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Rehabilitation Teaching & Research Unit

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From research to practice
… and practice to research.

A/Prof William Levack PhD
Rehabilitation Teaching & Research Unit (RTRU)

Trusted evidence.
Informed decisions.
Better health.

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Search...

Cochrane News

- Cochrane Response seeks Editorial Assistant - London, UK
- Cochrane seeks Executive Assistant to the CEO - London, UK
- Cochrane seeks post-doc research fellow - Exeter, UK
- Featured Review: School-based interventions for preventing HIV, sexually transmitted infections, and pregnancy in adolescents
- World Chronic Obstructive Pulmonary Disease Day 2016

More

Latest News and Events

Exploratory Meeting 2016, Rovato, Brescia, Italy

Cochrane Colloquium 2017

Keep Posted

Tweets by @CochraneRehab

Hmm, an empty timeline.
That's weird.

Check for Tweets

Embed View on Twitter

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Contents

- Origins of Cochrane Rehabilitation
- Goals & purpose of Cochrane Rehabilitation
- Work currently underway

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What is Cochrane?

- Global
- Independent
- Non-profit
- Network of researchers, professionals, patients, carers, and people interested in health
- Exists so that healthcare decisions get better

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A leader in evidence-based healthcare

Audit of systematic reviews found Cochrane Reviews:

- Most comprehensive reporting
- More likely to use a pre-published protocol
- More likely to report risk of bias assessment and integrate it in analysis of results
- Most consist use of appropriate statistical methods
- Most likely to be updated over time

(Page et al., 2016, PLoS Medicine)

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Free acce

Immunisation is the b
– it shows your body
they can make you s
works.

- Find out more a

New mental he announced

The Government has announced new mental health initiatives that take a social investment approach to preventing and responding to mental disorders in New Zealand. Find out more about the initiatives.

Mental health and addiction workers pay equity claim

Update on the Ministry of Health involvement in the pay equity claim for mental health and addiction workers. Read more.

Mental health services – where to get help

Other quicklinks

- Careers
- Cochrane Library
- Consultations
- Emergency information for staff
- Health Integrity Line
- Influenza
- Meningococcal disease (including meningitis)
- Ministry of Health Library
- New Zealand Health Survey
- Primary health care

Bac

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Cochrane Rehabilitation

Location:

- Department of Clinical and Experimental Sciences, University of Brescia

Initial Funding:

- Care & Research Institute; Don Gnocchi, Milan

Launch:

- 16 December 2016

Prof Stefano Negrini
Field Director

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Cochrane Rehabilitation Exec

Stefano Negrini, MD (Italy) – Director

Carlotte Kiekens, MD (Belgium) - Coordinator

William Levack, PT, PhD (NZ) – Review Committee

Thorsten Meyer, Psy, PhD (Germany) – Methods Committee

Elena Ilieva, MD, PhD (Bulgaria) – Education Committee

Julia Patrick Engkasan, MD (Malaysia) – Education Committee

Frane Grubisic, MD (Croatia) – Publications Committee

Farooq Rathore, MD (Pakistan) – LMIC Representative

Francesca Gimigliano, MD, PhD (Italy) – Communication Committee

Tracey Howe, PhD, PT (UK) – Professionals Representative

Antti Malmivaara, MD (Finland) – Methods Committee

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Cochrane Rehabilitation Advisory Board

ISPRM

ISPO

WCPT

WFNR

WFOT

WHO

AMLAR

ESPRM

UEMS PR

Pros Ortho Int

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Cochrane Organization

Review Groups: prepare & maintain Cochrane reviews

Centres: Support local Cochrane contributors, connect regions to Cochrane central

Methods Groups: development & implementation of methods used in the preparation of Cochrane reviews

Fields: Focus on dimensions of health care rather than a condition or topic; focus on knowledge translation and dissemination

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53 Cochrane Review Groups

- At least 4 Review Groups contain >20 systematic reviews relevant to rehab
- >28 Review Groups contain at least 1 systematic review relevant to rehab
- > 9 Review Groups directly relevant to neurorehab

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Role of Cochrane Fields: a bridge

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Cochrane Rehab Goals - Overview

1. Connect rehab stakeholders globally
2. Translate knowledge in rehab
3. Register rehab reviews
4. Educate rehab stakeholders
5. Develop rehab review methods
6. Promote Cochrane to Rehab & Rehab to Cochrane

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Developing a register of rehabilitation reviews

Review Committee

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Crowd sourcing the identification of rehab reviews

- Creation of an online database
- Membership driven screening and categorisation of systematic reviews
- Tagging of Cochrane Reviews by rehabilitation ‘type’
- Creation of a registry of review on the Cochrane Rehab website

Farooq Rathore

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PICO Annotation Project

(PICO = Population, Intervention, Control, Outcome)

- Making evidence more discoverable
- Developing a searchable database for everyone

- Some ongoing questions:

How annotations are organised and classified?

Are these annotation relevant to rehabilitation?

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Developing rehabilitation review methods

Methodology Committee

Chair: Dr. Antti Malmivaara (Finland)

Co-Chair: Prof. Thorsten Meyer (Germany)

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An international survey of work priorities

Online version at http://www.minervamedica.it

European Journal of Physical and Rehabilitation Medicine 2017 ????;53(??):000-000
DOI: 10.23736/S1973-9087.17.04958-9

SPECIAL ARTICLE

Cochrane Rehabilitation Methodology Committee: an international survey of priorities for future work

William M. LEVACK [1] *, Thorsten MEYER [2], Stefano NEGRINI [3, 4], Antti MALMIVAARA [5, 6]

[1]Unit Rehabilitation Teaching and Research, Department of Medicine, University of Otago, Wellington, New Zealand; [2]Institute for Epidemiology, Social Medicine and Health System Research, Hannover Medical School, Hannover, Germany; [3]Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy; [4]IRCCS Fondazione Don Gnocchi, Milan, Italy; [5]National Institute for Health & Welfare, Helsinki, Finland; [6]Finnish Medical Society Duodecim, Current Care Guidelines, Helsinki, Finland

*Corresponding author: William Levack, Rehabilitation Teaching and Research Unit, Department of Medicine, University of Otago, Mein St, Newtown, PO

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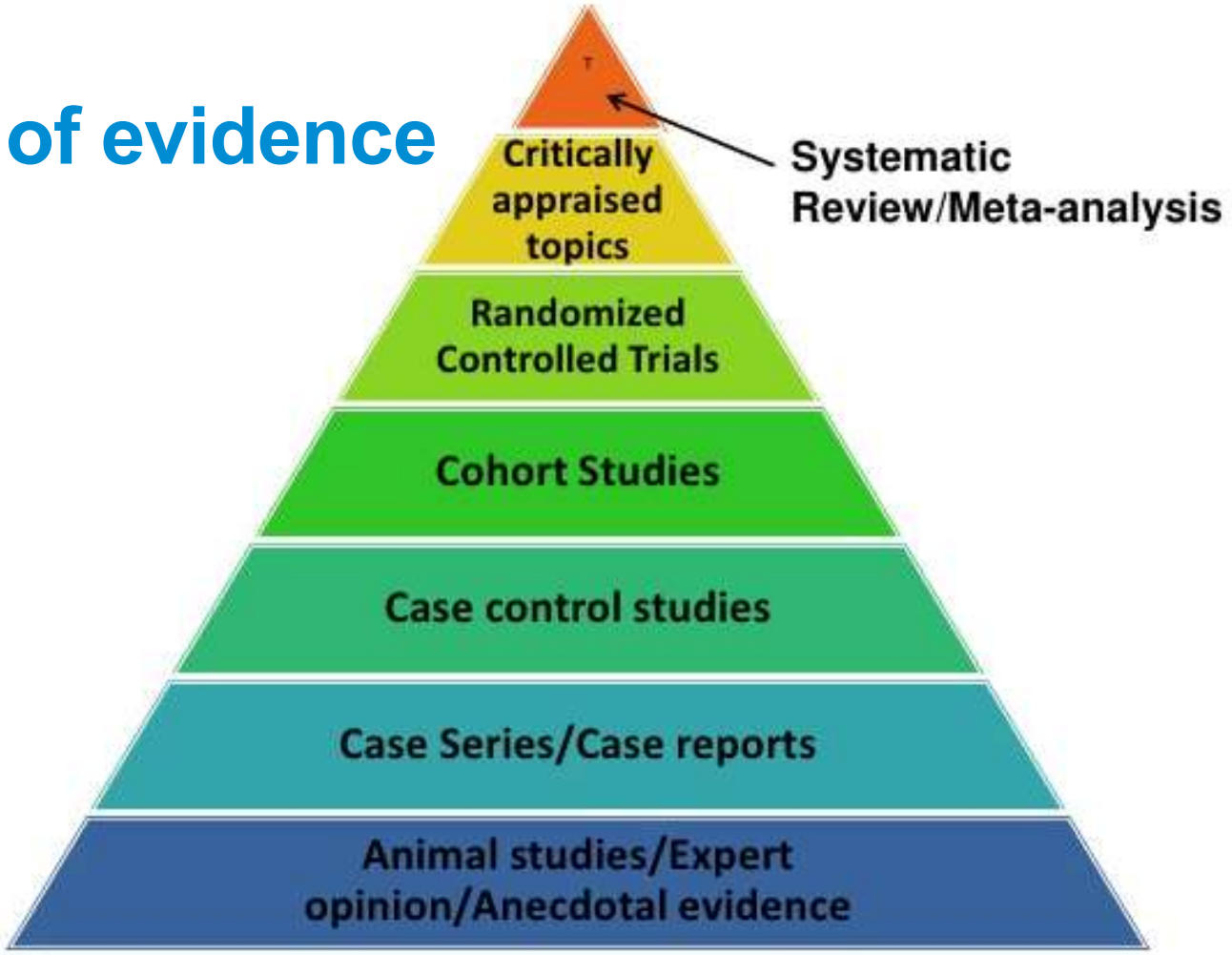
Hierarchy of evidence



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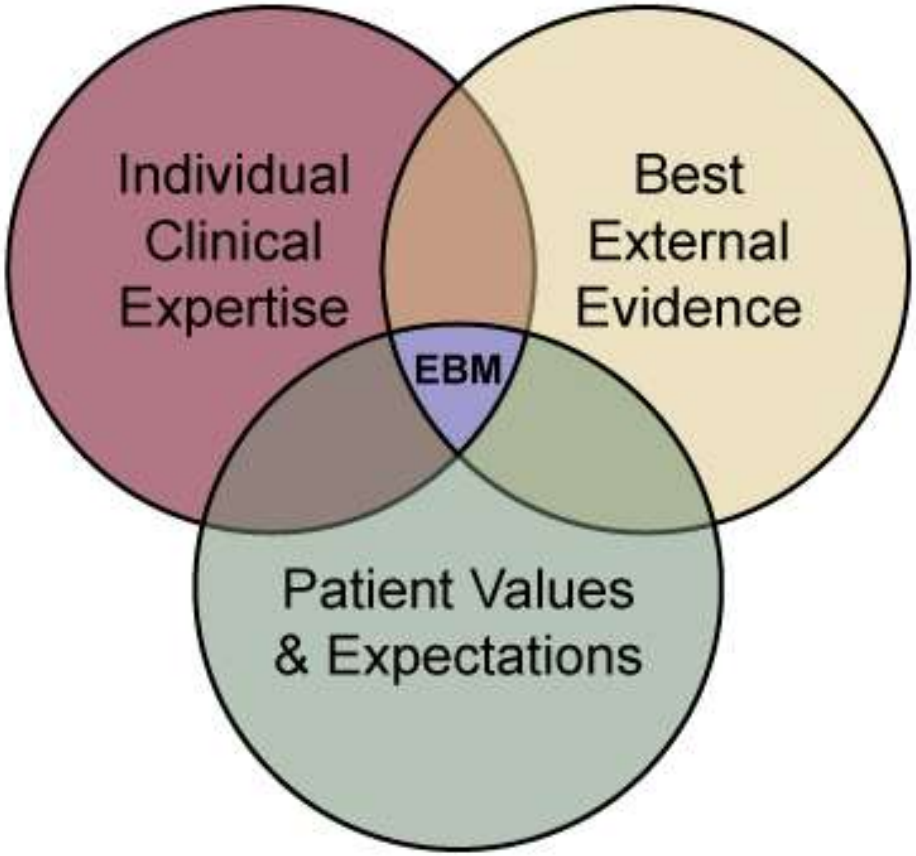
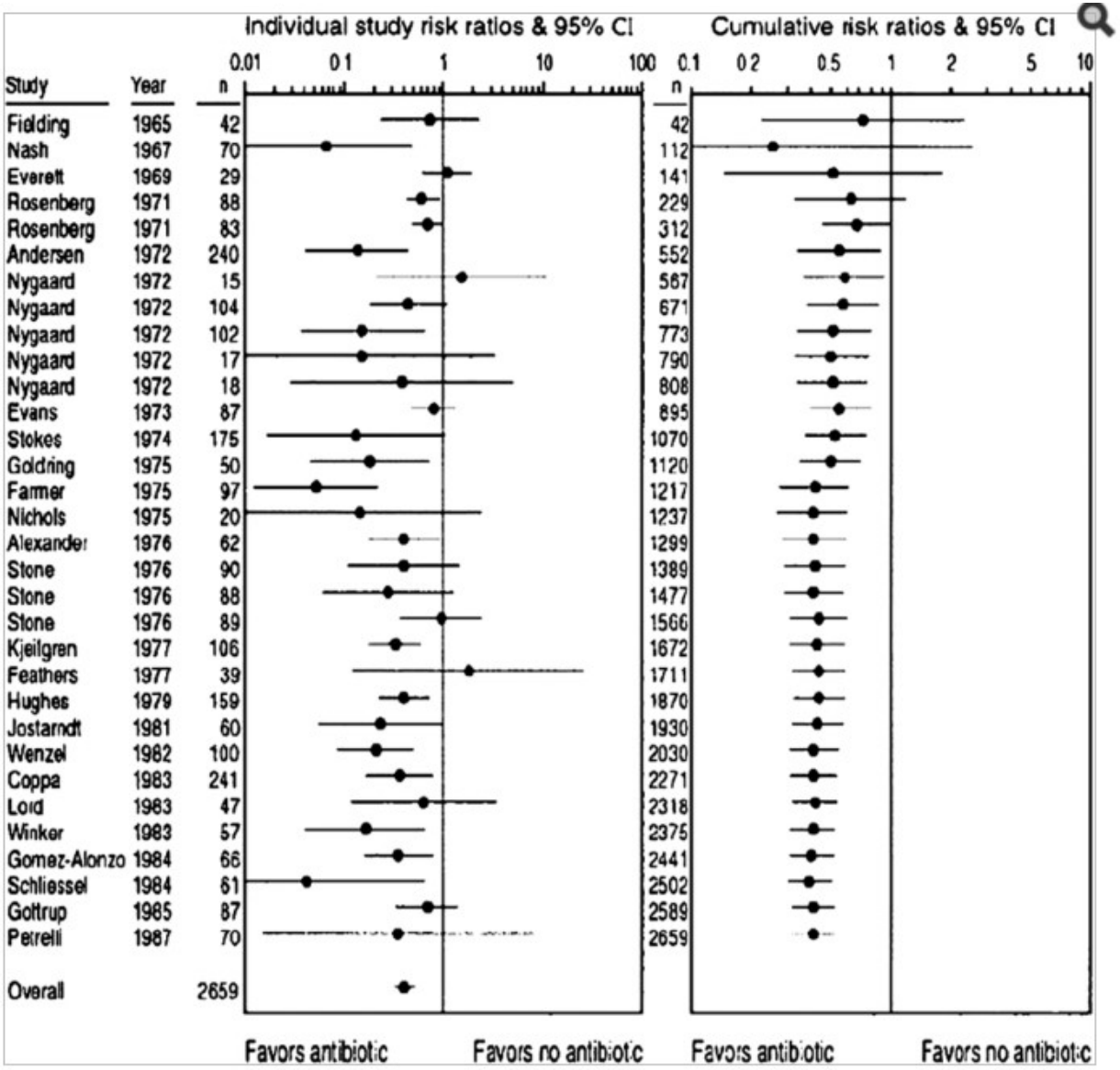
It's not all RCTs and SR however…





Use of antibiotic prophylaxis compared to no treatment in colon surgery to prevent infection.
(Ioannidis and Lau, 1999)

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Voices of dissent

doi:10.1111/j.1479-6988.2006.00041.x

Int J Evid Based Healthc 2006; 4: 180–186

SCHOLARLY ARTICLE

Deconst… the evidence-based discour… power

Dave Holme… PhD(cand)[1] a…

[1]Faculty of Health Sciences, Scho… Ryerson University Toronto, Ontario, Canada

Abstract

Background Drawing on the work of the late French philosophers Deleuze and Guattari, the objective of this paper is to demonstrate that the evidence-based movement

"[Others] have produced much better argued, less inflammatory, more constructive criticisms of evidence-based medicine."

(Richard Smith, Ex-BMJ Editor, 28 March 2017)

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“to put Cochrane evidence at the heart of health decision-making all over the world”

Producing the evidence:

- Coverage is define by the needs of end users…
- … continue to develop innovative methods for designing and conducting research evidence synthesis

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Cochrane Reviews on TBI interventions

Scoping of reviews (Feb 2017):

- 25 reviews and protocols
  - 13 exclusive to TBI (9 reviews; 4 protocol)
  - 12 mixed brain injury, incl. stroke (10 reviews; 2 protocol)
- 9/25 reviews or protocols over 5 years out of date
- Meta-analysis attempted in only 6 reviews (incl. only 2 TBI exclusive reviews)
- Majority concluded “insufficient evidence”

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GRADE the evidence

- Risk of bias (randomisation; group allocation; ITT; other)
- Directness of evidence
- Heterogeneity
- Precision of effect estimates
- Risk of publication bias

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GRADE the evidence

Rehabilitation interventions often:

- Complex (multiple components; behaviour change) and individualised
- Impossible to ‘blind’
- Difficult to create ‘control’ version for

Rehabilitation population often:

- Heterogenous; individual interests; rare conditions

Rehabilitation outcomes of most interest:

- Difficult to measure (e.g. participation, community integration, satisfaction of personal preferences)
- Difficult to ‘blind’

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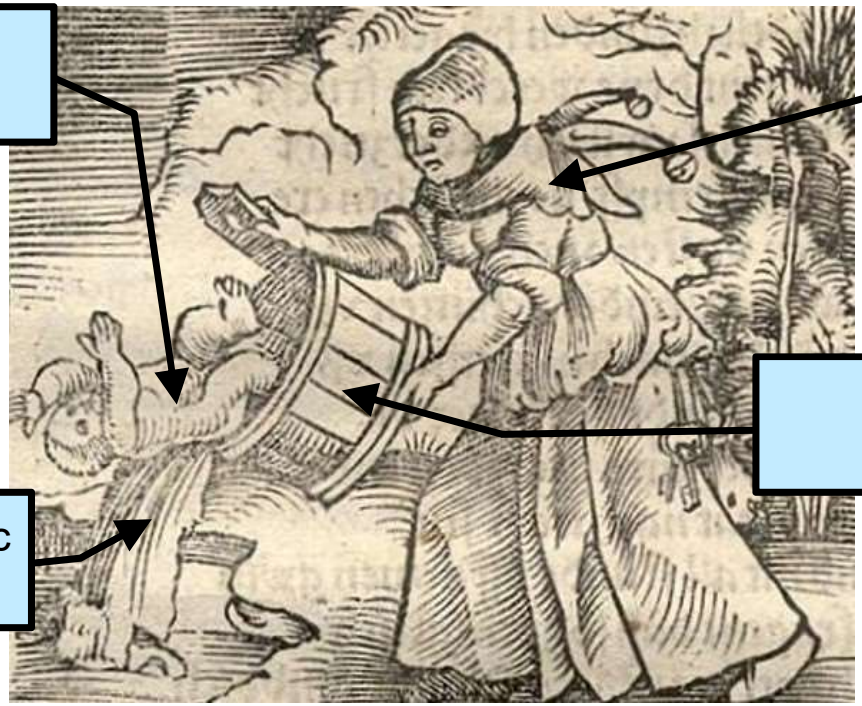
But… don't throw the baby out with the bathwater

Evidence-based rehabilitation

Rehabilitation professions



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Things that are problematic for rehabilitation research

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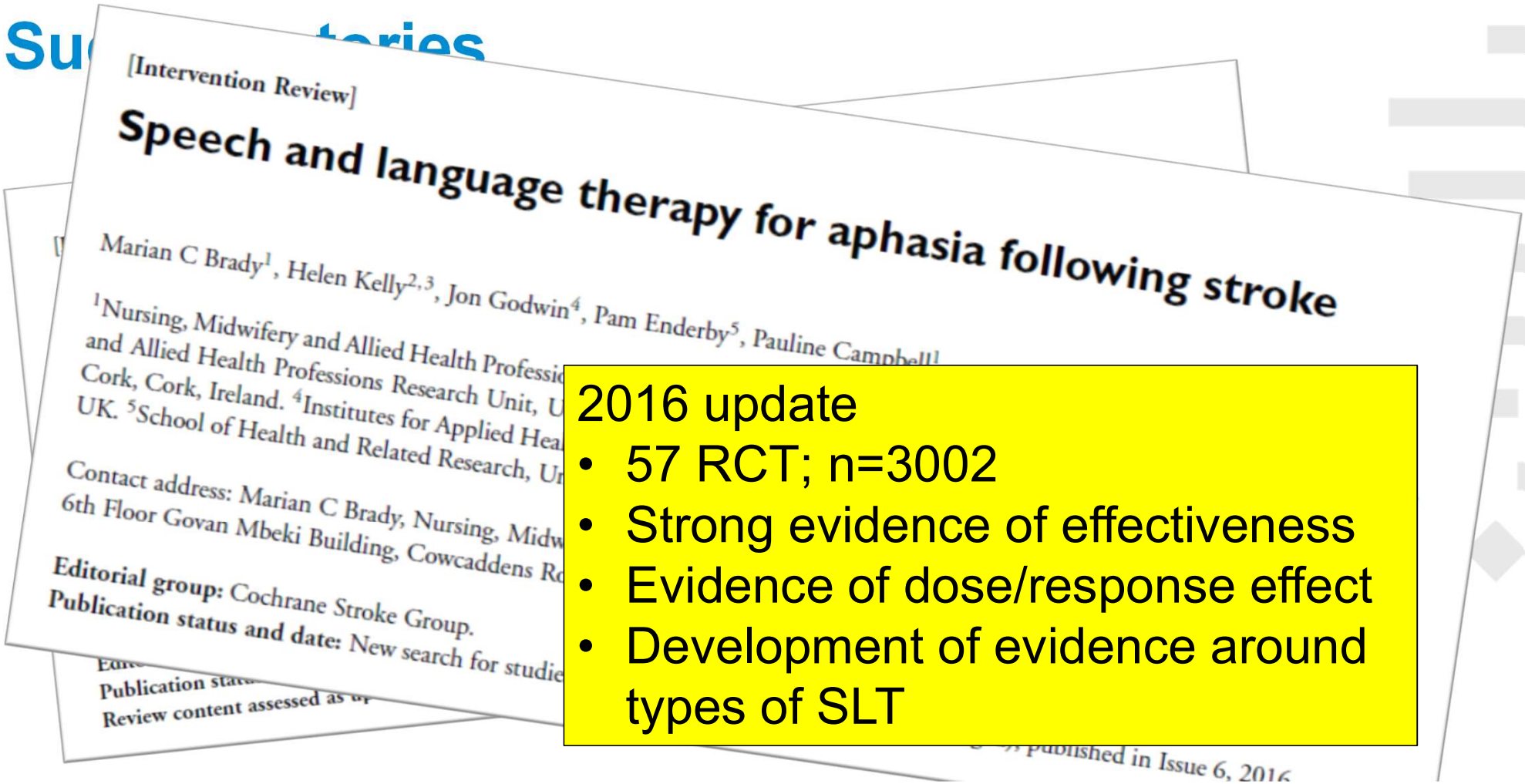
Su[illegible]tories



[Intervention Review]

Speech and language therapy for aphasia following stroke

Marian C Brady[1], Helen Kelly[2,3], Jon Godwin[4], Pam Enderby[5], Pauline Campbell[1]

[1]Nursing, Midwifery and Allied Health Professi[illegible] and Allied Health Professions Research Unit, U[illegible] Cork, Cork, Ireland. [4]Institutes for Applied Hea[illegible] UK. [5]School of Health and Related Research, U[illegible]

Contact address: Marian C Brady, Nursing, Midw[illegible] 6th Floor Govan Mbeki Building, Cowcaddens R[illegible]

Editorial group: Cochrane Stroke Group.

Publication status and date: New search for studie[illegible]

Publication sta[illegible]

Review content assessed as u[illegible]

[illegible] published in Issue 6, 2016

2016 update

- 57 RCT; n=3002
- Strong evidence of effectiveness
- Evidence of dose/response effect
- Development of evidence around types of SLT

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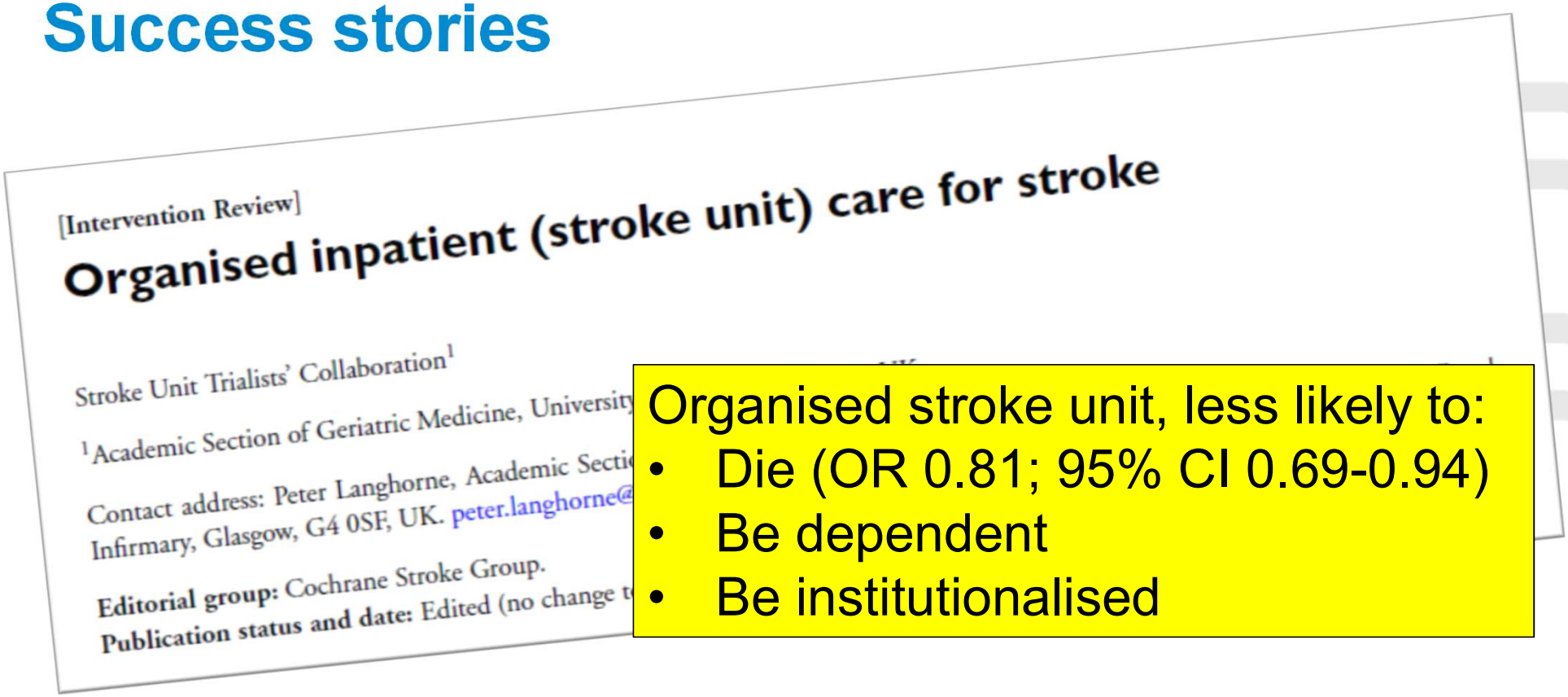
Success stories



[Intervention Review]

Organised inpatient (stroke unit) care for stroke

Stroke Unit Trialists' Collaboration[1]

[1]Academic Section of Geriatric Medicine, University

Contact address: Peter Langhorne, Academic Secti
Infirmary, Glasgow, G4 0SF, UK. peter.langhorne@

Editorial group: Cochrane Stroke Group.
Publication status and date: Edited (no change t

Organised stroke unit, less likely to:

- Die (OR 0.81; 95% CI 0.69-0.94)
- Be dependent
- Be institutionalised

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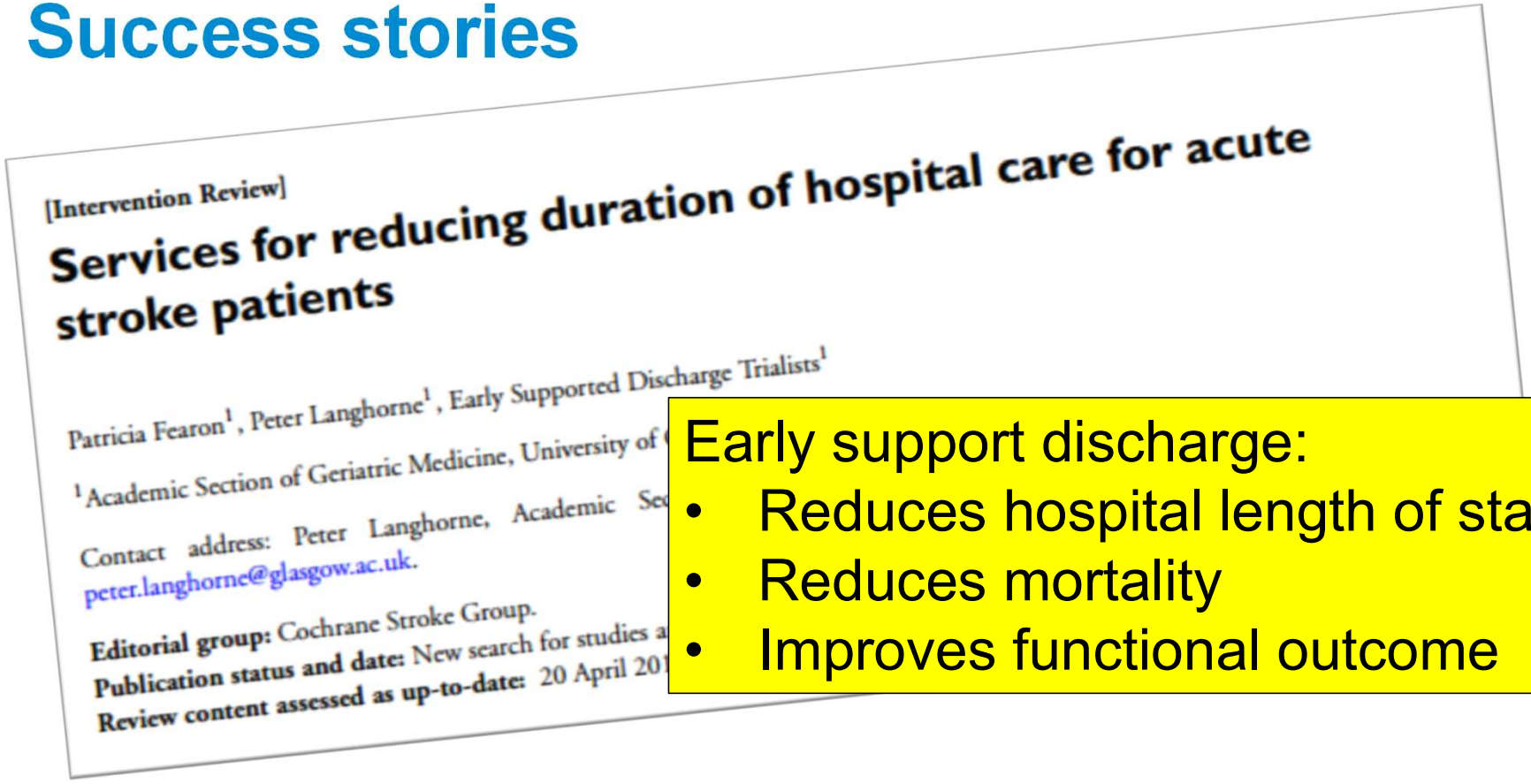
Success stories



[Intervention Review]

Services for reducing duration of hospital care for acute stroke patients

Patricia Fearon[1], Peter Langhorne[1], Early Supported Discharge Trialists[1]

[1]Academic Section of Geriatric Medicine, University of

Contact address: Peter Langhorne, Academic Se
peter.langhorne@glasgow.ac.uk.

Editorial group: Cochrane Stroke Group.
Publication status and date: New search for studies a
Review content assessed as up-to-date: 20 April 20

Early support discharge:

- Reduces hospital length of stay
- Reduces mortality
- Improves functional outcome

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Contributions welcome!

- A lot still to be done!
- Join Cochrane Rehabilitation mailing list:

cochrane.rehabilitation@gmail.com

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- Follow on Twitter: @CochraneRehab
  @DrLevack