**Coronary Care Update**

**April 2024**

# Welcome to the latest copy of the Coronary Care Update. The aim of this publication is to bring together a range of recently published research and guidance that will help you make evidence-based decisions.

**Accessing Articles**

The following abstracts are taken from a selection of recently published articles.

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Please contact Holly if you would like more information, or further evidence searches: holly.cook3@nhs.net.

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# Updates to Nice guidance: Sept 2023 🡪

**Temperature control to improve neurological outcomes after cardiac arrest**

Interventional procedures guidance [IPG782]

*Published: 23 January 2024*

<https://www.nice.org.uk/guidance/ipg782>

**Cardiovascular disease: risk assessment and reduction, including lipid modification**

NICE guideline [NG238]

*Published: 14 December 2023*

<https://www.nice.org.uk/guidance/ng238>

**Percutaneous thrombectomy for intermediate-risk or high-risk pulmonary embolism**

Interventional procedures guidance [IPG778]

*Published: 29 November 2023*

<https://www.nice.org.uk/guidance/ipg778>

**Empagliflozin for treating chronic heart failure with preserved or mildly reduced ejection fraction**

Technology appraisal guidance, Reference number:TA929

*Published: 01 November 2023*

<https://www.nice.org.uk/guidance/ta929>

**Algorithm-based remote monitoring of heart failure risk data in people with cardiac implantable electronic devices**

In development [GID-DG10080]

*Expected publication date: 22 August 2024*

<https://www.nice.org.uk/guidance/indevelopment/gid-dg10080>

**Sebelipase alfa for treating lysosomal acid lipase deficiency that is not Wolman disease (terminated appraisal)**

Technology appraisal, Reference number:TA961

*Published: 28 March 2024*

<https://www.nice.org.uk/guidance/ta961>

**Sebelipase alfa for treating Wolman disease**

Highly specialised technologies guidance, Reference number:HST30

*Published: 10 January 2024*

<https://www.nice.org.uk/guidance/hst30>

**Intravascular lithotripsy for calcified arteries in peripheral arterial disease**

Interventional procedures guidance [IPG780]

*Published: 03 January 2024*

<https://www.nice.org.uk/guidance/ipg780>

**Percutaneous deep venous arterialisation for chronic limb-threatening ischaemia**

Interventional procedures guidance [IPG773]

*Published: 18 October 2023*

<https://www.nice.org.uk/guidance/ipg773>

**Artificial intelligence (AI)-derived software to help clinical decision making in stroke**

Diagnostics guidance [DG57]

*Published: 23 January 2024*

<https://www.nice.org.uk/guidance/dg57>

**Percutaneous transarterial carotid artery stent placement for asymptomatic extracranial carotid stenosis**

Interventional procedures guidance [IPG777]

*Published: 22 November 2023*

<https://www.nice.org.uk/guidance/ipg777>

**Stroke rehabilitation in adults**

NICE guideline [NG236]

*Published: 18 October 2023*

<https://www.nice.org.uk/guidance/ng236>

**CYP2C19 genotype testing to guide clopidogrel use after ischaemic stroke or transient ischaemic attack**

In development [GID-DG10054]

*Expected publication date: 10 July 2024*

<https://www.nice.org.uk/guidance/indevelopment/gid-dg10054>

**Tafamidis for treating transthyretin amyloidosis with cardiomyopathy [ID6327]**

In development [GID-TA11389]

*Expected publication date: 12 June 2024*

<https://www.nice.org.uk/guidance/indevelopment/gid-ta11389>

**Bicaval valve implantation for tricuspid regurgitation**

Awaiting development [GID-IPG10344]

*Expected publication date: 21 August 2024*

<https://www.nice.org.uk/guidance/awaiting-development/gid-ipg10344>

**Transcatheter heart valves for transcatheter aortic valve implantation in people with aortic stenosis: Late stage assessment**

In development [GID-HTE10027]

*Expected publication date: 18 September 2024*

<https://www.nice.org.uk/guidance/indevelopment/gid-hte10027>

# Selection of papers from Medline and CINAHL (most recent first)

1. Telemedicine and patients with heart failure: evidence and unresolved issues
**Item Type:**Journal Article

**Authors:** Accorsi, Tarso Augusto Duenhas;Santos, Gabriela Guimarães Rodrigues Dos;Nemoto, Renato Paladino;Moreira, Flavio Tocci;De Amicis, Karine;Köhler, Karen Francine;Cordioli, Eduardo and Pedrotti, Carlos Henrique Sartorato

**Publication Date:**2024

**Journal:**Einstein (Sao Paulo, Brazil) 22, pp. eRW0393

**Abstract: Background:** Heart failure is the leading cause of cardiac-related hospitalizations. Limited access to reevaluations and outpatient appointments restricts the application of modern therapies. Telemedicine has become an essential resource in the healthcare system because of its countless benefits, such as higher and more frequent appointments and faster titration of medications. This narrative review aimed to demonstrate the evidence and unresolved issues related to the use of telemedicine in patients with heart failure. No studies have examined heart failure prevention; however, several studies have addressed the prevention of decompensation with positive results. Telemedicine can be used to evaluate all patients with heart failure, and many telemedicine platforms are available. Several strategies, including both noninvasive (phone calls, weight measurement, and virtual visits) and invasive (implantable pulmonary artery catheters) strategies can be implemented. Given these benefits, telemedicine is highly desirable, particularly for vulnerable groups. Although some questions remain unanswered, the development of new technologies can complement remote visits and improve patient care.

**Access or request full text:**<https://libkey.io/10.31744/einstein_journal/2024RW0393>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38451690&custid=ns023446>

2. Development and effects of advanced cardiac resuscitation nursing education program using web-based serious game: application of the IPO model
**Item Type:**Journal Article

**Authors:** Baek, Gyuli and Lee, Eunju

**Publication Date:**2024

**Journal:**BMC Nursing 23(1), pp. 1-11

**Abstract: Background:** The significant rise in cardiac arrest cases within hospitals, coupled with a low survival rate, poses a critical health issue. And in most situations, nurses are the first responders. To develop nursing students' competencies in advanced cardiopulmonary resuscitation, systematic and repetitive learner-centered self-directed education that can promote the integration of knowledge and practice is necessary. **Objectives:** To develop an advanced cardiopulmonary resuscitation training program using a web-based serious game for nursing students and verifying its efficacy. **Design:** The program was developed based on the stages of analysis, design, development, implementation, and evaluation, and the Input Process Outcome Model of Serious Game Design formed the theoretical basis. **Settings and participants:** The research design employed a before-and-after non-equivalent control group, and data collection took place among 2nd and 3rd year nursing students at K University in D City, Korea, from March 2, 2023, to March 24, 2023. **Methods:** The program consisted of a 120-min video lecture, 30 min of a web-based serious game, 30-min of written self-reported debriefing, and individual feedback using a video conference system. The effectiveness of the program was measured for both groups using an 89-item structured questionnaire regarding knowledge, confidence in performance, problem-solving ability, and learning transfer expectations. **Results:** The program was effective in improving nursing students' advanced cardiopulmonary knowledge, confidence in performance, problem-solving ability, and learning transfer expectation immediately after intervention. **Conclusions:** This program underscores the necessity of a new direction in nursing education, emphasizing learner-centered approaches, rather than the traditional focus on the mere transmission of basic knowledge and skills, to cultivate nurses with advanced cardiopulmonary resuscitation capabilities.

**Access or request full text:**<https://libkey.io/10.1186/s12912-024-01871-7>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=176300503&custid=ns023446>

3. Exploring the training needs of inherited cardiac conditions (ICC) nurses: Elucidating role boundaries and competencies for practice in the genomics era
**Item Type:**Journal Article

**Authors:** Braddel, Amy and Watson, Melanie

**Publication Date:**2024

**Journal:**Journal of Genetic Counseling 33(1), pp. 197-205

**Abstract:**Nurses represent the largest professional group within the National Health Service (NHS) and are therefore central to the successful integration of mainstreaming genomics into routine healthcare. Inherited cardiac conditions (ICC) nurse roles have been developed in recent years to streamline the care for patients and families affected by an ICC. Like many nurse specialists, ICC nurses' prior exposure to genomics and the wider implications surrounding inherited conditions is limited. The aim of the study was to explore the education needs and support required for ICC nurses to fulfill their role within the genomic medicine era. A convenience sampling approach was adopted to invite ICC nurses working within various NHS Trusts across the United Kingdom to take part. Semi‐structured interviews were conducted with ICC nurses (n = 8), which were recorded, transcribed, coded, and analyzed using an inductive thematic analysis approach. Analysis of interview data highlighted four core themes, which were transferrable core competencies; managing genomic information; mixed‐modality learning; defining multidisciplinary team boundaries. The study highlights areas for further training and demonstrates the importance of defining competencies and role boundaries within ICC services. The ICC nurses identified the limits of their practice and the complementary role of genetic counselors, indicating the need for both professions within the ICC service and proposing implications for practice.

**Access or request full text:**<https://libkey.io/10.1002/jgc4.1825>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=175799618&custid=ns023446>

4. Getting the message across; a realist study of the role of communication and information exchange processes in delivering stroke Early Supported Discharge services in England
**Item Type:**Journal Article

**Authors:** Chouliara, Niki;Cameron, Trudi;Byrne, Adrian and Fisher, Rebecca

**Publication Date:**2024

**Journal:**PloS One 19(3), pp. e0298140

**Abstract: Background**: Stroke early supported discharge (ESD) involves the co-ordinated transfer of care from hospital to home. The quality of communication processes between professionals delivering ESD and external stakeholders may have a role to play in streamlining this process. We explored how communication and information exchange were achieved and influenced the hospital-to-home transition and the delivery quality of ESD, from healthcare professionals' perspectives.; **Methods:** Six ESD case study sites in England were purposively selected. Under a realist approach, we conducted interviews and focus groups with 117 staff members, including a cross-section of the multidisciplinary team, service managers and commissioners.; **Results:** Great variation was observed between services in the type of communication processes they employed and how organised these efforts were. Effective communication between ESD team members and external stakeholders was identified as a key mechanism driving the development of collaborative and trusting relationships and promoting coordinated care transitions. Cross-boundary working arrangements with inpatient services helped clarify the role and remit of ESD, contributing to timely hospital discharge and response from ESD teams. Staff perceived honest and individualised information provision as key to effectively prepare stroke survivors and families for care transitions and promote rehabilitation engagement. In designing and implementing ESD, early stakeholder involvement ensured the services' fit in the local pathway and laid the foundations for communication and partnership working going forward.; **Conclusions:** Findings highlighted the interdependency between services delivering ESD and local stroke care pathways. Maintaining good communication and engagement with key stakeholders may help achieve a streamlined hospital discharge process and timely delivery of ESD. ESD services should actively manage communication processes with external partners. A shared cross-service communication strategy to guide the provision of information along to continuum of stroke care is required. Findings may inform efforts towards the delivery of better coordinated stroke care pathways.; **Competing Interests:** The authors have declared that no competing interests exist. (Copyright: © 2024 Chouliara et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:**<https://libkey.io/10.1371/journal.pone.0298140>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38457416&custid=ns023446>

5. The effect of obligatory Padua prediction scoring in hospitalized medically ill patients: A retrospective cohort study
**Item Type:**Journal Article

**Authors:** Drozdinsky, Genady;Zusman, Oren;Kushnir, Shiri;Leibovici, Leonard and Gafter-Gvili, Anat

**Publication Date:**2024

**Journal:**PloS One 19(2), pp. e0292661

**Abstract: Background:** Venous thromboembolism (VTE) is considered a preventable cause of mortality. The evidence for the benefit of VTE prophylaxis in acute medical patients is non-conclusive. Meta-analysis of RCTs failed to demonstrate reduction of all-cause mortality, while showing higher risk of bleeding. The Israeli Ministry of Health has instructed to assess all acute medical patients for the risk for VTE using the Padua Prediction Score, without mandating prophylaxis.; **Aim:** To evaluate the effect of filling the Padua score on clinical outcomes and VTE prophylaxis rates.; **Methods**: Retrospective Study was performed in Israel during the years 2014-2017. The participants were divided to Padua compliance vs non-compliance group. Primary outcome: 30-day mortality. Secondary outcomes: 90-day incidence of VTE and suspected major bleeding. A propensity-weighted logistic multiple regression was performed.; **Results:** 18,890 patients were included in the study. The fulfillment of the Padua score was associated with an increased use of VTE prophylaxis, OR 1.66 (95% CI 1.49-1.84). However, there was no reduction of mortality or VTE events, OR 1.13 (95% CI 0.97-1.31) and OR 1.22 (95% CI 0.79-1.8) respectively. Hospitalizations related to hemoglobin decrease were not statistically different between the two groups.; **Conclusions:** Padua score for the assessment of VTE risk in medical wards was associated with higher administration of pharmacological prophylaxis without reduction in VTE or mortality rate. Its usage should be reassessed as a performance measure.; Competing Interests: The authors have declared that no competing interests exist. (Copyright: © 2024 Drozdinsky et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:**<https://libkey.io/10.1371/journal.pone.0292661>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38324562&custid=ns023446>

6. Cardiac Arrest-Associated Coagulopathy Could Predict 30-day Mortality: A Retrospective Study from Medical Information Mart for Intensive Care IV Database
**Item Type:**Journal Article

**Authors:** Duan, Jingwei;Ge, Hongxia;Fan, Wenyang;Du, Lanfang;Zhang, Hua;Jiamaliding, Ayijiang;Duan, Baomin and Ma, Qingbian

**Publication Date:**2024

**Journal:**Clinical and Applied Thrombosis/Hemostasis : Official Journal of the International Academy of Clinical and Applied Thrombosis/Hemostasis 30, pp. 10760296231221986

**Abstract: Background:** Cardiac arrest (CA) can activate the coagulation system. Some coagulation-related indicators are associated with clinical outcomes. Early evaluation of patients with cardiac arrest-associated coagulopathy (CAAC) not only predicts clinical outcomes, but also allows for timely clinical intervention to prevent disseminated intravascular coagulation.; **Objective:** To assess whether CAAC predicts 30-day cumulative mortality.; **Methods:** From the Medical Information Mart for Intensive Care IV (MIMIC-IV) database, we conducted a retrospective cohort study from 2008 to 2019. Based on international normalized ratio (INR) value and platelet count, we diagnosed CAAC cases and made the following stratification of severity: mild CAAC was defined as 1.4 > INR≧1.2 and 100,000/µL  INR≧1.4 or 80,000/µL < platelet count≦100,000/µL; severe CAAC was defined as an INR≧1.6 and platelet count≦80,000/µL.; **Results:** A total of 1485 patients were included. Crude survival analysis showed that patients with CAAC had higher mortality risk than those without CAAC (33.0% vs 52.0%, P  < 0.001). Unadjusted survival analysis showed an incremental increase in the risk of mortality as the severity of CAAC increased. After adjusting confounders (prehospital characteristics and hospitalization characteristics), CAAC was independently associated with 30-day mortality (hazard rate HR] 1.77, 95% confidence interval CI] 1.41-2.25; P  < 0.001); moderate CAAC (HR 1.48, 95% CI 1.09-2.10; P  = 0.027) and severe CAAC (HR 2.22, 95% CI 1.64-2.97; P  < 0.001) were independently associated with 30-day mortality.; **Conclusion:** The presence of CAAC identifies a group of CA at higher risk for mortality, and there is an incremental increase in risk of mortality as the severity of CAAC increases. However, the results of this study should be further verified by multicenter study.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Access or request full text:**<https://libkey.io/10.1177/10760296231221986>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38196194&custid=ns023446>

7. PATHFINDER-CHD: prospective registry on adults with congenital heart disease, abnormal ventricular function, and/or heart failure as a foundation for establishing rehabilitative, prehabilitative, preventive, and health-promoting measures: rationale, aims, design and methods

**Item Type:**Journal Article

**Authors:** Freilinger, Sebastian;Kaemmerer, Harald;Pittrow, Robert D.;Achenbach, Stefan;Baldus, Stefan;Dewald, Oliver;Ewert, Peter;Freiberger, Annika;Gorenflo, Matthias;Harig, Frank;Hohmann, Christopher;Holdenrieder, Stefan;Hörer, Jürgen;Huntgeburth, Michael;Hübler, Michael;Kohls, Niko;Klawonn, Frank;Kozlik-Feldmann, Rainer;Kaulitz, Renate;Loßnitzer, Dirk, et al

**Publication Date:**2024

**Journal:**BMC Cardiovascular Disorders 24(1), pp. 181

**Abstract: Background:** Adults with congenital heart defects (ACHD) globally constitute a notably medically underserved patient population. Despite therapeutic advancements, these individuals often confront substantial physical and psychosocial residua or sequelae, requiring specialized, integrative cardiological care throughout their lifespan. Heart failure (HF) is a critical challenge in this population, markedly impacting morbidity and mortality.; **Aims:** The primary aim of this study is to establish a comprehensive, prospective registry to enhance understanding and management of HF in ACHD. Named PATHFINDER-CHD, this registry aims to establish foundational data for treatment strategies as well as the development of rehabilitative, prehabilitative, preventive, and health-promoting interventions, ultimately aiming to mitigate the elevated morbidity and mortality rates associated with congenital heart defects (CHD).; **Methods:** This multicenter survey will be conducted across various German university facilities with expertise in ACHD. Data collection will encompass real-world treatment scenarios and clinical trajectories in ACHD with manifest HF or at risk for its development, including those undergoing medical or interventional cardiac therapies, cardiac surgery, inclusive of pacemaker or ICD implantation, resynchronization therapy, assist devices, and those on solid organ transplantation.; **Design:** The study adopts an observational, exploratory design, prospectively gathering data from participating centers, with a focus on patient management and outcomes. The study is non-confirmatory, aiming to accumulate a broad spectrum of data to inform future hypotheses and studies.; Processes: Regular follow-ups will be conducted, systematically collecting data during routine clinical visits or hospital admissions, encompassing alterations in therapy or CHD-related complications, with visit schedules tailored to individual clinical needs.; **Assessments:** Baseline assessments and regular follow-ups will entail comprehensive assessments of medical history, ongoing treatments, and outcomes, with a focus on HF symptoms, cardiac function, and overall health status.; **Discussion of the Design:** The design of the PATHFINDER-CHD Registry is tailored to capture a wide range of data, prioritizing real-world HF management in ACHD. Its prospective nature facilitates longitudinal data acquisition, pivotal for comprehending for disease progression and treatment impacts.; **Conclusion:** The PATHFINDER-CHD Registry is poised to offer valuable insights into HF management in ACHD, bridging current knowledge gaps, enhancing patient care, and shaping future research endeavors in this domain. (© 2024. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1186/s12872-024-03833-y>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38532336&custid=ns023446>

8. Point-of-Care Arterio-Venous Fistula Ultrasound in the Outpatient Hemodialysis Unit—A Survey on the Nurses' Perspective
**Item Type:**Journal Article

**Authors:** Grosu, Iulia;Stirbu, Oana;Schiller, Adalbert;Gadalean, Florica and Bob, Flaviu

**Publication Date:**2024

**Journal:**Nursing Reports 14(1), pp. 353-361

**Abstract:**The preservation of complication-free arterio-venous fistulas (AVF) for long-term hemodialysis (HD) use is associated with better overall patient outcomes, which is why this is a current goal in any HD center. Point-of-care ultrasound (POCUS) for in-center AVF assessment has proven its benefits in the identification of vascular access (VA) complications and as an additional tool to avoid blind cannulation. The current study aims to assess the change in the HD nurses' perceptions regarding AVF POCUS use in the HD center. The nursing staff anonymously answered a Likert scale questionnaire with five questions related to various aspects of AVF POCUS utility shortly after the technique had been implemented and at a 5-year follow-up. The results showed an overall positive attitude toward this method, both at implementation and at follow-up, with no statistically significant score changes for four out of the five items assessed. However, we found a statistically significant reduction in the nurses' cannulation confidence scores at the 5-year follow-up (p < 0.01). Overall, AVF POCUS implementation is regarded as a useful tool, with major benefits both for the patient and for the medical team. The current study results aim to support the introduction of AVF POCUS assessment as a standard practice from the nursing staff's viewpoint. This study was not registered.

**Access or request full text:**<https://libkey.io/10.3390/nursrep14010027>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=176364816&custid=ns023446>

9. Provision of dietary education in UK-based cardiac rehabilitation: a cross-sectional survey conducted in conjunction with the British Association for Cardiovascular Prevention and Rehabilitation
**Item Type:**Journal Article

**Authors:** James, Emily;Butler, Tom;Nichols, Simon;Goodall, Stuart and O'Doherty, Alasdair,F.

**Publication Date:**2024

**Journal:**The British Journal of Nutrition 131(5), pp. 880-893

**Abstract:**Dietary education is a core component of cardiac rehabilitation (CR). It is unknown how or what dietary education is delivered across the UK. We aimed to characterise practitioners who deliver dietary education in UK CR and determine the format and content of the education sessions. A fifty-four-item survey was approved by the British Association for Cardiovascular Prevention and Rehabilitation (BACPR) committee and circulated between July and October 2021 via two emails to the BACPR mailing list and on social media. Practitioners providing dietary education within CR programmes were eligible to respond. Survey questions encompassed: practitioner job title and qualifications, resources, and the format, content and individual tailoring of diet education. Forty-nine different centres responded. Nurses (65·1 %) and dietitians (55·3 %) frequently provided dietary education. Practitioners had no nutrition-related qualifications in 46·9 % of services. Most services used credible resources to support their education, and 24·5 % used BACPR core competencies. CR programmes were mostly community based (40·8 %), lasting 8 weeks (range: 2-25) and included two (range: 1-7) diet sessions. Dietary history was assessed at the start (79·6 %) and followed up (83·7 %) by most centres; barriers to completing assessment were insufficient time, staffing or other priorities. Services mainly focused on the Mediterranean diet while topics such as malnutrition and protein intake were lower priority topics. Service improvement should focus on increasing qualifications of practitioners, standardisation of dietary assessment and improvement in protein and malnutrition screening and assessment.

**Access or request full text:**<https://libkey.io/10.1017/S0007114523002374>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37869978&custid=ns023446>

10. Clinical course of COPD patients with exercise-induced elevation of pulmonary artery pressure or less severe pulmonary hypertension presenting with respiratory symptoms and the impact of bosentan intervention-prospective, single-center, randomized, parallel-group study
**Item Type:**Journal Article

**Authors:** Kashiwada, Takeru;Tanaka, Yosuke;Tanaka, Toru;Okano, Tetsuya;Saito, Yoshinobu;Seike, Masahiro;Hino, Mitsunori;Kimura, Hiroshi and Gemma, Akihiko

**Publication Date:**2024

**Journal:**BMC Pulmonary Medicine 24(1), pp. 90

**Abstract: Background:** The data on bosentan were lacking for the treatment of exercise-induced elevation of pulmonary artery pressure (eePAP) or less severe PH in COPD. This study was conducted to investigate long-term efficacy and safety of bosentan for the treatment of eePAP or less severe PH in COPD.; **Methods:** COPD patients diagnosed at this hospital as having COPD (WHO functional class II, III or IV) with eePAP or less severe PH whose respiratory symptoms were stable but remained and gradually progressed even after COPD therapy were randomly assigned in a 1:1 ratio to receive either bosentan or no PH treatment for two years and assessed at baseline and every 6 months for respiratory failure, activities of daily living (ADL), lung and heart functions by right heart catheterization (RHC), and other parameters.; **Results:** A total of 29 patients who underwent RHC for detail examination were enrolled in the current study between August 2010 and October 2018.No death occurred in drug-treated group (n = 14) for 2 years; 5 patients died in untreated group (n = 15). Significant differences were noted between the 2 group in hospital-free survival (686.00 ± 55.87 days vs. 499.94 ± 53.27 days; hazard ratio HR], 0.18; P = 0.026) and overall survival (727 days vs. 516.36 ± 55.38 days; HR, 0.095; P = 0.030) in all causes of death analysis, but not in overall survival in analysis of respiratory-related death. Bosentan was not associated with increased adverse events including requiring O 2 inhalation.; **Conclusions:** This study suggested that the prognosis for COPD patients with eePAP or less severe PH presenting with respiratory symptoms was very poor and that bosentan tended to improve their prognosis and suppress ADL deterioration without worsening respiratory failure.; Trial Registration: This study was registered with UMIN-CTR Clinical Trial as UMIN000004749 . First trial registration at 18/12/2010. (© 2024. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1186/s12890-024-02895-0>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38368315&custid=ns023446>

11. Nurses’ motivation for performing cardiopulmonary resuscitation: a cross-sectional study
**Item Type:**Journal Article

**Authors:** Najafi, Mozhdeh;Yadollahi, Safoura;Maghami, Mahboobeh and Azizi-Fini, Ismail

**Publication Date:**2024

**Journal:**BMC Nursing 23(1), pp. 1-10

**Abstract: Background:** Nurse motivation can have a significant impact on the quality of cardiopulmonary resuscitation and the patients’ survival. Therefore, the present study aimed to examine nurses’ motivation for performing cardiopulmonary resuscitation. **Methods:** This cross-sectional study focused on 217 nurses in a teaching hospital in Iran, in 2023. A random sample of nurses was selected from four hospital departments (emergency, critical care, medical, and surgery). These nurses completed the demographic information and motivation for cardiopulmonary resuscitation questionnaires. The data were analyzed using Mann-Whitney, Spearman coefficients, and Kruskal-Wallis and multiple linear regression tests. **Results:** The mean score of the dimension of the feeling of achievement (4.10 ± 0.50) was high in the nurses’ motivation for performing cardiopulmonary resuscitation. There were more motivational factors in the emergency department compared to the other departments in terms of the feeling of achievement, high chance of success, low chances of success, recognition and appreciation, perceived importance, and beliefs (p < 0.05). The nurses who had participated in cardiopulmonary resuscitation workshops and had a bachelor’s degree had a higher mean score in the dimension of perceived importance (p < 0.05). The correlation coefficient showed that there was a significant negative correlation between the nurses’ frequency of participation in cardiopulmonary resuscitation and their motivation scores in the dimensions of the feeling of achievement(r=-0.170), low chances of success(r=-0.183), perceived importance (r = -0.302), and beliefs (r = -0.250; p < 0.05). The department variable predicted the motivation score in the dimensions of feeling of achievement, high chance of success, low chance of success, perceived importance, and beliefs. The sex variable predicted the motivation score in the dimensions of facilitator of resuscitation and high chance of success. Besides, the variable of years of membership in the CPR team predicted the motivation score in the feeling of achievement and high chance of success (p < 0.05). **Conclusion:** Nurses would be more motivated to perform a quality cardiopulmonary resuscitation if they had a feeling of success. The nurses’ motivation was affected by certain factors such as their department, sex, education level, years of membership in CPR team, number of participation in CPR, and participation in educational workshops.Key Points: • Despite the improvement in CPR guidelines, survival rates remain low. • A feeling of success in CPR increases nurses’ motivation. • A high level of motivation leads to high-quality CPR.

**Access or request full text:**<https://libkey.io/10.1186/s12912-024-01853-9>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=176087509&custid=ns023446>

12. Safe and promising outcomes of in-hospital preoperative rehabilitation for coronary artery bypass grafting after an acute coronary syndrome
**Item Type:**Journal Article

**Authors:** Nakamura, Ken;Arai, Shusuke;Kobayashi, Kimihiro;Nakai, Shingo;Sho, Ri;Ishizawa, Ai;Watanabe, Daisuke;Hirooka, Shuto;Ohba, Eiichi;Mizumoto, Masahiro;Kuroda, Yoshinori;Kim, Cholsu;Uchino, Hideaki;Shimanuki, Takao and Uchida, Tetsuro

**Publication Date:**2024

**Journal:**BMC Cardiovascular Disorders 24(1), pp. 139

**Abstract: Objective:** In patients with stable hemodynamic status after an acute coronary syndrome (ACS), coronary artery bypass grafting (CABG) after preoperative investigations can provide outcomes comparable to those of emergency surgery. However, no established guidelines exist regarding the preparation period before surgery. We report the results of the use of an inpatient cardiac rehabilitation program followed by CABG after an ACS to improve post-operative outcomes and prognosis after discharge.; **Methods:** From 2005 to 2017, 471 patients underwent either isolated or combined CABG at our institution, and of those, the 393 who received isolated CABG were included in the analysis. Twenty-seven patients (6.9%) were admitted with ACS and underwent preoperative rehabilitation before undergoing CABG, with a subsequent review of surgical morbidity and mortality rates. Propensity score matching yielded a cohort of 26 patients who underwent preoperative rehabilitation (group A) and 26 controls (group B). Preoperative characteristics were similar between groups.; **Results:** The completion rate of the rehabilitation program was 96.3%. All programs were conducted with inpatients, with an average length of stay of 23 ± 12 days. All patients completed in-bed exercises, and 85% completed out-of-bed exercises. The 30-day postoperative mortality was 0% in both groups A and B, and the rate of postoperative major adverse cardiac or cerebrovascular events at 12 months did not differ significantly between groups (7.7% vs 3.9%, respectively; p = 1.0). The duration of mechanical ventilation (1.3 ± 0.3 vs 1.5 ± 0.3 days, respectively; p = 0.633), length of intensive care unit stay (4.4 ± 2.1 vs 4.8 ± 2.3 days, respectively; p = 0.584) and length of hospital stay (25 ± 13 vs 22 ± 9 days, respectively; p = 0.378) did not differ significantly between groups.; **Conclusions:** No complications of preoperative rehabilitation were observed, suggesting that it is an acceptable option for patients who experience ACS and undergo CABG. These results are promising in offering more robust designs of future trials. (© 2024. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1186/s12872-024-03757-7>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38438846&custid=ns023446>

13. Cost Analysis of Remote Cardiac Rehabilitation Compared With Facility-Based Cardiac Rehabilitation for Coronary Artery Disease
**Item Type:**Journal Article

**Authors:** Oehler, Andrew C.;Holmstrand, Ericka C.;Zhou, Lulu;Harzand, Arash;Vathsangam, Harshvardhan;Kendall, Kellee;Gabriel, George and Murali, Srinivas

**Publication Date:**2024

**Journal:**The American Journal of Cardiology 210, pp. 266-272

**Abstract:**Remote cardiac rehabilitation (RCR) represents a promising, noninferior alternative to facility-based cardiac rehabilitation (FBCR). The comparable cost of RCR in US populations has yet to be extensively studied. The purpose of this prospective, patient-selected study of traditional FBCR versus a third-party asynchronous RCR platform was to assess whether RCR can be administered at a comparable cost and clinical efficacy to FBCR. Adult insured patients were eligible for enrollment after an admission for a coronary heart disease event. Patients selected either FBCR or Movn RCR, a 12-week telehealth intervention using an app-based platform and internet-capable medical devices. Clinical demographics, intervention adherence, cost-effectiveness, and hospitalizations at 1-year after enrollment were assessed from the Highmark claims database after propensity matching between groups. A total of 260 patients were included and 171 of those eligible (65.8%) received at least 1 cardiac rehabilitation session and half of the patients chose Movn RCR. The propensity matching produced a sample of 41 matched pairs. Movn RCR led to a faster enrollment and higher completion rates (80% vs 50%). The total medical costs were similar between Movn RCR and FBCR, although tended toward cost savings with Movn RCR ($10,574/patient). The cost of cardiac rehabilitation was lower in those enrolled in Movn RCR ($1,377/patient, p = 0.002). The all-cause and cardiovascular-related hospitalizations or emergency department visits in the year after enrollment in both groups were similar. In conclusion, this pragmatic study of patients after a coronary heart disease event led to equivalent total medical costs and lower intervention costs for an asynchronous RCR platform than traditional FBCR while maintaining similar clinically important outcomes.; Competing Interests: Declaration of Competing Interest Dr. Harzand received consultant fees from the study sponsor, Movn Health. Dr. Vathsangam holds an executive position for the study sponsor, Movn Health. Dr. Kendall receives financial support from Movn Health. Dr. Harzand reports a relation with Movn health that includes consulting or advisory. Dr. Vathsangam reports a relation with Movn Health that includes employment. The remaining authors have no competing interest to declare. (Copyright © 2023 Elsevier Inc. All rights reserved.)

**Access or request full text:**<https://libkey.io/10.1016/j.amjcard.2023.08.061>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37973439&custid=ns023446>

14. Championing nurse-led services for cardiology patients
**Item Type:**Journal Article

**Authors:** Pottle, Alison

**Publication Date:**2024

**Journal:**British Journal of Nursing 33(1), pp. 44-45

**Abstract:**Alison Pottle, Consultant Nurse, Cardiology, Harefield Hospital, London (A.P[ottle@rbht.nhs.uk](https://refworks.proquest.com/ottle%40rbht.nhs.uk)), was the winner of the Silver Award in the Cardiovascular Nurse of the Year Category in the BJN Awards 2023

**Access or request full text:**<https://libkey.io/10.12968/bjon.2024.33.1.44>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174690979&custid=ns023446>

15. Nurse-led intervention in the management of patients with cardiovascular diseases: a brief literature review
**Item Type:**Journal Article

**Authors:** Qiu, Xiaoqin

**Publication Date:**2024

**Journal:**BMC Nursing 23(1), pp. 1-9

**Abstract:**Coronary artery disease (CAD) is one among the major causes of mortality in patients all around the globe. It has been reported by the World Health Organization (WHO) that approximately 80% of cardiovascular diseases could be prevented through lifestyle modifications. Management of CAD involves the prevention and control of cardiovascular risk factors, invasive and non-invasive treatments including coronary revascularizations, adherence to proper medications and regular outpatient follow-ups. Nurse-led clinics were intended to mainly provide supportive, educational, preventive measures and psychological support to the patients, which were completely different from therapeutic clinics. Our review focuses on the involvement and implication of nurses in the primary and secondary prevention and management of cardiovascular diseases. Nurses have a vital role in Interventional cardiology. They also have major roles during the management of cardiac complications including congestive heart failure, atrial fibrillation and heart transplantation. Today, the implementation of a nurse-led tele-consultation strategy is also gaining positive views. Therefore, a nurse-led intervention for the management of patients with cardiovascular diseases should be implemented in clinical practice. Based on advances in therapy, more research should be carried out to further investigate the effect of nurse-led clinics during the long-term treatment and management of patients with cardiovascular diseases.

**Access or request full text:**<https://libkey.io/10.1186/s12912-023-01422-6>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174544666&custid=ns023446>

16. The effect of virtual interactive nurse-led support group intervention on fatigue, shock anxiety, and acceptance of implantable cardioverter defibrillator patients: a randomized trial
**Item Type:**Journal Article

**Authors:** Rambod, Masoume;Rohaninasab, Samira;Pasyar, Nilofar and Nikoo, Mohammad Hossein

**Publication Date:**2024

**Journal:**BMC Cardiovascular Disorders 24(1), pp. 1-10

**Access or request full text:**<https://libkey.io/10.1186/s12872-024-03713-5>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174759644&custid=ns023446>

17. 'The illness isn't the end of the road'-Patient perspectives on the initiation of and early participation in a multi-disease, community-based exercise programme
**Item Type:**Journal Article

**Authors:** Regan-Moriarty, Joanne;Hardcastle, Sarah;McCallion, Maire;Youell, Azura;Collery, Audrey;McCarren, Andrew;Moyna, Niall and Kehoe, Brona

**Publication Date:**2024

**Journal:**PloS One 19(3), pp. e0291700

**Abstract: Background:** Exercise is the cornerstone of cardiac rehabilitation (CR). Hospital-based CR exercise programmes are a routine part of clinical care and are typically 6-12 weeks in duration. Following completion, physical activity levels of patients decline. Multi-disease, community-based exercise programmes (MCEP) are an efficient model that could play an important role in the long-term maintenance of positive health behaviours in individuals with cardiovascular disease (CVD) following their medically supervised programme.; Aim: To explore patients experiences of the initiation and early participation in a MCEP programme and the dimensions that facilitate and hinder physical activity engagement.; **Methods:** Individuals with established CVD who had completed hospital-based CR were referred to a MCEP. The programme consisted of twice weekly group exercise classes supervised by clinical exercise professionals. Those that completed (n = 31) an initial 10 weeks of the programme were invited to attend a focus group to discuss their experience. Focus groups were transcribed and analysed using reflexive thematic analysis.; **Results:** Twenty-four (63% male, 65.5±6.12yrs) patients attended one of four focus groups. The main themes identified were 'Moving from fear to confidence', 'Drivers of engagement,' and 'Challenges to keeping it (exercise) up'.; **Conclusion:** Participation in a MCEP by individuals with CVD could be viewed as a double-edged sword. Whilst the programme clearly provided an important transition from the clinical to the community setting, there were signs it may breed dependency and not effectively promote independent exercise. Another novel finding was the use of social comparison that provided favourable valuations of performance and increased exercise confidence.; Competing Interests: The authors have declared that no competing interests exist. (Copyright: © 2024 Regan-Moriarty et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:**<https://libkey.io/10.1371/journal.pone.0291700>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38551937&custid=ns023446>

18. Impact of mental disorders on unplanned readmissions for congestive heart failure patients: a population-level study
**Item Type:**Journal Article

**Authors:** Sa, Zhisheng;Badgery-Parker, Tim;Long, Janet C.;Braithwaite, Jeffrey;Brown, Martin;Levesque, Jean-Frederic;Watson, Diane E.;Westbrook, Johanna I. and Mitchell, Rebecca

**Publication Date:**2024

**Journal:**ESC Heart Failure 11(2), pp. 962-973

**Abstract: Aims:** Reducing preventable hospitalization for congestive heart failure (CHF) patients is a challenge for health systems worldwide. CHF patients who also have a recent or ongoing mental disorder may have worse health outcomes compared with CHF patients with no mental disorders. This study examined the impact of mental disorders on 28 day unplanned readmissions of CHF patients.; **Methods and Results:** This retrospective cohort study used population-level linked public and private hospitalization and death data of adults aged ≥18 years who had a CHF admission in New South Wales, Australia, between 1 January 2014 and 31 December 2020. Individuals' mental disorder diagnosis and Charlson comorbidity and hospital frailty index scores were derived from admission records. Competing risk and cause-specific risk analyses were conducted to examine the impact of having a mental disorder diagnosis on all-cause hospital readmission. Of the 65 861 adults with index CHF admission discharged alive (mean age: 78.6 ± 12.1; 48% female), 19.2% (12 675) had at least one unplanned readmission within 28 days following discharge. Adults with CHF with a mental disorder diagnosis within 12 months had a higher risk of 28 day all-cause unplanned readmission hazard ratio (HR): 1.21, 95% confidence interval (CI): 1.15-1.27, P-value < 0.001], particularly those with anxiety disorder (HR: 1.49, 95% CI: 1.35-1.65, P-value < 0.001). CHF patients aged ≥85 years (HR: 1.19, 95% CI: 1.11-1.28), having ≥3 other comorbidities (HR: 1.35, 95% CI: 1.25-1.46), and having an intermediate (HR: 1.34, 95% CI: 1.28-1.40) or high (HR: 1.37, 95% CI: 1.27-1.47) frailty score on admission had a higher risk of unplanned readmission. CHF patients with a mental disorder who have ≥3 other comorbidities and an intermediate frailty score had the highest probability of unplanned readmission (29.84%, 95% CI: 24.68-35.73%) after considering other patient-level factors and competing events.; **Conclusions:** CHF patients who had a mental disorder diagnosis in the past 12 months are more likely to be readmitted compared with those without a mental disorder diagnosis. CHF patients with frailty and a mental disorder have the highest probability of readmission. Addressing mental health care services in CHF patient's discharge plan could potentially assist reduce unplanned readmissions. (© 2024 The Authors. ESC Heart Failure published by John Wiley & Sons Ltd on behalf of European Society of Cardiology.)

**Access or request full text:**<https://libkey.io/10.1002/ehf2.14644>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38229459&custid=ns023446>

19. The effect of personalized mobile health (mHealth) in cardiac rehabilitation for discharged elderly patients after acute myocardial infarction on their inner strength and resilience
**Item Type:**Journal Article

**Authors:** Salarvand, Shahin;Farzanpour, Farzad and Gharaei, Hasan Ahmadi

**Publication Date:**2024

**Journal:**BMC Cardiovascular Disorders 24(1), pp. 116

**Abstract: Introduction:** Given the importance of promoting self-care and quality of life for discharged elderly patients after acute Myocardial Infarction(MI), It is necessitated we conduct interventions to promote these items. This study was conducted to determine the effect of mHealth-Cardiac rehabilitation (CR) on the inner Strength and resilience of elderly patients with MI after discharge from the hospital.; **Methods:** The present study was a randomized controlled trial that was conducted on 56 Elderly patients with myocardial infarction were discharged from the heart departments. In the intervention group after the patient's discharge, the patients were contacted twice a week for one month and the necessary training and support were given online. To gather data, the Mini-Mental State Examination (MMSE), the demographic and clinical characteristics questionnaire, the inner strength scale (ISS), and the Connor-Davidson Resilience Scale (CD-RISC) were completed pre- and post-intervention. The data analysis was done by SPSS16.; **Results:** This study showed the mean resilience and inner strength scores before and after the intervention in the control group had no statistically significant difference(P˃0.05). There was a significant increase in the mean resilience and inner strength scores in the intervention group after the intervention (P ≤ 0.001).; **Conclusion:** The results of this study showed that mHealth as a kind of telenursing nursing has a significant effect on both variables of inner strength and resilience of post-discharge elderly patients after acute myocardial infarction. This means that using mHealth for these patients could increase the inner strength and resilience of the elderly discharged after myocardial infarction. Therefore, through using this method, elderly patients' self-care ability and quality of life could be increased. (© 2024. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1186/s12872-024-03791-5>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38373888&custid=ns023446>

20. How can triage nurses spot a patient with posterior stroke?: Posterior stroke can be difficult to spot, but nurses can use the BEFAST acronym to save lives
**Item Type:**Journal Article

**Authors:** Scott Aplin, Neal

**Publication Date:**2024

**Journal:**Emergency Nurse 32(1), pp. 19

**Abstract:**About 20% of ischaemic strokes in the UK affect the posterior circulation, however it can be more difficult to recognise compared to other stroke types and if not identified, a delayed or misdiagnosis could result in preventable death or disability (Merwick and Werring 2014).

**Access or request full text:**<https://libkey.io/10.7748/en.32.1.19.s9>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174786002&custid=ns023446>

21. Association Between Nurse-Led Multidisciplinary Education and Cardiac Events in Patients With Heart Failure: A Retrospective Chart Review
**Item Type:**Journal Article

**Authors:** Son, Haeng-Mi and Lee, Hyeongsuk

**Publication Date:**2024

**Journal:**Asian Nursing Research 18(1), pp. 60-67

**Abstract:**This study examined the modifiable factors, including nurse-led multidisciplinary education and in/out-of-hospital rehabilitation, to predict cardiac events in patients with heart failure (HF) in South Korea. A retrospective review of the medical records was conducted using data of patients admitted for HF between June 2021 and April 2022. A total of 342 patients were included in this study. Information related to HF education, cardiac rehabilitation, and demographic and clinical characteristics were collected. Cardiac events, including emergency department visits, readmissions, and deaths, were defined as a composite of events. After adjusting for covariates, a multivariate Cox proportional hazard regression model was used to explore the association between modifiable factors and cardiac events in patients with HF. During the follow-up period (median, 823 days), 123 patients (36.0%) experienced at least one cardiac event. In the Cox regression model, patients who received nurse-led multidisciplinary HF education during hospitalization were less likely to experience cardiac events (hazard ratio: 0.487; 95% confidence interval CI]:0.239–0.993). Additionally, high NT-pro BNP levels were associated with an increased risk of cardiac events. The education led by nurses on HF was a factor that reduced adverse prognoses in patients with HF. Our results highlight the importance of a nurse-led multidisciplinary approach during hospitalization.

**Access or request full text:**<https://libkey.io/10.1016/j.anr.2024.01.009>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=175793820&custid=ns023446>

22. Hospital Variation in Skilled Nursing Facility Use After Coronary Artery Bypass Graft Surgery

**Item Type:**Journal Article

**Authors:** Stewart, James W.;Hou, Hechuan;Hawkins, Robert B.;Pagani, Francis D.;Sterling, Madeline R.;Likosky, Donald S. and Thompson, Michael P.

**Publication Date:**2024

**Journal:**Journal of the American Heart Association 13(2), pp. 1-8

**Access or request full text:**<https://libkey.io/10.1161/JAHA.123.029833>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=175266676&custid=ns023446>

23. Roles and competencies of nurses and physicians in shared decision‐making in cardiac surgery: A scoping review
**Item Type:**Journal Article

**Authors:** van Dieën, Milou S. H.;Paans, Wolter;Mariani, Massimo A.;Dieperink, Willem and Blokzijl, Fredrike

**Publication Date:**2024

**Journal:**Journal of Advanced Nursing (John Wiley & Sons, Inc.) 80(1), pp. 60-72

**Abstract: Aim:** Identification and synthesis of research data related to the roles and competencies of physicians and nurses that are prerequisites for careful shared decision‐making with patients potentially undergoing cardiac surgery. Design: A scoping review was conducted in accordance with the Joanna Briggs Institute's methodology for scoping reviews and the PRISMA Extension for Scoping Reviews. **Methods**: PubMed, EMBASE and CINAHL were searched from inception dates up to March 2022, to identify primary studies published in a peer‐reviewed journal. Study selection, assessment of the methodological quality and data extracting of the included studies were done by at least two independent researchers. To describe the findings of the studies, an emergent synthesis approach was used to visualize a descriptive representation of professional roles and competencies in shared decision‐making, in an overview. **Results:** The systematic search revealed 10,055 potential papers, 8873 articles were screened on title and abstract and 76 full texts were retrieved. Eight articles were included for final evaluation. For nurses and physicians, 26 different skills were identified in the literature to practice shared decision‐making in cardiac surgery. The skills that emerged were divided into five professional roles: moderator; health educator; data collector; psychological supporter and translator. **Conclusions:** This review specifies the professional roles and required competencies related to shared decision‐making in cardiac surgery. Further research is needed to compare our findings with other clinical areas and from there to arrive at a professional division of roles between the different clinical disciplines involved. Impact: The visualization of generic shared decision‐making competencies and roles should establish the professional division of positions between various clinical physician and nurse disciplines in order to create a treatment plan based on evidence, values, preferences and the patient's personal situation. Patient or Public Contribution: No patient or public contribution.

**Access or request full text:**<https://libkey.io/10.1111/jan.15811>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174108428&custid=ns023446>

24. Practice patterns, role and impact of advanced practice nurses in stroke care: A mixed‐methods systematic review
**Item Type:**Journal Article

**Authors:** Woo, Brigitte Fong Yeong;Ng, Wai May;Tan, Il Fan and Zhou, Wentao

**Publication Date:**2024

**Journal:**Journal of Clinical Nursing (John Wiley & Sons, Inc.) 33(4), pp. 1306-1319

**Abstract: Aim(s):** To undertake a systematic review of the practice patterns and roles of advanced practice nurses (APNs) in inpatient and outpatient stroke‐care services; and to evaluate the impact of APN‐led inpatient and outpatient stroke‐care services on clinical and patient‐reported outcomes. **Design:** A mixed‐methods systematic review. **Methods:** A systematic search was conducted across six electronic databases for primary studies. Data were synthesised using a convergent integrated approach. Data Sources (Include Search Dates) \*for Reviews Only: A systematic search was conducted across PubMed, CINAHL, Cochrane Library, Embase, PsycInfo and ProQuest Dissertations & Theses Global, for primary studies published between the inception of the databases and 3 November 2022. **Results:** Findings based on the 18 included primary studies indicate that the APNs' roles have been implemented across the continuum of stroke care, including pre‐intervention care, inpatient care and post‐discharge care. Practicing at an advanced level, the APNs engaged in clinical, operational and educational undertakings across services and disciplines. Positive clinical and patient‐reported outcomes have been attributed to their practice. **Conclusion:** The review highlights the critical role of APNs in improving stroke care, especially in the pre‐intervention phase. Their clinical expertise, patient‐centered approach and collaboration can transform stroke care. Integrating APNs into stroke care teams is essential for better management and outcomes in light of the increasing stroke burden. Implications for the profession and/or patient care: Healthcare institutions should integrate APNs to enhance pre‐intervention stroke care, improve diagnostic accuracy and expedite treatment. APNs can prioritise patient‐centric care, including assessments, coordination and education. Medication reconciliation, timely rehabilitation referrals and lifestyle modifications for secondary stroke prevention are crucial. Implementing advanced practice nursing frameworks ensures successful APN integration, leading to improved stroke care and better patient outcomes in response to the growing stroke burden. Impact (Addressing): What problem did the study address? Poor clarity of the role of advanced practice nurses among patients, physicians, healthcare professionals, health policymakers and nurses.What were the main findings? Advanced practice nurses practise across the continuum of stroke care, mainly in pre‐intervention care which takes place before initiating treatment, inpatient care and post‐discharge care.The implementation of the advanced practice nurse role in stroke care has contributed positively to clinical and patient‐reported outcomes.Where and on whom will the research have an impact? Insights from the review are envisioned to inform healthcare policymakers and leaders in the implementation and evaluation of the APN role in stroke care. **Reporting Method:** Preferred Reporting Items for Systematic Review and Meta‐Analyses (PRISMA) guidelines. Patient or Public Contribution: No Patient or Public Contribution. Trial and Protocol Registration: [https://figshare.com/ndownloader/files/41606781;](https://figshare.com/ndownloader/files/41606781) Registered on Open Science Framework osf.io/dav8j.

**Access or request full text:**<https://libkey.io/10.1111/jocn.16970>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=175919576&custid=ns023446>

25. The Impact of Home Cardiac Rehabilitation on Quality of Life and Psychological Well-Being in Patients with Coronary Heart Disease: A Randomized Controlled Study
**Item Type:**Journal Article

**Authors:** Zheng, Yan;Zhou, Li-Fang;Qin, Shu-Wen;Guo, Jing and Qin, Bi-Yong

**Publication Date:**2024

**Journal:**Medical Science Monitor : International Medical Journal of Experimental and Clinical Research 30, pp. e942803

**Abstract: BACKGROUND** Percutaneous coronary intervention (PCI), a therapeutic approach to coronary heart disease, significantly alleviates symptoms of coronary heart disease (CHD) and substantially improves quality of life. This study aimed to investigate the effect of home cardiac rehabilitation (HCR) on patients after PCI. **MATERIAL AND METHODS** We randomly divided 106 patients after PCI into an Intervention group (n=52) and a Control group (n=53). Left ventricular ejection fraction (LVEF), blood pressure, blood glucose, and low-density lipoprotein were measured in both groups before hospital discharge and after 3 months of engaging in the intervention. Patients were assessed using the short-form health survey (SF-12) scale and Hospital Anxiety and Depression Scale (HADS) scale. **RESULTS** After 3 months of HCR intervention, SF-12 scores of patients in the Intervention group were significantly higher compared to patients in the Control group (physical component summary (PCS): 47.46±9.86 vs 43.28±8.21; and Mental Component Summary (MCS): 50.68±9.82 vs 48.26±9.69) (P.

**Access or request full text:**<https://libkey.io/10.12659/MSM.942803>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38515387&custid=ns023446>

26. Patient Adherence to Secondary Prevention Therapies After an Acute Coronary Syndrome: A Scoping Review
**Item Type:**Journal Article

**Authors:** Bahit, M. C.;Korjian, Serge;Daaboul, Yazan;Baron, Suzanne;Bhatt, Deepak L.;Kalayci, Arzu;Chi, Gerald;Nara, Paul;Shaunik, Alka and Gibson, C. M.

**Publication Date:**2023

**Journal:**Clinical Therapeutics 45(11), pp. 1119-1126

**Abstract: Purpose:** Adherence to guideline-recommended, long-term secondary preventative therapies among patients with acute coronary syndrome (ACS) is fundamental to improving long-term outcomes. The purpose of this scoping review was to provide a broad synopsis of pertinent studies in a structured and comprehensive way regarding factors that influence patient adherence to medical therapy after ACS.; **Methods**: Relevant articles focusing on adherence to medical therapy after ACS were retrieved from the EMBASE and MEDLINE databases (search date, September 7, 2021). Studies were independently screened, and relevant information was extracted.; **Findings:** A total of 58 studies were identified by using the EMBASE and MEDLINE databases. Adherence to secondary prevention was moderate to low and steadily decreased over time. Nearly 30% of patients discontinued one or more medications within 90 days of their primary ACS, and adherence decreased to 50% to 60% at 1 year postdischarge. There were no major differences in adherence between drug classes. Factors influencing patient adherence can be broadly divided into 3 categories: patient related, health care system related, and disease related. Patients managed with percutaneous coronary interventions were more adherent to follow-up treatment than medically managed patients. Depression was reported as a major psychological factor that negatively affected adherence. Improved adherence was observed when higher levels of patient education and provider engagement were delivered during postdischarge follow-up, particularly when scheduled early. Notably, the incidence of major adverse cardiovascular events was lower in hospitals with high 90-day medication adherence than those with moderate or low adherence.; **Implications:** Patient nonadherence to guideline-recommended long-term pharmacologic secondary preventative therapies after ACS is multifactorial. A comprehensive multifaceted approach should be implemented to improve adherence and clinical outcomes. This approach should include key interventions such as early follow-up visits, high medication adherence at 90 days, patient engagement and education, and development of novel interventions that support the 3 broad categories influencing patient adherence as discussed in this review.; Competing Interests: Lots… click on article.
**Access or request full text:**<https://libkey.io/10.1016/j.clinthera.2023.08.011>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37690915&custid=ns023446>

27. Effects of the Million Hearts Model on Myocardial Infarctions, Strokes, and Medicare Spending: A Randomized Clinical Trial
**Item Type:**Journal Article

**Authors:** Blue, Laura;Kranker, Keith;Markovitz, Amanda R.;Powell, Rhea E.;Williams, Malcolm V.;Pu, Jia;Magid, David J.;McCall, Nancy;Steiner, Allison;Stewart, Kate A.;Rollison, Julia M.;Markovich, Patricia and Peterson, G. G.

**Publication Date:**2023

**Journal:**Jama 330(15), pp. 1437-1447

**Abstract: Importance:** The Million Hearts Model paid health care organizations to assess and reduce cardiovascular disease (CVD) risk. Model effects on long-term outcomes are unknown.; **Objective:** To estimate model effects on first-time myocardial infarctions (MIs) and strokes and Medicare spending over a period up to 5 years.; **Design, Setting, and Participants:** This pragmatic cluster-randomized trial ran from 2017 to 2021, with organizations assigned to a model intervention group or standard care control group. Randomized organizations included 516 US-based primary care and specialty practices, health centers, and hospital-based outpatient clinics participating voluntarily. Of these organizations, 342 entered patients into the study population, which included Medicare fee-for-service beneficiaries aged 40 to 79 years with no previous MI or stroke and with high or medium CVD risk (a 10-year predicted probability of MI or stroke ie, CVD risk score] ≥15%) in 2017-2018.; **Intervention:** Organizations agreed to perform guideline-concordant care, including routine CVD risk assessment and cardiovascular care management for high-risk patients. The Centers for Medicare & Medicaid Services paid organizations to calculate CVD risk scores for Medicare fee-for-service beneficiaries. CMS further rewarded organizations for reducing risk among high-risk beneficiaries (CVD risk score ≥30%).; **Main Outcomes and Measures:** Outcomes included first-time CVD events (MIs, strokes, and transient ischemic attacks) identified in Medicare claims, combined first-time CVD events from claims and CVD deaths (coronary heart disease or cerebrovascular disease deaths) identified using the National Death Index, and Medicare Parts A and B spending for CVD events and overall. Outcomes were measured through 2021.; **Results:** High- and medium-risk model intervention beneficiaries (n = 130 578) and standard care control beneficiaries (n = 88 286) were similar in age (median age, 72-73 y), sex (58%-59% men), race (7%-8% Black), and baseline CVD risk score (median, 24%). The probability of a first-time CVD event within 5 years was 0.3 percentage points lower for intervention beneficiaries than control beneficiaries (3.3% relative effect; adjusted hazard ratio HR], 0.97 90% CI, 0.93-1.00]; P = .09). The 5-year probability of combined first-time CVD events and CVD deaths was 0.4 percentage points lower in the intervention group (4.2% relative effect; HR, 0.96 90% CI, 0.93-0.99]; P = .02). Medicare spending for CVD events was similar between the groups (effect estimate, -$1.83 per beneficiary per month 90% CI, -$3.97 to -$0.30]; P = .16), as was overall Medicare spending including model payments (effect estimate, $2.11 per beneficiary per month 90% CI, -$16.66 to $20.89]; P = .85).; Conclusions and Relevance: The Million Hearts Model, which encouraged and paid for CVD risk assessment and reduction, reduced first-time MIs and strokes. Results support guidelines to use risk scores for CVD primary prevention.; Trial Registration: ClinicalTrials.gov Identifier: NCT04047147.

**Access or request full text:**<https://libkey.io/10.1001/jama.2023.19597>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37847273&custid=ns023446>

28. Rehabilitation Support via Postcard (RSVP): A Randomised Controlled Trial of a Postcard to Promote Uptake of Cardiac Rehabilitation

**Item Type:**Journal Article

**Authors:** Britton, Ben;Murphy, Maria;Jansson, Anna K.;Boyle, Andrew;Duncan, Mitch J.;Collins, Clare E.;Baker, Amanda L.;Kerr, Jane;Rutherford, Julie;Inder, Kerry J. and Plotnikoff, Ronald C.

**Publication Date:**2023

**Journal:**Heart, Lung & Circulation 32(8), pp. 1010-1016

**Abstract: Purpose:** The aim was to increase cardiac rehabilitation (CR) uptake using a novel intervention, Rehabilitation Support Via Postcard (RSVP), among patients with acute myocardial infarction discharged from two major hospitals in Hunter New England Local Health District (HNELHD), New South Wales, Australia.; **Methods:** The RSVP trial was evaluated using a two-armed randomised controlled trial design. Participants (N=430) were recruited from the two main hospitals in HNELHD, and enrolled and randomised to either the intervention (n=216) or control (n=214) group over a six-month period. All participants received usual care; however, the intervention group received postcards promoting CR attendance between January and July 2020. The postcard was ostensibly written as an invitation from the patient's admitting medical officer to promote timely and early uptake of CR. The primary outcome was CR attendance at outpatient HNELHD CR services in the 30-days post-discharge.; **Results:** Fifty-four percent (54%) of participants who received RSVP attended CR, compared to 46% in the control group; however this difference was not statistically significant (odds ratio OR]=1.4, 95% confidence interval CI]=0.9-2.0, p=0.11). Exploratory post-hoc analysis among four sub-groups (i.e., Indigeneity, gender, age and rurality), found that the intervention significantly increased attendance in males (OR=1.6, 95%CI=1.0-2.6, p=0.03) but had no significant impact on attendance for other sub-groups.; **Conclusions:** While not statistically significant, postcards increased overall CR attendance by 8%. This strategy may be useful to increase attendance, particularly in men. Alternative strategies are necessary to increase CR uptake among women, Indigenous people, older people and people from regional and remote locations. (Copyright © 2023 The Author(s). Published by Elsevier B.V. All rights reserved.)

**Access or request full text:**<https://libkey.io/10.1016/j.hlc.2023.05.008>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37302865&custid=ns023446>

29. Impact of preeclampsia on cardiovascular events: An analysis of the Generation Scotland: Scottish family health study
**Item Type:**Journal Article

**Authors:** Brown, Catriona E.;Casey, Helen;Dominiczak, Anna F.;Kerr, Shona;Campbell, Archie and Delles, Christian

**Publication Date:**2023

**Journal:**Journal of Human Hypertension 37(8), pp. 735-741

**Abstract:**Preeclampsia is a recognised cause of an increased risk of major adverse cardiovascular events when compared to the background risk in women who did not have hypertensive disorders during pregnancy. The Generation Scotland: Scottish Family Health Study (GS:SFHS) is a population cohort of more than 20,000 members of the Scottish population. Using the Scottish Morbidity Records, we linked the women in the GS:SFHS cohort to validated maternity and inpatient admission data. This allowed us to robustly identify cardiovascular outcomes in the form of inpatient admission for cardiovascular events, We also aimed to explore the risk of pregnancy on future cardiovascular events, using data from nulliparous and parous women.In total, 9732 women were selected. 3693 women were nulliparous, and after study exclusion, 5253 women with 9583 pregnancies remained. Pregnancies from 1980 until the end of the study period of 1st of July 2013 were included. Cardiovascular events occurred in 9.0% of nulliparous women, 4.2% of women with pregnancies and in 7.6% of women with a history of preeclampsia. A total of 218 parous women experienced cardiovascular events, 25 in the preeclampsia group and 193 in the normotensive group. Survival analysis was undertaken, with index pregnancy taken as first pregnancy in normotensive controls and first preeclampsia pregnancy in cases. Endpoint of interest was admission to hospital with first cardiovascular event. After further exclusions a total of 169 cardiovascular events occurred in the normotensive pregnancy group and 20 in the preeclampsia group. Women with a history of preeclampsia were more likely to have cardiovascular events later in life than women with normotensive deliveries., This was statistically significantly different on Kaplan Meier survival analysis, (log rank Mantel-Cox p-value < 0.001). The women in our study were middle-aged, within 33 years of pregnancy, with a mean age of 53 years in the preeclampsia cardiovascular events group.Our study supports the urgent need for uniform guidelines and implementation to improve the health in women with this medical history. Increased awareness among the public of the cardiovascular risk associated with PE is vital to aid uptake of cardiovascular prevention programmes. (© 2023. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1038/s41371-023-00812-2>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36973315&custid=ns023446>

30. Healthcare professionals' perceptions of using a digital patient educational programme as part of cardiac rehabilitation in patients with coronary artery disease - a qualitative study
**Item Type:**Journal Article

**Authors:** Danielsbacka, Jenny;Feldthusen, Caroline and Bäck, Maria

**Publication Date:**2023

**Journal:**BMC Health Services Research 23(1), pp. 1017

**Abstract: Background:** Participation in cardiac rehabilitation in patients with coronary artery disease (CAD) remains underutilised. Digital educational programmes, as part of cardiac rehabilitation, are emerging as a means of increasing accessibility, but healthcare professionals' perceptions of implementing and using these programmes are not known. The aim of the study was therefore to explore healthcare professionals ̓ perceptions and experiences of implementing and using a digital patient educational programme (DPE) as part of cardiac rehabilitation after acute CAD.; **Methods:** Individual semi-structured interviews were performed with 12 nurses and physiotherapists, ten women with a median age of 49.5 (min 37- max 59) years, with experience of using the DPE as part of a phase II cardiac rehabilitation programme in Region Västra Götaland, Sweden. The interviews were transcribed verbatim and analysed with inductive content analysis according to Graneheim and Lundman.; **Results:** An overall theme was identified throughout the unit of analysis: "Digital patient education - a complement yet not a replacement". Within this theme, three main categories were identified: "Finding ways that make implementation work", "Accessibility to information for confident and involved patients" and "Reaching one another in a digital world". Each main category contains a number of sub-categories.; **Conclusions:** This study adds new knowledge on healthcare professionals' perceptions of a digital patient educational programme as a valuable and accessible alternative to centre-based education programmes as part of cardiac rehabilitation for patients with CAD. The participants highlighted the factors necessary for a successful implementation, such as support through the process and sufficient time from the employer to learn the system and to create new routines in daily practice. Future research is needed to further understand the impact of digital education systems in the secondary prevention of CAD. Ultimately, hybrid models, where the choice of delivery depends on the preferences of the individual patient, would be the optimal model of care for the future. (© 2023. BioMed Central Ltd., part of Springer Nature.)

**Access or request full text:**<https://libkey.io/10.1186/s12913-023-09997-1>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37735650&custid=ns023446>

31. Examining the effectiveness of home-based cardiac rehabilitation programs for heart failure patients with reduced ejection fraction: a critical review
**Item Type:**Journal Article

**Authors:** Darvishzadehdaledari, Shahram;Harrison, Alexander;Gholami, Fatemeh and Azadnia, Arian

**Publication Date:**2023

**Journal:**BMC Cardiovascular Disorders 23(1), pp. 593

**Abstract: Background:** Heart failure (HF) is the most common cardiovascular reason for hospital admission, particularly among patients older than 60 years old. Heart failure with reduced ejection fraction (HFrEF) comprises approximately 50% of all heart failure cases. Home-based cardiac rehabilitation (HBCR) is an alternative option to enhance the participation rate in cardiac rehabilitation (CR) interventions for patients who are not able to attend center-based cardiac rehabilitation (CBCR). The purpose of this review is to clarify the extent to which present studies of HBCR align with the core components defined by both the European Society of Cardiology (ESC) and the British Association for Cardiac Prevention and Rehabilitation (BACPR).; **Methods:** A critical review was conducted through four databases, MEDLINE, Embase, Cochrane Central Register of Controlled Trials, and Cochrane Database of Systematic Reviews, to identify randomized controlled trials up until June 2022. We scrutinized the commonalities between BACPR and ESC and developed a list of standards. The risk of bias was assessed using the RoB 2 tool.; **Results:** Among the 87 papers selected for full-text screening, 11 studies met the inclusion criteria. Six papers possessed a high proportion of fidelity to essential standards, four studies had a medium alliance, and one intervention had a low level of alliance.; **Conclusion:** Overall, the majority of included studies had medium to high alignment with standards and core components. However, a need for more attention to long-term strategy as an important standard is revealed. Rapid identification and initial assessment are the most met standards; however, lifestyle risk factor management and long-term outcomes were recognized as the least met standards. (© 2023. The Author(s).)

**Access or request full text:**<https://libkey.io/10.1186/s12872-023-03640-x>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38053086&custid=ns023446>

32. Application Effects of NNN-link Care Model in Patients with Coronary Heart Disease
**Item Type:**Journal Article

**Authors:** Duan, Wenjuan and Ren, Baojun

**Publication Date:**2023

**Journal:**The Heart Surgery Forum 26(5), pp. E592-E599

**Abstract: Objective:** To investigate the effect of a NNN-linked care model applied in elderly patients with coronary heart disease.; **Methods:** A total of 120 elderly patients with coronary heart disease admitted to the hospital from January, 2023 to May, 2023 were randomly divided into two groups of 60 cases respectively. The control group received routine intervention, and the observation group received the NNN-linked care model. Changes in cardiac function, the ability for self-care, and quality of life were recorded between the groups before and after the intervention.; **Results:** Indices of cardiac function in the observation group were higher than those of the control group after 3 weeks (p < 0.05). Compared with the control group, the total score for the ability for self-care and the scores of each dimension of the observation group were higher after 3 weeks of intervention (p < 0.05). The scores of quality of life of the observation group were higher in comparison with the control group after 3 weeks of intervention (p < 0.05).; **Conclusion:** The application of the NNN-linked care model to elderly patients with coronary heart disease can improve the ability for self-care, increase cardiac function and improve the quality of life.

**Access or request full text:**<https://libkey.io/10.59958/hsf.5837>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37920086&custid=ns023446>

33. Compassion fatigue and stress related to cardiopulmonary resuscitation: a study of critical care nurses' experiences
**Item Type:**Journal Article

**Authors:** El-Ashry, Ayman;Elsayed, Shimmaa Mohamed;Ghoneam, Mohamed Adel and Atta, Mohamed Hussein Ramadan

**Publication Date:**2023

**Journal:**BMC Nursing 22(1), pp. 1-11

**Abstract: Background:** Cardiopulmonary resuscitation (CPR) is considered one of the most stressful experiences in critical care nursing; it directly and indirectly leads to compassion fatigue and burnout. **Aim:** Determine the levels of and relationship between postcode stress and compassion fatigue. Design and methods: A descriptive-correlational study using 300 critical care nurses from five intensive care units in two hospitals was conducted. **Tools:** Demographic and work-related data, the Postcode Stress Scale, and the Professional Quality of Life Scale: Compassion Fatigue subscale. **Results:** Nurses had moderate to high postcode stress and compassion fatigue (67.98 ± 16.39 and 65.40±14.34, respectively). Moreover, there was a significant positive correlation between postcode stress, burnout (r=0.350, p=<0.001), secondary traumatic stress (r=0.518, p=<0.001), and subsequently, compassion fatigue (r=0.449, p=<0.001). In addition, higher levels of postcode stress were associated with higher levels of compassion fatigue with its subscales: burnout and secondary traumatic stress, with a coefficient of determination for compassion fatigue (0.199), burnout subscale (0.121), and secondary traumatic stress (0.266). **Conclusion:** Critical care nurses involved in resuscitation experiences are susceptible to postcode stress, burnout, secondary traumatic stress, and compassion fatigue. There is a significant relationship between these factors, with higher levels of postcode stress contributing to higher levels of compassion fatigue and its subscales: burnout and secondary traumatic stress. These results highlight the importance of addressing and managing the psychological well-being of nurses in resuscitation settings to mitigate the adverse effects of stress and promote their overall resilience and well-being.

**Access or request full text:**<https://libkey.io/10.1186/s12912-023-01640-y>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174298143&custid=ns023446>

34. Barriers and facilitators in providing home-based rehabilitation for stroke survivors with severe disability in the UK: an online focus group study with multidisciplinary rehabilitation teams
**Item Type:**Journal Article

**Authors:** Fisher, Rebecca J.;Russell, Lal;Riley-Bennett, Frances;Cameron, Trudi;Walker, Marion and Sackley, Cath

**Publication Date:**2023

**Journal:**BMJ Open 13(8), pp. e071217

**Abstract: Objectives:** In the UK, over 20% of stroke survivors leave hospital with severe disability. Limited evidence-based clinical guidance is available to support the rehabilitation of these individuals. Our previous research has focused on establishing consensus regarding the core components of home-based rehabilitation for this under investigated group. This study explores the barriers of providing rehabilitation and identifies strategies to overcome them.; **Design:** Three focus group interviews were conducted with n=20. The context coding framework was employed to organise the transcribed data and to facilitate inductive and deductive analysis and synthesis.; **Setting:** Online, MSTeams, UK.; **Participants**: A purposive sample of 20 National Health Service clinical staff participants, from 3 multidisciplinary teams providing home-based stroke rehabilitation for this population (n=7, 6 and 7).; **Results:** High levels of need were reported across multiple domains for survivors including continence, communication and physical function. Interventions often required multiagency collaboration in order to optimise the available resources and specialist skills. There was lack of clarity regarding who was ultimately responsible for providing components of rehabilitation for stroke survivors with severe disability. Teams provide rehabilitation for this population but are insufficiently commissioned or resourced to fully meet their needs. In-complete and disjointed pathways with resultant healthcare inequalities were commonly reported. Teams used a variety of strategies to overcome these barriers and optimise rehabilitation opportunities. These included upskilling a diverse range of partners to capitalise on the skills and resources across health, social care and voluntary sector boundaries employing multiagency collaboration. Teams established and engaged networks of stakeholders in order to advocate on behalf of stroke survivors.; **Conclusions:** Collaboration and partnership working is important in the delivery of rehabilitation for stroke survivors with severe disability. Commissioners need to be aware that cross-agency multidisciplinary expertise is required, if rehabilitation opportunities are to be realised and existing health inequalities addressed.; Competing Interests: Competing interests: None declared. (© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.)

**Access or request full text:**<https://libkey.io/10.1136/bmjopen-2022-071217>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37532479&custid=ns023446>

35. Effects of Home-based Remote Cardiac Rehabilitation on Left Ventricular Function and Fear of Exercise in Patients after Percutaneous Coronary Intervention (PCI): A Retrospective Cohort Study
**Item Type:**Journal Article

**Authors:** Gao, Xizhen;Zhang, Lan and Chen, Zhengbo

**Publication Date:**2023

**Journal:**The Heart Surgery Forum 26(6), pp. E855-E862

**Abstract: Aim:** This study aims to explore the effects of home-based remote cardiac rehabilitation on left ventricular function and exercise fear in patients after percutaneous coronary intervention (PCI).; **Methods:** A total of 232 patients with coronary heart disease after PCI treated in Tianshan Traditional Chinese Medicine Hospital from January 2020 to December 2022 were retrospectively analyzed. The patients were divided into the remote rehabilitation group (169 cases) and the routine group (63 cases) according to the exposure factor (home-based remote cardiac rehabilitation). Changes in left ventricular function and sports phobia Tampa Scale in patients with coronary heart disease after PCI were compared using propensity score matching to reduce selection bias and confounding factors.; **Results:** After the intervention, the scores of patients in the tele-rehabilitation group were significantly higher than those in the conventional group in terms of fear of movement, perception of danger, fear of movement, avoidance of movement, and dysfunction (p-value < 0.05). Left heart function was compared between the tele-rehabilitation group and the conventional group. Patients in the tele-rehabilitation group had significantly higher peak mitral valve blood flow in the early diastolic period (E), peak mitral valve blood flow in the late diastolic period (A), six-minute walk test (6MWT), and ratio of the peak mitral valve blood flow in the early diastolic period to the peak mitral valve blood flow in the late diastolic period (E/A) than those in the conventional group (p-value < 0.05). However, the peak deceleration time and isovolumic diastolic time in the early mitral valve diastolic period were significantly higher in the tele-rehabilitation group than in the conventional group (p-value < 0.05).; **Conclusions:** Home-based remote cardiac rehabilitation instruction can improve the heart function and exercise fear state of patients after PCI.

**Access or request full text:**<https://libkey.io/10.59958/hsf.6827>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38178347&custid=ns023446>

36. Does stroke-associated pneumonia play an important role on risk of in-hospital mortality associated with severe stroke? A four-way decomposition analysis of a national cohort of stroke patients
**Item Type:**Journal Article

**Authors:** Gittins, Matthew;Lobo Chaves, Marco Antonio;Vail, Andy and Smith, Craig J.

**Publication Date:**2023

**Journal:**International Journal of Stroke : Official Journal of the International Stroke Society 18(9), pp. 1092-1101

**Abstract: Background:** Severe strokes and stroke-associated pneumonia (SAP) have long been associated with poorer patient health outcomes, for example, in-hospital mortality. However, it is unclear what role SAP plays in the risk of in-hospital mortality associated with a severe stroke at admission.; **Methods:** Using the Sentinel Stroke National Audit Program data on stroke admissions (2013-2018) in England and Wales, we modeled the "total" effect for severe stroke on risk of in-hospital mortality. Through four-way decomposition methodology, we broke down the "total" observed risk into four components. The direct "severity on outcome only" effect, the pure indirect effect of severity mediated via SAP only, the interaction between severity and SAP when mediation is not present, and when mediation via SAP is present.; **Results:** Of 339,139 stroke patients included, 9.4% had SAP and 15.6% died in hospital. Of SAP patients, 45% died versus 12% of non-SAP patients. The risk ratio for in-hospital mortality associated with severe versus mild/moderate stroke (i.e. total effect) was 4.72 (95% confidence interval: 4.60-4.85). Of this, 43%-increased risk was due to additive SAP interaction, this increased to 50% for "very severe" stroke. The remaining excess relative risk was due to the direct severity on outcome effect only, that is, there was no evidence here for a mediation effect via SAP.; **Conclusion:** SAP was associated with a higher mortality in severe stroke patients. Prioritizing SAP prevention in severe stroke patients may improve in-hospital survival. Our results suggest that in severe stroke patients avoiding SAP might result in an up to 43% reduction in mortality.; Competing Interests: Declaration of conflicting interestsThe author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: M.G., M.A.L.C., A.V., and C.J.S. have no conflicts related to this work. This study is additional follow-up work based on M.A.L.C.’s PhD thesis investigating stroke-associated pneumonia using the SSNAP data. M.A.L.C.’s work at Glaxosmithkline Biologicals is in no way related or in conflict to the work presented here.

**Access or request full text:**<https://libkey.io/10.1177/17474930231177881>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37170807&custid=ns023446>

37. Theory‐based nursing interventions in adults with coronary heart disease: A systematic review and meta‐analysis of randomized controlled trials
**Item Type:**Journal Article

**Authors:** Gok Metin, Zehra;Izgu, Nur;Gulbahar Eren, Merve and Eroglu, Hacer

**Publication Date:**2023

**Journal:**Journal of Nursing Scholarship 55(2), pp. 439-463

**Abstract: Purpose**: This systematic review and meta‐analysis aimed to synthesize the outcomes of theory‐based nursing interventions for coronary heart disease management. **Design and Methods:** Web of Science, Scopus, Science Direct, and PubMed databases were electronically searched from January 2013 to August 2021. The Preferred Reporting Item for Systematic Reviews and Meta‐analyses statement guidelines was followed for this meta‐analysis. Randomized controlled trials on patients with coronary heart disease, using a theory‐based nursing intervention were eligible. Methodological quality was examined by two authors using the Modified Jadad Scale. Based on the heterogeneity test, the results were analyzed using a pool of data with 95% confidence intervals, p‐values, and fixed or random‐effect models (PROSPERO registration number X). Findings A total of 1030 studies were initially retrieved, and 8 randomized controlled trials were eventually included in the meta‐analysis after screening. The big majority (81.3%) of participants were males, and the mean age was 54.8 (SD = 8.7) years. This meta‐analysis found theory‐based nursing interventions had no significant effect on blood lipid profile, blood pressure, and healthy lifestyle. However, these interventions significantly reduced fasting blood glucose, and body mass index and improved the physical and psychological domains of quality of life. **Conclusions:** The evidence from this meta‐analysis reveals that theory‐based nursing interventions have a positive effect on fasting blood glucose, body mass index, and quality of life. However, their effects on blood lipid profile, blood pressure, and a healthy lifestyle are inconclusive. The results of this metanalysis are largely based on a few trials and were limited in terms of the number of outcomes. Conducting well‐designed randomized controlled trials with adequate power is needed to make a firm conclusion on the influence of theory‐based nursing interventions on patient outcomes in the CHD population. **Clinical relevance:** Considering the high mortality and morbidity of coronary heart disease, nurses may play a significant role in coronary heart disease management by providing interventions that are based on a certain theoretical framework. This meta‐analysis provides insights into the implementation of theory‐based nursing interventions in heart attack survivors or those newly diagnosed with coronary heart disease led by nurses and lasting longer than 6 months in coronary heart disease. In addition, future studies should consider enhancing the content of training programs for a healthy lifestyle within the theory‐based nursing interventions and compare the effects of these interventions on acute and chronic coronary syndromes.

**Access or request full text:**<https://libkey.io/10.1111/jnu.12839>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=162242966&custid=ns023446>

38. Effect of CSMS Scale Combined with Narrative Psychological Nursing on Rehabilitation of Hypertensive Patients with Coronary Heart Disease
**Item Type:**Journal Article

**Authors:** Han, Yujuan;Tian, Huizhen and DeJi, LaMao

**Publication Date:**2023

**Journal:**Alternative Therapies in Health and Medicine 29(6), pp. 182-186

**Abstract: Objective:** This study investigated the impact of combining the Coronary Heart Disease Self-Management Scale (CSMS) with narrative psychological nursing on the rehabilitation of patients with hypertension and coronary heart disease.; **Methods:** A total of 300 patients with hypertension and coronary heart disease were enrolled in this study at our hospital from June 2021 to June 2022. Random number tables were used to allocate the patients into two groups, with 150 patients in each group. The control group received conventional care, while the observation group received the CSMS scale combined with narrative psychological nursing.; **Results:** Rehabilitation efficacy, disease self-management ability, Self-Rating Anxiety Scale (SAS), and Self-Rating Depression Scale (SDS) were compared between the two groups. After the intervention, the observation group showed lower systolic blood pressure, diastolic blood pressure, SAS scores, and SDS scores compared to the control group, with statistically significant differences (P < .05). Additionally, the CSMS scores in the observation group were significantly higher than those in the control group.; **Conclusions:** The combination of the CSMS scale and narrative psychological nursing is an effective approach for rehabilitating hypertensive patients with coronary artery disease. It leads to decreased blood pressure, improved emotional well-being, and enhanced self-management abilities.

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37295007&custid=ns023446>

39. Effectiveness and Safety of Remote Cardiac Rehabilitation for Patients After Acute Coronary Syndrome
**Item Type:**Journal Article

**Authors:** Hilu, Ranin;Haskiah, Feras;Khaskia, Abid;Assali, Abid;Baron, Igal;Gabarin, Mustafa;Chen, Jacob and Pereg, David

**Publication Date:**2023

**Journal:**The American Journal of Cardiology 207, pp. 54-58

**Abstract:**Cardiac rehabilitation improves cardiovascular outcomes in patients after acute coronary syndrome (ACS). Recently there has been a growing interest in remote cardiac rehabilitation (RCR) programs. We aimed to evaluate the effectiveness of RCR compared with center-based cardiac rehabilitation (CBCR). This is an observational study including patients after hospital admission for ACS. The study group included patients at low-to-moderate risk for cardiovascular complications who were referred for RCR. The control group included patients at similar risk who participated in CBCR. The primary end points were the improvement of at least 10% to 25% in exercise capacity after 6 months of cardiac rehabilitation. Included were 305 patients who completed 6 months of cardiac rehabilitation. Of them, 107 patients participated in RCR and 198 in CBCR. RCR patients were younger and more frequently males. Improvement of ≥10% in exercise capacity after 6 months was achieved more frequently in patients participating in RCR compared with CBCR (69.3% and 55% respectively, p = 0.03). A similar trend was observed for improvement of ≥25% in exercise capacity after 6 months (33.8% and 22.7% in RCR and CBCR, respectively, p = 0.05). While weight reduction and the increase in muscle mass were similar in the 2 groups, fat percent reduction was significantly greater in the RCR compared with the CBCR (2.5% and 1.4% respectively, p <0.005). We conclude that RCR program is an effective and safe option for low-risk patients after hospital admission for ACS. It enables optimizing the utilization of this important service for patients with coronary artery disease.; Competing Interests: Declaration of Competing Interest The authors have no competing interests to declare. (Copyright © 2023 Elsevier Inc. All rights reserved.)

**Access or request full text:**<https://libkey.io/10.1016/j.amjcard.2023.08.168>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37722202&custid=ns023446>

40. Trends in cardiac rehabilitation rates among patients admitted for acute heart failure in Japan, 2009-2020
**Item Type:**Journal Article

**Authors:** Kim, Junghyun;Jiang, Jenny;Shen, Sophie and Setoguchi, Soko

**Publication Date:**2023

**Journal:**PloS One 18(11), pp. e0294844

**Abstract: Objectives:** To describe inpatient and outpatient cardiac rehabilitation (CR) utilization patterns over time and by subgroups among patients admitted for acute heart failure (AHF) in Japan.; Background: Cardiac rehabilitation (CR) is a crucial secondary prevention strategy for patients with heart failure. While the number of older patients with AHF continues to rise, trends in inpatient and outpatient CR participation following AHF in Japan have not been described to date.; **Methods:** We conducted a retrospective cohort study of adult patients hospitalized for AHF in Japan between April 2008 and December 2020. Using data from the Medical Data Vision database, we measured trends in inpatient and outpatient CR participation following AHF. Descriptive analyses and summary statistics for AHF patients by CR participation status were reported.; **Results:** The analytic cohort included 88,052 patients. Among these patients, 37,810 (42.9%) participated in inpatient and/or outpatient CR. Of those, 36,431 (96.4%) participated in inpatient CR only and 1,277 (3.4%) participated in both inpatient and outpatient CR. Rates of inpatient CR rose more than 6-fold over the study period, from 9% in 2009 to 55% in 2020, whereas rates of outpatient CR were consistently low.; **Conclusions:** The rate of inpatient CR participation among AHF patients in Japan rose dramatically over a 12-year period, whereas outpatient CR following AHF was vastly underutilized. Further study is needed to assess the clinical effectiveness of inpatient CR and to create infrastructure and incentives to support and encourage outpatient CR.; Competing Interests: Soko Setoguchi and Junghyun Kim received consultancy fees from Bristol Myers Squibb. Jenny Jiang and Sophie Shen are employees of Bristol Myers Squibb, and Junghyun Kim was an employee of Rutgers University when the research was conducted. The study was funded by Bristol Myers Squibb, NJ, USA (CV013-030). This does not alter our adherence to PLOS ONE policies on sharing data and materials. The datasets analyzed during the current study are not publicly available due to licensing agreement with Medical Data Vision Co., Ltd. (Copyright: © 2023 Kim et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:**<https://libkey.io/10.1371/journal.pone.0294844>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38015991&custid=ns023446>

41. To Explore the Safety of 3R Nursing and Dietary Nutrition Intervention in Elderly Patients with Vascular Dementia and the Effect of Improving the Self-Care Ability of Patients
**Item Type:**Journal Article

**Authors:** Liu, Ying;Hao, Pingping;Zou, Guihua;Liu, Bosen and Qu, Lixin

**Publication Date:**2023

**Journal:**Alternative Therapies in Health and Medicine 29(8), pp. 92-96

**Abstract: Objective:** Exploring the application safety of 3R nursing and dietary nutrition intervention in elderly vascular dementia, as well as the application value of improving patients' self-care ability in elderly vascular dementia.; **Method:** 120 elderly patients with vascular dementia in our hospital from August 2020 to June 2022 were selected as the research subjects and divided into an observation group (n = 60) and a control group (n = 60) using a random number table method. The control group received routine care+3R care, while the observation group received dietary and nutritional interventions on the basis of the control group. Compare the Mini Mental State Examination (MMSE), Neuropsychiatric Inventory Questionnaire (NPI-Q) before and after intervention between two groups, and investigate the Activities of Daily Living (ADL), Quality of Life Alzheimer's Disease (QOL-AD) Score with the Simplified Fugl Meyer Motor Function Rating Scale (FMA) and calculate nursing satisfaction.; **Result:** After intervention, the MMSE score of the observation group was significantly higher than that of the control group, with a statistically significant difference (P .05). The observation group had significantly more people who were very satisfied than the control group, and the number of people who were dissatisfied was significantly lower than the control group, with a statistically significant difference (P < .05).; **Conclusion:** 3R nursing with diet and nutrition intervention improves safety, self-care ability, cognitive function, and nursing satisfaction in elderly patients with vascular dementia, suggesting its potential for clinical implementation.

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37652427&custid=ns023446>

42. Early cardiovascular prevention: the crucial role of nurse-led intervention
**Item Type:**Journal Article

**Authors:** Mattioli, Anna Vittoria and Gallina, Sabina

**Publication Date:**2023

**Journal:**BMC Nursing 22(1), pp. 1-3

**Abstract:**The present comment on Qiu's work intends to emphasize two points: (1) Cardiovascular prevention must start early due to the progressive nature of atherosclerosis. (2) growing evidence that coaching performed by nurses leads to effective results. Nurses can intercept the young population who must be sensitized and educated about prevention.

**Access or request full text:**<https://libkey.io/10.1186/s12912-023-01511-6>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=172440665&custid=ns023446>

43. Exercise-based cardiac rehabilitation for adults with heart failure - 2023 Cochrane systematic review and meta-analysis
**Item Type:**Journal Article

**Authors:** Molloy, Cal D.;Long, Linda;Mordi, Ify R.;Bridges, Charlene;Sagar, Viral A.;Davies, Edward J.;Coats, Andrew J. S.;Dalal, Hasnain;Rees, Karen;Singh, Sally J. and Taylor, Rod S.

**Publication Date:**2023

**Journal:**European Journal of Heart Failure 25(12), pp. 2263-2273

**Abstract: Aims:** Despite strong evidence, access to exercise-based cardiac rehabilitation (ExCR) remains low across global healthcare systems. We provide a contemporary update of the Cochrane review randomized trial evidence for ExCR for adults with heart failure (HF) and compare different delivery modes: centre-based, home-based (including digital support), and both (hybrid).; **Methods and Results**: Databases, bibliographies of previous systematic reviews and included trials, and trials registers were searched with no language restrictions. Randomized controlled trials, recruiting adults with HF, assigned to either ExCR or a no-exercise control group, with follow-up of ≥6 months were included. Two review authors independently screened titles for inclusion, extracted trial and patient characteristics, outcome data, and assessed risk of bias. Outcomes of mortality, hospitalization, and health-related quality of life (HRQoL) were pooled across trials using meta-analysis at short-term (≤12 months) and long-term follow-up (>12 months) and stratified by delivery mode. Sixty trials (8728 participants) were included. In the short term, compared to control, ExCR did not impact all-cause mortality (relative risk RR] 0.93; 95% confidence interval CI] 0.71-1.21), reduced all-cause hospitalization (RR 0.69; 95% CI 0.56-0.86, number needed to treat: 13, 95% CI 9-22), and was associated with a clinically important improvement in HRQoL measured by the Minnesota Living with Heart Failure Questionnaire (MLWHF) overall score (mean difference: -7.39; 95% CI -10.30 to -4.47). Improvements in outcomes with ExCR was seen across centre, home (including digitally supported), and hybrid settings. A similar pattern of results was seen in the long term (mortality: RR 0.87, 95% CI 0.72-1.04; all-cause hospitalization: RR 0.84, 95% CI 0.70-1.01, MLWHF: -9.59, 95% CI -17.48 to -1.50).; **Conclusions:** To improve global suboptimal levels of uptake for HF patients, global healthcare systems need to routinely recommend ExCR and offer a choice of mode of delivery, dependent on an individual patient's level of risk and complexity. (© 2023 The Authors. European Journal of Heart Failure published by John Wiley & Sons Ltd on behalf of European Society of Cardiology.)

**Access or request full text:**<https://libkey.io/10.1002/ejhf.3046>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37850321&custid=ns023446>

44. The effectiveness of cognitive-behavioral therapy for heart failure patients: a narrative review
**Item Type:**Journal Article

**Authors:** Rajasree Katta, Maanya;Prasad, Sakshi;Tiwari, Atit;Abdelgawad Abouzid, Mohamed Riad and Mitra, Saloni

**Publication Date:**2023

**Journal:**The Journal of International Medical Research 51(9), pp. 3000605231198371

**Abstract:**Heart failure (HF) remains a major cause of morbidity, mortality and healthcare costs, despite available treatments. Psychological issues such as depression, anxiety and poor self-care are prevalent in HF patients. Such issues adversely affect patients' daily lives and increase hospitalization and mortality rates; therefore, effective approaches to address these are needed. Cognitive-behavioral therapy (CBT) has been proposed as potentially useful for psychological comorbidities in HF patients, but its efficacy is not well-established. This narrative review aimed to summarize the evidence on the effectiveness of CBT for HF patients. A search was conducted using PubMed and Google Scholar for randomized controlled trials (RCTs) on CBT for HF patients. Ten studies (nine RCTs and one case study) were included in the review. CBT was found to be an effective intervention for managing depression, anxiety, low quality of life, and impaired social and physical functioning in HF patients. The results suggest that CBT can improve psychological well-being and enhance the benefits of rehabilitation programs. Face-to-face CBT appears to be superior to conventional therapy and can be implemented in cardiac rehabilitation settings. Further research is needed to evaluate the efficacy of internet-based CBT for cardiac patients and identify factors that promote treatment adherence.

**Access or request full text:**<https://libkey.io/10.1177/03000605231198371>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37694958&custid=ns023446>

45. Current Trends in Balance Rehabilitation for Stroke Survivors: A Scoping Review of Experimental Studies
**Item Type:**Journal Article

**Authors:** Saraiva, Júlia;Rosa, Gonçalo;Fernandes, Sónia and Fernandes, Júlio Belo

**Publication Date:**2023

**Journal:**International Journal of Environmental Research and Public Health 20(19)
**Abstract:**Balance impairment is a common consequence of a stroke, which can significantly hinder individuals' participation in daily activities, social interactions, and leisure pursuits and their ability to return to work. Rehabilitation is vital for minimizing post-stroke sequelae and facilitating the recovery of patients. This review aims to identify current trends in balance rehabilitation of stroke survivors. This Scoping review followed Arksey and O'Malley's methodological framework. The literature search was conducted in electronic databases, including CINAHL Complete, MEDLINE Complete, and Nursing & Allied Health Collection. The search was performed in March 2023, and the inclusion criteria were articles published in English or Portuguese between 2013 and 2023. A total of 446 articles were identified. After selecting and analyzing the reports, fourteen publications were included in this review. Seven distinct categories of balance rehabilitation interventions were identified, covering various approaches. These categories included conventional rehabilitation exercises, gym-based interventions, vibration therapy, rhythmic auditory stimulation training, boxing therapy, dual-task training, and technology-based rehabilitation interventions. Each of these methods presents unique benefits and can significantly impact the recovery of balance in stroke survivors, enhancing their overall well-being and functional capacity.

**Access or request full text:**<https://libkey.io/10.3390/ijerph20196829>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37835099&custid=ns023446>

46. Cognitive performance following stroke, transient ischaemic attack, myocardial infarction, and hospitalisation: an individual participant data meta-analysis of six randomised controlled trials
**Item Type:**Journal Article

**Authors:** Sherlock, Laura;Lee, Shun Fu;Katsanos, Aristeidis H.;Cukierman-Yaffe, Tali;Canavan, Michelle;Joundi, Raed;Sharma, Mukul;Shoamanesh, Ashkan;Brayne, Carol;Gerstein, Hertzel C.;O'Donnell, Martin,J.;Muniz-Terrera, Graciela;Yusuf, Salim;Bosch, Jackie and Whiteley, William N.

**Publication Date:**2023

**Journal:**The Lancet.Healthy Longevity 4(12), pp. e665-e674

**Abstract: Background:** Survivors of stroke are often concerned about cognitive problems, and information on the risk of cognitive problems often comes from small studies. We aimed to estimate years of cognitive ageing associated with stroke compared with transient ischaemic attack, myocardial infarction, and other hospitalisations in a large population.; **Methods:** Using data from six randomised controlled trials (ORIGIN, ONTARGET, TRANSCEND, COMPASS, HOPE-3, and NAVIGATE ESUS), we completed an individual participant data meta-analysis using data requested from the Public Health Research Institute to estimate the association of stroke (by type and severity), transient ischaemic attack, myocardial infarction, and other hospitalisations with cognitive performance measured at the end of each trial. We included participants in any of these randomised controlled trials with a cognitive assessment at baseline and at least one other timepoint. Cognitive performance was measured with the Mini-Mental State Examination or the Montreal Cognitive Assessment, transformed into Z scores. We estimated Z score differences in end of trial cognitive performance between people with and without events and calculated corresponding years of cognitive ageing in these trials, and additionally calculated using a population representative cohort-the Cognitive Function and Ageing Study.; **Findings:** In 64 106 participants from 55 countries, compared with no event, stroke was associated with 18 years of cognitive ageing (1487 strokes included in the model, 95% CI 10 to 28; p<0·0001) and transient ischaemic attack with 3 years (660 transient ischaemic attacks included in the model, 0 to 6; p=0·021). Myocardial infarction (p=0·60) and other hospitalisations (p=0·26) were not associated with cognitive ageing. The mean difference in SD compared with people without an event was -0·84 (95% CI -0·91 to -0·76; p<0·0001) for disabling stroke, and -0·12 (-0·19 to -0·05; p=0·0012) for non-disabling stroke. Haemorrhagic stroke was associated with worse cognition (-0·75, -0·95 to -0·55; p<0·0001) than ischaemic stroke (-0·42, -0·48 to -0·36; p <0·0001).; Interpretation: Stroke has a substantial effect on cognition. The effects of transient ischaemic attack were small, whereas myocardial infarction and hospitalisation had a neutral effect. Prevention of stroke could lead to a reduction in cognitive ageing in those at greatest risk.; **Funding:** Population Health Research Institute and Chief Scientist Office of Scotland.; **Competing Interests:** Declaration of interests TC-Y has received payment or honoraria for lectures, presentations, speaker's bureaus, manuscript writing, and educational events from Eli Lilly, Sanofi, Merck Sharp & Dohme, Novo Nordisk, Medtronic, Geffen Medical, AstraZeneca, and Boehringer Ingelheim. MS has done consultancy work for Bayer and Jassen, and is a member of the Board of Canadian Stroke Consortium. AS has done consultancy work for AstraZeneca, Takeda Pharmaceutical Company, Bioxodes, Bayer, Servier Canada, and Daiichi Sankyo; has done data safety monitoring for Bayer; and has received payment or honoraria for lectures, presentations, speaker's bureaus, manuscript writing, or educational events from AstraZeneca, Bayer, Daiichi Sankyo, and Servier Canada. HCG has done consultancy work for Abbott, AstraZeneca, Eli Lilly and Company, Novo Nordisk, Sanofi, Kowa, Pfizer, and Hanmi, and has received payment or honoraria for lectures, presentations, speaker's bureaus, manuscript writing, or educational events from AstraZeneca, Eli Lilly and Company, Jiangsu-Hanen, Carbon Brand, Novo Nordisk, Sanofi, and Boehringer Ingelheim. WNW has done consultancy work for Bayer; data safety monitoring for the Universities of Calgary, Manchester, Oxford, and Utrecht; has received compensation from UK Courts for expert witness services; and has received compensation from American Heart Association for other services. All other authors declare no competing interests. (Copyright © 2023 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license. Published by Elsevier Ltd.. All rights reserved.)

**Access or request full text:**[https://libkey.io/10.1016/S2666-7568(23)00207-6](https://libkey.io/10.1016/S2666-7568%2823%2900207-6)

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38042159&custid=ns023446>

47. The effects of computer-aided cognitive rehabilitation combined with virtual reality technology on event-related potential P300 and cognitive function of patients with cognitive impairment after stroke
**Item Type:**Journal Article

**Authors:** Shi, J.;Ma, S-J;Hu, J.;Hu, Z-K;Xia, J-Y and Xu, H-Y

**Publication Date:**2023

**Journal:**European Review for Medical and Pharmacological Sciences 27(19), pp. 8993-9000

**Abstract: Objective:** The aim of this study was to explore the effects of computer-aided cognitive rehabilitation (CACR) combined with virtual reality (VR) technology on event-related potential P300 and cognitive function in patients with cognitive impairment after stroke.; **Patients and Methods:** Clinical data from 94 patients with post-stroke cognitive impairment, admitted to our hospital from January 2020 to March 2023, were retrospectively analyzed. Of them, 45 patients received routine rehabilitation training (Control group), and 49 patients received CACR combined with VR technology (Observation group). Cognitive rehabilitation status, event-related potential P300 examination status, biochemical indices levels, and daily living activity scores of the two groups were evaluated and compared.; **Results:** After treatment, cognitive function significantly improved in the Observation group compared to the Control group. The amplitude of P300 in the Observation group was significantly higher, and the latency was significantly lower compared to the Control group. The levels of brain-derived neurotrophic factor (BDNF) in the Observation group were significantly higher (p<0.05), while the levels of cystatin C (Cys-C) and neuron-specific enolase (NSE) were significantly lower than those in the Control group (p<0.05 each). Patients in the Observation group demonstrated a significantly higher ability to perform daily living activities compared to the Control group (p<0.05).; **Conclusions:** Compared with conventional rehabilitation training, the combination of CACR and VR technology in the treatment of stroke-induced cognitive impairment is more effective in improving patients' cognitive function, regulating BDNF, Cys-C, and NSE levels, and enhancing patients' ability to perform daily living activities.

**Access or request full text:**<https://libkey.io/10.26355/eurrev_202310_33923>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37843311&custid=ns023446>

48. Optimal outcomes from cardiac rehabilitation are associated with longer-term follow-up and risk factor status at 12 months: An observational registry-based study
**Item Type:**Journal Article

**Authors:** Tang, Lars Hermann;Doherty, Patrick;Skou, Søren T. and Harrison, Alexander

**Publication Date:**2023

**Journal:**International Journal of Cardiology 386, pp. 134-140

**Abstract: Aim:** The purpose of Cardiac Rehabilitation (CR) is to promote and reduce risk factors in the short and long term, however, the latter has, to date, been poorly evaluated. We explored characteristics associated with provision and outcomes of a long-term assessment in CR.; **Method:** Data from the UK National Audit of CR between April 2015 and March 2020 was used. Programmes were selected if they had an established mechanism and routine methodology to collect the 12-month assessments. Risk factors pre and post phase II CR and at the 12-month assessment were explored; BMI ≤30, ≥150 min of physical activity per week, hospital anxiety and depression scale (HADS) scores <8. The data came from 32 programmes, 24,644 patients with coronary heart disease. Patients being in at least one optimal risk factor stage throughout phase II CR (OR = 1.43 95% CI 1.28 to 1.59) or successfully reaching an optimal stage during phase II CR (OR = 1.61 95% CI 1.44 to 1.80) had an increased likelihood of being assessed at 12 months compared to those who did not. Patients being in the optimal stage upon completion of phase II CR had an increased likelihood of still being in the optimal stage at 12 months. Most prominent was BMI; (OR = 14.6 (95% CI 11.1 to 19.2) for patients reaching an optimal stage throughout phase II CR.; **Conclusion:** Being in an optimal stage upon routine CR completion could be an overlooked predictor in the provision of a long-term CR service and prediction of longer-term risk factor status.; Competing Interests: Declaration of Competing Interest The authors report no relationships that could be construed as a conflict of interest. (Copyright © 2023 The Author(s). Published by Elsevier B.V. All rights reserved.)

**Access or request full text:**<https://libkey.io/10.1016/j.ijcard.2023.05.028>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37201610&custid=ns023446>

49. Cardiac rehabilitation engagement and associated factors among heart failure patients: a cross-sectional study
**Item Type:**Journal Article

**Authors:** Yu, Tianxi;Gao, Min;Sun, Guozhen;Graffigna, Guendalina;Liu, Shenxinyu and Wang, Jie

**Publication Date:**2023

**Journal:**BMC Cardiovascular Disorders 23(1), pp. 447

**Abstract: Background:** Chronic Heart Failure (CHF) still affects millions of people worldwide despite great advances in therapeutic approaches in the cardiovascular field. Cardiac rehabilitation (CR) is known to improve disease-related symptoms, quality of life and clinical outcomes, yet implementation is suboptimal, a frequently low engagement in rehabilitation programs has been found globally.; **Objective:** To quantify diverse CR-engaged processes and elucidate associated factors of the various levels of CR engagement in CHF patients.; **Methods:** Discharged patients admitted from cardiology departments between May 2022 to July 2022 were enrolled by mobile phone text messaging, CHF patients from same department between August 2022 to December 2022 were enrolled by face-to-face. Individuals who met the inclusion criteria filled the questionnaires, including the generalized anxiety disorders scale, patient health questionnaire, cardiac rehabilitation inventory, patient activation measure, Tampa scale for kinesiophobia heart, social frailty, Patient Health Engagement Scale (PHE-s®). We obtained sociodemographic characteristics and clinical data from medical records. Chi-square tests and multivariable logistic regression analyses were performed to examine the factors associated with CR engagement phases.; **Results:** A total of 684 patients were included in the study. 52.49% patients were in the Adhesion phase. At the multivariate level, compared with the blackout phase process anxiety, monthly income (RMB yuan) equal to or more than 5,000 were the most important factor impacting CHF patients CR engagement. Compared with the Blackout phase, regular exercise or not, severe depression, previous cardiac-related hospitalizations 1 or 2 times, Age influenced patient CR engagement in the Arousal phase. Besides, compared with the Blackout phase, outcome anxiety and activation level were independent factors in the Eudaimonic Project phase.; **Conclusion:** This study characterized CR engagement, and explored demographic, medical, and psychological factors-with the most important being process anxiety, monthly income, patient activation, severe depression, and previous cardiac-related hospitalizations. The associated factors of CR engagement were not identical among different phases. Our findings suggested that factors could potentially be targeted in clinical practice to identify low CR engagement patients, and strategies implemented to strengthen or overcome these associations to address low CR engagement in CHF patients. (© 2023. BioMed Central Ltd., part of Springer Nature.)

**Access or request full text:**<https://libkey.io/10.1186/s12872-023-03470-x>

**URL:**<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37697249&custid=ns023446>

50. Clinical efficacy of ultrasound-guided stellate ganglion block combined with extracorporeal shock wave therapy on limb spasticity in patients with ischemic stroke
**Item Type:**Journal Article

**Authors:** Yuan, Zhen;Luo, Jun;Cheng, Qing-Feng and Zhang, Qiao

**Publication Date:**2023

**Journal:**BMC Neurology 23(1), pp. 349

**Abstract: Introduction:** To observe the clinical efficacy of ultrasound-guided stellate ganglion block (SGB) + extracorporeal shock wave therapy (ESWT) for limb spasticity in patients with ischemic stroke.; **Methods:** A total of 60 patients with post-stroke limb spasticity in our hospital were selected and randomly divided into four groups (n = 15). In the control group, patients received routine rehabilitation training. Based on routine rehabilitation training, SGB group patients underwent ultrasound-guided SGB, ESWT group patients received ESWT, and SGB + ESWT group patients received ultrasound-guided SGB combined with ESWT. The total treatment course was one month. The Modified Barthel Index (MBI) score, Fugl-Meyer Assessment and upper limb rehabilitation training system were applied to evaluate the activities of daily living, upper limb motor function and upper limb performance before and after treatment. Finally, the improvement after treatment was compared among different groups.; **Results:** After treatment, compared with the control group, the MBI score and the upper limb score based on Fugl-Meyer Assessment in the SGB, ESWT, and SGB + ESWT groups were significantly increased (P  0.05). In terms of upper limb performance ability, patients in the SGB, ESWT and SGB + ESWT groups had better fitting degree, participation and exertion of exercise than those in the control group, and the SGB + ESWT group patients had the same movement trajectory as robots.; **Conclusion:** Ultrasound-guided SGB and ESWT can reduce the muscle tension of patients, alleviate spasticity, promote the motor function of the upper limb, and improve the working performance of patients. However, the effect of SGB combined with ESWT is better. (© 2023. BioMed Central Ltd., part of Springer Nature.)

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