Traffic Lighting Overview: Identifying the Evidence on Intervention Effectiveness

This document outlines a framework[1] and classification scale that can be used to highlight the state of the evidence about routine interventions in order to inform clinical practice.
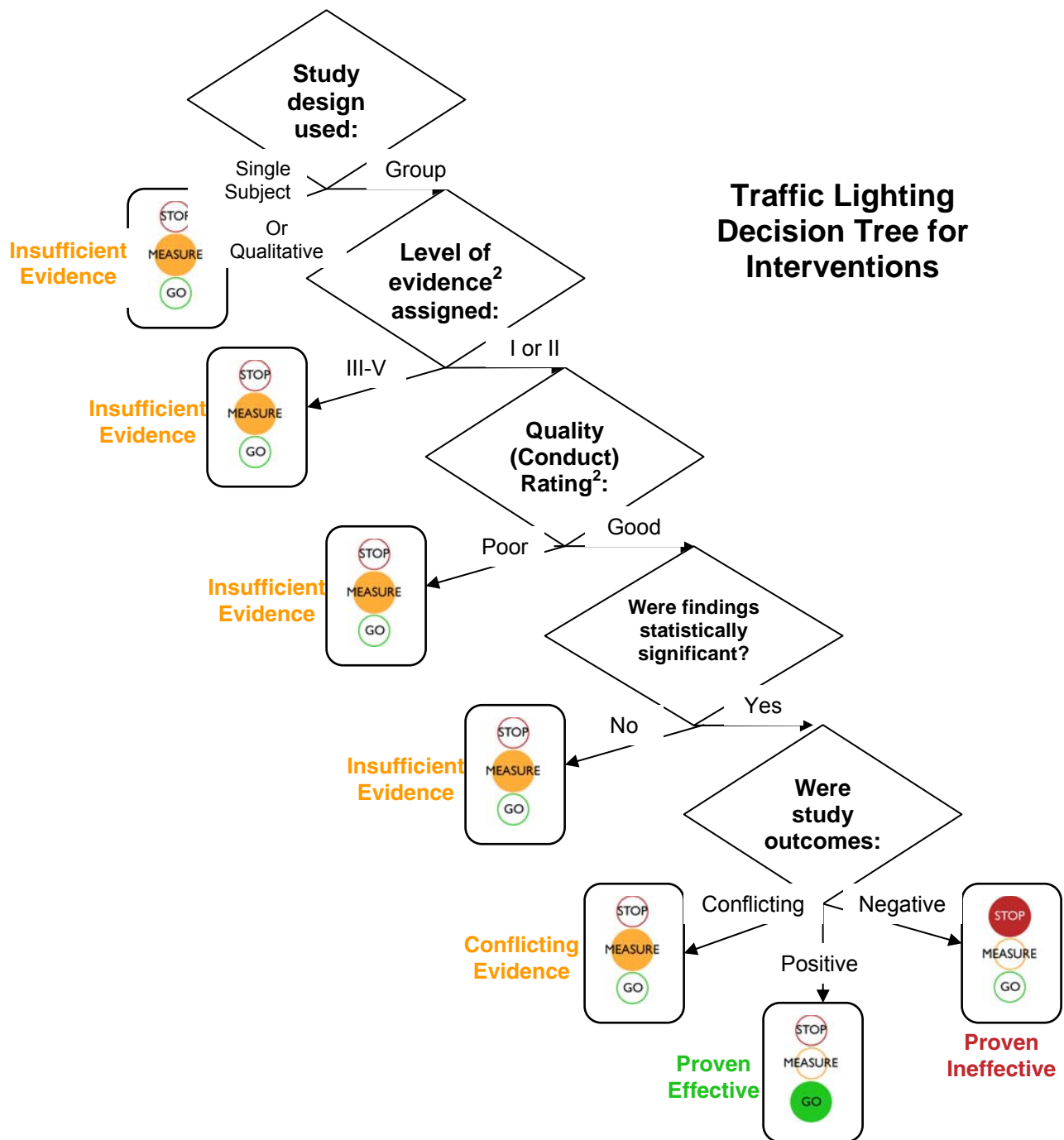
Traffic Lighting Classification Scale[1]

Colour Code	Criteria	State of the Evidence
	Group design Level I or II evidence of good[*] quality demonstrating negative outcomes (e.g. absence of change compared to no treatment)	**Proven Ineffective**
	• Group design Level I or II evidence of poor[∞] quality regardless of outcome • Group design Level III-V evidence of any quality regardless of outcome • Single study research design Level I-V of any quality regardless of outcome • Inconclusive results	**Insufficient Evidence**
	No evidence about the intervention's effectiveness	**No Evidence**
	Group design of either Level I or II evidence, where both studies of the same level of evidence show conflicting results	**Conflicting Evidence**
	Group design Level I or II evidence of good[*] quality, demonstrating statistically significant positive outcomes	**Proven Effective**

*Moderate or Strong quality (Group Design AACPDM Conduct Rating Scale[2] score of 4-7 or AMSTAR score of 4-11)
∞Weak quality (Group Design AACPDM Conduct Rating Scale[2] or AMSTAR score of 1-3)

When assigning a Traffic Light colour based on more than one source of evidence (e.g. multiple studies - preferable), use the evidence with the highest level and quality, choosing group design over single subject research design studies. If you have two evidence sources that match in study design, carry them both through the decision tree until you find that they differ, and retain the one(s) that follow the right side of the path. If the population under study does not match your target population, consider Yellow – Insufficient Evidence.

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Study design used:

Single Subject Or Qualitative

Group

Insufficient Evidence

Traffic Lighting Decision Tree for Interventions

Level of evidence[2] assigned:

III-V

I or II

Insufficient Evidence

Quality (Conduct) Rating[2]:

Poor

Good

Insufficient Evidence

Were findings statistically significant?

No

Yes

Insufficient Evidence

Were study outcomes:

Conflicting

Negative

Positive

Conflicting Evidence

Proven Effective

Proven Ineffective

Refer to the Traffic Lighting Process and Traffic Lighting Record for recommendations on how to document the state of the evidence and proceed with developing a practice change, knowledge translation or research plan for your team or discipline.

References:
1. Table and process adapted from: Novak, I. (September 29, 2010). Closing the Research- Practice Gap: Responsibilities and Solutions. *Evidence Based Practice Workshop*. Lecture conducted from Sunny Hill Health Centre, Vancouver.
2. American Academy for Cerebral Palsy and Development Medicine Treatment Outcomes Committee. 2008. AACPDM Methodology to Develop Systematic Reviews of Treatment Interventions (Revision 1.2) 2008 Version. http://www.aacpdm.org/membership/members/committees/treatment_outcomes_methodology.pdf Accessed August 23, 2011.

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