

Strengths and challenges of the CPG development process: Canadian Society of Nephrology

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1. Context of guidelines

- CPG are produced by and for CSN members (effort led by CPG committee)
- No external organization like NKF-K/DOQI is charged with CPG development
- Funding is from CSN general revenue
 - the CSN does accept unrestricted educational grants from industry for “CPG development”
 - these grants are not associated with a specific CPG
 - sponsors are not acknowledged for these grants

Organizational structure

CSN
membership

CSN Executive

CSN Council

CSN CPG committee

CPG topic chair
Referral of patients with CKD

CPG topic chair
Anemia

CPG topic chair
Care of patients with CKD

Workgroup members

Workgroup members

Workgroup members

2. Selection/prioritization of topics

- CPG committee selects topics and timing in consultation with CSN executive/council
- input from CSN members is permitted / sought
- no input from industrial sponsors is permitted re. topic or timing of CPG
- Prior topics:
 - GN, hemodialysis, peritoneal dialysis
 - identification/referral of adults with CKD
 - anemia
 - care of adults with CKD

3. Selection of committee and workgroup members

- No formal process for selection of CPG committee
 - chair nominated by outbound chair / approved by council
- workgroups (with chair) selected for each topic:
 - by topic chair/overall chair; approved by CSN council
 - criteria include:
 - content expertise; diversity of location; philosophy
- All participants complete COI forms
 - currently no policy re. disqualifying COI

4a. Methodology for CPG development

- scope of each topic is set by topic chair and overall chair
- Each topic split into subtopics
- Each subtopic is assigned to a workgroup participant who can choose collaborators
- Literature review and draft of subtopic is responsibility of each subtopic chief

4b. Methodology for CPG development

- Factors explicitly considered:
 - efficacy; cost-effectiveness; feasibility
- Recommendations graded for:
 - Level of evidence (CHEP; grades A-D)
 - Not strength of recommendation
- No standard format or template for document

4c. Methodology for CPG development

- critical review by topic chair & subtopic chairs
- peer review by CSN members and other stakeholders
- feedback from CSN membership
- external peer review prior to publication **
- No use of standard instrument for evaluation

5a. Dissemination and implementation activities

- committee includes participants in CPG process as well as content experts in KT
- work to date limited to identification/referral of CKD
 - identification of target audiences and key messages
 - creation of tool kit for CME (slide kit, algorithm, handouts)
 - train the trainer sessions for Nephrologists
 - distribution of referral algorithm to primary care MDs and their organizations

5b. Dissemination and implementation activities

- advocacy with governments, hospitals and labs to encourage eGFR reporting
- future plans
 - evaluation of work to date including process and outcomes (baseline data collected)
 - strategy for CKD management guidelines

6. Principal strength and challenge of CSN methodology

- Strength:
 - addresses practice in Canadian context
 - allows incorporation of resource use into interpretation of literature
 - topics chosen based on needs of members
- Challenge:
 - More formalized process required
 - is a formal systematic review practical?

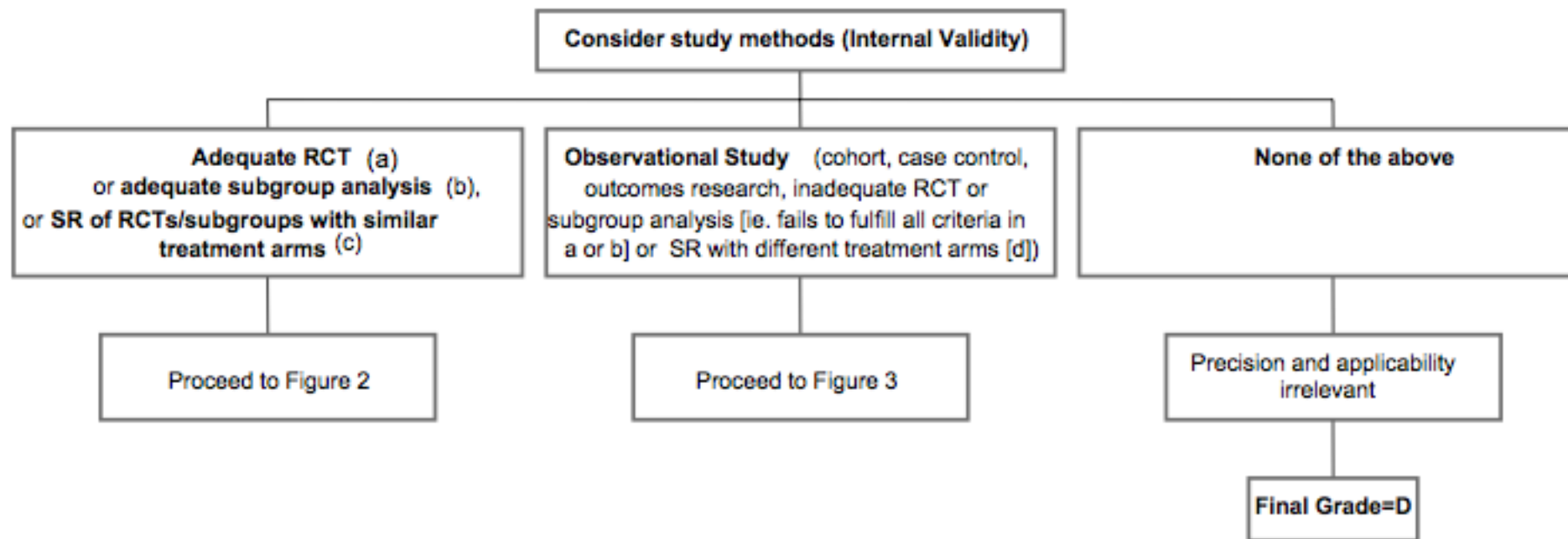
6b. Other weaknesses

- no formal process for:
 - training of CPG authors
 - timing and nature of updates
 - involving participants other than content experts in CPG working groups
 - resolving financial COI
 - clarifying which non-financial COI are important
 - no formal process for utilizing existing SR

Future outlook

- Existing CPG frameworks do not currently meet the needs of our members ... so we need to make our process work
- What to do about formal lit review?
 - for topics which overlap: can we share resources with other organizations?
- Partnership with other professional organizations re. dissemination

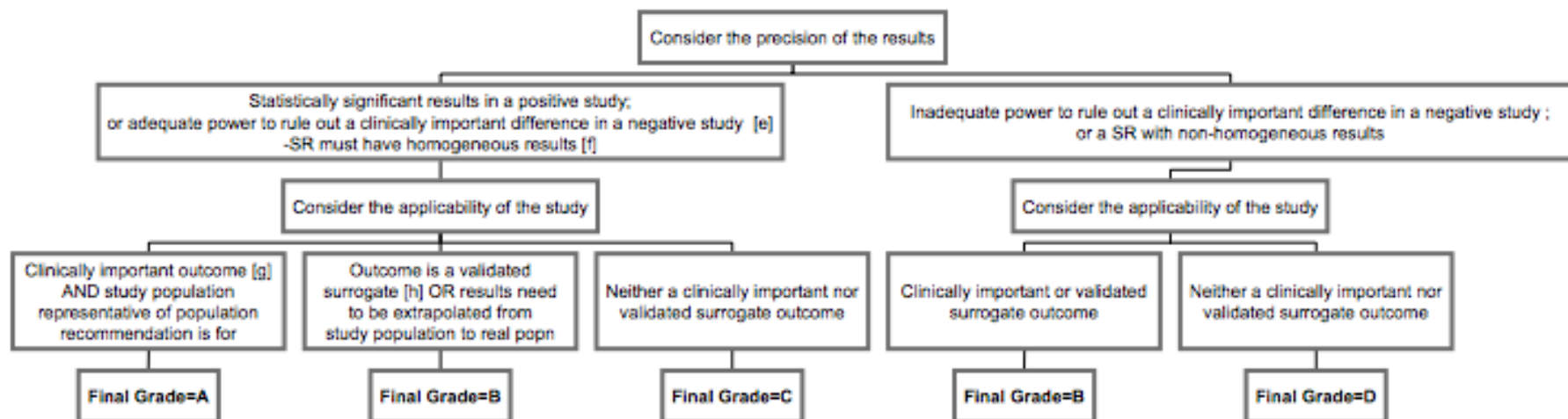
Figure 1: Algorithm for assigning evidence grades to therapy recommendations



Definitions:

- a Randomized clinical trial with blinded assessment of outcomes (if applicable), intention-to-treat analysis, adequate follow-up (ie. at least 90%, or losses to follow-up are too few to materially affect the results), and sufficient sample size to detect a clinically important difference with power > 80%.
- b Subgroup analysis was a-priori, done within an adequate RCT, one of only a few tested, and there was sufficient sample size within the examined subgroup to detect a clinically important difference with power > 80%.
- c Systematic review (SR, also known as meta-analysis) in which the comparison arms are derived from head-to-head comparisons within the same RCT.
- d SR in which the comparison arms are derived from different placebo-controlled RCTs, then extrapolations are made across RCTs.

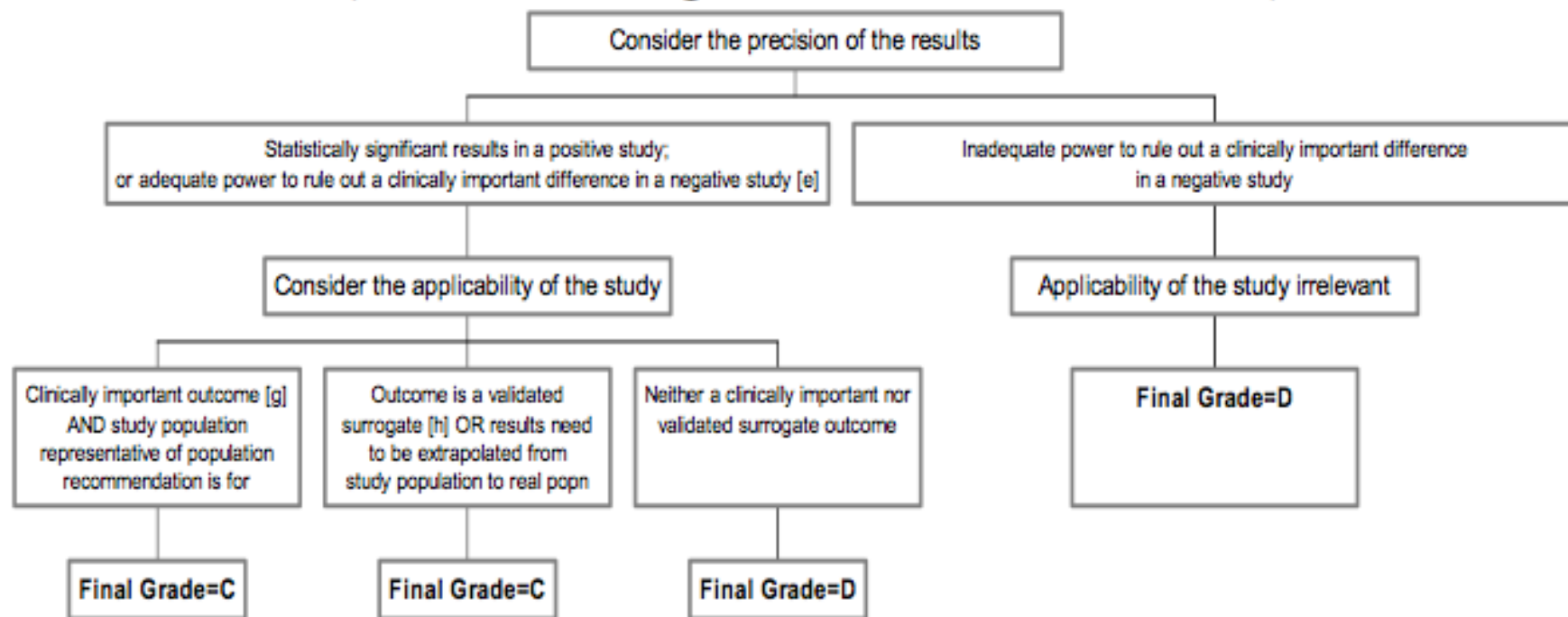
Figure 2: Algorithm for assigning evidence grades to therapy recommendations (continued from figure 1- for adequate randomized trials, systematic reviews, or subgroup analyses)



Definitions:

- e Adequate power in a negative study implies that 95% CI exclude a clinically important difference.
- f Effect estimates in each study included in the systematic review are qualitatively similar (ie. in the same direction).
- g “Hard” endpoints such as death, stroke, myocardial infarction, hospitalization, and need for dialysis; or measures of quality of life.
- h Endpoints which have been consistently shown to be associated with the clinical end point in multiple studies (observational or RCT), and RCTs have consistently demonstrated that improvement in the surrogate translates into a consistent and predictable improvement in the clinical end point.

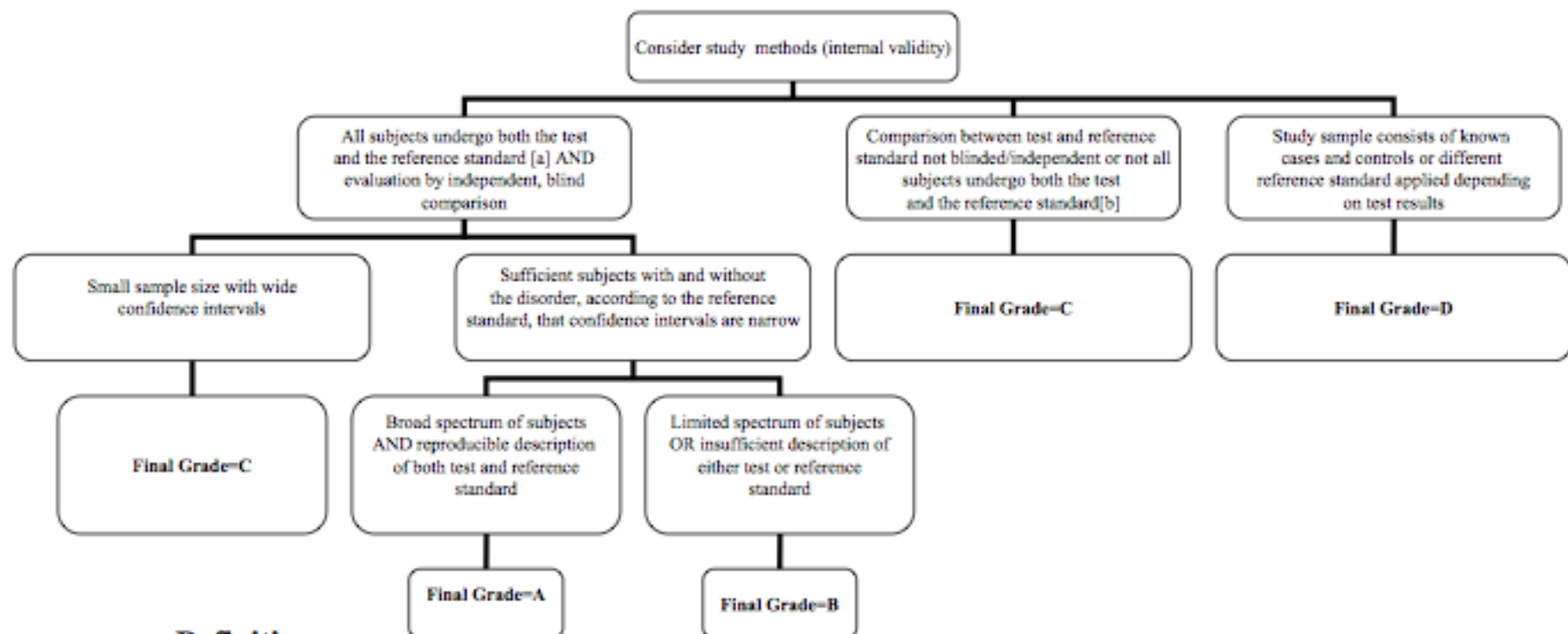
**Figure 3: Algorithm for assigning evidence grades to therapy recommendations
(continued from Figure 1 - for observational studies)**



Definitions:

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Figure 4: Algorithm for assigning evidence grades to diagnostic recommendations



• **Definitions:**

- a The gold standard. This can be either another test which is currently accepted as the gold standard or analysis of a representative cohort of patients who underwent the test of interest and are followed for a sufficient length of time that occurrence of the target outcome is likely if the diagnosis is present (with adjustment for covariates associated with prognosis).
- b Note that if follow-up of a cohort is not sufficiently long or complete enough to rule out diagnostic errors, or if data is not adjusted for covariates, then this category would apply.