A new randomized trial design to aid disinvestment from rehabilitation services that do not have evidence of efficacy, safety and/or cost effectiveness—Application to hospital based allied health services provided on weekends

Early proponents of evidence-based medicine claimed that 20-25% of patients have treatments that are unnecessary or potentially harmful. Some have evidence of benefit, but have become obsolete, are misused or overused. These interventions are ready candidates for disinvestment (the displacement of non-cost effective technologies for resource reinvestment or reallocation). Other interventions have little credible evidence of effectiveness, cost-effectiveness or safety, yet have become established parts of usual care and are uncertain candidates for disinvestment. Evaluating these interventions in randomised trials is difficult given their acceptance as a part of usual care. We propose a novel research design under a non-inferiority paradigm to address this problem: The stepped-wedge, “roll-in” cluster randomized trial.1 This presentation will describe this research design and its world first application to evaluating the disinvestment from hospital-based allied health (physical therapy, occupational therapy, speech pathology, social work, dietetics) services delivered on weekends.

Provision of allied health services on acute hospital wards on weekends is common internationally. However, little evidence supports their effectiveness, safety and cost-effectiveness in this role. There is also great diversity in the scope and intensity of services provided, and no gold-standard exists describing how these services should be structured. We are conducting 3 stepped wedge, “roll-in” cluster randomized trials across three metropolitan hospitals in Melbourne, Australia to evaluate the efficacy, cost-effectiveness and safety of these existing services. This is being followed by 3 conventional stepped wedge, “roll-out” cluster randomized trials at these same sites.

Biography

Terry P Haines completed his PhD at the age of 27 years from Melbourne University and undertook postdoctoral studies at The University of Queensland. He is the director of the Monash Health and Monash University Allied Health Research Unit. He has published over 150 full peer-reviewed papers and been awarded the Australian National Health and Medical Research Council Achievement Award for being the leading population health researcher per career stage in 2010 and 2014.

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