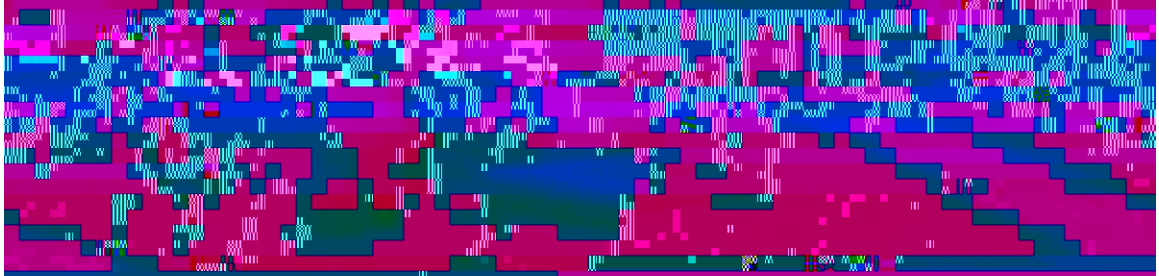


LEAHY COMMUNITY HEALTH AND FAMILY CENTER

PRO BONO

NEW PATIENT REFERRALS

NEW PATIENT REFERRALS



Leahy Community Health and Family Center is seeking qualified individuals to provide pro bono services. We are currently accepting referrals for various medical specialties, including but not limited to: Internal Medicine, Pediatrics, Geriatrics, and Behavioral Health. Our center is committed to providing high-quality, accessible care to our community, and we believe that the expertise of our pro bono providers is essential to our mission. If you are interested in providing pro bono services, please contact our Referral Coordinator at (617) 552-1234 or email us at referrals@leahyhealth.org. We look forward to hearing from you.

For more information, visit our website at www.leahyhealth.org. We are a 501(c)(3) organization and all services are provided on a non-profit basis. Thank you for your interest in supporting our community's health and well-being.

Schedule of Events

Introduction: Dr. Tracey L. Collins

Group 1:

Effectiveness of Gait Interventions in Improving Gait in Adults with Ataxia: A Systematic Review

Lauren Bonitz, Megan Fasano, Meghan Goyden, Caroline Segota, Dr. Jennifer Schwartz

Group 2:

The Effects of Blood Flow Restriction Therapy on Physical Performance in Adults as Compared to Standard Physical Exercise and Control Groups: A Systematic Review

Omar Amer, Berta Carmo, Dannylyn Manabat, Jonathan L. Mayes, Dr. Peter Leininger

Group 3:

The Impact of Home Health Care on Cost Effectiveness Compared to Other Post-Acute Settings in Individuals Status Post Total Joint Arthroplasty: A Systematic Review

William Cavanaugh, John Huller, Nicholas Mullery, Joseph Pichiarello, Dr. Tracey L. Collins

Group 4:

The Effects of Intramuscular FES on Objective Gait Measures in Adult Patients with Chronic Stroke: A Systematic Review

Levi Haldeman, Lisa Jackowitz, Aaron Oquendo, Matthew Wells, Dr. Renee M Hakim

Group 5:

The Effect of Transcranial Direct Current Stimulation on Balance and Mobility in Children with Cerebral Palsy: A Systematic Review

Courtney Jo James, Danielle Frank, Krista Ziegler, Sarah Kosik, Dr. Nicholas Rodio, Dr. Renee M. Hakim

Individual Research

The Use of Cognitive Behavioral Therapy on Patients with Chronic Pain in Home Health Physical Therapy: A Systematic Review

Maura McGowan, Dr. Tracey L. Collins

SHORT BREAK

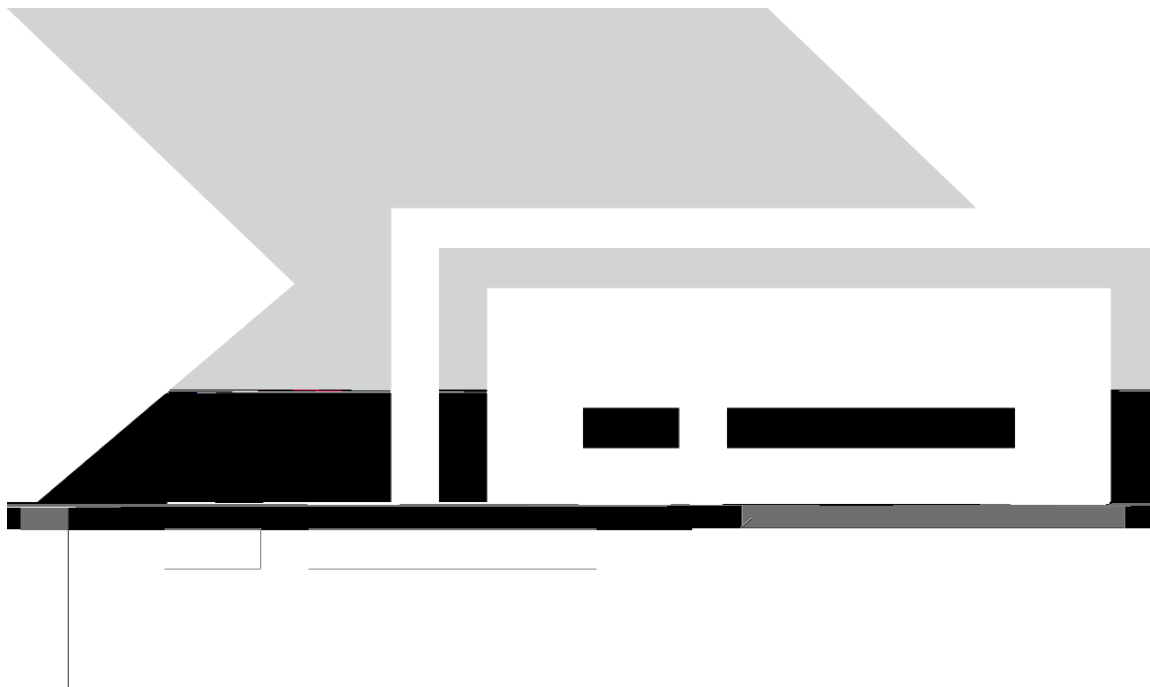
MINORS Scale

Table 1. The revised and validated version of MINORS

Methodological quality of non-randomized comparative studies	Score
1. A clearly stated aim (the question addressed should be precise and relevant in the context of current literature)	
2. Inclusion of consecutive patients; all patients potentially fit for inclusion (the criteria for inclusion or exclusion should be stated)	
3. Description of the interventions and comparisons	
4. Description of the outcomes and measures used	
5. Description of the setting and locations where the data were collected	
6. Description of the baseline characteristics of the participants	
7. Description of the methods used to derive the final sample	
8. Description of the methods used to measure the outcomes and measures	
9. Description of the methods used to analyze the data	
10. Description of the methods used to assess the risk of bias	
11. Description of the methods used to assess the quality of the evidence	
12. Description of the methods used to assess the impact of the findings	
13. Description of the methods used to assess the generalizability of the findings	
14. Description of the methods used to assess the applicability of the findings	
15. Description of the methods used to assess the acceptability of the findings	
16. Description of the methods used to assess the feasibility of the findings	
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100. Description of the methods used to assess the acceptability of the findings	

The items are scored 0 (not reported), 1 (reported but inadequate), or 2 (reported and adequate).

MINORS is a valid instrument designed to assess the methodological quality of non-randomized studies, whether comparative or non-comparative.



Title: Effectiveness of Gait Interventions in Improving Gait in Adults with Ataxia: A Systematic Review

Authors: Lauren Bonitz, SPT; Megan Fasano, SPT; Meghan Goyden, SPT Caroline Segota, SPT; and Jennifer Schwartz, PT, DPT, Board-Certified Clinical Specialist in Neurologic Physical Therapy

Purpose/hypothesis: The purpose of this study was to determine the most effective gait intervention to improve gait in patients with ataxia.

Summary of methods: A literature search (2008-2018) of CINAHL, Health Source: Nursing/Academic Edition, MEDLINE/PubMed, and ProQuest was conducted using the search terms: ataxia AND (gait training or locomotion training or gait rehabilitation). Search limits: English, human subjects and peer reviewed. Selection criteria: adults (> 18 years) with ataxia, objective gait measures, and gait intervention. Two reviewers independently assessed each study for methodologic quality and reached consensus using Sackett guidelines.

Results: 55 articles were evaluated for eligibility, yielding 9 studies after application of selection criteria. Sackett levels ranged from IB-V (1 RCT, 3 pre-post design, 5 case reports). Studies included subjects with ataxia (ages 19-81) due to: acquired brain injury (TBI, CVA or infection) or degenerative cerebellar changes. Samples ranged from 1-19 participants (n=58). Interventions included: treadmill training, body weight support, dynamic gait training, auditory cueing, and conventional gait training

Title: The effects of blood flow restriction therapy on physical performance in adults as compared to standard physical exercise and control groups: Systematic review.

Authors: Omar Amer SPT, Berta Carmo SPT, Jonathan L. Mayes SPT, Dannylyn Manabat SPT, Peter M. Leininger PT, PhD, OCS

Purpose/Hypothesis: The purpose of this systematic review was to determine the effects of blood flow restriction therapy (BFRT) on physical performance in adults as compared to standard exercise protocol or no exercise.

Materials/Methods: A literature search of ProQuest, PubMed, Cochrane Library, CINAHL, and Google Scholar included search terms: (Blood Flow Restriction OR BFR OR Blood Flow Occlusion OR Blood Flow Restriction Therapy OR BFRT) AND (adults) AND (walking OR ambulating OR ambulation OR gait). Search Limits: peer-reviewed studies (2008-2018), English, and human subjects. Selection criteria: otherwise healthy (excluded: history of blood clots, cardiovascular disease, peripheral vascular disease, smoking, etc.) adults < 45 years, BFR training, physical performance and/or mobility and/or strength outcomes, and RCTs. Two reviewers independently assessed each article for methodological quality and came to consensus based on PEDro guidelines.

Results: A total of 968 articles were screened for eligibility and 5 articles met selection criteria. PEDro scores were all 6/10. Sample sizes ranged from 18-37 participants (121 total; aged 50-80 years). BFRT intervention ranged from 18 to 40 total sessions (10-45 min) over 6 to 10 weeks duration for 3-5 times/week. Blood flow restriction was applied (4 studies with LE and 1 study with UE) with pressure ranging from 96-240 mmHg. Outcome measures assessed physical performance (TUG, 30 sec sit-stand, biodex system, 1 repetition (rep) max (1RM)). All 4 studies that measured the TUG showed statistically significant improvement with BFRT (3 comparing BFRT to control and 1 comparing BFRT to high intensity training (HIT) and control). All 4 studies that measured the 30 sec sit-stand showed statistically significant improvement with BFRT (3 comparing BFRT to control and 1 comparing BFRT to HIT and control). All 3 studies that analyzed strength demonstrated improvements with BFRT compared to control groups.

Conclusions: There is moderate to strong evidence in support of BFRT to improve physical performance in adults.

Limitations included small samples sizes, TUG distance variations, inability to blind subject, assessor, and therapists, and differences in BFR parameters. Future RCTs should focus on determining the optimal parameters (frequency, duration, intensity) and long-term effects of BFRT, would prove enlightening.

Clinical Relevance: Clinicians should consider BFRT with selected adults to improve physical performance. Studies reviewed demonstrated improved physical performance with reductions in the TUG times and increased reps in the 30 sec sit-stand test demonstrating efficacy of BFRT in reducing fall risk and improving ADL's. It is imperative that thorough screening to ensure safety and appropriate use of device is conducted prior to BFRT, in the adult population. Blood flow restriction walking is a low-load alternative to resistance training for improving physical performance in older adults who are contraindicated to high-load resistance training.

Title: The Impact of Home Health Care on Cost Effectiveness Compared to Other Post-Acute Settings in Individuals Status Post Total Joint Arthroplasty: A Systematic Review

Authors:

Article Authors	MINORS Score	
Mahomed N et al ³	21/24	Mean: 14.6/24 Range: 10/24 – 21/24
Sigurdsson E et al ⁴	20/24	
Ramos NL et al ⁵	14/24	
Sabeh KG et al ⁶	13/24	
Ponnusamy KE et al ⁷	13/24	
Bozic KJ et al ⁸	11/24	
Slover JD et al ⁹	10/24	

Title: The Effects of Intramuscular FES on Objective Gait Measures in Adult Patients with Chronic Stroke: A

PEDro Scale

Title: The Effect of Transcranial Direct Current Stimulation on Balance and Mobility in Children with Cerebral Palsy: A Systematic Review

Authors:

Title:

MINORS Scoring

Category	Bach et al	Beissner et al	Carrington Reid et al	Cederbom et al
Clearly stated aim	2	2	2	2
Inclusion of consecutive patients	2	0	2	2
Prospective collection of data	1	1	2	2

Title: The Effect of Home Health Care in Reducing Hospital Readmissions: A Systematic Review

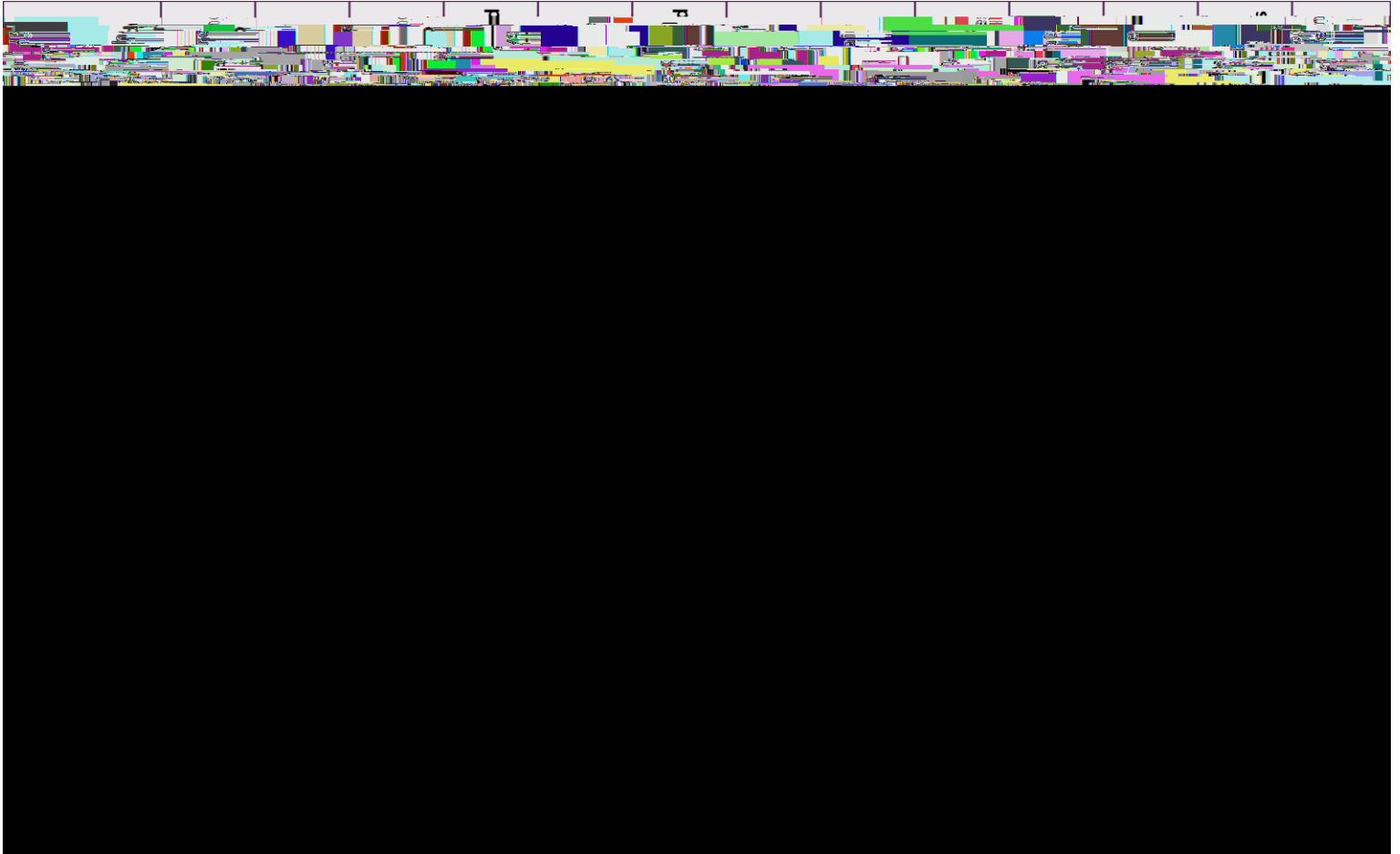
Authors: McGraw, Lindsay; Collins, Tracey

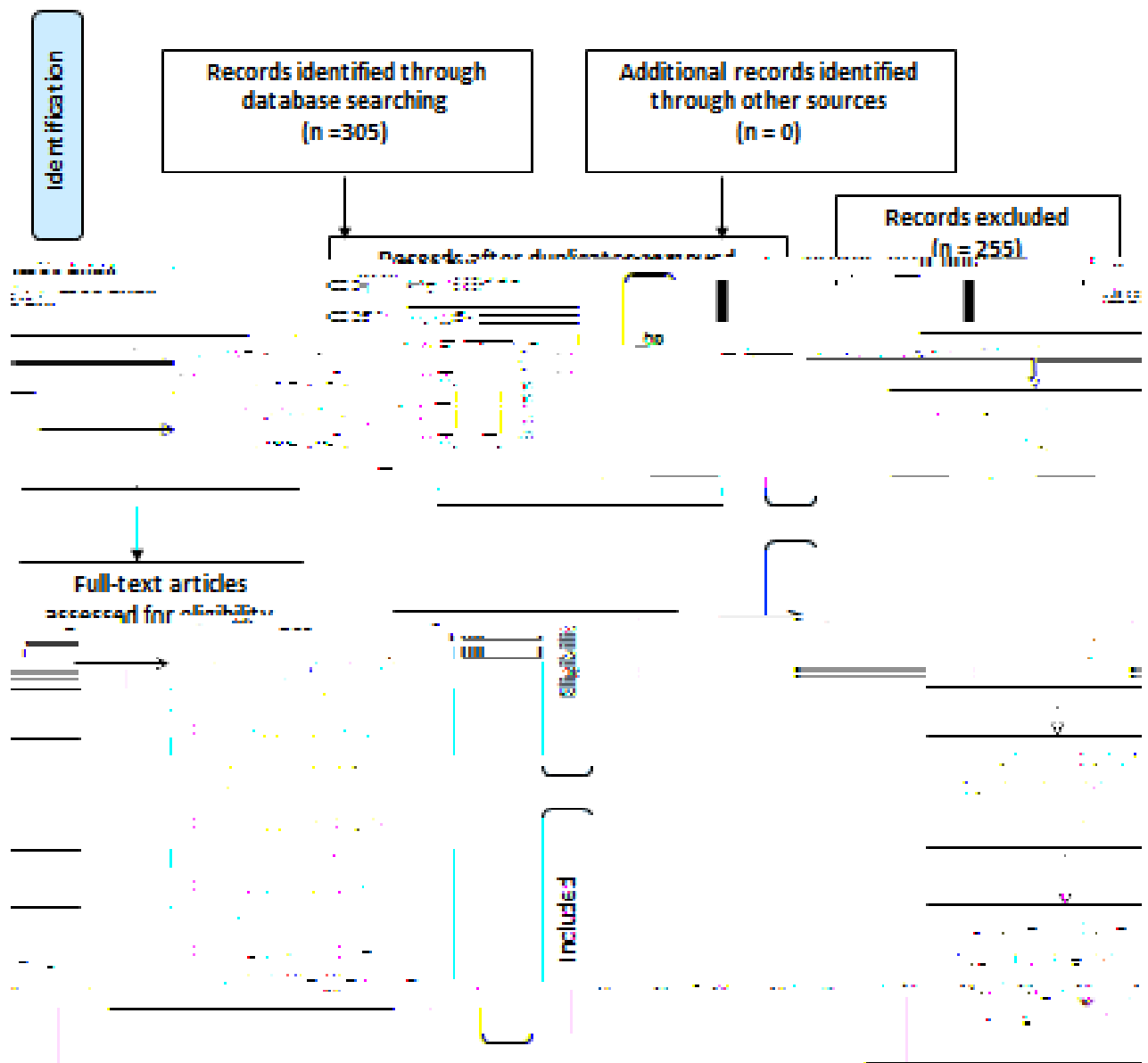
Purpose/Hypothesis: The purpose of this systematic review was to determine if home health care was effective in reducing hospital readmissions in adults.

Materials/Methods: A literature search (2008-2018) was conducted in CINAHL, HealthSource: Nursing/Academic Edition, PubMed, and ProQuest Central databases using search terms: (home care or home health) and (rehospitalization or readmission or hospital readmission) and (physical therapy or physiotherapy or rehabilitation) Search limits: English, peer-reviewed and humans. Selection criteria: adults over 18 y/o and primary outcomes of hospital readmission. One reviewer independently assessed each article for methodological quality using the MINOR's scale guidelines.

Results: A total of 365 articles were screened for eligibility. Following detailed appraisals, 5 studies met the selection criteria. MINOR scores ranged from 15/24 to 17/24 with an avg of 15.6. Sample size ranged from 68-1348 (2,940 total) with mean age of patients of p(

Minors Scale





Article Citation	Study Design	Sackett Score
Cordingly et al. ³	Retrospective chart review	4
Dematteo et al. ⁴	Cross-sectional study	2b
Leddy JJ et al. ⁵	Prospective randomized controlled trial	1b
Darling SR et al. ⁶	Retrospective chart review	4
Kozlowski et al. ⁷	Cross-sectional study	2b
Leddy et al. ⁸	Prospective case series	4

Baily NF⁹



Title: Effects of Combined Skilled Aquatic and Land Based Therapy Compared to Land Therapy Alone on Balance and Gait in Adults After a Stroke: A Systematic Review

Authors: Suchocki, Emily; Manzo, Megan; Vitolo, Gianna; Smith, Colleen; Leininger, Peter.

Purpose/Hypothesis: The purpose of this systematic review is to compare the effects of skilled aquatic therapy combined with land based therapy (AT/LBT) to land based therapy (LBT) on physical function in adults that have experienced a cerebrovascular accident CVA.

Materials/Methods: A literature search was done using MEDLINE/PubMed, CINAHL, ProQuest, Cochrane Library and hand-searching. Search terms included (“aquatic therapy” or “water therapy” or hydrotherapy or “water-based therapy” or “water exercise” or “aquatic exercise”) AND (“cerebrovascular accident” or CVA or stroke). Search limits: peer-reviewed studies (2008-2018), English and human subjects. Selection criteria: adults at least 18 years old, following a CVA, no other neurological conditions, and therapy provided by a “skilled” or licensed PT or OT. Two reviewers independently assessed each article for methodological

Title: The Effect of Virtual Reality Training on Balance and Mobility in Adults with Moderate to Severe Traumatic Brain Injury: A Systematic Review

Authors:

PEDro Scores

Random Allocati on	Conceale d Allocatio n	Baseline Comparis on	Blind Subjec ts	Blind Therapis ts	Blind Assessor s
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