

Table 4: Review protocol: Preoperative risk stratification tools

ID	Field	Content
0.	PROSPERO registration number	Not registered
1.	Review title	Which validated preoperative risk stratification tools best identify increased risk of mortality and morbidity in adults who will be undergoing surgery?
2.	Review question	Which validated preoperative risk stratification tools best identify increased risk of mortality and morbidity in adults who will be undergoing surgery?
3.	Objective	To determine which validated preoperative risk stratification tools best identify increased risk of mortality and morbidity in adults who will be undergoing surgery.
4.	Searches	Medline, Embase, The Cochrane Library
5.	Condition or domain being studied	Perioperative care
6.	Population	Inclusion: Adults 18 years and over undergoing surgery. Exclusion: <ul style="list-style-type: none"> • children and young people aged 17 years and younger • surgery for burns, traumatic brain injury or neurosurgery
7.	Test	Validated risk stratification tools: <ul style="list-style-type: none"> • P-POSSUM score (Physiological and Operative Severity Score for the Enumeration of Mortality and Morbidity) • SORT (Surgical Outcome Risk Tool) • NSQIP (National Surgical Quality Improvement Program) universal surgical risk calculator
8.	Comparator/Reference standard/Confounding factors	n/a
9.	Types of study to be included	Prospective and retrospective cohort studies
10.	Other exclusion criteria	<ul style="list-style-type: none"> • derivation studies • internal validation studies • non-English language studies • studies published before 2000
11.	Context	n/a

12.	Primary outcomes (critical outcomes)	Mortality Morbidity
13.	Secondary outcomes (important outcomes)	n/a
14.	Data extraction (selection and coding)	<p>EndNote will be used for reference management, sifting, citations and bibliographies. All references identified by the searches and from other sources will be screened for inclusion. 10% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above.</p> <p>A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4).</p> <p>Pairwise meta-analyses performed using Cochrane Review Manager (RevMan5).</p>
15.	Risk of bias (quality) assessment	<p>Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual</p> <p>10% of all evidence reviews are quality assured by a senior research fellow. This includes checking:</p> <ul style="list-style-type: none"> • papers were included /excluded appropriately • a sample of the data extractions • correct methods are used to synthesise data • a sample of the risk of bias assessments <p>Disagreements between the review authors over the risk of bias in particular studies will be resolved by discussion, with involvement of a third review author where necessary.</p>
16.	Strategy for data synthesis	GRADEpro used to assess the quality of evidence for each outcome.
17.	Analysis of sub-groups	Subgroups: <ul style="list-style-type: none"> • older adults (over 60)
18.	Type and method of review	<input type="checkbox"/> Intervention
		<input type="checkbox"/> Diagnostic
		<input type="checkbox"/> Prognostic
		<input type="checkbox"/> Qualitative
		<input type="checkbox"/> Epidemiologic
		<input type="checkbox"/> Service Delivery
		<input checked="" type="checkbox"/> Risk prediction

19.	Language	English		
20.	Country	England		
21.	Anticipated or actual start date	[x]		
22.	Anticipated completion date	[x]		
23.	Stage of review at time of this submission	Review stage	Started	Completed
		Preliminary searches	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Piloting of the study selection process	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Formal screening of search results against eligibility criteria	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Data extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Risk of bias (quality) assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Data analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24.	Named contact	<p>5a. Named contact National Guideline Centre</p> <p>5b Named contact e-mail POC@nice.org.uk</p> <p>5e Organisational affiliation of the review National Institute for Health and Care Excellence (NICE) and the National Guideline Centre</p>		
25.	Review team members	<p>From the National Guideline Centre:</p> <p>Ms Kate Ashmore Ms Kate Kelley Ms Sharon Swaine Mr Ben Mayer Ms Maria Smyth Mr Vimal Bedia Mr Audrius Stonkus Ms Madelaine Zucker Ms Margaret Constanti Ms Annabelle Davis Ms Lina Gulhane</p>		

26.	Funding sources/sponsor	This systematic review is being completed by the National Guideline Centre which receives funding from NICE.	
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.	
28.	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual . Members of the guideline committee are available on the NICE website: [NICE guideline webpage].	
29.	Other registration details	[n/a]	
30.	Reference/URL for published protocol	[Give the citation and link for the published protocol, if there is one.]	
31.	Dissemination plans	<p>NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as:</p> <ul style="list-style-type: none"> • notifying registered stakeholders of publication • publicising the guideline through NICE's newsletter and alerts • issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE. 	
32.	Keywords	Perioperative care, surgery, risk prediction	
33.	Details of existing review of same topic by same authors	[n/a]	
34.	Current review status	<input type="checkbox"/>	Ongoing
		<input checked="" type="checkbox"/>	Completed but not published
		<input type="checkbox"/>	Completed and published
		<input type="checkbox"/>	Completed, published and being

		<input type="checkbox"/>	updated
		<input type="checkbox"/>	Discontinued
35.	Additional information	[n/a]	
36.	Details of final publication	www.nice.org.uk	