Conclusions The MEWS independently predicts the likelihood of MICU readmission. Since the MEWS score can be automatically generated by the EHR it is prudent for clinicians to use it for frequent monitoring of patients during the first 72 hours of their discharge from the intensive care unit.

2 RETHINKING BIAS AND TRUTH IN EBM

^{1,2}Sietse Wieringa, ³Eivind Engebretsen, ²Kristin Heggen, ¹Trish Greenhalgh. ¹University of Oxford, Oxford, UK; ²University of Oslo, Oslo, Norway; ³University of Oslo, Norway

10.1136/bmjebm-2019-EBMLive.10

Objectives Abstract In modern philosophy, the concept of truth has been problematized from different angles, yet in evidence-based health care (EBHC), it continues to operate hidden and almost undisputed through the linked concept of 'bias.' To prevent unwarranted relativism and make better inferences in clinical practice, clinicians may benefit from a closer analysis of existing assumptions about truth, validity, and reality. Here we give a brief overview of several important theories of truth, notably the ideal limit theorem (which assumes an ultimate and absolute truth towards which scientific inquiry progresses), the dominant way truth is conceptualized in the discourse and practice of EBHC.

Method We draw on Belgian philosopher Isabelle Stengers' work to demonstrate that bias means one thing if one assumes a world of hard facts 'out there,' waiting to be collected. It means something different if one takes a critical view of the knowledge-power complex in research trials. Bias appears to have both an unproductive aspect and a productive aspect as argued by Stengers and others: Facts are not absolute but result from an interest, or *interesse*: a bias towards a certain line of questioning that cannot be eliminated.

Results The duality that Stengers' view invokes draws attention to and challenges the assumptions underlying the ideal limit theory of truth in several ways. Most importantly, it casts doubt on the ideal limit theory as it applies to the single case scenario of the clinical encounter, the cornerstone of EBHC. To the extent that the goal of EBHC is to support inferencing in the clinical encounter, then the ideal limit as the sole concept of truth appears to be conceptually insufficient.

Conclusions We contend that EBHC could usefully incorporate a more pluralist understanding of truth and bias and provide an example how this would work out in a clinical scenario.

3 DON'T LABEL AGEING AS DISEASE: THE KIDNEY AGE COMMUNICATION TOOL

¹Richard Stevens, ¹Clare Bankhead, ¹Jennifer Hirst, ²Jeremy Horwood, ¹Gavin Hubbard, ¹Chelu Mfalila, ¹Chris O'Callaghan, ¹Sara Ryan. ¹University of Oxford, Oxford, UK; ²University of Bristol, Bristol, UK

10.1136/bmjebm-2019-EBMLive.11

Objectives Previous research shows that the terminology 'chronic kidney disease' (CKD) is problematic for both patients and general practitioners, arguably because it represents an ageing process rather than a disease. We have previously proposed an alternative terminology 'kidney age' to supersede the terminology of CKD stages 2, 3a, 3b and 4. We aim to develop a communication tool that can be used to discuss declining kidney function with patients without using the terminology of 'disease'.

Method We used electronic health record data from UK primary care to design a prototype communication aid: a table and explanatory text showing how eGFR values map to bands of 'kidney age', and the increasing CVD risk at each band of kidney age. The design and content were refined iteratively in consultation with patient-public involvement representatives. UK general practitioners were then interviewed about the proposed design and content.

Results Interviews are ongoing but results to date suggest that GPs would welcome 'kidney age' terminology and our communication tool, possibly modified, as a potential intervention.

Conclusions A web-based version of the communication aid is currently under development, that can be tested as an intervention in a future parallel-group trial.

4 THE SECTION ON MATERIALS AND METHODS IN PUBLISHED REPORTS OF RANDOMIZED CONTROLLED TRIALS (RCTS) DOES NOT PROVIDE SUFFICIENT INFORMATION TO ALLOW CLINICAL REPLICABILITY OF COMPLEX INTERVENTIONS: A COCHRANE REHABILITATION METHODOLOGICAL PAPER

¹Stefano Negrini, ²Chiara Arienti, ²Joel Pollet, ³Julia Patrick Engkasan, ⁴Gerard E Francisco, ⁵Walter Frontera, ²Silvia Galeri, ⁶Kamila Gworys, ⁶Jolanta Kujawa, ⁷Mazlina Mazlan, ⁸Farooq A Rathore, ⁹Fabienne Schillebeeckx, ⁹Charlotte Kiekens. ¹University of Brescia, Brescia, Italy; ²IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy; ³University of Malaya, Malaya, Malaysia; ⁴The Neuro-Recovery Research Center, TIRR Memorial Hermann, Houston, USA; ⁵University of Puerto Rico School of Medicine, San Juan, Puerto Rico; ⁶Medical University of Lodz, Lodz, Poland; ⁷University of Malaya, Malaya, Malaysia; ⁸PNS Shifa Hospital Pakistan, Karachi, Pakistan; ⁹University Hospital Leuven, Leuven, Belgium

10.1136/bmjebm-2019-EBMLive.12

Objectives To study if Randomized Controlled Trials (RCTs) on complex interventions published in top journals include all the practical details needed to replicate the intervention in everyday clinical practice (clinical replicability). We chose rehabilitation as a case-study because the World Health Organization calls for its development within health services, and due to its intrinsic complexities.

Method Online survey of a pre-defined sample of clinical expert teams from different world regions with diverse rehabilitation competences. Forty-seven clinicians from 7 Physical and Rehabilitation Medicine (PRM) teams (Belgium, Italy, Malaysia, Pakistan, Poland, Puerto Rico, USA), including 20 physicians, 12 physiotherapists, 6 occupational therapists, 6 psychologists and 3 others. The team leaders were active researchers. All RCTs published between January and July 2017 in the top PRM journals (76 RCTs) were reviewed by each team leader. 14 questions developed using CONSORT and TIDieR checklists through consensus and piloting.

Results The response rate was 99%. Inter-rater agreement was moderate/good. All participants considered unanimously 12 (16%) RCTs clinically replicable and none not replicable. Of the other, 56 (74%) RCTs have been considered replicable and 45 (59%) not replicable by at least one complete team. At least one 'absent' information was found by all participants in 60 RCTs (79%), and by a minimum of 85% in the remaining 16 (21%). Information considered to be less well described (8-19% 'perfect' information) included two providers (skills, experience) and two delivery (cautions, relationships) items. The best described (50-79% 'perfect') were the classic methodological items included in CONSORT (descending

order: participants, materials, procedures, setting and intervention).

Conclusions This rehabilitation case-study shows problems of clinical replicability of RCTs on complex interventions and suggests the need to better define some clinical items not described by classical methodological checklists like CONSORT.

5 CONTINUOUS OUTCOME MEASURES – CONUNDRUMS AND CONVERSIONS CONTRIBUTING TO CLINICAL APPLICATION OBJECTIVES

^{1,2}Martin Mayer. ¹EBSCO Health, Ipswich, MA, USA; ²Cone Health, Greensboro, NC, USA

10.1136/bmjebm-2019-EBMLive.13

Objectives To discuss how continuous outcome measures are commonly used to measure patient-relevant outcomes, the obstacles in employing these measures clinically, and methods available to facilitate use of bodies of evidence comprised of continuous outcomes.

Method Many patient-relevant outcomes, particularly quality of life measures such as pain or function, are routinely measured on a continuous scale. However, the interpretation of continuous outcomes can be difficult, particularly when considering application to clinical practice and shared decision-making. Making matters worse is the frequent existence of multiple scales for any given construct. Therefore, quantitative syntheses of literature must find a way to combine different scales into a ‘common language’, and the longest-standing and most frequently used method to do so is the standardized mean difference. Unfortunately, the standardized mean difference is even more difficult to interpret clinically. However, there are validated methods to make these measures easier to understand and apply clinically. This presentation explores these issues and offers a resource to help make these continuous measures more clinically useful.

Results Different methods to amplify the clinical use of continuous outcome measures have been discussed for at least three decades now, some better known than others. These methods seek to estimate the proportion of patients expected to achieve a specified degree of benefit or harm based on the observed continuous outcome. Exploring the strengths, limitations, and judicious use of these methods facilitates a greater understanding of how continuous outcomes data might be usable for clinical and shared decision-making. Of the methods that have been validated for this purpose, approximated and observed estimates of the proportion of people who achieved a specified degree of change in the continuous outcome measure have shown considerable consistency.

Conclusions Although not necessarily a panacea, methods facilitating conversion of continuous outcomes data to proportions of people expected to achieve a specified degree of benefit adds considerably to our ability to make sense and clinical use of continuous outcome measures. As such, when these

methods are used appropriately, they add substantially to our evidence-based medicine and shared decision-making ‘toolkit’.

6 VACCINE INJURY REDRESS PROGRAMMES: A SYSTEMATIC INTEGRATIVE REVIEW

Martin Keane, Tonya Moloney, Caitriona Lee, Michael O’Sullivan, Jean Long. *Health Research Board, Dublin, Ireland*

10.1136/bmjebm-2019-EBMLive.14

Objectives This review investigated the design features of vaccine injury redress programmes that are thought to impact on the operating costs, timely access to compensation, number of applicants, and the volume and costs of awards. In addition, we ascertained if such programmes enjoy public acceptance. Vaccine injury redress programmes are available in 20 jurisdictions; only 11 jurisdictions have completed detailed papers on their set up and operation, namely, China, Denmark, Finland, Japan, Korea, Norway, New Zealand, Sweden, Taiwan, UK, and USA.

Method We chose the Integrative Review approach to synthesise an array of theoretical and empirical data to answer our questions. We searched in MEDLINE, CINAHL, Scopus, Web of Science, Cochrane Library, HeinOnline and LegalTrac. We identified 2,838 papers and selected 33 papers that provided relevant data to answer at least one of our questions. We developed a conceptual schema based on key design features of vaccine injury redress programmes to code and extract data. The design features identified were: approach, administrator, funding source, vaccines covered, injuries covered, claims and decisionmaking process, standard of proof, litigation rights, costs awarded, and cost controls. We analysed the data using the constant comparative method as none of the papers included in our review asked either the same or similar questions to ours.

Results The treatment injury compensation scheme in New Zealand and the drug injury scheme in the four Nordic countries have improved access to compensation by removing the concept of negligence and lowering the standard of proof required. Removing negligence has also reduced administrative and legal costs in the five countries. Public awareness of and support for the scheme is high in New Zealand and it has buy-in from physicians. The schemes in these five countries are aligned to national employment insurance schemes and publicly funded health care.

The USA, UK and four countries in Asia operate standalone vaccine injury redress programmes. The USA, UK and China employs a strict standard of proof which reduces timely access to redress and keeps the approval rate for claims low. Korea and Taiwan operate a more relaxed standard of proof, and Taiwan resolves claims in a timely fashion. In Japan, higher compensation is awarded to claimants judged to have protected ‘the herd immunity’.