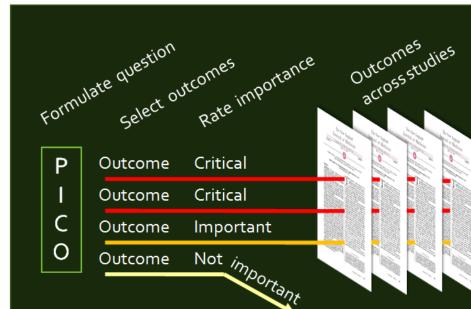
# EVIDENCE TO DECISION FRAMEWORK



Create Create Evidence Profile With GRADEPro

& estimate of effect

for each outcome

Ratequality of evidence for each outcome



Low Very lo

RCT start high, obs. data start low

1. Risk of bias

2. Inconsistency

3. Indirectness

Grade down

Grade

4. Imprecision

5. Publication bias

1. Large effect

Dose response

3. Confounders

#### Systematic review

#### Guideline development

#### Formulate recommendations:

- For or against (direction)
- Strong or weak (strength)

By considering:



- Quality of evidence
- ☐ Balance benefits/harms
- ☐ Values and preferences

Revise if necessary by considering:

☐ Resource use (cost)





Rate
overall quality of evidence
across outcomes based on
lowest quality
of *critical* outcomes

- "We recommend using..."
- "We suggest using..."
- "We recommend against using..."
- "We suggest against using..."

#### JUDGEMENT

						l	
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 fayors the comparison	Does not favor either the intervention or the comparison	Probably fayors the intervention	Favors the intervention	Varies	Don't know
RESOURCES REQUIRED	Large costs	Moderate costs	Negligible costs and savings	Moderate savings	Large savings	Varies	Don't know
CERTAINTY OF EVIDENCE OF REQUIRED RESOURCES	Very low	Low	Moderate	High			No included studies
COST EFFECTIVENESS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	No included studies
EQUITY	Reduced	Probably reduced	Probably no impact	Probably increased	Increased	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

Panel chair	Nathan
Methodologist	Arash
Systematic review team	Noha Hayek
	Paul
<b>Economics specialist</b>	Ahmed
Panel members	Soha Ahmed
	Marian
	Mai Salama
	Amir Yassen

## Organized inpatient care (stroke unit) for stroke

## **Background**

Participants: people with acute stroke

**Intervention:** Special ward with multidisciplinary teams for stroke compared to general medical wards. These special wards have rehabilitation teams

Comparison: care on acute medical or neurological ward

**Outcomes:** death, poor outcome (death or dependency), participant health status, patient satisfaction, length of stay

## Systematic review team

### Noha Hayek, Paul Garner

We declare no conflicts of interest

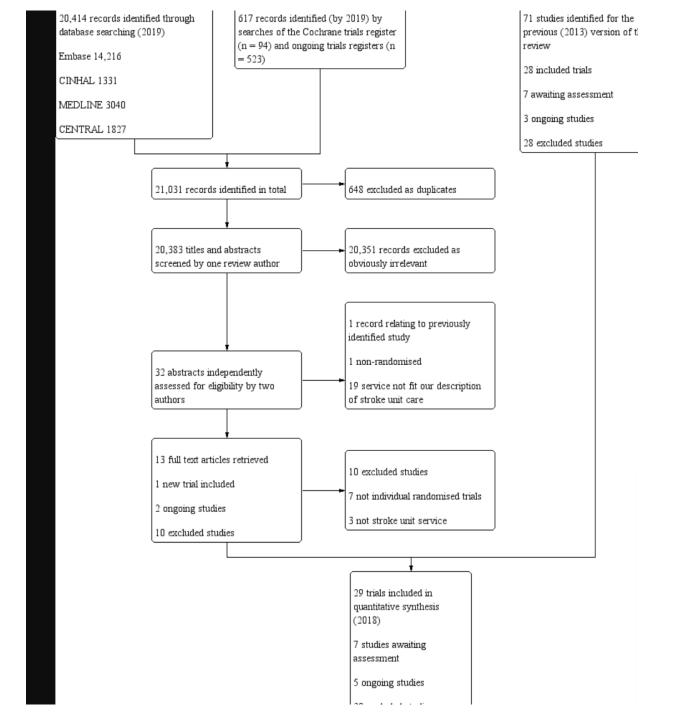
Paul notes that people a sibling died with a stroke so he has a personal interest in the topic

## Systematic review methods

We took a Cochrane review published in 2020: network meta-analysis

We checked the quality by AMSTAR and it was high

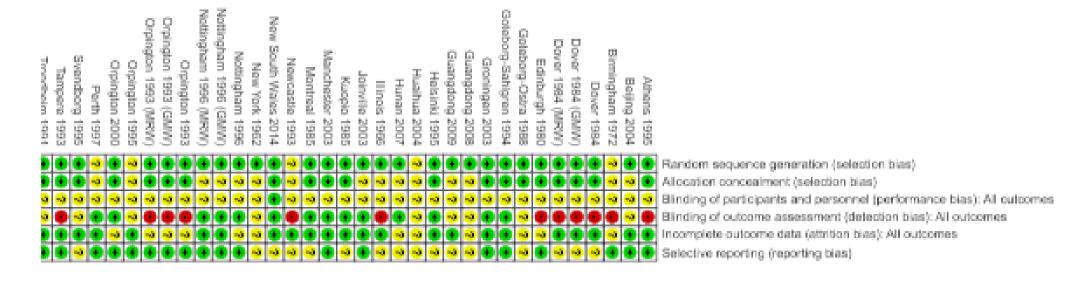
We summarised the results



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## Authors' methods

- RCTS only
- Two authors assessed each possible study
- Pair wise comparison, network meta-analysis to confirm the relative effects



	Treatment		Control		Peto Odds Ratio		Peto Odds Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	Peto, Fixed, 95% CI	Peto, Fixed, 95% CI	
1.2.1 Stroke ward vs gene	eral medica	al ward						
Athens 1995	103	302	127	302	17.6%	0.71 [0.51 , 0.99]	-	
Beijing 2004	12	195	19	197	3.5%	0.62 [0.30 , 1.29]		
Dover 1984 (GMW)	34	98	35	89	5.4%	0.82 [0.45 , 1.48]		
Edinburgh 1980	48	155	55	156	8.5%	0.82 [0.51 , 1.32]		
Goteborg-Ostra 1988	16	215	12	202	3.2%	1.27 [0.59 , 2.73]		
Goteborg-Sahlgren 1994	45	166	19	83	5.2%	1.25 [0.68 , 2.27]		
Guangdong 2009	2	100	5	100	0.8%	0.41 [0.09 , 1.86]	<del>-</del>	
Huaihua 2004	10	324	10	73	1.4%	0.11 [0.03 , 0.35]	<u> </u>	
Joinville 2003	9	35	12	39	1.9%	0.78 [0.29 , 2.14]		
Nottingham 1996 (GMW)	14	98	10	76	2.5%	1.10 [0.46 , 2.61]		
Orpington 1993 (GMW)	3	53	6	48	1.0%	0.43 [0.11 , 1.70]		
Orpington 1995	7	34	17	37	2.0%	0.33 [0.12 , 0.87]		
Perth 1997	4	29	6	30	1.0%	0.65 [0.17 , 2.50]		
Svendborg 1995	14	31	12	34	2.0%	1.50 [0.56 , 4.02]		
Trondheim 1991	27	110	36	110	5.6%	0.67 [0.37 , 1.20]		
Subtotal (95% CI)		1945		1576	61.8%	0.75 [0.63 , 0.90]	•	
Total events:	348		381			_	<b>V</b>	
Heterogeneity: Chi <sup>2</sup> = 22.5	4, df = 14 (F	P = 0.07);	$I^2 = 38\%$					
Test for overall effect: $Z = 3$	•	•						

#### Organised inpatient (stroke unit) care compared with general medical ward care for stroke

Patient or population: adults with acute stroke

Settings: hospital

**Intervention:** stroke ward care

**Comparison:** general medical ward care

Outcomes	Illustrative compar	Relative effect	Number of	Quality of	Comments	
	Assumed risk	med risk Corresponding risk		participants (studies)	the evidence	
	General medical ward care	Stroke ward care			(GRADE)	
Poor outcome by the end of scheduled follow-up  (modified Rankin score 3 to 6 or requiring stitutional care; median 12-month follow-up) (Analysis 2.1)	549 per 1000	499 per 1000 (459 to 529)	OR 0.78 (0.68 to 0.91)	3321 (14)	⊕⊕⊕⊝ moderate <sup>a</sup>	Sensitivity analysis based on trial quality suggested no alteration of conclusions

Outcomes	Illustrative compar	ative risks* (95% CI)	Relative	Number of	Quality of	Comments	
	Assumed risk Corresponding risk		effect (95% CI)	participants (studies)	the evidence		
	General medical ward care	Stroke ward care			(GRADE)		
Death by the end of scheduled follow-up  (median 12-month follow-up) (Analysis 2.2)	242 per 1000	202 per 1000 (172 to 222)	OR 0.75 (0.63 to 0.90)	3523 (15)	⊕⊕⊕⊝ moderate <sup>a</sup>	Sensitivity analysis based on trial quality suggested no alteration of conclusions	
Death or institutional care by the end of scheduled follow-up  (median 12-month follow-up) (Analysis 2.3)	383 per 1000	323 per 1000 (283 to 353)	OR 0.74 (0.63 to 0.87)	2924 (13)	⊕⊕⊕⊝ moderate <sup>a</sup>	Sensitivity analysis based on trial quality suggested no alteration of conclusions	
Death or dependency by the end of scheduled follow-up (modified Rankin score 3 to 6; median 12-month follow-up) (Analysis 2.4)	602 per 1000	532 per 1000 (502 to 572)	OR 0.75 (0.64 to 0.88)	2839 (12)	⊕⊕⊕⊝ moderate <sup>a</sup>	Sensitivity analysis based on trial quality suggested no alteration of conclusions	

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence	Comments
	Assumed risk Corresponding risk					
	General medical ward care	Stroke ward care			(GRADE)	
Subjective health status score	•	of improved results among , with results attaining	N/A	535	⊕⊝⊝⊝	Data from 3 trials only
Participant quality of life (Nottingham Health Profile; Quality of Life Scale)	statistical significance			(2)	very low <sup>a,b,c</sup>	High rate of missing data
Patient satisfaction or preference	We could find no sys	N/A	N/A	N/A	No data available	
Length of stay (days) in a hospital or institution (Analysis 2.5)	Mean length of stay across control groups ranged from 12.8 to 123 days	Mean length of stay for the intervention groups was, on average, 2.2 days less (5.2 days less to 0.8 days more)	SMD 0.13 lower (0.29 lower to 0.04 higher)	2547 (10)	⊕⊕⊝⊝ low <sup>a,b</sup>	Different definitions and imprecise measures of length of stay were reported