MACH
Melbourne Academic
Centre for Health

Navigating Implementation Science: The Holy Grail of Scale

Chair: **Professor Shelley Dolan** (Peter MacCallum Cancer Centre)

Keynote speaker: **Professor Terry Haines** (Monash University)

Clinical partner: **Professor Karin Thursky** (Peter MacCallum Cancer Centre, Royal Melbourne Hospital, University of Melbourne)

Followed by Q&A

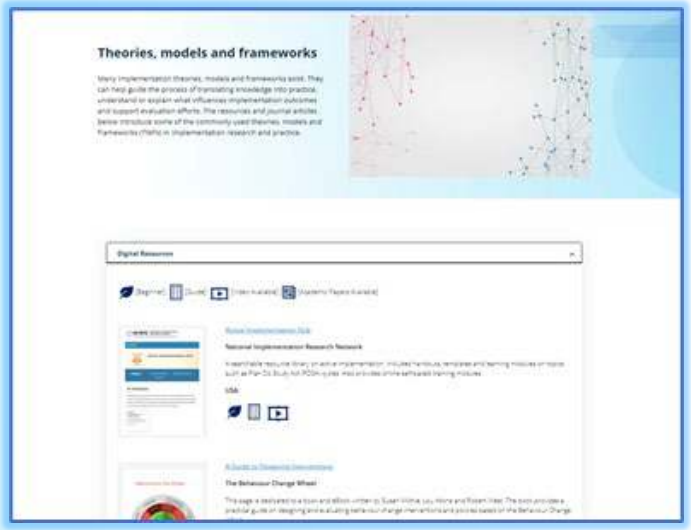
The recording of this event will be available on the MACH website

www.machaustralia.org

MACH
Melbourne Academic
Centre for Health

Now live at www.machaustralia.org
Implementation Science Resource Directory

A curated library of high-quality, international resources for users of all knowledge levels to support implementation of research evidence into practice



Principles of allocating resources in health care: Discrepancies between theory and practice

Prof Terry Haines
Head of School
School of Primary and Allied Health Care
& National Centre for Healthy Ageing
Monash University
Terry.Haines@monash.edu

Menu

Appetizer:

Theory of deciding what we should be implementing

Mains:

What we are actually doing

Dessert:

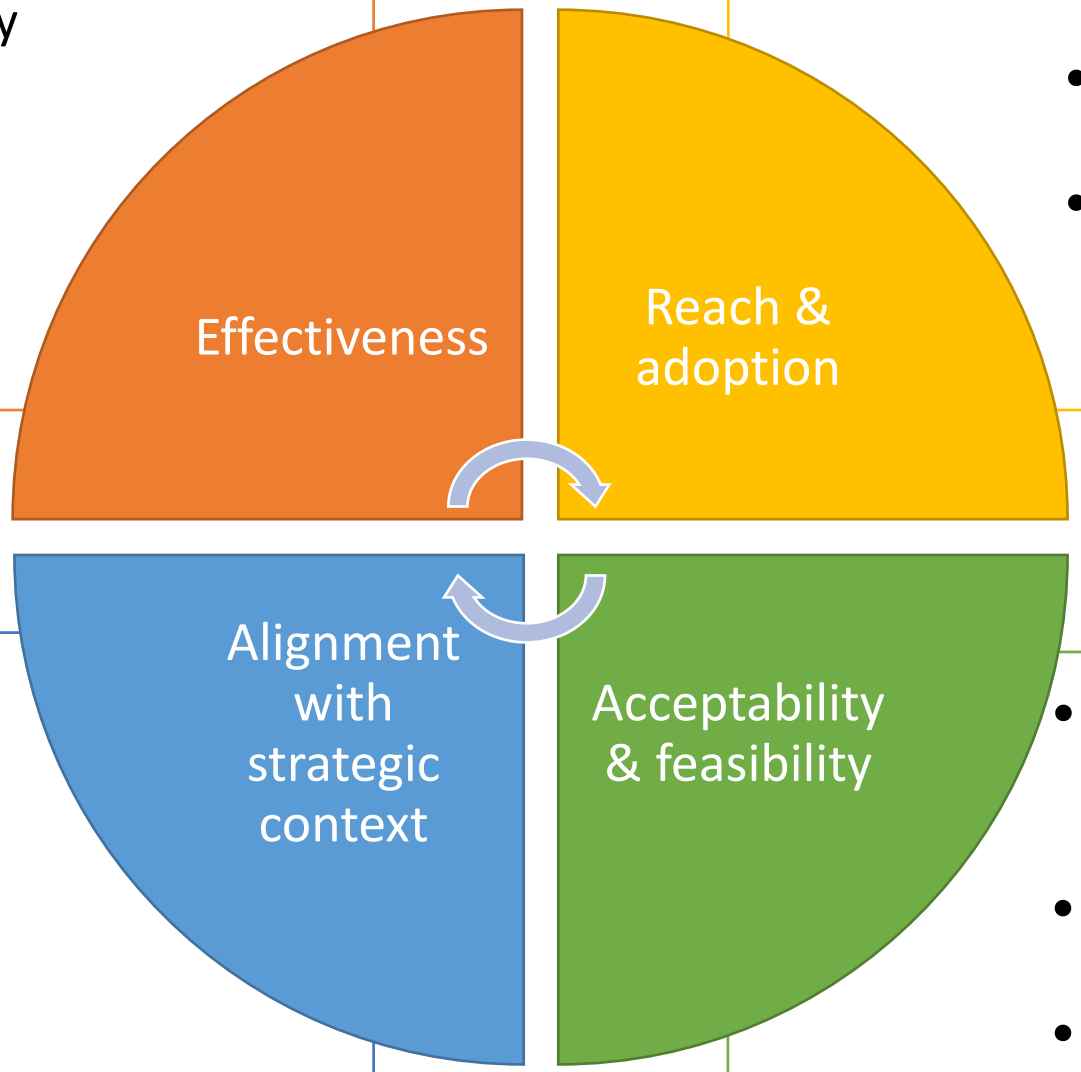
Recommendations for dealing with having an appetizer and mains that don’t match

Theory of deciding **what** we should be implementing

Milat AJ, Newson R, King L, Increasing the scale of population health interventions: a guide. Sydney: NSW Ministry of Health; 2014.

Available from: www.health.nsw.gov.au/research/Publications/scalability-guide.pdf

- Efficacy
- Costs and economic efficiency
- Adaptability to different contexts, subgroups
- Potential harms, unintended consequences, adverse outcomes



- Potential reach to population if scaled-up
- Likely adoption rate by providers
- Reach and adoption in different contexts, subgroups

- Consistency with policy and strategic directions
- Addresses “need” of funding agency
- Contextual similarity
- Compatibility with interventions in same setting
- Superiority to current practice

- Organisational, technical, human and financial resources required
- Readiness of current system to accommodate
- Acceptability to target group and stakeholders
- Availability of budget to accommodate costs of scaling

What we are actually doing?

n=59 across 4 discussion forums

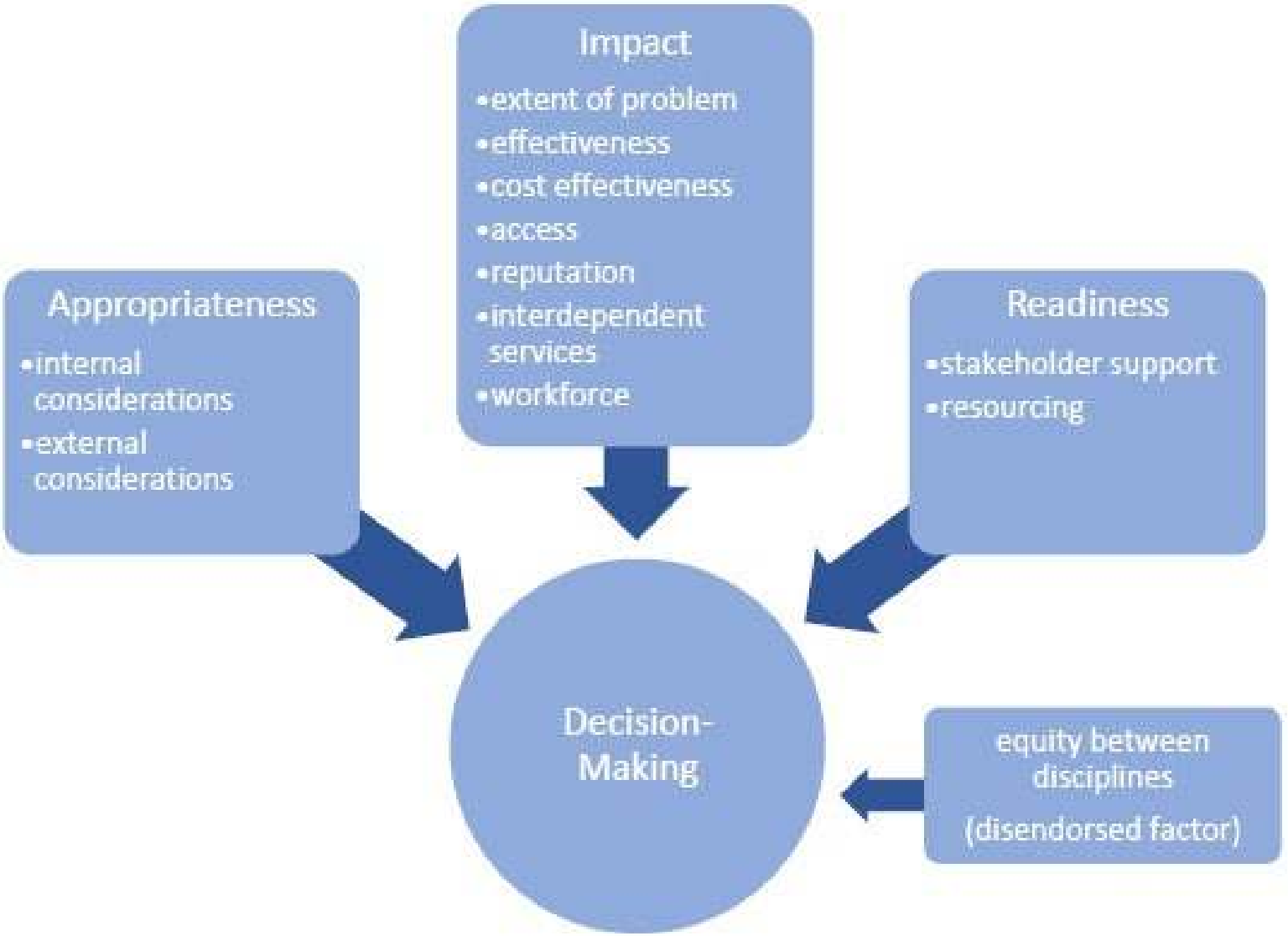
- Case study
- 2 hypothetical reallocation scenarios
- Idealised situation resource allocation decisions
- Reality, barriers, enablers
- Key stakeholder working party

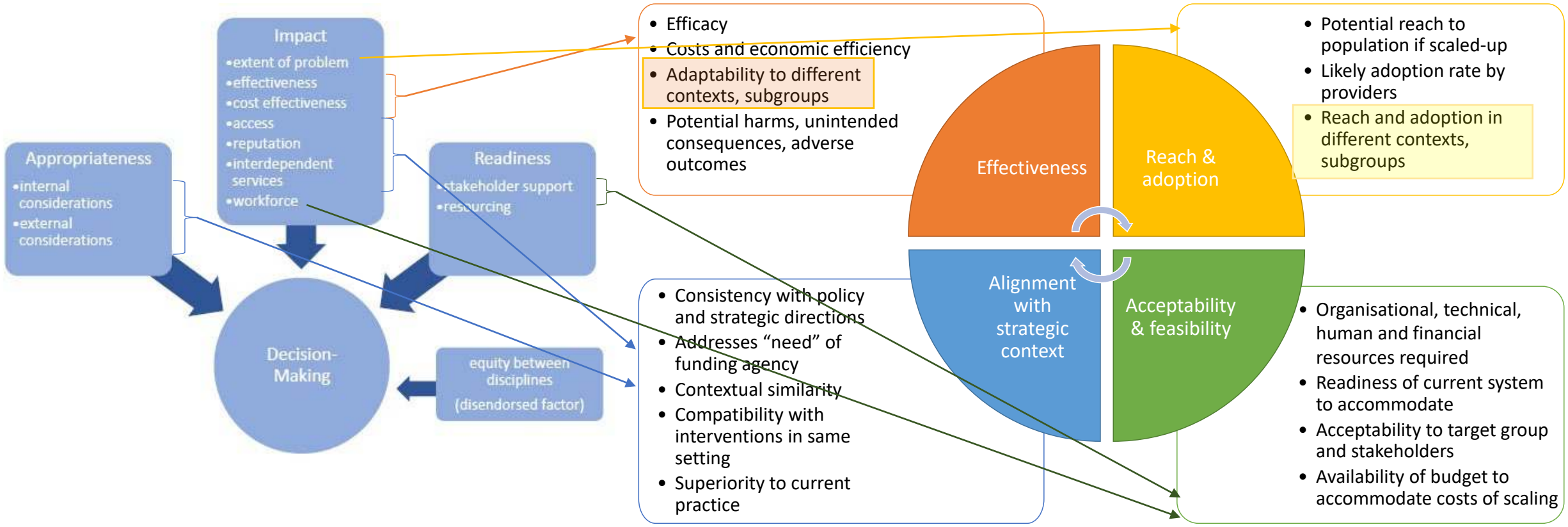
International Journal of Health Policy and Management
ISSN: 2322-5939
http://ijhpm.com

Int J Health Policy Manag. 2018 May; 7(5): 412–420.
Published online 2017 Sep 12. doi: 10.15171/ijhpm.2017.105
PMCID: PMC5953524
PMID: 29764105

What Factors Do Allied Health Take Into Account When Making Resource Allocation Decisions?

Haylee Lane, [1,*] Tamica Sturgess, [2] Kathleen Philip, [3] Donna Markham, [4] Jennifer Martin, [5] Jill Walsh, [4] Wendy Hubbard, [6] and Terry Haines [1]


Impact
•extent of problem
•effectiveness
•cost effectiveness
•access
•reputation
•interdependent services
•workforce
Appropriateness
•internal considerations
•external considerations
Readiness
•stakeholder support
•resourcing
Decision-Making
equity between disciplines
(disendorsed factor)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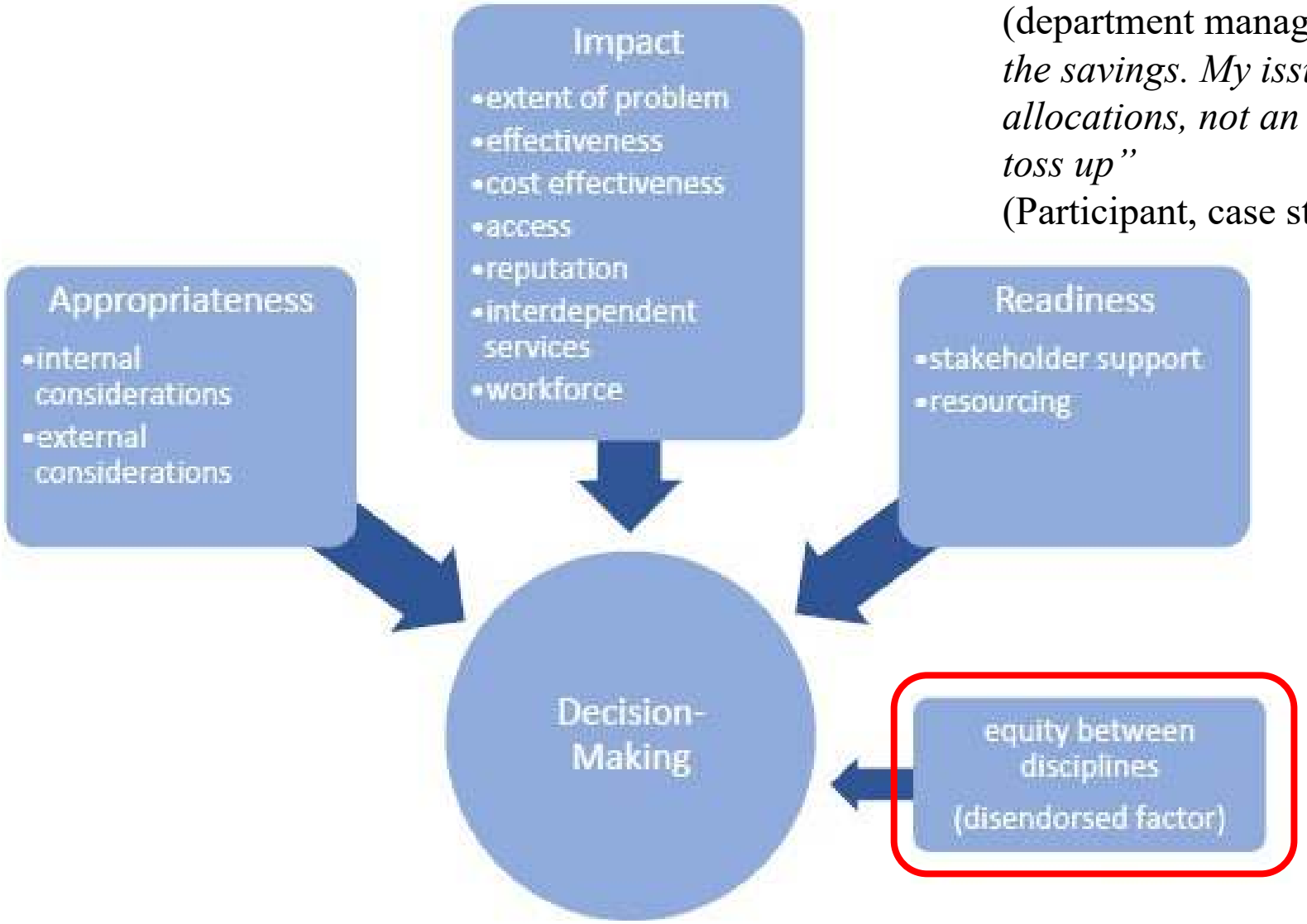
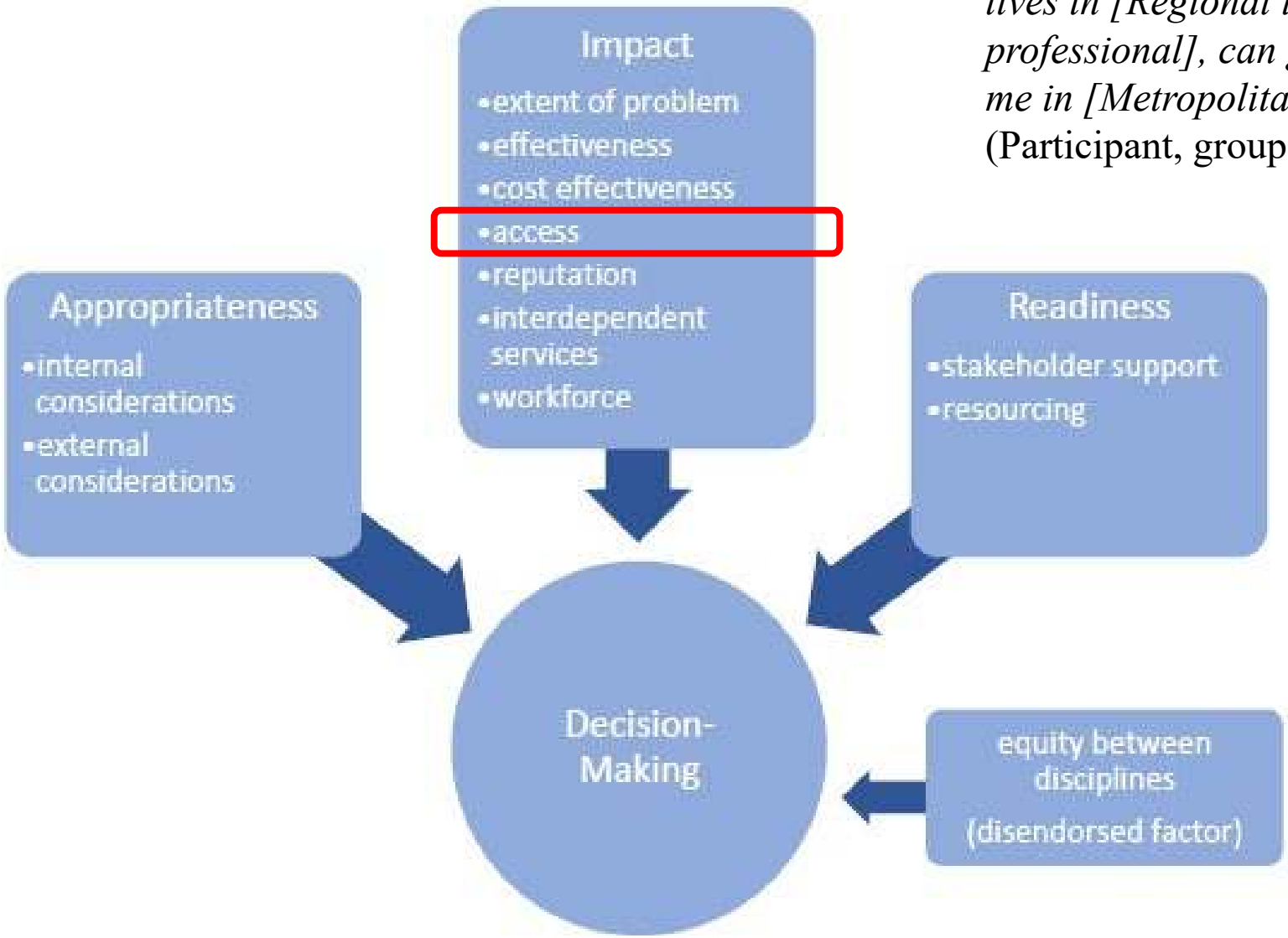
Effectiveness
Reach & adoption
• Potential reach to population if scaled-up
• Likely adoption rate by providers
• Reach and adoption in different contexts, subgroups
Alignment with strategic context
Acceptability & feasibility
• Consistency with policy and strategic directions
• Addresses "need" of funding agency
• Contextual similarity
• Compatibility with interventions in same setting
• Superiority to current practice
• Organisational, technical, human and financial resources required
• Readiness of current system to accommodate
• Acceptability to target group and stakeholders
• Availability of budget to accommodate costs of scaling



"I guess the other key driver was we've tackled it from an equity perspective in terms of the percentage of the budget that people (department managers) *have and then making the percentage of the savings. My issue with that is that it's based on historical allocations, not an actual needs base thing so that was a big toss up"*
(Participant, case study, forum two)

"We should be looking at a distribution that's equally available to patients or patient groups rather than our own professional background"
(Participant, expert working party)

"But it's also health equity for the consumer… That Jimmy that lives in [Regional location] and has to go and see [health professional], can get the same service as Suzanne who can see me in [Metropolitan location]"
(Participant, group discussion, forum three).



Participants would readily identify that equity was a consideration when making resource decisions but were generally silent for a prolonged period when prompted to identify what they meant when using this term.

How Do Allied Health Professionals Define and Apply Equity When Making Resource Allocation Decisions?

Lane H[1], Sturgess T[2], Philip K[3], Markham D[4], Walsh J[5], Hubbard W[6], Martin J[7], Haines T[1]

Author information

International Journal of Health Services : Planning, Administration, Evaluation, 26 Mar 2018, 48(2):349-364
DOI: 10.1177/0020731418762721 PMID: 29580131

Social Science & Medicine
Volume 175, February 2017, Pages 11-27

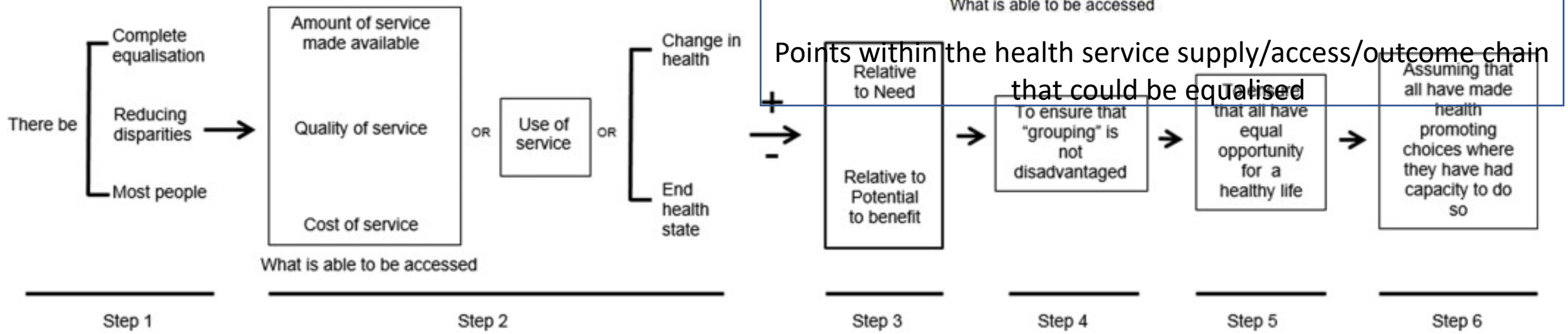
n=74 papers
n=60 explicit definitions
n=14 implicit elements without an explicit definition

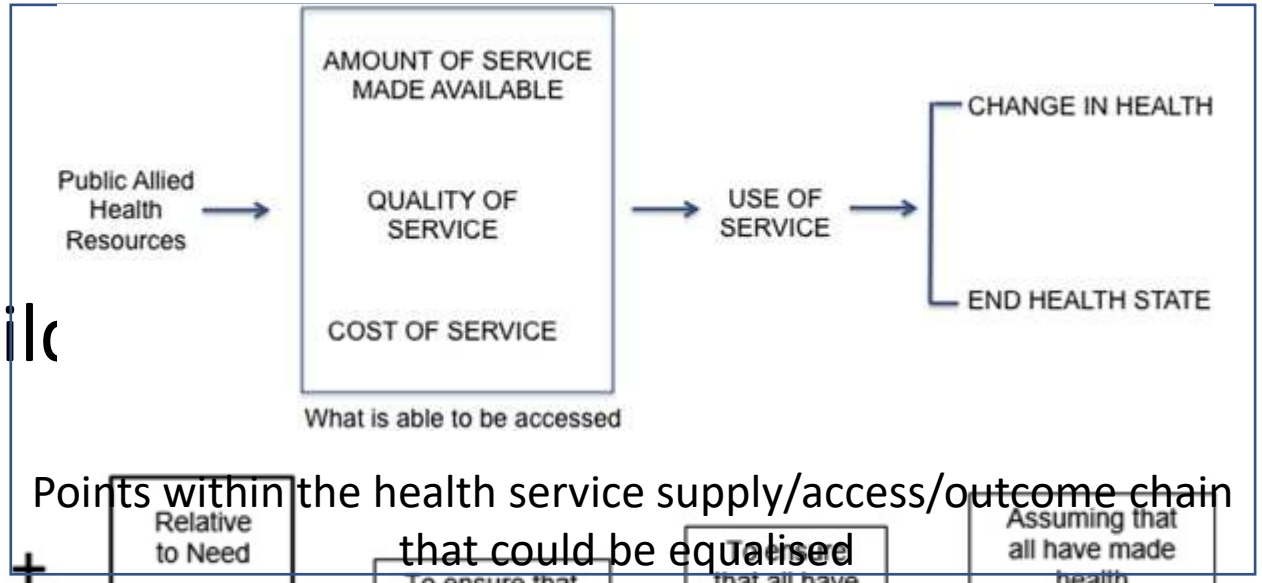
Review article

Equity in healthcare resource allocation decision making: A systematic review

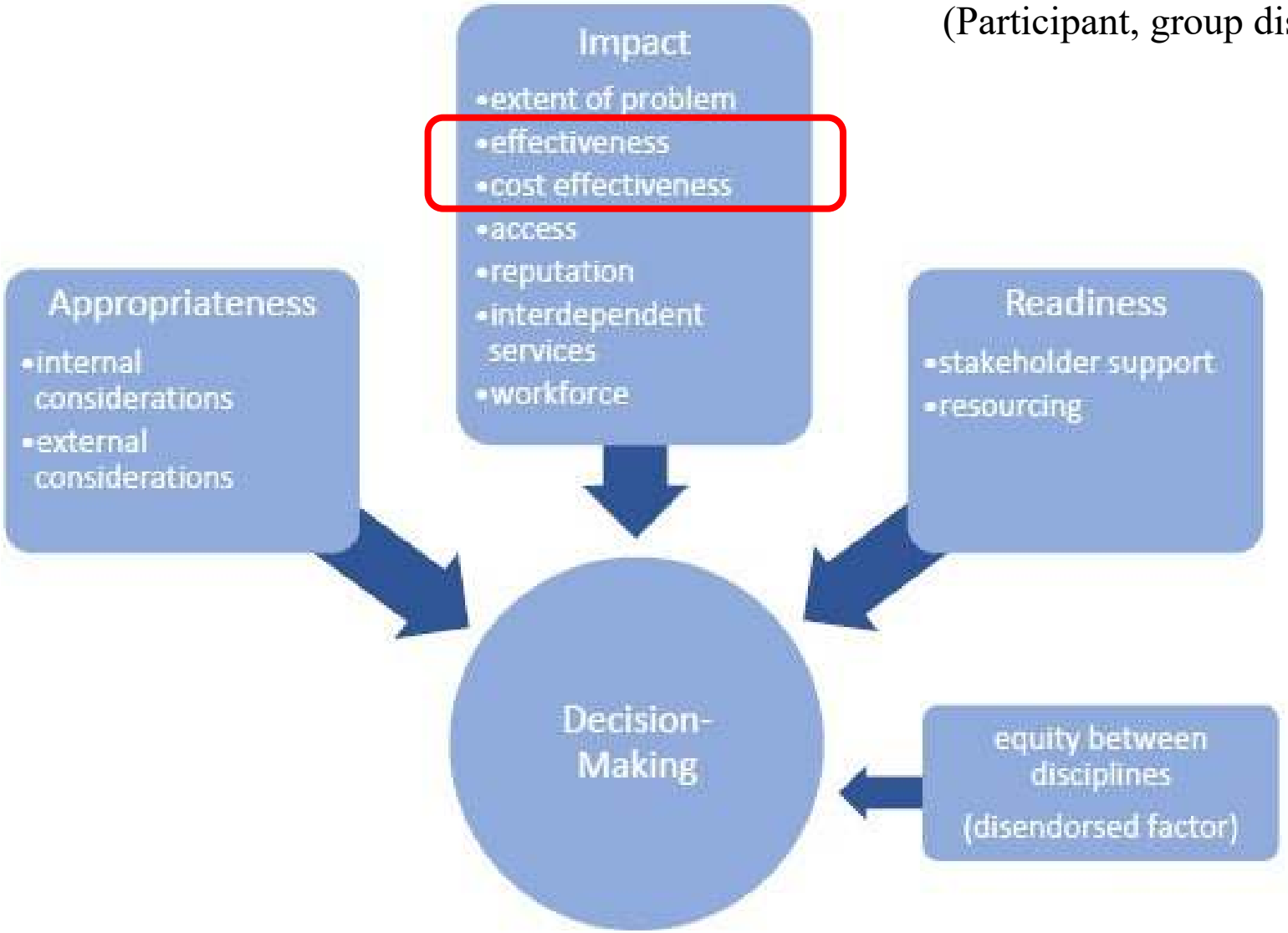
Haylee Lane [a], Mitchell Sarkies [a, b], Jennifer Martin [c], Terry Haines [a, b]

Operational definition of equity build





Points within the health service supply/access/outcome chain that could be equalised



"I think sometimes literature is helpful there but you have to know where to find it"
(Participant, group discussion, forum two).

"This is what our service may look like in terms of money. Who else has a similar sized service? And talk to them about their demand and where their experience of - how they've structured their service"
(Participant discussion, hypothetical scenario, forum one).

"Benchmarking. ...See what their ideal would be and then what they have learnt..."
(Participant discussion, hypothetical scenario, forum one).

"The other thing I'm thinking is let's just say it's X amount. Well X amount in the NICU may not go as far as it would in ED, for example. So it's a bit of that cost effectiveness thing in terms of where we're going to get the best outcome for the best dollar"
(Participant discussion, hypothetical scenario, forum three).

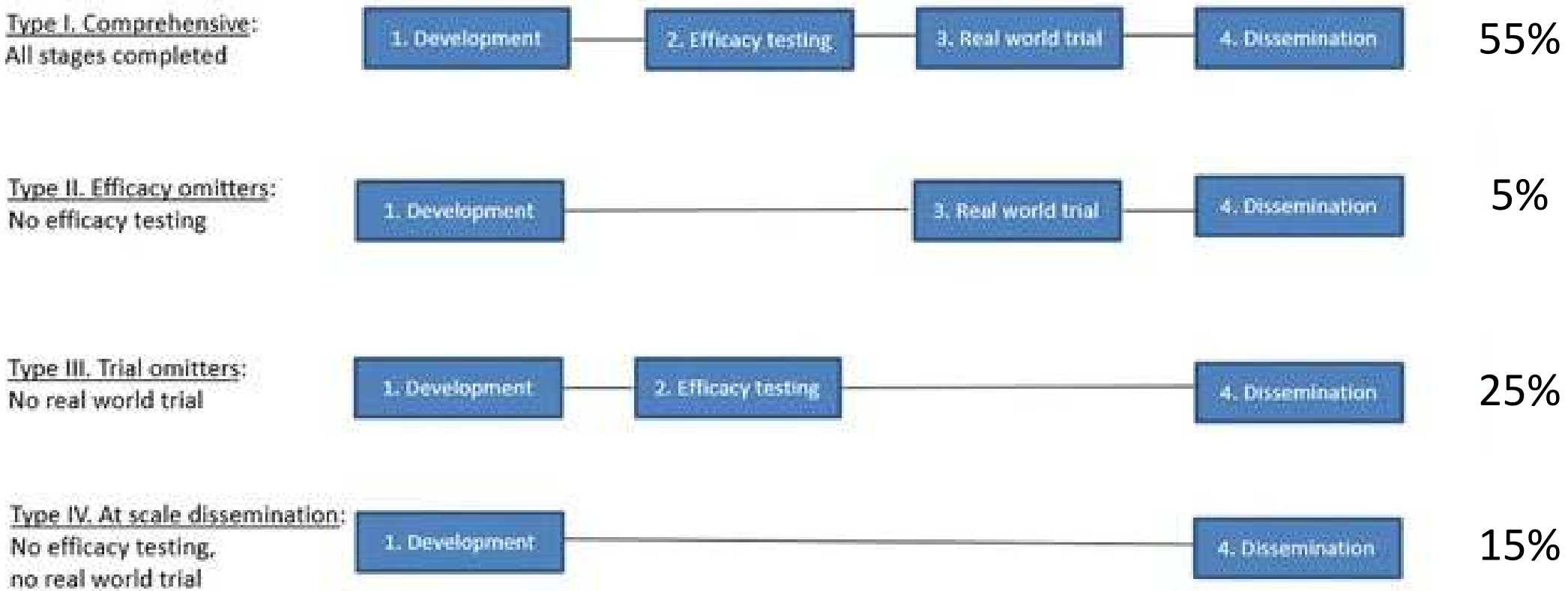
Is it just allied health doing this?

Pathways for scaling up public health interventions

Devon Indig, Karen Lee, Anne Grunseit, Andrew Milat & Adrian Bauman

BMC Public Health **18**, Article number: 68 (2018) | Cite this article

n=40 public health strategies with evidence of scaling up



What about hospital settings?

International Journal of Nursing Studies
Volume 86, October 2018, Pages 52-59

Where are falls prevention resources allocated by hospitals and what do they cost? A cross sectional survey using semi-structured interviews of key informants at six Australian health services

Deb Mitchell [a, b], Melissa Raymond [c], Joanna Jellett [d], Melinda Webb-St Mart [e], Lee Boyd [f, g], Mari Botti [h, i], Kate Steen [h], Alison Hutchinson [a, i], Bernice Redley [a, i], Terry Haines [j]

n=186 health service personnel interviews

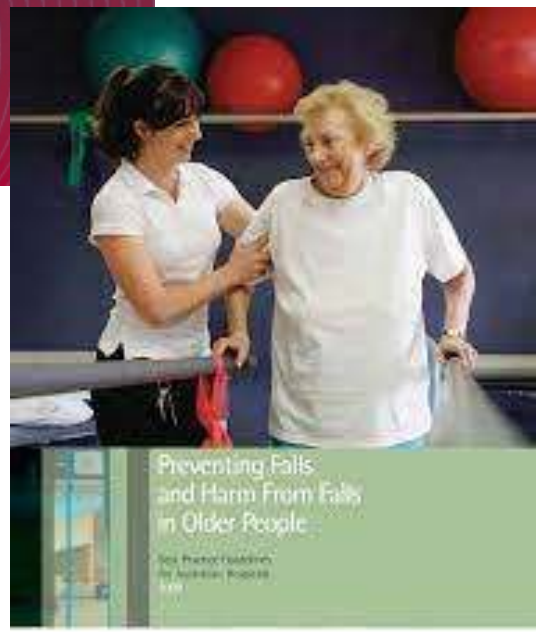
- ~$46 million on falls prevention annually at these sites
- ~$590 million annually Australia wide

The estimated percentage of total resource allocation and average cost per bed per year of the top eight falls prevention activities.

Activity	% of total spent	Cost per bed AU$
Physiotherapy treatment aimed at falls prevention	18%	1482
Continuous patient observers	14%	1160
Falls assessment/screen by professions other than nursing	12%	1033
Purchase, locate and respond to falls prevention alarms	11%	909
Nursing risk screening/assessment	8%	716
Informal falls prevention patient education	8%	695
Moving patients to a ward area with higher visibility	6%	541
Occupational Therapy treatment aimed at falls prevention	4%	362


PDF
Falls Prevention
Best Practice Guidelines
for Public Hospitals and
State Government Residential
Aged Care Facilities incorporating
a Community Integration Supplement
Quality Improvement
and Enhancement Program
Queensland Government

2003


Preventing Falls
and Harm From Falls
in Older People

The Journals of
GERONTOLOGY® SERIES a

Volume 62, Issue 6
June 2007

Design-Related Bias in Hospital Fall Risk Screening Tool Predictive Accuracy Evaluations: Systematic Review and Meta-Analysis FREE

Terry P. Haines ✉, Keith Hill, Willeke Walsh, Richard Osborne

The Jour
https://d
Publish

JCE
JOURNAL OF CLINICAL EPIDEMIOLOGY

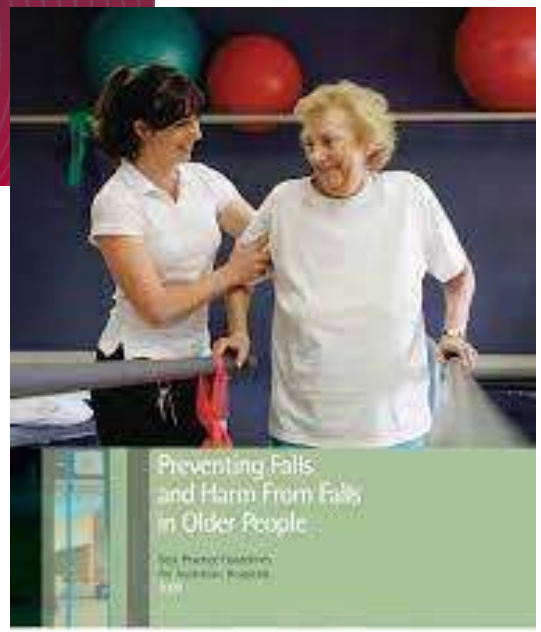
REVIEW ARTICLE | VOLUME 67, ISSUE 2, P144-151, FEBRUARY 01, 2014

A novel research design can aid disinvestment from existing health technologies with uncertain effectiveness, cost-effectiveness, and/or safety

Terry Haines ✉ • Lisa O'Brien • Fiona McDermott • ... Deb Mitchell • Dina Watterson • Elizabeth Skinner •
Show all authors

Published: November 25, 2013 • DOI: https://doi.org/10.1016/j.jclinepi.2013.08.014

2003



JCN Journal of Clinical Nursing
The International Voice of Nursing Research, Theory and Practice

ORIGINAL ARTICLE

Falls risk score removal does not impact inpatient falls: A stepped-wedge, cluster-randomised trial

Joanna Jellett BN, MProfEd&Trng, Cylie Williams BAppSci(Pod), PhD, Diana Clayton BN, Virginia Plummer BN, PhD, Terry Haines B Physio (Hon), PhD,

First published: 17 September 2020 | https://doi.org/10.1111/jocn.15471 | Citations: 2

JOURNAL OF THE AMERICAN GERIATRICS SOCIETY
AGS

Brief Report | Open Access

Divesting from a Scored Hospital Fall Risk Assessment Tool (FRAT): A Cluster Randomized Non-Inferiority Trial

Meg E. Morris PhD, Terry Haines PhD, Anne Marie Hill PhD, Ian D. Cameron PhD, Cathy Jones B.App.Sci(SpPath) (hons), Dana Jazayeri PhD, Biswadev Mitra PhD, ... See all authors

First published: 09 April 2021 | https://doi.org/10.1111/jgs.17125

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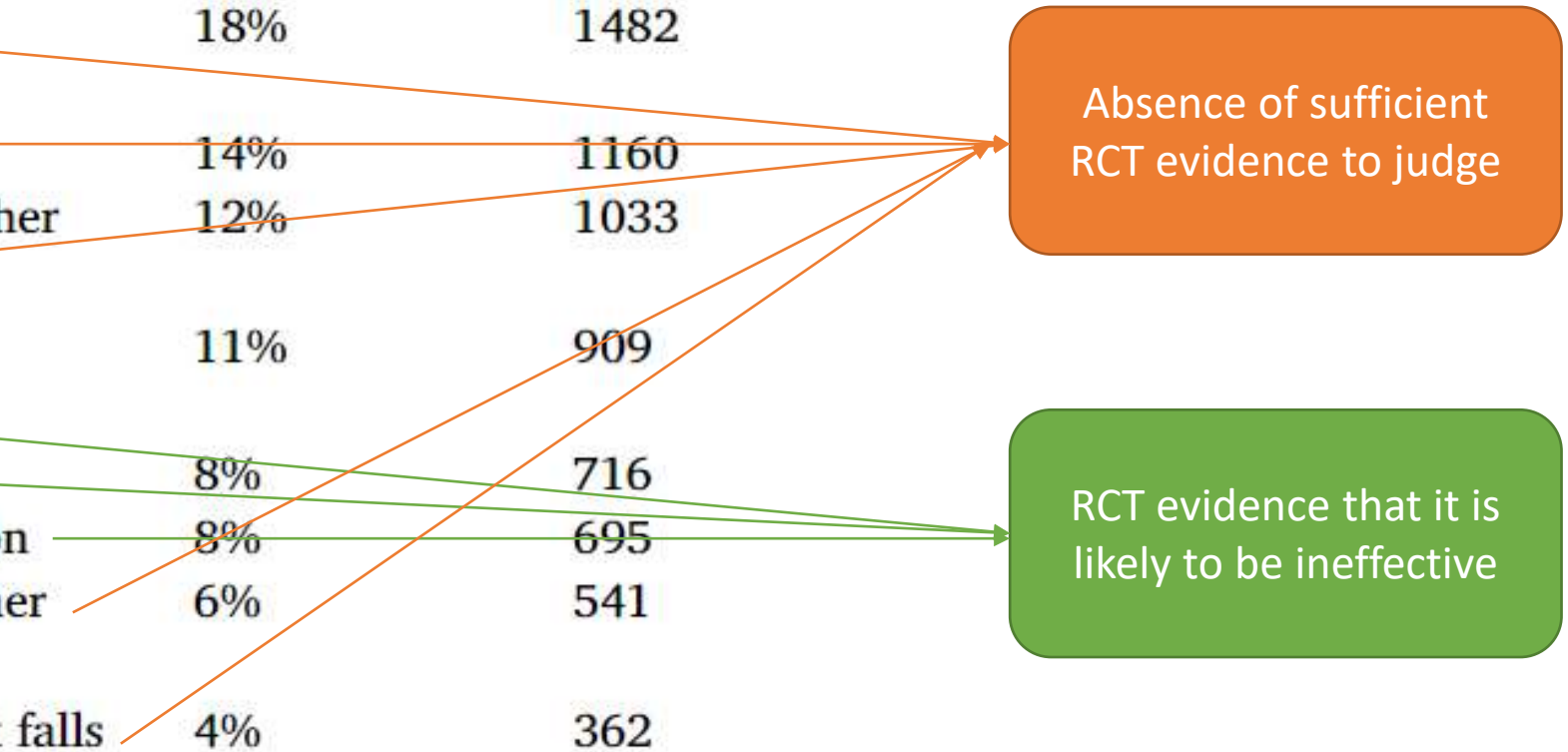
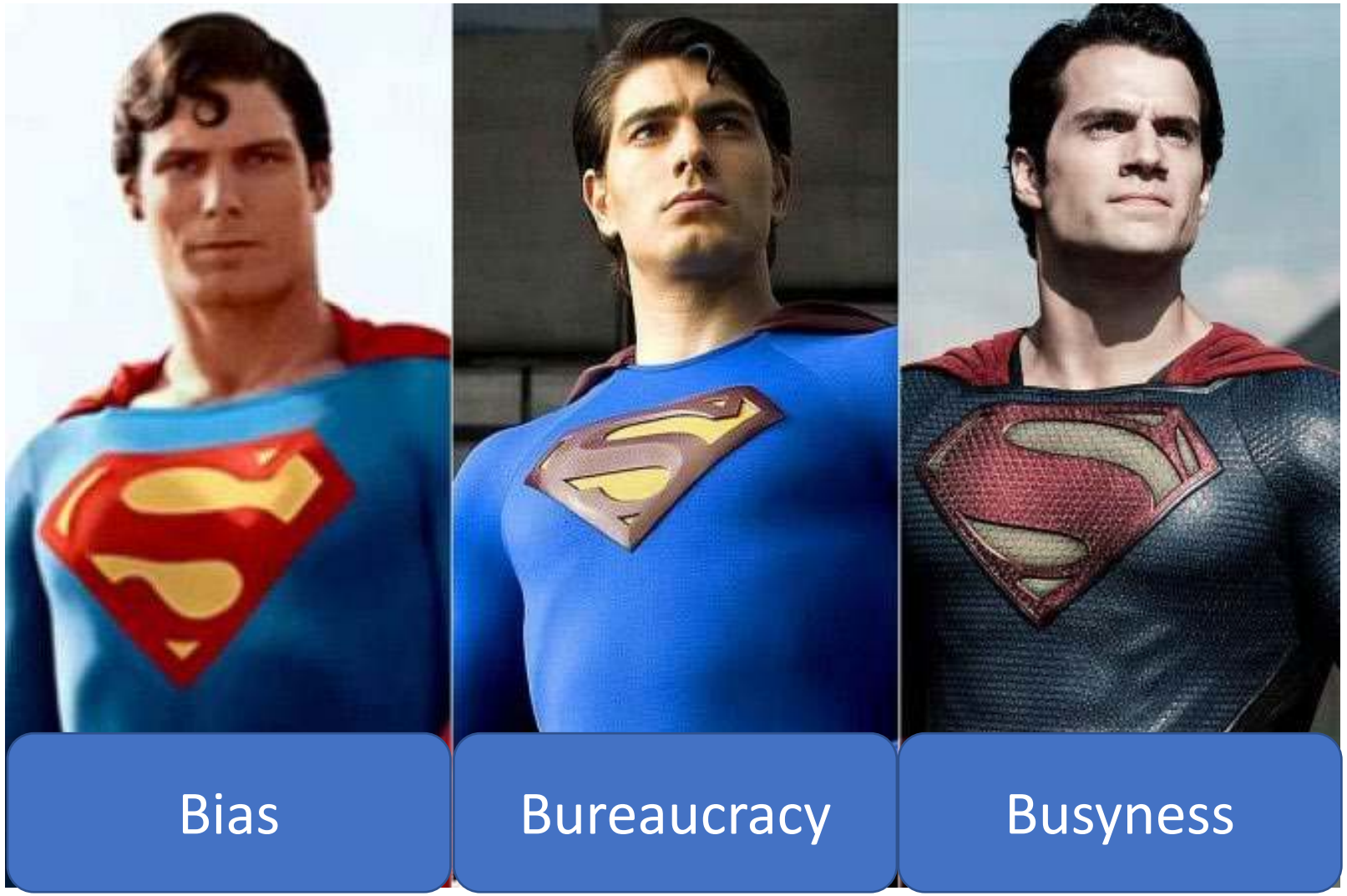


We all make bad decisions caused by the 3 B's



Bias

Bureaucracy

Busyness

The important thing is that we recognise we will make mistakes, and put in place systems to help identify them and rectify

This also applies to **how** we should implement, not just **what** we should implement

PLOS MEDICINE

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Effectiveness of knowledge brokering and recommendation dissemination for influencing healthcare resource allocation decisions: A cluster randomised controlled implementation trial

Mitchell N. Sarkies, Lauren M. Robins, Megan Jepson, Cylie M. Williams, Nicholas F. Taylor, Anne Bardoel, Meg E. Morris, Leeanne M. Carey, Anne E. Holland, Katrina M. Long, Terry P. H

Published: October 22, 2021 • https://doi.org/10.1371/journal.pmed.1003833

Global Implementation Research and Applications
https://doi.org/10.1007/s43477-021-00026-z

The Efficacy Implementation Ratio: A Conceptual Model for Understanding the Impact of Implementation Strategies Using Health Outcomes

Mitchell N. Sarkies[1,2] · Elizabeth H. Skinner[3,4,5,6] · Kelly-Ann Bowles[7] · Monica Taljaard[8,9] · Wei Cheng[10] · Terry P. Haines[2]

Recommendations

- Organisations need to be explicit for decisions to align with strategy
  - Vague terms and decision rules are subject to variation in interpretation
- Decision-makers need to be equipped /supported to find and use evidence
  - Effectiveness
  - Cost-effectiveness
- Decisions for implementation often need to be made in advance of evidence availability
  - Systems should be put in place to prioritise revisiting these decisions to develop the evidence that was missing
- Decision-makers need to accept that we will make mistakes
  - Particularly when it is convenient for us to do so
    - Less effort in thinking, planning, evaluating

SCALING THE THINK SEPSIS ACT FAST PATHWAY IN VICTORIA

23 hospitals, 11 health services 2018/2019

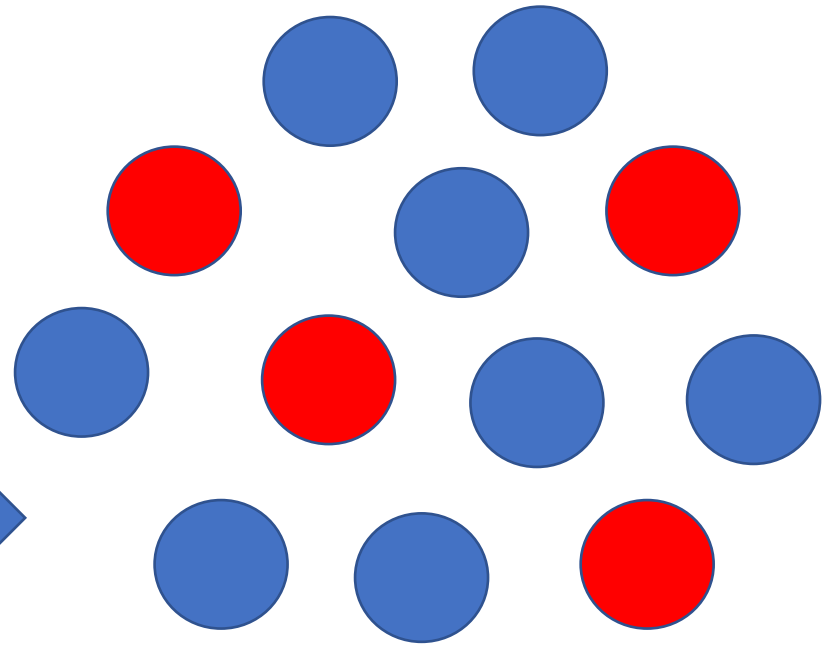
Peter Mac
Peter MacCallum Cancer Centre
Victoria Australia

The Royal Melbourne Hospital

Whole of hospital Cancer pathway 2013-

Cancer wards 2015

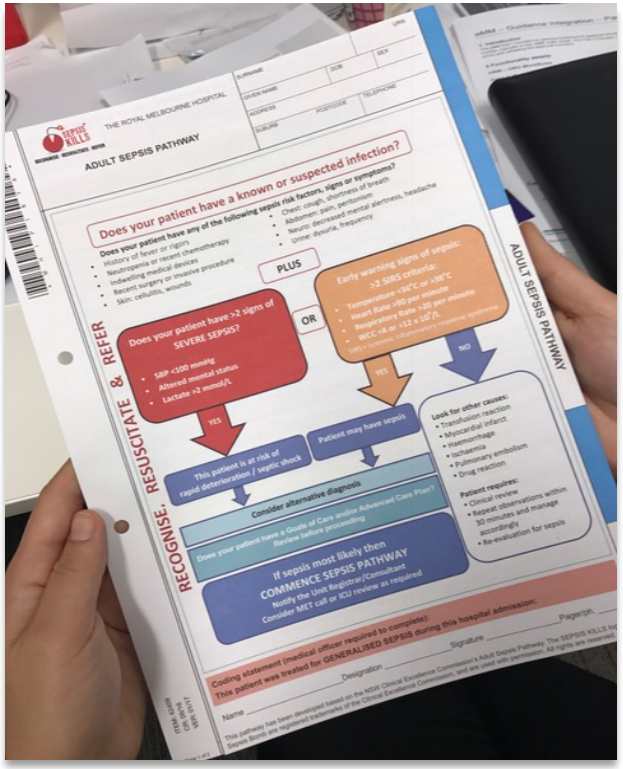
Whole of hospital 2016/2017

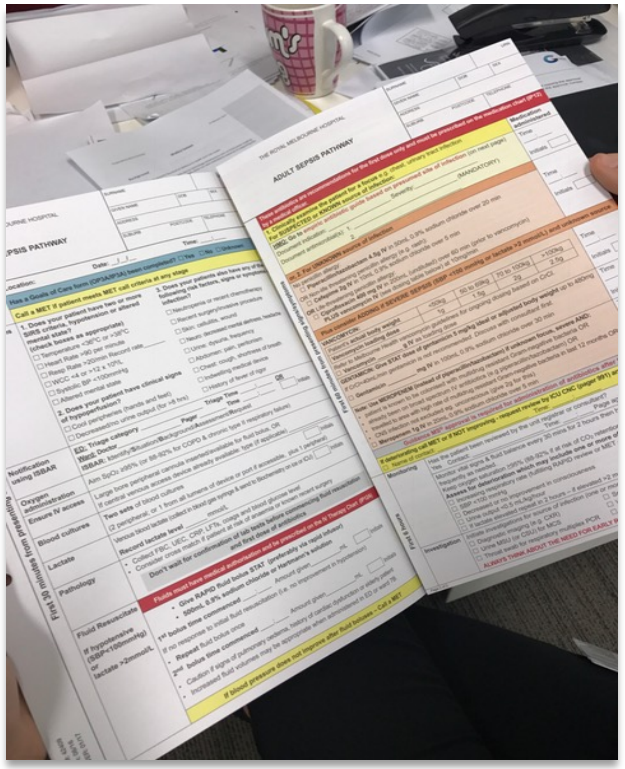


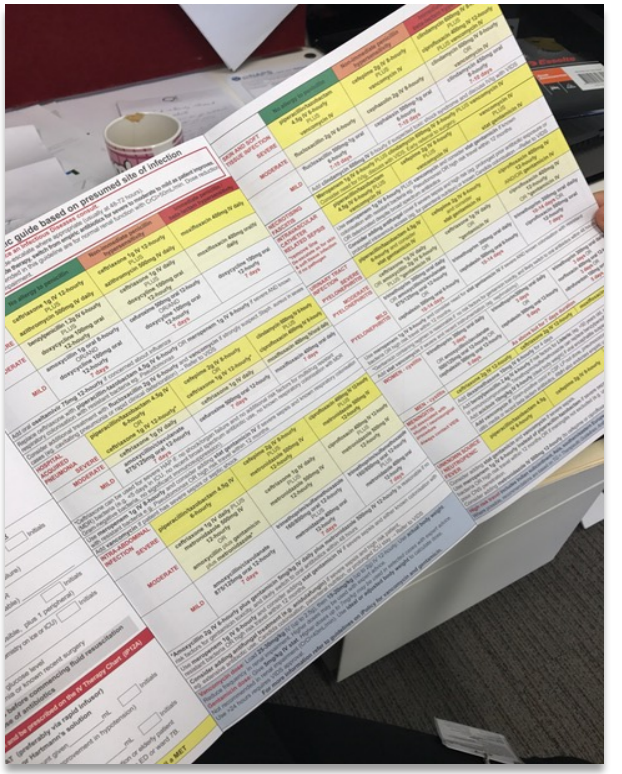
Metropolitan

Rural/regional

Thursky et al. BMJ Open Quality 2018







A CLINICAL PATHWAY FOR SEPSIS

Enforces time critical components

Standardises elements of care

Becomes an audit tool & supports coding

Promotes nurse initiation***

Supports effective communication

For those who have worked many years and to those who were new to clinical practice, it taught and empowered us more than we could have imagined. It actually evidenced clinical improvement – in front of our eyes. – Health service project officer

95%
would participate again

I felt like the ***Sepsis Pathway*** *was a* ***call to action****, rallying the troops. The result was a* ***highly coordinated response*** *that was time sensitive with all staff communicating clearly, thoroughly and including us at all times. We felt at* ***every step*** *that my son was receiving* ***expert and focused care.***

–A Carer

EMPOWERMENT

A punishing schedule……

+

Data collection
Baseline (876 pts) + Implementation (1476 pts)
ICD10 coded cases
Matched time periods

A SUPPORTED COLLABORATION

RMH Clinical leads with Better Care Victoria Project Governance

- Collaborative model (including consumers)

- Whole of hospital approach

- Project + clinical lead at each service *(Funded)*

- Barriers and enablers assessment

- Toolkit x 4 provided

https://www.bettersafercare.vic.gov.au/improvement/projects/mtip/think-sepsis-act-fast

Coming together

Workshops
Every 6-8 weeks around Victoria

Site visits
Road trips!

Basecamp
Project management and chat app

Newsletter
Every month

Sepsis Scaling Collaboration updates and announcements

Prepared by: Kelly Sykes
Date: 20 July 2018

Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Planning			Piloting			Implementation					Sustainability	

We are here

Hi all!
Welcome to our first Sepsis Scaling Collaboration update… just a little something we're trying out. Hope you enjoy!
-Kelly

What's Been Happening

You may have heard that Swan Hill is now famous for their remake of Right Said Fred's hit song with "I'm too septic" but *in other news*…

- **All health services have finalised pilot pathways**
- **12 health services launched their pilot!**
  Hang tight, Western, Wangaratta, and Peninsula – you're almost there and we can't wait to see what you do!
- **396 patients were put on the sepsis pathway**
- **2,412 clinicians received sepsis education**
- **3 workshops held and 2 reports submitted**
- **Sepsis cupcakes consumed: too many to count**
- **Interstate interest is high!** We have been involved with meetings and teleconferences with our colleagues in NSW and QLD.
- **Our first EMR teleconference was convened**

Announcements

Emergency Care Clinical Network: 32 health services are now involved in the ECCN's 'Implementing a sepsis bundle of care in EDs and urgent care centres.' We are working closely with the ECCN team to ensure we share our learnings – good luck to these project teams over the next year!

Kicking Goals

In honour of the World Cup, check out some of the health services that are kicking goals:

Swan Hill: Time to antibiotics: ↓ 107 mins to 30.8 mins
BCx2 compliance: ↑ 9.7% to 63%
Lactate compliance: ↑ 51.2% to 94%

Ballarat: Time to antibiotics dropping by the week!
Week 1: 75 mins → Week 2: 37 mins

Connections

Struggling to find ways to engage consumers? Check in with Western Health

Having a hard time with surgical buy-in? Check in with Ballarat

Need ideas for World Sepsis Day forum topics? Check in with South West

Thinking about a 'Code Sepsis'? Check in with The Alfred and Swan Hill

Basecamp

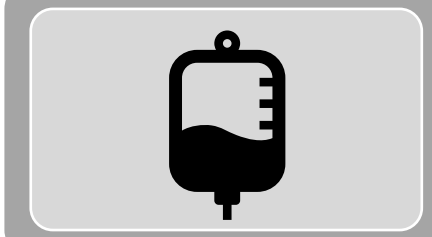
There's been some great conversations (367 messages in fact) around the Campfire, but here are the highlights…

- Pilot updates
- Ways to engage consumers
- Sepsis kits – love 'em or leave 'em?
- Marketing materials
- Launch photos
- Sepsis in the news
- Cannulation competencies
- Clinical scenarios
- Pathology– who can order it?
- Point of care lactate

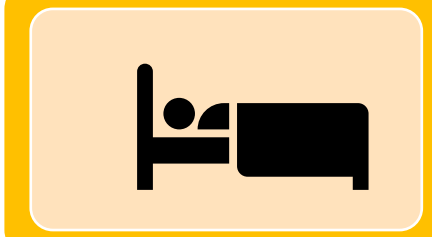
Tip: *Check the 'Docs & Files' folder to see pathways and other shared resources.*

In 4 months of implementation phase, the program:

Saved 52 lives



Avoided 96 intensive care unit admissions



Reduced total hospital length of stay by 3,781 bed days

Saved $11.7 million (Cost of program $1.5 million)



THINK SEPSIS
ACT FAST



THINK SEPSIS
ACT FAST

SEPSIS