CQ 1
P: Adult patient with critical illness
I: Protocolized rehabilitation in the intensive care unit
C: Usual care

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Fundamental Motion (assessed with: PFIT, IMS, MMS, SOMS)												
6	randomised trials	serious [a]	serious [b]	not serious	serious [c]	none	307	288	-	SMD **0.62 higher** (0.01 higher to 1.23 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of Daily Living (assessed with: FIM, BI, mmFIM, SPPB)												
5	randomised trials	very serious [d]	serious [e]	not serious	serious [f]	none	314	327	-	SMD **0.15 higher** (0.27 lower to 0.57 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle Strength (assessed with: MRC-SS)												
5	randomised trials	very serious [d]	serious [g]	not serious	serious [f]	none	137	135	-	MD **4.52 higher** (1.54 lower to 10.59 higher)	⨁◯◯◯ Very low	CRITICAL
Duration of Mechanical Ventilation (days)												
16	randomised trials	very serious [d]	serious [h]	not serious	not serious	publication bias strongly suspected [i]	584	581	-	MD **1.28 day lower** (1.68 lower to 0.87 lower)	⨁◯◯◯ Very low	CRITICAL
Length of Stay in the ICU (days)												
19	randomised trials	very serious [d]	serious [j]	not serious	not serious	none	925	913	-	MD **1.53 day lower** (2.3 lower to 0.77 lower)	⨁◯◯◯ Very low	CRITICAL
Incidence of Delirium in the ICU												
0											-	CRITICAL
Any Adverse Event												
7	randomised trials	serious [a]	serious [k]	not serious	serious [l]	none	39/489 (8.0%)	43/505 (8.5%)	**RR 0.72** (0.28 to 1.83)	**24 fewer per 1,000** (from 61 fewer to 71 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

a. Downgrade one level due to risk of bias (blinding of participants and personnel).
b. Downgrade one level due to considerable heterogeneity (I^2 = 92%).
c. Downgrade one level due to smaller than OIS.
d. Downgrade two levels due to risk of bias (blinding of participants and personnel and incomplete outcome data).
e. Downgrade one level due to considerable heterogeneity (I^2 = 85%).

f. Downgrade one level due to the 95% confidence interval overlaps 0 and smaller than OIS.
g. Downgrade one level due to considerable heterogeneity (I^2= 82%).
h. Downgrade one level due to considerable heterogeneity (I^2 = 93%).
i. Detection of serious publication bias from Egger test (P < .01) and asymmetry of funnel plot.
j. Downgrade one level due to considerable heterogeneity (I^2 = 89%).
k. Downgrade one level due to substantial heterogeneity (I^2= 65%).
l. Downgrade one level due to the 95% confidence interval overlaps 1 and smaller than OIS.

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ2
P: Adult patient with critical illness
I: At least two rehabilitation sessions per day in the ICU
C: Only one rehabilitation session per day in the ICU

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Fundamental Motion (Modified Rivermead Mobility Index)												
1	randomised trials	very serious[a]	not serious	not serious	very serious[b]	none	112	104	-	MD **3 higher** (0.33 higher to 5.67 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of Daily Living (FIM, Modified Barthel Index)												
2	randomised trials	serious[c]	not serious	not serious	very serious[d]	none	109	95	-	SMD **0.22 higher** (0.05 lower to 0.5 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle Strength (MRC-SS)												
2	randomised trials	serious[c]	not serious	not serious	very serious[d]	none	45	42	-	MD **2.17 lower** (5.62 lower to 1.29 higher)	⨁◯◯◯ Very low	CRITICAL
Duration of Mechanical Ventilation												
6	randomised trials	very serious[e]	serious[f]	not serious	serious[g]	none	147	144	-	MD **2.26 day lower** (3.86 lower to 0.65 lower)	⨁◯◯◯ Very low	CRITICAL
Length of Stay in the ICU												
7	randomised trials	very serious[e]	not serious	not serious	serious[g]	none	271	262	-	MD **2.24 day lower** (4.02 lower to 0.46 lower)	⨁◯◯◯ Very low	CRITICAL
Incidence of Delirium in the ICU												
0												
Any Adverse Events												
3	randomised trials	serious[c]	not serious	not serious	serious[g]	none	2/205 (1.0%)	0/217 (0.0%)	**RR 3.08** (0.33 to 29.10)	**10 more per 1,000** (from 10 fewer to 20 more)	⨁⨁◯◯ Low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

a. Downgraded two levels due to risk of bias (blinding of participants and personnel, and blinding of outcome assessment).
b. Downgraded two levels due to a smaller sample size than OIS and a wide range of 95% confidence interval.
c. Downgraded one level due to risk of bias (blinding of participants and personnel).
d. Downgraded two levels due to a smaller sample size than OIS and a wide range of 95% confidence interval straddling 1.
e. Downgraded two levels due to risk of bias (allocation concealment, blinding of outcome assessment).
f. Downgraded one level due to substantial heterogeneity (I2 = 53%).
g. Downgraded one level due to a smaller sample size than OIS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ 3-1
P: Patient with critical illness
I: Neuromuscular electrical stimulation
C: Non-neuromuscular electrical stimulation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
ADL（Barthel index）												
2	randomised trials	very serious[a]	serious[b]	not serious	very serious[c]	none	54	52	-	MD **10.76 higher** (12.95 lower to 34.48 higher)	⨁◯◯◯ Very low	CRITICAL
Exercise tolerance (6MWD)												
0												CRITICAL
Muscle strength (MRC SS)												
2	randomised trials	serious[d]	serious[e]	not serious	very serious[c]	none	30	38	-	MD **4.68 higher** (2.66 lower to 12.03 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle mass												
2	randomised trials	not serious	serious[f]	not serious	very serious[c]	none	19	23	-	MD **0.37 mm higher** (2.57 lower to 3.30 higher)	⨁◯◯◯ Very low	CRITICAL
Ventilator days												
10	randomised trials	not serious	not serious	not serious	serious[g]	none	249	253	-	MD **1 day lower** (2.18 lower to 0.18 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Hospital days												
7	randomised trials	serious[h]	serious[i]	not serious	serious[g]	none	197	214	-	MD **3.77 day lower** (7.98 lower to 0.43 higher)	⨁◯◯◯ Very low	CRITICAL
Adverse events												
4	randomised trials	serious[j]	very serious[k]	not serious	very serious[l]	none	11/65 (16.9%)	18/74 (24.3%)	not estimable	**140 fewer per 1,000** (from 380 fewer to 100 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference

Explanations

a. Downgrade two level due to risk of bias (blinding of participants and personnel, blinding outcome assessment, incomplete outcome data, and selective reporting).
b. Downgrade one level due to substantial heterogeneity (I2=64%).
c. Downgrade two level due to the 95% confidence interval overlaps 0 and smaller than OIS.
d. Downgrade one level due to risk of bias (blinding of participants and personnel, blinding outcome assessment, and incomplete outcome data).
e. Downgrade one level due to substantial heterogeneity (I2=73%).
f. Downgrade one level due to substantial heterogeneity (I2=47%).
g. Downgrade one level due to the 95% confidence interval overlaps 0.
h. Downgrade one level due to risk of bias (blinding of participants and personnel, and incomplete outcome data).
i. Downgrade one level due to substantial heterogeneity (I2=52%).
j. Downgrade one level due to risk of bias (blinding of participants and personnel, blinding outcome assessment, incomplete outcome data, and selective reporting).
k. Downgrade two level due to considerable heterogeneity (I2=87%).
l. Downgrade two level due to the 95% confidence interval overlaps 1 and smaller than OIS.

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	**Moderate**	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	**Moderate**	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	**Favors the intervention**	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know

CQ3-2
P: Patient with critical illness
I: In-bed cycle ergometry
C: Non-in-bed cycle ergometry

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
ADL (Barthel index)												
0												CRITICAL
Exercise tolerance (6MWD)												
1	randomised trials	very serious[a]	not serious	not serious	very serious[b]	none	31	36	-	MD **53 m higher** (16.85 lower to 122.85 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle strength (MRC SS)												
2	randomised trials	serious[c]	not serious	not serious	serious[d]	none	58	52	-	MD **0.19 lower** (2.91 lower to 2.53 higher)	⨁⨁◯◯ Low	CRITICAL
Muscle mass												
1	randomised trials	not serious	not serious	not serious	very serious[e]	none	12	12	-	MD **2.75 mm higher** (4.17 lower to 9.67 higher)	⨁⨁◯◯ Low	CRITICAL
Ventilator days												
7	randomised trials	serious[f]	not serious	not serious	serious[g]	none	166	153	-	MD **0.76 day higher** (0.69 lower to 2.2 higher)	⨁⨁◯◯ Low	CRITICAL
Hospital days												
6	randomised trials	serious[h]	not serious	not serious	serious[i]	none	146	131	-	MD **1.28 day lower** (5.44 lower to 2.88 higher)	⨁⨁◯◯ Low	CRITICAL
Adverse events												
1	randomised trials	very serious[j]	not serious	not serious	very serious[k]	none	0/31 (0.0%)	0/36 (0.0%)	not estimable	**0 fewer per 1,000** (from 60 fewer to 60 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference

Explanations

a. Downgrade two level due to risk of bias (blinding of participants and personnel, blinding of outcome assessment, Incomplete outcome data, and other bias).
b. Downgrade two levels due to wide range of 95% confidence interval and smaller than OIS.
c. Downgrade one level due to risk of bias (blinding of participants and personnel).
d. Downgrade one level due to smaller than OIS.
e. Downgrade two level due to smaller than OIS and the 95% CI overlaps 0.
f. Downgraded one level due to risk of bias (blinding of participants, personnel, Incomplete outcome data, and selective reporting).
g. Downgrade one level due to smaller than OIS.
h. Downgrade one level due to risk of bias (blinding of participants and personnel, Incomplete outcome data).
i. Downgrade one level due to smaller than OIS.
j. Downgrade two level due to risk of bias (blinding of participants and personnel, blinding of outcome assessment, Incomplete outcome data, and other bias).
k. Downgraded two level due to the 95% confidence interval overlaps 1 and small number of studies.

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	**Small**	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	**Probably favors the intervention**	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know

CQ 3-3
P: Patient with critical illness
I: In-bed cycle ergometry and neuromuscular electrical stimulation
C: Non-in-bed cycle ergometry and neuromuscular electrical stimulation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
ADL (Katz Index, Barthel index)												
2	randomised trials	serious[a]	serious[b]	not serious	very serious[c]	none	118	132	-	SMD **0.21 higher** (0.29 lower to 0.71 higher)	⨁◯◯◯ Very low	CRITICAL
Exercise tolerance (6MWD)												
1	randomised trials	not serious	not serious	not serious	serious[d]	none	23	23	-	MD **81 m higher** (7.01 higher to 154.99 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Muscle strength (MRC SS)												
3	randomised trials	not serious	very serious[e]	not serious	serious[f]	none	235	242	-	MD **0.47 higher** (4.09 lower to 5.04 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle mass												
3	randomised trials	serious[g]	serious[h]	not serious	serious[i]	none	295	290	-	SMD **0.39 higher** (0.13 higher to 0.65 higher)	⨁◯◯◯ Very low	CRITICAL
Ventilator days												
2	randomised trials	serious[j]	not serious	not serious	serious[k]	none	238	236	-	MD **0 day** (0.25 lower to 0.25 higher)	⨁⨁◯◯ Low	CRITICAL
Hospital days												
2	randomised trials	not serious	not serious	not serious	serious[l]	none	150	151	-	MD **1.96 day lower** (3.32 lower to 0.6 lower)	⨁⨁⨁◯ Moderate	CRITICAL
Adverse events												
1	randomised trials	very serious[m]	not serious	not serious	very serious[n]	none	7/158 (4.4%)	9/154 (5.8%)	not estimable	**10 fewer per 1,000** (from 60 fewer to 30 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

a. Downgrade one level due to risk of bias (blinding of participants and personnel).
b. Downgrade one level due to considerable heterogeneity (I2 = 65%).
c. Downgrade two level due to wide range of 95% confidence interval and smaller than OIS.
d. Downgrade one level due to smaller than OIS.
e. Downgrade two level due to considerable heterogeneity (I2 = 98%).
f. Downgrade one level due to smaller than OIS.
g. Downgrade one level due to risk of bias (blinding of participants and personnel).
h. Downgrade one level due to considerable heterogeneity (I2 = 58%).
i. Downgrade one level due to smaller than OIS.
j. Downgrade one level due to risk of bias (blinding of participants and personnel).
k. Downgrade one level due to smaller than OIS.
l. Downgrade one level due to smaller than OIS.
m. Downgrade two level due to risk of bias (blinding of participants and personnel, blinding of outcome assessment, Incomplete outcome data, and Selective reporting).
n. Downgrade two levels due to wide range of 95% confidence interval and smaller than OIS.

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	**Moderate**	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	**Moderate**	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	**Favors the intervention**	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		**Varies**	Don't know

CQ 5
P: Patient with critical illness
I: Dysphagia management based on video endoscopic examination
C: Dysphagia management based on usual assessment

Quality assessment							№ of patients		Effect		Quality	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Pneumonia												
1	randomised trials	serious [a]	not serious	not serious	very serious [b]	none	5/37 (13.5%)	2/33 (6.1%)	**RR 2.23** (0.46 to 10.73)	**75 more per 1,000** (from 33 fewer to 590 more)	⨁◯◯◯ Very low	CRITICAL
Adverse events												
1	randomised trials	serious [a]	not serious	not serious	very serious [b]	none	2/37 (5.4%)	1/33 (3.0%)	**RR 1.78** (0.17 to 18.78)	**24 more per 1,000** (from 25 fewer to 539 more)	⨁◯◯◯ Very low	CRITICAL

a. Downgraded because a randomized trial did not blind patients, caretakers and investigators.
b. Downgraded because the number of events was very small and *the 95% confidence interval* includes both clinically thresholds for benefits and harms.

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ 6
P: Patient with critical illness
I: Dysphagia rehabilitation
C: No intervention

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Mortality												
9	randomised trials	not serious	not serious	very serious[a]	very serious[b]	none	47/353 (13.3%)	29/238 (12.2%)	**RR 0.99** (0.55 to 1.78)	**1 fewer per 1,000** (from 55 fewer to 95 more)	⨁◯◯◯ Very low	CRITICAL
Pneumonia												
5	randomised trials	not serious	not serious	serious[c]	serious[d]	none	71/299 (23.7%)	73/201 (36.3%)	**RR 0.60** (0.46 to 0.78)	**145 fewer per 1,000** (from 196 fewer to 80 fewer)	⨁⨁◯◯ Low	CRITICAL
QOL (SF-36, EQ-5D)												
0	randomised trials									-		CRITICAL
ADL (FIM, Barthel Index, Katz Index)												
0										-		CRITICAL
Eating Status (FOIS)												
3	randomised trials	not serious	serious[e]	serious[c]	very serious[f]	none	71	70	-	MD **0.79 higher** (0.21 lower to 1.79 higher)	⨁◯◯◯ Very low	CRITICAL
Length of Hospital Stay												
3	randomised trials	not serious	serious[g]	serious[c]	very serious[f]	none	253	142	-	MD **0.26 day higher** (3.95 lower to 4.47 higher)	⨁◯◯◯ Very low	IMPORTANT
Adverse events												
4	randomised trials	not serious	serious[h]	serious[i]	very serious[i]	none	100/266 (37.6%)	67/153 (43.8%)	**RR 0.97** (0.40 to 2.31)	**13 fewer per 1,000** (from 263 fewer to 574 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio

Explanations

a. Downgraded by two points because the definition and timing of mortality in the included studies potentially varied and most of the studies focused on stroke patients who might have partly differed from critically ill ones.
b. Downgraded by two points because the optimal information size was not reached and the confidence interval of the effect size straddled 1.
c. Downgraded by one point because most of the studies focused on stroke patients, who might have partly differed from critically ill ones.
d. Downgraded by one point because the optimal information size was not reached.
e. Downgraded by one point due to moderate heterogeneity (I2= 53%).
f. Downgraded by two points because the optimal information size was not reached and the 95% confidence interval of the pooled effect straddled 0.
g. Downgraded by one point due to the substantial heterogeneity (I2= 63%).
h. Downgraded by one point due to moderate heterogeneity (I2= 54%).
i. Downgraded by one point because most of the studies focused on stroke patients, who might have partly differed from critically ill patients.

j. Downgraded by two points because the optimal information size was not reached and the confidence interval of the effect size straddled 1.

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ 9
P: Adult patients with critical illness
I: Energy provision of equal to or more than 20 kcal/kg/day or 70 % energy expenditure
C: Energy provision of less than 20 kcal/kg/day or 70 % energy expenditure, or usual nutrition therapy
Energy amount was determined as target energy provision in the study design. Target energy was identified between 4 and 10 days from admission. Actual body weight or adjusted body weight were used.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
ADL score												
0										-		CRITICAL
Hand grip strength												
2	randomised trials	serious[a]	not serious	not serious	very serious[b]	none	93	99	-	MD **0.58 kg higher** (4.77 lower to 5.92 higher)	⨁◯◯◯ Very low	CRITICAL
Muscle volume change												
0												CRITICAL
QOL: ED-5D-3L												
2	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	263	288	-	MD **0.01 higher** (0.03 lower to 0.05 higher)	⨁◯◯◯ Very low	CRITICAL
Diarrhea												
3	randomised trials	not serious	Serious[d]	not serious	very serious[e]	none	121/560 (21.6%)	101/554 (18.2%)	**RR 1.20** (0.95 to 1.51)	**36 more per 1,000** (from 9 fewer to 93 more)	⨁◯◯◯ Very low	CRITICAL
Mortality												
8	randomised trials	not serious	not serious	not serious	serious[f]	none	341/1369 (24.9%)	339/1385 (24.6%)	**RR 1.01** (0.89 to 1.15)	**0 fewer per 1,000** (from 30 fewer to 34 more)	⨁⨁⨁◯ Moderate	IMPORTANT
Hospital day												
7	randomised trials	not serious	serious[g]	not serious	very serious[e]	none	401	391	-	MD **1.08 day lower** (4.86 lower to 2.7 higher)	⨁◯◯◯ Very low	IMPORTANT

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

a. Downgraded one level due to high risk of bias (difficulty in blinding patients and providers, incomplete outcomes)
b. Many have small sample sizes where the 95% CI includes no effect and does not meet OIS
c. Downgraded 2 levels due to subjective outcome and very high risk of bias (difficulty in blinding patients and providers, unknown blinding of assessors, incomplete outcome)

d. I2=55%, one step downgrade
e. 95% CI not including no effect, less than OIS
f. Meets OIS but 95% CI includes no effect
g. I2=45%, one step downgrade

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	**Trivial**	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	**Does not favor either the intervention or the comparison**	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know

CQ 10
P: Adult patients with critical illness
I: Protein provision of equal to or more than 1 g/kg/day
C: Protein provision of less than 1 g/kg/day 1g/kg/day, or usual nutrition therapy
Protein amount was determined as target protein provision in the study design. Target protein was identified between 4 and 10 days from admission. Actual body weight or adjusted body weight were used.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Barthel index												
3	randomised trials	not serious	serious[a]	not serious	very serious[b]	none	114	122	-	MD **21.55 higher** (1.3 lower to 44.4 higher)	⨁◯◯◯ Very low	CRITICAL
hand grip strength												
2	randomised trials	very serious[c]	not serious	not serious	very serious[d]	none	25	40	-	MD **1 kg lower** (5.79 lower to 3.79 higher)	⨁◯◯◯ Very low	CRITICAL
muscle volume change												
3	randomised trials	not serious	not serious	not serious	serious[e]	none	145	141	-	SMD **0.47 higher** (0.24 higher to 0.71 higher)	⨁⨁⨁◯ Moderate	CRITICAL
QOL score (physical)												
3	randomised trials	very serious[f]	not serious	not serious	serious[g]	none	361	352	-	SMD **0.13 lower** (0.31 lower to 0.06 higher)	⨁◯◯◯ Very low	CRITICAL
Diarrhea												
7	randomised trials	not serious	serious[h]	not serious	very serious[i]	none	93/234 (39.7%)	104/231 (45.0%)	**RR 0.90** (0.61 to 1.31)	**45 fewer per 1,000** (from 176 fewer to 140 more)	⨁◯◯◯ Very low	CRITICAL
Mortality												
11	randomised trials	not serious	not serious	not serious	very serious[j]	none	128/750 (17.1%)	149/778 (19.2%)	**RR 0.90** (0.73 to 1.12)	**19 fewer per 1,000** (from 52 fewer to 23 more)	⨁⨁◯◯ Low	IMPORTANT
hospital day												
13	randomised trials	not serious	serious[k]	not serious	not serious	none	812	832	-	MD **0.36 day higher** (0.98 lower to 1.7 higher)	⨁⨁⨁◯ Moderate	IMPORTANT

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardized mean difference

Explanations

a. I2 is high at 76%. However, the forest plot was the same direction. Therefore, downgrage was limitted to serious.
b. Downgraded due to total sample size of 236<800
c. Included two studies had high risk of bias about blinding of participants and personeel and incomplete outcome data.
d. Downgraded due to total sample size of 65<800
e. Downgraded due to total sample size of 286<800
f. No study was judged to be low risk of bias about blinding of participants and personeel and blinding of outcome assessment.
g. Downgraded due to total sample size of 712<800
h. I2 is high at 64%. Forest plot direction a little bit different among included studies.
i. Downgraded due to total events size of 197<300
j. Downgraded due to total events size of 277<300
k. I2 is high at 61%.

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	**Small**	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	**Probably favors the intervention**	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know

CQ 11
P: Critically ill children admitted to the ICU
I: Implementation of early physical rehabilitation protocol
C: No intervention

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Mortality												
1	randomised trials								-	-	-	CRITICAL
Length of Hospital Stay												
1	randomised trials	not serious	not serious	not serious	very serious[a]	none	26	32	-	MD **0 day** (4.98 lower to 4.98 higher)	⨁⨁◯◯ Low	CRITICAL
Length of ICU Stay												
1	randomised trials	not serious	not serious	not serious	very serious[a]	none	26	32	-	MD **1.5 day higher** (2.63 lower to 5.63 higher)	⨁⨁◯◯ Low	CRITICAL
Adverse events requiring therapeutic intervention												
2	randomised trials	not serious	not serious	not serious	Very serious[a]	none	1/46 (2.2%)	4/42 (9.5%)	**RR 0.31** (0.04 to 2.59)	**66 fewer per 1,000** (from 91 fewer to 151 more)	⨁⨁◯◯ Low	CRITICAL

CI: confidence interval; **RR:** risk ratio

Explanations

a: Downgraded two level due to imprecision (wide confidence intervals and the small sample size).

	JUDGEMENT						
PROBLEM	No	Probably no	**Probably yes**	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	**Don't know**
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	**No important uncertainty or variability**			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	**Don't know**
ACCEPTABILITY	No	Probably no	**Probably yes**	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	**Probably yes**	Yes		Varies	Don't know

CQ12
P: Critically ill children who received mechanical ventilation including NPPV
I: Respiratory physical therapy
C: No intervention or standard care

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Mortality												
2[a]	randomised trials	serious[b]	not serious	not serious	serious[c]	none	9/73 (12.3%)	16/70 (22.9%)	**RR 0.53** (0.22 to 1.28)	**107 fewer per 1,000** (from 178 fewer to 64 more)	⨁⨁◯◯ Low	CRITICAL
Length of Hospital Stay												
0												CRITICAL
Length of ICU Stay												
0												CRITICAL
Duration of mechanical ventilation												
1[a]	randomised trials	serious[b]	not serious	not serious	very serious[d]	none	22	20	-	MD **10.1 hours higher** (37.57 lower to 57.77 higher)	⨁◯◯◯ Very low	CRITICAL
Adverse events requiring treatment												
1[a]	randomised trials	very serious[e]	not serious	not serious	serious[c]	none	4/51 (7.8%)	5/50 (10.0%)	**RR 0.78** (0.22 to 2.75)	**22 fewer per 1,000** (from 78 fewer to 175 more)	⨁◯◯◯ Very low	CRITICAL
Oxygenation（PaO2/FIO2 ratio）												
2[a]	randomised trials	serious[b]	serious[f]	not serious	serious[c]	none	72	69	-	MD **67.87 higher** (96.35 lower to 232.09 higher)	⨁◯◯◯ Very low	IMPORTANT
Atelectasis												
0												IMPORTANT

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio

Explanations

a. All the included studies investigated prone positioning as physical therapy
b. Downgraded one level due to the risk of bias (allocation concealment, selective reporting and other bias).
c. Downgraded one level due to smaller than OIS.

d. Downgrade two levels due to wide range of 95% confidence interval and smaller than OIS.
e. Downgraded two levels due to insufficient information about the number of the patient who experienced adverse events and following selection of unplanned extubation as a representative adverse event by reviewers.
f. Downgraded one level because substantial heterogeneity (I2 = 68%)

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	**Yes**		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ13
P: Patient with critical illness
I: Enhanced rehabilitation following ICU discharge
C: No intervention or usual care

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Intervention	Comparison	Relative (95% CI)	Absolute (95% CI)		
Quality of life (physical)												
9	randomised trials	very serious[a,b]	not serious	not serious	serious[c]	none	398	409	-	SMD **0.1 higher** (0.06 lower to 0.25 higher)	⨁◯◯◯ Very low	CRITICAL
Quality of life (mental)												
9	randomised trials	very serious[a,b]	serious[d]	not serious	serious[c]	publication bias strongly suspected[e]	395	408	-	SMD **0.19 higher** (0.03 lower to 0.42 higher)	⨁◯◯◯ Very low	CRITICAL
Quality of life（overall）												
5	randomised trials	very serious[a,b]	serious[f]	not serious	very serious[c,g]	none	201	223	-	SMD **0.22 SD higher** (0.09 lower to 0.54 higher)	⨁◯◯◯ Very low	CRITICAL
Mortality												
2	randomised trials	serious[b]	not serious	not serious	very serious[g,h]	none	10/148 (6.8%)	7/140 (5.0%)	RR 1.44 (0.39 to 5.36)	**22 more per 1,000** (from 31 fewer to 218 more)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living												
2	randomised trials	serious[b]	serious[i]	not serious	very serious[c,f]	none	53	62	-	SMD **0.41 SD lower** (1.28 lower to 0.46 higher)	⨁◯◯◯ Very low	CRITICAL
Return to work												
0												CRITICAL
All adverse events												
4	randomised trials	very serious[a,j]	not serious	not serious	very serious[c,h]	none	6/84 (7.1%)	2/82 (2.4%)	RR 3.00 (0.66 to 13.69)	**49 more per 1,000** (from 8 fewer to 310 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; RR: risk ratio; SMD: standardised mean difference

Explanations

a. Downgraded one level due to risk of bias (blinding of outcome assessment)
b. Downgraded one level due to risk of bias (blinding of participants and personnel).
c. Downgraded one level due to a smaller sample size than OIS.
d. Downgraded one level due to substantial heterogeneity (I2 = 53%).
e. Downgraded one level because the asymmetry of the funnel plot is suspected.
f. Downgraded one level due to substantial heterogeneity (I2 = 52%).
g. Downgraded one level due to a wide range of 95% confidence interval and straddling zero.
h. Downgraded one level due to wide range of 95% confidence interval.
i. Downgraded one level due to considerable heterogeneity (I2 = 81%).
j. Downgraded one level due to risk of bias (Selective reporting).

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know