁰	Time to being medically fit for discharge (days)	46	3 (median)	3 to 4 (IQR)	45	6 (median)	6 to 7 (IQR)	3.3 (0.8)	6.3 (0.8)	-3.92 (-4.63 to - 3.21)	-3.0 (-3.32 to -2.68)	<.001
Jones 2013 ³⁰	EQ-5D (Area Under Curve)	46	37.2		45	35.6						
Richardson 2015 ³¹	Days to mobilise	22	1 (median)	1 to 1 (IQR)	44	2 (median)	1 to 2 (IQR)	1.0 (0.0)	1.7 (0.8)	+	-.67 (-.99 to -.34)	<.001
Richardson 2015 ³¹	Days to removal of nasogastric tube	22	1 (median)	1 to 2 (IQR)	44	1 (median)	1 to 3 (IQR)	1.3 (0.8)	1.7 (1.5)	-.25 (-.76 to .26)	-.33 (-1.03 to .36)	.34
Richardson 2015 ³¹	Days to start liquid diet	22	1 (median)	1 to 1 (IQR)	44	1 (median)	1 to 2 (IQR)	1.0 (0.0)	1.3 (0.8)	+	-.33 (-.66 to -.01)	<.05
Richardson 2015 ³¹	Days to start solid diet	22	2 (median)	2 to 2 (IQR)	44	3 (median)	2 to 4 (IQR)	2.0 (0.0)	3.0 (1.5)	+	-1.0 (-1.66 to -.34)	<.01
Richardson 2015 ³¹	Days to pass flatus	22	3 (median)	2 to 4 (IQR)	44	4 (median)	2 to 5 (IQR)	3.0 (1.6)	3.7 (2.3)	-.32 (-.83 to .2)	-.67 (-1.76 to .42)	.22
Richardson 2015 ³¹	Days to pass stool	22	3 (median)	3 to 5 (IQR)	44	5 (median)	5 to 7 (IQR)	3.7 (1.6)	5.7 (1.5)	-1.29 (-1.85 to -.73)	-2.0 (-2.80 to -1.19)	<.001

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs, imputed where necessary. P-values are from independent samples t-tests. CI=Confidence Interval; SD=Standard Deviation; HR=High Risk patients; QoL=Quality of Life; +Not calculable due to zero standard deviation; n=sample size

Table 12. Data for all effectiveness outcomes for the one study trialling a Prehabilitation intervention to improve recovery after upper abdominal surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Dunne 2016 ³³	Duration of stay in critical care (days)	19	1 (median)	1 to 2 (IQR)	15	1.5 (median)	1 to 2 (IQR)	1.3 (0.8)	1.5 (0.8)	-.21 (-.89 to .47)	-.17 (-.74 to .40)	.55
Dunne 2016 ³³	LOS (days)	19	5 (median)	4 to 6 (IQR)	15	5 (median)	4.5 to 7 (IQR)	5.0 (1.6)	5.5 (2)	-.28 (-.96 to .4)	-.5 (-1.77 to .77)	.43
Dunne 2016 ³³	Readmissions (n)	19	4		15	0						.06
Dunne 2016 ³³	Oxygen uptake at anaerobic threshold (ml per kg per min)	19	12.2	2.4	16	11.0	2.1			.53 (-.15 to 1.21)	1.2 (-.37 to 2.77)	.13
Dunne 2016 ³³	Oxygen uptake at peak (ml per kg per min)	19	19.6	3.8	16	18.7	4.1			.23 (-.44 to .9)	.9 (-1.82 to 3.62)	.51
Dunne 2016 ³³	Oxygen pulse at anaerobic threshold (ml/beat)	19	9.6	2.9	16	9.6	3.3			0 (-.67 to .67)	0 (-2.13 to 2.13)	1.0
Dunne 2016 ³³	Oxygen pulse at peak (ml/beat)	19	11.6	3.0	16	12.1	3.8			-.15 (-.81 to .52)	-.5 (-2.84 to 1.84)	.67
Dunne 2016 ³³	Peak work rate (W)	19	138	35	16	140	39			-.05 (-.72 to .61)	-2.0 (-27.5 to 23.5)	.87
Dunne 2016 ³³	Heart rate reserve (beats/min)	19	62	20	16	57	17			.27 (-.4 to .94)	5.0 (-7.91 to 17.9)	.44
Dunne 2016 ³³	SF-36: Physical health subscale (raw score)	19	72	20	16	68	21			.2 (-.47 to 0.86)	4.0 (-10.1 to 18.1)	.57
Dunne 2016 ³³	SF-36: Mental health subscale (raw score)	19	77	19	16	72	23			.24 (-.43 to .91)	5.0 (-9.44 to 19.4)	.49

Study	Outcome (units)	Intervention			Comparator			Intervention	Comparator	<i>d</i> (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)			
Dunne 2016 ³³	SF-36: QoL subscale (raw score)	19	77	18	16	71	22			.3 (-.37 to .97)	6.0 (-7.75 to 19.8)	.38
Dunne 2016 ³³	High Risk: Oxygen uptake at anaerobic threshold (ml per kg per min)	9	11.9	2.2	8	9.4	1.1			1.41 (.33 to 2.49)	2.5 (.66 to 4.34)	<.05
Dunne 2016 ³³	High Risk: Oxygen uptake at peak (ml per kg per min)	9	18.9	4.7	8	16	3.5			.69 (-.29 to 1.68)	2.9 (-1.43 to 7.23)	.17
Dunne 2016 ³³	High Risk: Oxygen pulse at anaerobic threshold (ml/beat)	9	9.3	2.2	8	7.3	1.7			1.01 (-.01 to 2.03)	2.0 (-.05 to 4.05)	.06
Dunne 2016 ³³	High Risk: Oxygen pulse at peak (ml/beat)	9	11.3	2.2	8	9.5	2.0			.85 (-.15 to 1.85)	1.8 (-.38 to 3.98)	.10
Dunne 2016 ³³	High Risk: Peak work rate (W)	9	130.0	34.0	8	117	28.0			.41 (-.55 to 1.38)	13.0 (-19.5 to 45.5)	.41
Dunne 2016 ³³	High Risk: Heart rate reserve (beats/min)	9	58.0	23.0	8	55.0	22.0			.13 (-.82 to 1.09)	3.0 (-20.3 to 26.3)	.79
Dunne 2016 ³³	High Risk: SF-36 Physical health subscale (raw score)	9	66.0	27.0	8	56.0	15.0			.45 (-.52 to 1.42)	10.00 (-13.0 to 33.0)	.37
Dunne 2016 ³³	High Risk: SF-36 Mental health subscale (raw score)	9	75.0	24.0	8	61.0	25.0			.57 (-.4 to 1.55)	14.0 (-11.3 to 39.3)	.26
Dunne 2016 ³³	High Risk: SF-36 QoL subscale,	9	73.0	23.0	8	59.0	21.0			.63 (-.35 to 1.61)	14.0 (-8.88 to 36.9)	.21

Study	Outcome (units) (raw score)	Intervention			Comparator			Intervention	Comparator	<i>d</i> (95% CI)	Mean change (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)			

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs, imputed where necessary. P-values are from independent samples t-tests. LOS=Length of Stay; SF-36=Short Form 36; W=Watts; SD=Standard Deviation; CI=Confidence Interval; QoL=Quality of Life; n=sample size

Table 13. Data for clinical outcomes for studies trialling ERP interventions to improve recovery from thoracic surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Brunelli 2017 ³⁴	LOS (days)	235	5 (median)	3 to 7 (IQR)	365	4 (median)	3 to 7 (IQR)	5.0 (3.0)	4.7 (3.0)	.11 (-.05 to .28)	.33 (-.16 to .82)	.18
Brunelli 2017 ³⁴	LOS > 5 days (%)	235	41		365	35				OR: 1.29 (0.92 to 1.81)		.14
Brunelli 2017 ³⁴	Readmission <30 days (%)	235	7.2		365	7.4				OR: 0.97 (0.52 to 1.82)		.93
Brunelli 2017 ³⁴	Readmission <90 days (%)	235	9.8		365	12.3				OR: 0.77 (0.46 to 1.32)		.35
Brunelli 2017 ³⁴	Relative 90 day readmission (%)	235	2.6		365	4.9				OR: 0.52 (0.2 to 1.32)		.16
Brunelli 2017 ³⁴	Cardiovascular and pulmonary complications	235	53		365	82				OR: 1.01 (0.68 to 1.49)		.98
Brunelli 2017 ³⁴	In-hospital mortality	235	6		365	8				OR: 1.17 (0.4 to 3.41)		.78
Gatenby 2015 ³⁵	Critical Care Unit LOS (days)	27	6 (median)	1 to 26 (range)	35	6 (median)	2 to 41 (range)					
Gatenby 2015 ³⁵	LOS (days)	27	15 (median)	8 to 42 (range)	35	18 (median)	9 to 56 (range)					
Gatenby 2015 ³⁵	Complications at 3b, 4 or 5 Clavien-Dindo rating (n)	27	2		35	2				OR: 1.32 (0.17 to 10.03)		.79
Gatenby 2015 ³⁵	Mortality (n)	27	1		35	0						.25
Gatenby 2015 ³⁵	Readmissions (n)	27	1		35	1				OR: 1.31 (0.08 to 21.91)		.85
Karran 2016 ³⁶	LOS: All patients (days)	160	13 (median)	10 to 17 (IQR)	92	16 (median)	13 to 26 (IQR)	13.3 (5.2)	18.3 (9.8)	-.69 (-.95 to -.43)	-5.0 (-6.86 to -3.14)	<.001
Karran 2016 ³⁶	LOS in critical care: All patients	160	1 (median)	0 to 1 (IQR)	92	1 (median)	1 to 2 (IQR)	0.7 (0.7)	1.3 (0.8)	-.89 (-1.16 to -.62)	-.67 (-.86 to -.47)	<.001

Study	Outcome (units)	Intervention			Comparator			Intervention	Comparator	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance	Imputed Mean (SD)	Imputed Mean (SD)			
	(days)											
Karran 2016 ³⁶	Readmission: All patients <30 days (n)	160	13		92	4				OR: 1.47 (0.45 to 4.82)		.53
Karran 2016 ³⁶	LOS: Oesophageal surgery patients (days)	81	15 (median)	12 to 19.5 (IQR)	58	18 (median)	13.8 to 31.3 (IQR)	15.5 (5.7)	21.0 (13.3)	-.58 (-.92 to -.23)	-5.53 (-8.80 to -2.26)	<.01
Karran 2016 ³⁶	LOS in critical care: Oesophageal surgery patients (days)	81	1 (median)	1 to 2 (IQR)	58	1 (median)	1 to 4 (IQR)	1.3 (0.8)	2.0 (2.3)	-.42 (-.76 to -.08)	-.67 (-1.20 to -.13)	<.05
Karran 2016 ³⁶	Readmission: Oesophageal surgery patients <30 days (n)	81	7		58	4				OR: 1.28 (0.36 to 4.58)		.71
Karran 2016 ³⁶	LOS: Gastric surgery patients (days)	79	11 (median)	8 to 15 (IQR)	34	14 (median)	12 to 18 (IQR)	11.3 (5.3)	14.7 (4.6)	-.65 (-1.06 to -.24)	-3.33 (-5.41 to -1.26)	<.01
Karran 2016 ³⁶	LOS in critical care: Gastric surgery patients (days)	79	0 (median)	0 to 1 (IQR)	34	1 (median)	1 to 1 (IQR)	0.3 (0.8)	1.0 (0.0)	+	<.67 (-.92 to -.41)	<.001
Karran 2016 ³⁶	Readmission: Gastric surgery patients <30 days (n)	79	6		34	0						.10
Karran 2016 ³⁶	Patients suffering Clavien-Dindo morbidity grade C3 complications (n)	79	22		34	16				OR: 0.43 (0.19 to 1)		<.05
Karran	Mortality <30	79	5		34	2				OR: 1.08		.93

Study	Outcome (units)	Intervention			Comparator			Intervention Imputed Mean (SD)	Comparator Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
2016 ³⁶	days (n)									(0.2 to 5.87)		

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of Stay; SD=Standard deviation; CI=Confidence interval; ICU=Intensive Care Unit; OR=Odds Ratio; +Not calculable due to zero standard deviation; n=sample size

Table 14. Data for all effectiveness outcomes for the two studies trialling an ERP intervention to improve recovery from pelvic surgery in the UK. Reported values are presented (mean and standard deviation (SD) unless indicated), as well as imputed means and SD where calculated.

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
Arumainayagam 2008 ³⁷	Time to defecation (days)	56	6 (median)		56	6 (median)						
Arumainayagam 2008 ³⁷	LOS (days)	56	13 (median)	11 to 17 (IQR)	56	17 (median)	15 to 23 (IQR)	13.7 (4.6)	18.3 (6.1)	-.85 (-1.24 to -.46)	-4.67 (-6.68 to -2.65)	<.001
Arumainayagam 2008 ³⁷	Postop LOS (days)	56	12 (median)	10 to 15 (IQR)	56	15 (median)	13 to 21 (IQR)	12.3 (3.8)	16.3 (6.1)	-.79 (-1.17 to -.4)	-4.0 (-5.90 to -2.10)	<.001
Arumainayagam 2008 ³⁷	Complications (n)	56	18		56	23				OR: 0.68 (0.31 to 1.47)		.33
Arumainayagam 2008 ³⁷	Return to theatre (n)	56	4		56	3				OR: 1.36 (0.29 to 6.37)		.70
Arumainayagam 2008 ³⁷	Deaths <28 days (n with days after surgery)	56	1 (20 days)		56	1 (7 days)				OR: 1 (0.06 to 16.39)		1.0
Arumainayagam 2008 ³⁷	Readmissions within 28 days	56	3		56	5				OR: 0.58 (0.13 to 2.54)		.46
Mukhtar 2013 ³⁸	Total theatre time (mins)	51	335.0	10.0	26	315.0	10.0			2.0 (1.43 to 2.57)	20.0 (15.2 to 24.8)	<.001
Mukhtar 2013 ³⁸	ICU LOS (days)	51	1.0	0.1	26	2.4	0.9			-2.66 (-3.3 to -2.03)	-1.4 (-1.65 to -1.15)	<.001
Mukhtar 2013 ³⁸	Time to removal of nasogastric tube (days)	51	2.0	0.3	26	5.1	1.2			-4.22 (-5.04 to -3.39)	-3.1 (-3.45 to -2.75)	<.001
Mukhtar 2013 ³⁸	Time to removal of intravenous	51	3.6	0.3	26	4.9	0.5			-3.43 (-4.16 to -	-1.3 (-1.48 to -1.12)	<.001

Study, intervention	Outcome (units)	Intervention			Comparator			Imputed Mean (SD)	Imputed Mean (SD)	<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance					
	fluids (days)									2.71)		
Mukhtar 2013 ³⁸	LOS (days)	51	10.4 (median)	6 to 62 (range)	26	11.5 (median)	7 to 24 (range)					
Mukhtar 2013 ³⁸	LOS with outlier removed (days)	51	11.5		26	12.9						
Mukhtar 2013 ³⁸	Complications (n)	51	19		26	11				OR: 0.81 (0.31 to 2.12)		.67
Mukhtar 2013 ³⁸	Time to passage of flatus (days)	51	4.6	0.2	26	6.2	0.4			-5.66 (-6.68 to - 4.64)	-1.6 (-1.74 to -1.46)	<.001
Mukhtar 2013 ³⁸	Time to passage of faeces (days)	51	6.1	0.3	26	7.4	0.5			-3.43 (-4.16 to - 2.71)	-1.3 (-1.48 to -1.12)	<.001
Mukhtar 2013 ³⁸	Time to full oral diet (days)	51	4.6	0.2	26	5.9	0.3			-5.46 (-6.45 to - 4.47)	-1.3 (-1.41 to -1.19)	<.001

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data, imputed where necessary. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of stay; SD=Standard deviation; CI=Confidence interval; ICU=Intensive Care Unit; OR=Odds Ratio; n=sample size

Table 15. Data for all effectiveness outcomes for the study trialling an intervention to improve recovery from vascular surgery in the UK. Mean and standard deviation are presented.

Study	Outcome (units)	Intervention			Comparator			<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance			
Partridge 2017 ³⁹	LOS (days)	85	3.32		91	5.53				
Partridge 2017 ³⁹	New comorbid diagnoses made at assessment (%)	101	63.40		100	5		OR: 32.91 (12.28 to 88.24)		<.001
Partridge 2017 ³⁹	Incidence of postoperative delirium (%)	85	11		91	24		OR: 0.39 (0.17 to 0.9)		<.05
Partridge 2017 ³⁹	Fall (%)	85	2		91	8		OR: 0.23 (0.04 to 1.28)		.07
Partridge 2017 ³⁹	Cardiac complications (%)	85	8		91	27		OR: 0.24 (0.09 to 0.58)		<.01
Partridge 2017 ³⁹	Pulmonary complications (%)	85	9		91	14		OR: 0.61 (0.23 to 1.57)		.30
Partridge 2017 ³⁹	Infective complications (%)	85	16		91	27		OR: 0.51 (0.25 to 1.08)		.08
Partridge 2017 ³⁹	Bowel and bladder complications (%)	85	33		91	55		OR: 0.4 (0.22 to 0.74)		<.01
Partridge 2017 ³⁹	Postoperative vascular surgery related issues (%)	85	7		91	11		OR: 0.61 (0.21 to 1.76)		.36
Partridge 2017 ³⁹	Discharge timed get up and go (seconds)	85	18.9	1.8	91	20.1	11.6	-.14 (-.44 to .15)	-1.2 (-3.71 to 1.31)	.35
Partridge 2017 ³⁹	Discharge gait speed (m.s ⁻¹)	85	0.7	0.3	91	0.7	0.2	.0 (-.3 to .3)	0 (-.08 to .08)	1.0
Partridge 2017 ³⁹	Postoperative blood transfusion (units infused)	85	0.3	0.7	91	1	3.7	-.26 (-.56 to .04)	-.7 (-1.51 to .11)	.09
Partridge 2017 ³⁹	Discharge to higher care (%)	85	14		91	5		OR: 0.35 (0.11 to 1.11)		.07
Partridge 2017 ³⁹	Readmission < 30 days (%)	85	18		91	11		OR: 1.95 (0.86 to 4.42)		.10
Partridge 2017 ³⁹	Level 2/3 care used immediately after surgery (%)	85	31		91	43		OR: 0.6 (0.32 to 1.11)		.10

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of Stay; CI=Confidence interval; SIRS= Systemic Inflammatory Response Syndrome; OR=Odds Ratio; n=sample size

Table 16. Data for effectiveness outcomes from the study trialling a preoperative assessment intervention to improve recovery from various elective surgeries in the UK. Mean and standard deviation (SD) is presented unless indicated.

Study	Outcome (units)	Intervention			Comparator			<i>d</i> or OR (95% CI)	Mean difference (95% CI)	p
		n	Estimate	Variance	n	Estimate	Variance			
Ellis 2012 ⁴⁰	Referrals – OT (%)	172	22.1		141	42.6				
Ellis 2012 ⁴⁰	Referrals – Physiotherapy (%)	172	35.5		141	58.2				
Ellis 2012 ⁴⁰	Referrals - Dietician (%)	172	3.5		141	8.5				
Ellis 2012 ⁴⁰	Referrals - Social work/early supported discharge (%)	172	3.5		141	9.9				
Ellis 2012 ⁴⁰	Referrals - Falls team (%)	172	0.0		141	4.3				
Ellis 2012 ⁴⁰	Referrals - GP or district nurse (%)	172	1.7		141	5.0				
Ellis 2012 ⁴⁰	Referrals - Carer support worker (%)	172	1.7		141	2.1				
Ellis 2012 ⁴⁰	Referrals - Other agencies (%)	172	4.7		141	3.5				
Ellis 2012 ⁴⁰	Total complications (%)	172	2.3		141	8.5		OR: 0.24 (0.08 to 0.76)		<.01
Ellis 2012 ⁴⁰	LOS (days)	172	4.9	5.0	141	8.9	7.6	-.63 (-.86 to -.41)	-4.0 (-5.40 to -2.59)	<.001
Ellis 2012 ⁴⁰	MMSE (raw score)	34	26.7	2.9	53	26	2.9	.24 (-.19 to .67)	0.7 (-.57 to 1.97)	.27

Standardised (Cohen's *d*) and non-standardised mean differences with 95% and confidence intervals were calculated from means and SDs for continuous data. Odds ratios and 95% confidence intervals were calculated for dichotomous data. P-values are from independent samples t-tests (for continuous data) or z-scores (for dichotomous data). LOS=Length of Stay; OR=Odds Ratio; SD=Standard deviation; CI=Confidence interval; OT=Occupational Therapist; MMSE=Mini Mental State Exam; n=sample size

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