Jurnal Ners Volume 10 Nomor 1 Tahun 2026 Halaman 1621 - 1633
JURNAL NERS
Research & Learning in Nursing Science
http://journal.universitaspahlawan.ac.id/index.php/ners

CONTINUITY OF CARE IN POST–CORONARY ARTERY BYPASS GRAFTING (CABG) PATIENTS: A LITERATURE REVIEW

Irman Tabroni[1], Wan Nishfa Dewi[2], Sri Wahyuni[3]
[1,2,3]Faculty of Nursing, Universitas Riau
wan.dewi@lecturer.unri.ac.id

Abstrak

Latar belakang: Penyakit kardiovaskular, terutama morbiditas dan mortalitas global. Operasi *Coronary Artery Bypass Grafting* (CABG) dilakukan untuk memulihkan aliran darah miokardium dan fungsi jantung, namun pasien pasca-CABG akan menghadapi keterbatasan mobilitas, kelelahan, nyeri, dan masalah psikososial, sehingga memerlukan *Continuity of Care* (CoC) setelah pulang dari Rumah Sakit. Tujuan: Memetakan penerapan CoC pasca-CABG, menilai dampaknya terhadap hasil kesehatan dan praktik keperawatan, serta mengidentifikasi faktor-faktor yang mempengaruhi efektivitasnya. Metode*: Literature review* mengikuti pedoman PRISMA 2020. Pencarian literatur di *PubMed*, *ScienceDirect*, *ProQuest*, dan *Google Scholar* (2015–2025) menghasilkan 6.429 artikel, dari mana 7 artikel penelitian asli disertakan. Data diekstraksi mencakup karakteristik studi, bentuk intervensi CoC, dan hasil utama. Analisis tematik digunakan, sementara kualitas studi dinilai dengan *Joanna Briggs Institute Critical Appraisal Tools*. Hasil: Tiga tema utama muncul: 1) Ragam bentuk implementasi CoC (rujukan otomatis, rehabilitasi rawat jalan, *tele-rehabilitasi*, *discharge planning*, *yoga-based*), 2) Dampak terhadap pemulihan klinis, kualitas hidup, dan kemandirian pasien, serta 3) Faktor yang memengaruhi efektivitas (usia, komorbiditas, kesiapan fisik, dukungan keluarga, akses teknologi). Kesimpulan: CoC pasca-CABG efektif mendukung pemulihan klinis, kualitas hidup, dan kemandirian pasien melalui pendekatan multidisiplin, edukasi, dukungan sosial, dan pemanfaatan teknologi.

Kata Kunci: *Continuity of Care; Coronary Artery Bypass Grafting (CABG); Patient Outcomes*

Abstract

Background: Cardiovascular disease, particularly coronary artery disease, remains a leading cause of global morbidity and mortality. Coronary Artery Bypass Grafting (CABG) surgery is performed to restore myocardial blood flow and enhance cardiac function. However, following CABG, patients may experience limited mobility, fatigue, pain, and psychosocial challenges, necessitating continuity of care (CoC) after hospital discharge. Objective: This review aims to map the implementation of CoC after CABG, evaluate its impact on health outcomes and nursing practice, and identify factors influencing its effectiveness. Methods: This literature review was conducted in accordance with PRISMA 2020 guidelines. Database searches were performed in PubMed, ScienceDirect, ProQuest, and Google Scholar (2015–2025), identifying 6,429 articles, from which seven original research studies were included. Results: Three key themes emerged: (1) variations in CoC implementation, including automatic referral, outpatient rehabilitation, tele-rehabilitation, discharge planning, and yoga-based interventions; (2) demonstrated improvements in clinical recovery, quality of life, and patient independence; and (3) effectiveness influenced by age, comorbidities, physical readiness, family support, and access to technology. Conclusion: Post-CABG CoC effectively supports recovery, quality of life, and patient independence by leveraging multidisciplinary approaches, education, social support, and technological resources.

Keywords: *Continuity of Care; Coronary Artery Bypass Grafting (CABG); Patient Outcomes*

* Corresponding author :
Address : Jalan Pattimura No 9 Gedung G Pekanbaru Riau Kode Pos 28131 Indonesia
Email: wan.dewi@lecturer.unri.ac.id
Phone: 0812-7522-049

INTRODUCTION

Cardiovascular disease is the leading cause of death worldwide, resulting in nearly 17.9 million deaths annually (World Health Organization, 2021). Coronary Artery Disease (CAD), a major contributor, is treated through medication, catheterization, or Coronary Artery Bypass Grafting (CABG) (Nadeak et al., 2021; Seo et al., 2017). CABG uses the patient's vein or arterial grafts to bypass blocked arteries, restoring blood flow, improving cardiac function, and relieving angina.

Although CABG improves prognosis, the postoperative period involves several challenges. Patients may experience limited mobility, prolonged fatigue, persistent pain, and digestive disturbances. Psychological issues, such as sleep disorders, weakness, difficulty concentrating, and anxiety, are also reported (Prasetyaningrum et al., 2021). These conditions may affect the patient's quality of life and reflect the quality of postoperative care provided by the hospital.

Cardiac Rehabilitation (CR) is a program of exercise, education, counseling, and lifestyle changes designed to aid cardiac patients after CABG. CR is often home-based and delivered via patient education, counseling, and lifestyle change (Agostinho et al., 2024; Nangliya et al., 2023). A multidisciplinary team—nurses, physicians, physiotherapists, and nutritionists—addresses physical, emotional, and social needs (Nangliya et al., 2023; Tedjasukmana, 2019). CR usually happens in phases: hospital mobilization, outpatient care, and long-term maintenance, all stressing lifestyle change. The goal is to improve physical capacity, self-confidence, and heart health (Galih et al., 2022; Tsaloglidou, 2019). Digital platforms and wearable devices support remote monitoring and allow for personalized interventions (Sharon, 2024). CR improves quality of life and reduces both death and readmission after CABG, though many patients cannot participate due to limited awareness, finances, or motivation. Combining education, team support, and technology maximizes recovery (Sharon, 2024; Subih et al., 2024; Tedjasuksmana, 2019; Tsaloglidou, 2019).

Recent studies have demonstrated significant benefits of Continuity of Care (CoC) in post-CABG patients. CoC contributes to improved tolerance of physical activity. Patients enrolled in continuous care programs exhibit better mobility and reduced fatigue during postoperative rehabilitation (Galih et al., 2022; Nangliya et al., 2023). Structured rehabilitation programs are associated with improved physiological outcomes, including increased cardiovascular capacity and enhanced blood pressure control compared to standard care (Galih et al., 2022). CoC is also linked to a reduced risk of hospital readmission, as patients receiving continuous care tend to have fewer complications and lower readmission rates (Nangliya et al., 2023).

Continuity of Care also promotes functional recovery and quality of life. Enhanced daily activity, reduced fatigue, and improvements in psychosocial health, including decreased anxiety and fewer sleep disturbances, have been reported following surgery (Prasetyaningrum et al., 2021). Home-based and community-based rehabilitation facilitates ongoing patient monitoring and adherence to programs, strengthening long-term recovery outcomes.

However, CoC has challenges. Resources are limited. Distance and transportation may hinder access. Patient adherence to rehab is often low. This highlights the need to evaluate forms, impacts, and key factors of CoC. This review aims to map CoC for post-CABG patients, examine health and nursing outcomes, and identify factors for effective care. Findings can help develop better integrated, patient-focused nursing practices.

METHODS

This study followed PRISMA 2020 Statement guidelines (Page et al., 2021) to ensure transparency and precision. The review was chosen to give a comprehensive view of current approaches.

a. Problem Identification

Problem identification in this study used the PICO approach, which stands for Population, Intervention, Concept, and Outcome. This approach helped define the review focus and establish objectives and inclusion criteria. Table 1 summarizes the PICO components:

Table 1. PICO Components

PICO Components	Description
P	Patients who have undergone coronary artery bypass grafting (CABG) or other cardiac surgeries
I	Continuity of Care, including care coordination, care transition (hospital-to-home), follow-up, discharge planning, and communication among healthcare providers
C	Post-cardiac surgery healthcare services (hospital, cardiac clinic, home-based care, or community health services)
O	Clinical recovery, quality of life, and patient independence

Following the PICO framework, this study aims to map Continuity of Care for post–CABG patients and examine its effects on patient outcomes and nursing. The review answers: How is Continuity of Care implemented in post–CABG patients, and how do its impacts and factors contribute to better health and nursing?

b. Inclusion Criteria

The inclusion criteria for this review are articles discussing Continuity of Care in post-CABG patients, studies on factors or techniques that affect its success, and assessments of CoC's impact on outcomes such as adherence, quality of life, and readmission rates. Also included are articles on nursing practice or healthcare services in the context of continuous care after cardiac surgery. We included original research articles using quantitative, qualitative, or mixed methods, available in full text and free of charge, published from February 2015 to February 2025, and written in English. Exclusion criteria are articles that do not discuss CoC or post- CABG patients, studies focused solely on clinical or technical surgical aspects without continuous care, and non-scientific articles such as editorials, commentaries, brief reports, or narrative reviews that lack primary data or systematic synthesis.

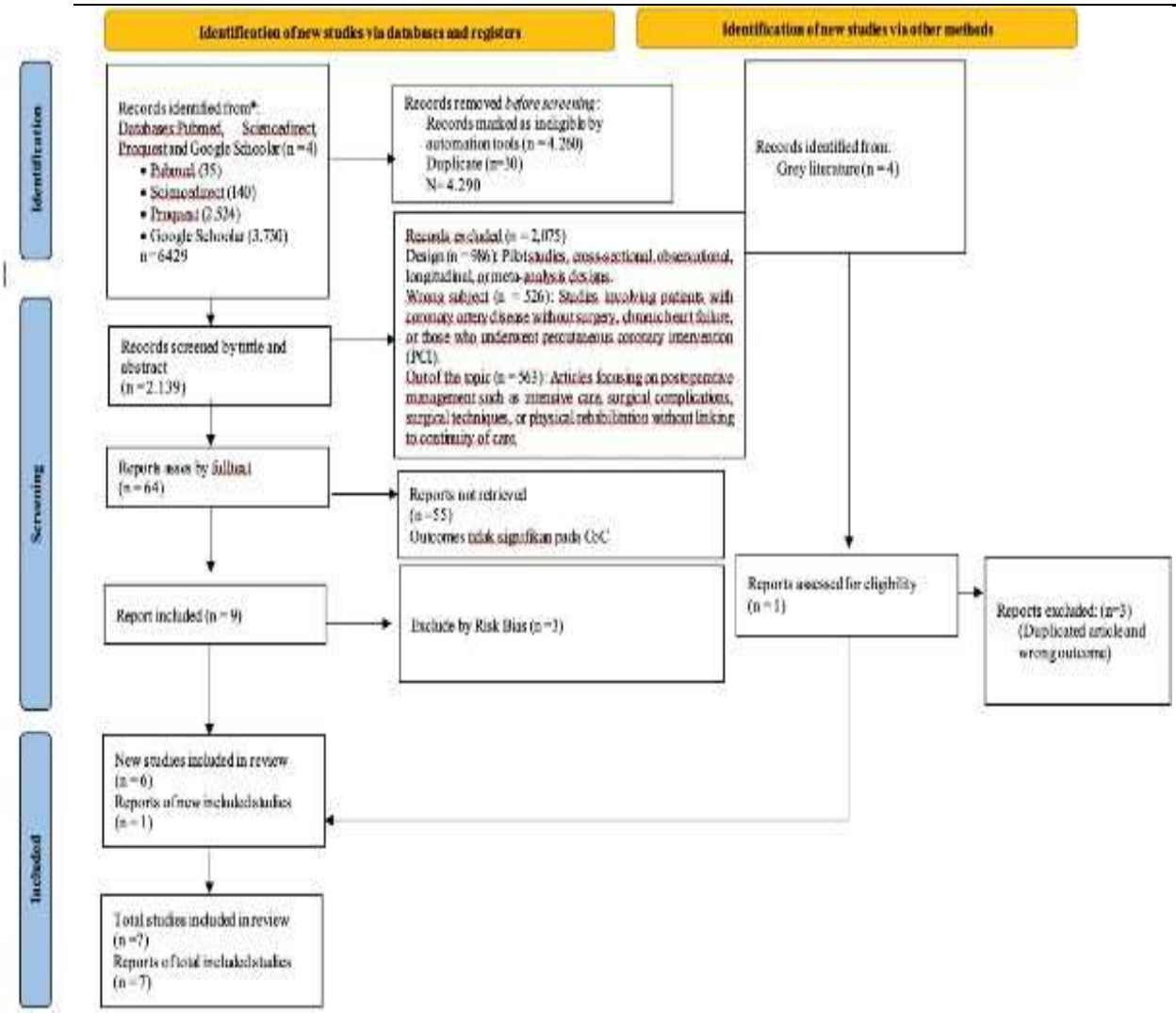
c. Search Strategy

The article search process, based on predetermined criteria, was conducted by three reviewers (IT, WND, SW). The search was conducted following the PICO (Population, Intervention, Concept, Outcome) components, previously formulated to ensure alignment with the review framework on the implementation of Continuity of Care in post–Coronary Artery Bypass Grafting (CABG) patients. The article search was conducted on June 12, 2025, through four main databases: PubMed, ScienceDirect, Scopus, and Google Scholar. Boolean operators AND and OR were used to combine keywords, ensuring that the search results were more focused and relevant to the research topic. Complete details of the search strategy, including keyword combinations and initial findings from each database, are presented in Table 2.

Subsequently, the selection process was carried out according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram, which outlines the stages of identification, screening, eligibility, and inclusion of studies. The PRISMA diagram summarizing all stages of the article selection process is presented in Figure 1. From the initial search results, 6,429 articles were retrieved from the four databases. After the screening process was carried out according to the inclusion and exclusion criteria, a total of 2,075 articles were excluded. As many as 986 articles were excluded because they had unsuitable research designs, such as pilot studies, cross-sectional, observational, longitudinal, or meta-analyses. A total of 526 articles were excluded because the study subjects did not meet the inclusion criteria, including patients with non- surgical cardiac conditions, chronic heart failure, or those who underwent percutaneous coronary interventions (PCIs). In addition, 563 articles were excluded because they were not relevant to the topic, namely articles discussing postoperative management such as intensive care, surgical complications, surgical techniques, or physical rehabilitation without linking them to the aspect of Continuity of Care.

Tabel 2. Keywords

Database	Keywords
Pubmed	*("Continuity of Care" OR "care coordination" OR "transitional care") AND ("coronary artery bypass grafting" OR CABG) AND ("readmission" OR "quality of life")*
Sciendirect	*("Continuity of Care" OR "care coordination" OR "transitional care" OR "integrated care" OR "discharge planning") AND ("coronary artery bypass" OR CABG) AND ("rehabilitation" OR "postoperative care" OR "home care") AND ("readmission" OR "quality of life" OR "functional recovery" OR "patient outcomes")*
Proquest	*("Continuity of Care" OR "care coordination" OR "transitional care") AND ("coronary artery bypass" OR CABG) AND ("rehabilitation" OR "postoperative care" OR "home care") AND ("readmission" OR "quality of life" OR "functional recovery" OR "patient outcomes")*
Google Schoolar	*("Continuity of Care" OR "transitional care" OR "post-discharge follow-up" OR "care transition") AND ("coronary artery bypass graft" OR CABG) AND ("postoperative" OR "post-surgery" OR "after surgery" OR "rehabilitation" OR "home care") AND ("nursing" OR "nurse-led" OR "patient outcomes" OR "readmission")*



d. Data Extraction

The data extraction process was conducted independently by three reviewers — IT, WND, and SW —for all articles that met the inclusion criteria for this scoping review. The collected data included the author's name, article title, and year

of publication, country or region of study, research design, type of intervention or Continuity of Care approach applied to post–Coronary Artery Bypass Grafting (CABG) patients, and the main outcomes reported.

e. Analysis and Synthesis

Thematic synthesis was used to analyze the data inductively from the studies included in the review process (Thomas & Harden, 2008). This process consisted of three stages: coding the extracted data, grouping descriptive themes, and developing analytical themes that extend beyond the findings reported in the original studies.

f. Article Quality

The quality of the articles was assessed to identify potential bias by three reviewers using the Joanna Briggs Institute (JBI) Critical Appraisal Tools, which include several evaluation aspects. The articles were evaluated on a categorization of "good," "fair," and "poor." The assessed aspects included the clarity of the research objectives, the suitability of the design to the objectives, the accuracy of the data collection methods, the validity and reliability of the instruments, and the appropriateness of the data analysis. Discussions among all reviewers were held to ensure the accuracy of the quality assessment of the reviewed articles. The results of the article quality assessment are presented in Table 3 below.

Table 3. *JBI Critical Appraisal*

Author	Checkilst JBI	Yes (%)	No (%)	Unclear (%)	NA
Liu, et al (2019)	Randomized Control Trial (RCT)	69,2	15,4	15,4	0
Rakhshan et al., (2019)	Randomized Control Trial (RCT)	61,5	23,1	15,4	0
Khalil, et al., (2024)	Randomized Control Trial (RCT)	69,2	30,8	0	0
Bishawi et al (2018)	Randomized Control Trial (RCT)	84,6	0	7.7	7.7
Majumdar, V. et al. (2025)	Randomized Control Trial (RCT)	100	0	0	0
Shaikha, et al. (2025)	Randomized Control Trial (RCT)	100	0	0	0
Aziz, et al.,. (2020)	Quasy Experimental	100	0	0	0

RESULTS AND DISCUSSION

a. Study Characteristics

A total of seven studies analyzed in this review used a Randomized Controlled Trial (RCT) design. It focused on the implementation of Continuity of Care in post–Coronary Artery Bypass Grafting (CABG) patients. The interventions were conducted in various countries with different income levels according to the World Bank (2024) classification, including high-income countries such as Canada and the United States, upper- middle-income countries such as Jordan and Iran, and lower-middle-income countries such as Egypt and India. The forms of CoC implemented included various approaches, such as an automatic referral system to cardiac rehabilitation to enhance the connection between hospital and community care (Liu et al., 2019); an Outpatient Cardiac Rehabilitation (OCR) program emphasizing physical exercise and patient education (Rakhshan et al., 2019), and the Early Implementation of the 6-Minute Walking Test (6MWT) post-CABG in Egypt, which included monitoring physiological parameters and the Borg RPE scale, proven to improve walking tolerance and enhance patients' physiological parameters (El-Aziz et al., 2020). In addition, a longitudinal study conducted in the United States highlighted the importance of long-term follow-up for patients with high comorbidity (Bishawi et al., 2018), while a study in India showed the effectiveness of yoga-based cardiac rehabilitation in reducing mortality and cardiovascular events (Majumdar et al., 2025). The modified Re-Engineered Discharge (RED) program in Jordan emphasized the importance of structured discharge planning, although its results were not yet significant (Abu

Shaikha et al., 2025).

Table 4. Study Characteristics

Author and Year of Publication	Title	Country	Research Design	Main Findings
Liu et al. (2019)	*Automated Referral to Cardiac Rehabilitation After Coronary Artery Bypass Grafting Is Associated With Modest Improvement in Program Completion*	Canada	RCT	After implementing the automatic referral system, there was a significant increase in participation and completion rates in cardiac rehabilitation programs among post-CABG patients. However, the improvement was moderate, indicating the presence of non-systemic barriers in the continuity of postoperative care.
Rakhshan et al. (2019)	*The Effect of Outpatient Cardiac Rehabilitation on the Level of Sexual Satisfaction Among Post-CABG Patients*	India	RCT	The OCR program significantly improved the level of sexual satisfaction among post-CABG patients ($p < 0.001$) compared to the control group, which only received routine hospital care. The study suggested that the OCR program should become an integral part of post-CABG continuing care.
Khalil et al. (2024)	*Home-Based Transitional Cardiac Telerehabilitation in Older Adults Post– Coronary Artery Bypass Grafting: A Randomized Controlled Trial*	Egypt and Bahrain	RCT	The intervention group showed significant improvements in health- related quality of life (HRQoL) ($t1 = 3.386$, $p = 0.001$; $t2 = 4.224$, $p < 0.001$) and therapeutic self-care ability ($t1 = 7.104$, $p < 0.001$; $t2 = 4.242$, $p < 0.001$) compared to the control group. This study confirmed that home-based transitional telerehabilitation is effective in enhancing Continuity of Care and postoperative outcomes among older adults following CABG.
Bishawi et al. (2018)	*Preoperative Factors Associated with Worsening in Health- Related Quality of Life Following Coronary Artery Bypass Grafting in the Randomized On/Off Bypass (ROOBY) Trial*	United States	RCT	Approximately 80% of patients experienced improvement or no change in HRQoL one year after CABG, while less than 20% showed a decline. The main risk factors for decreased HRQoL included diabetes, COPD, depression, PVD, history of stroke, and smoking habits. The study emphasized the importance of preoperative education and continuous follow-up for patients with high comorbidity to maintain quality of life after surgery.

Majumdar, V. et al. (2025)	*Long-Term Mortality and MACE Outcomes of Yoga-Based Cardiac Rehabilitation in Patients with CABG: A 15-Year Legacy Study of a Randomized Controlled Trial*	India	RCT	The YCRP group showed a significant reduction in overall mortality (HR = 0.41; 95% CI = 0.16–0.91; p = 0.02) and a decreasing trend in MACE (HR = 0.57; p = 0.065) compared to the CCRP group. This study demonstrated that yoga-based Continuity of Care improves long-term survival and reduces cardiovascular event risk among post-CABG patients..
Shaikha et al. (2025)	*Impact of a Modified Discharge Program on Health-Related Quality of Life Following Coronary Artery Bypass Grafting: A Randomized Controlled Trial*	Jordan	RCT	No significant differences were found between the intervention and control groups in total HRQoL scores or subscales (p > .05). However, the intervention group showed a slight improvement in several subscales. The study highlighted the challenges of integrating discharge programs into routine post-CABG care practices.
Aziz et al. (2023)	*The Effect of Early Six-Minute Walking Test Post-Coronary Artery Bypass Graft on Walking Tolerance and Physiological Parameters*	Mesir	Quasi-Experimental	Early 6MWT post-CABG improved patients' walking tolerance and enhanced physiological parameters; it was significant in reducing shortness of breath and fatigue, the number of rest periods, and the duration of mechanical ventilation.

Synthesis

Three themes were identified from this literature review: the various forms of Continuity of Care implementation after CABG; the impact of Continuity of Care on clinical recovery, quality of life, and patient independence; and the factors influencing Continuity of Care effectiveness. The synthesis results are presented in Table 4 below.

Table 5. Research Synthesis

Theme	Findings in the Articles	Author
Various Forms of Continuity of Care Implementation After CABG	System-based continuity with automatic referral to cardiac rehabilitation programs increased participation in community-based rehabilitation.	Liu et al., 2019
	Outpatient-based continuity through 20 sessions of Outpatient Cardiac Rehabilitation (OCR), combining physical exercise, education, and counseling.	Rakhshan et al., 2019

	Twelve-week home-based tele-rehabilitation, including preoperative education, instructional videos, home visits, and remote monitoring.	Khalil et al., 2024
	Discharge-based continuity through the modified Re- Engineered Discharge (RED) program for structured discharge planning.	**Shaikha et al., 2025**
	Long-term continuity through yoga-based cardiac rehabilitation beginning preoperatively and continuing up to 12 months postoperatively with telephone follow-ups and clinic visits.	**Majumdar et al., 2025**
	Follow-up continuity for one year after CABG to assess quality of life and preoperative risk factors.	**Bishawi et al., 2018**
	In-hospital continuity through early physiotherapy (6MWT) in the ICU improved physiological recovery and reduced ICU length of stay.	**Aziz et al., 2020**
The Impact of Continuity of Care on Clinical Recovery, Quality of Life, and Patient Independence	Cardiac rehabilitation increased 10-year survival rates (84.2% vs. 67.4%).	**Liu et al., 2019**
	Yoga-based cardiac rehabilitation reduced mortality (HR = 0.46; p = 0.02) and decreased the incidence of MACE.	**Majumdar et al., 2025**
	Home-based tele-rehabilitation improved quality of life (p < 0.001) and therapeutic self-care.	**Khalil et al., 2024**
	Continuous rehabilitation enhanced sexual satisfaction and socio-emotional functioning (p < 0.001).	**Rakhshan et al., 2019**
	Early mobilization exercises improved cardiopulmonary function, reduced dyspnea, and accelerated recovery from mechanical ventilation (p < 0.001).	**Aziz et al., 2020**

	80% of patients experienced improvement or stability in quality of life 1 year after CABG.	**Bishawi et al., 2018**
	Structured discharge planning led to minor improvements in quality of life	**Shaikha et al., 2025**
Factors Influencing the Effectiveness of Continuity of Care	Older age, female gender, and comorbidities (diabetes, heart failure) were risk factors for not completing rehabilitation	**Liu et al., 2019**
	Comorbidities (diabetes, depression, COPD) were predictors of decreased quality of life.	**Bishawi et al., 2018**
	Comorbidities (diabetes, depression, COPD) were predictors of decreased quality of life.	**Bishawi et al., 2018**
	The success of tele-rehabilitation depended on technological readiness and family support.	**Khalil et al., 2024**
	Educational level and body perception influenced the success of psychosocial rehabilitation.	Rakhshan et al., 2019
	Physical readiness and timing of physiotherapy intervention were essential; early mobilization shortened ICU stay duration (p = 0.005).	Aziz et al., 2020

The results of this literature review show that Continuity of Care after CABG can be implemented through various forms that emphasize the continuity of care from the hospital to the home and community, including transitional approaches, long-term rehabilitation, and digital monitoring tailored to patient needs to improve outcomes, reduce complications, and ensure a smooth transition (Allen, 2014). The strategies implemented include system-based continuity through automatic referrals and coordinated care (Allen, 2014), outpatient-based continuity through follow-up programs and routine rehabilitation that enhance functional recovery (Lin et al., 2025), as well as home-based remote rehabilitation that allows patients to exercise at home while increasing their autonomy (Joice et al., 2017). Structured discharge planning, especially for patients with complex conditions, can improve quality of life through family support (Restipa et al., 2022), while long-term yoga-based rehabilitation provides sustained physical and mental benefits (Nogueira Junior, 2025). Early physiotherapy in hospitals has also been shown to accelerate recovery and shorten hospital stays while ensuring the integration of interdisciplinary care (Nogueira Junior, 2025).

Cardiac Rehabilitation Programs (CRP)

have a significant impact on clinical recovery, quality of life, and patient independence after CABG. CRPs that include physical exercise, remote rehabilitation, and yoga-based interventions have been proven to increase survival, reduce mortality risk, and improve physical function, mental health, and socio-emotional functioning (Masoumi et al., 2017; Subih et al., 2024). Early mobilization in the ICU and general ward settings accelerates physiological recovery, shortens hospital stay, and encourages patient independence (Han et al., 2022), Meanwhile, a multidisciplinary approach involving medical evaluation, structured exercise, risk factor modification, education, and counseling supports healthy behaviors and self-care (Subih et al., 2024). However, patient participation remains limited due to barriers related to insurance, motivation, and awareness; therefore, efforts to address these factors are essential to maximize the benefits of CRP (Tsaloglidou, 2019).

Both individual and systemic factors also influence the success of Continuity of Care. Older age, comorbidities, physical readiness, education level, patient perception, as well as family and technological support, can significantly affect the effectiveness of the intervention (Albarqi, 2024; Barzegari et al., 2021; Shin et al., 2022; Vrijhoef, 2023). Although continuity of care generally has a positive impact, barriers such as limited geographical access, system fragmentation, and inefficient resource utilization may reduce its effectiveness. Therefore, a comprehensive approach involving coordination, supportive policies, and the utilization of technology becomes essential to bridge service gaps (Abdullah et al., 2023; Shin et al., 2022).

In addition, the integration of technology, particularly tele-rehabilitation, has been proven effective in expanding service coverage, improving access, and supporting remote monitoring and long- term follow-up (Annadurai et al., 2023; Oshomoji et al., 2024). This approach enhances patient accessibility and convenience, promotes self- management, and is comparable or even more effective than face-to-face rehabilitation for patients with chronic or neurological conditions (Nicolas et al., 2024; Nikolaev & Nikolaev, 2022; Promsarn et al., 2024). Tele-rehabilitation is also cost-effective and can reduce the burden on healthcare facilities (Kryvyakin & Shuba, 2021; Oshomoji et al., 2024). However, it faces challenges such as technological limitations, digital literacy gaps, privacy concerns, and restrictions on physical contact. Therefore, a hybrid approach that combines occasional face-to-face sessions, provider training, and culturally sensitive strategies is required to ensure comprehensive care and maintain meaningfulpatient–provider

relationships (Kryvyakin & Shuba, 2021; Velez et al., 2023).

Overall, these findings affirm that Continuity of Care after CABG is an essential strategy to support comprehensive patient recovery. Effective implementation requires a combination of clinical interventions, education, social support, and the utilization of technology, tailored to each patient's individual needs. In addition, this review highlights the need for further research to identify the most effective models of Continuity of Care across various contexts and patient populations, particularly those that consider risk factors and comorbid conditions..

CONCLUSION

Continuity of Care (CoC) after CABG has been shown to improve clinical recovery, quality of life, and patient independence. Various implementation strategies, including automatic referral, outpatient rehabilitation, home-based tele- rehabilitation, discharge planning, and yoga-based rehabilitation, provide significant benefits by enhancing physical activity, self-care, and patient satisfaction, while reducing mortality and complications. The success of CoC is influenced by individual factors such as age, comorbidities, physical readiness, education level, as well as family and technological support. Optimal implementation requires a multidisciplinary approach, education, social support, and technology integration to ensure effective continuous care. Further research is needed to identify the most suitable CoC models in various contexts and post- CABG patient populations.

REFERENCES

Abdullah, M., Alsalamah, G., Alanazi, M., Alissa, I., Bamagos, M., Alghamd, J., AlQadhib, Z., Filfilan, R., Altowairqi, M., Aljahdaly, S., & Alfarj, Z. (2023). Effect of Continuity of Care on Chronic Diseases. *Journal of Healthcare Sciences*, *03*(01), 53–57.

https://doi.org/10.52533/JOHS.2023.30109

Abu Shaikha, H. S., Alshraideh, J. A., Kawafha, M., & Al Maghaireh, D. (2025). Impact of a Modified Discharge Program on Health- related Quality of Life Following Coronary Artery Bypass Grafting: A Randomized Controlled Trial. *The Open Nursing Journal*, *19*(1). https://doi.org/10.2174/0118744346368558250320043722

Agostinho, D. R., Gonzales Rodrigues, A., Krutzfeldt Antoniazzi, L. C., Vieira Meireles, J., & Alves de Oliveira, P. (2024). REABILITAÇÃO CARDIOVASCULAR: A IMPORTÂNCIA DA ABORDAGEM MULTIDISCIPLINAR. *Revista Da Sociedade de Cardiologia Do Estado de São Paulo*, *34*(2), 165–170. https://doi.org/10.29381/0103-8559/20243402165-70

Albarqi, M. N. (2024). Continuity and sustainability of care in family medicine: Assessing its association with quality of life and health outcomes in older populations—A systematic review. *PLOS ONE*, *19*(12), e0299283. https://doi.org/10.1371/journal.pone.0299283

Allen, L. D. (2014). *System, application and method for managing patient care coordination* (Patent U.S. Patent No. 20,150,278,975).

Annadurai, B., Gokulan, P., Alagesan, J., & Ramalingam, V. (2023). Telerehabilitation in physiotherapy. In *Medical Equipment Engineering: Design, manufacture and applications* (pp. 271–279). Institution of Engineering and Technology. https://doi.org/10.1049/PBHE054E_ch17

Barzegari, J., Aryankhesal, A., Moinfar, Z., & Abolhassani, F. (2021). Non-communicable diseases units: continuity of care factors. *Journal of Public Health*, *29*(3), 653–657. https://doi.org/10.1007/s10389-019-01168-z

Bishawi, M., Hattler, B., Almassi, G. H., Spertus, J. A., Quin, J. A., Collins, J. F., Grover, F. L., & Shroyer, A. L. (2018). Preoperative factors associated with worsening in health-related quality of life following coronary artery bypass grafting in the Randomized On/Off Bypass (ROOBY) trial. *American Heart Journal*, *198*, 33–38. https://doi.org/10.1016/j.ahj.2017.12.014

El-Aziz, W. A., Attia Kandee, N., & Elsayed Mansour, H. (2020). The Effect of Early Six- Minute Walking Test Post-Coronary Artery Bypass Graft on Walking Tolerance and Physiological Parameters. *Egyptian Journal of Health Care*, *11*(3), 784–794. https://doi.org/10.21608/ejhc.2020.177493

Galih, A., Tri Tjahjono, C., Rizal, A., & Martini, H. (2022). Phase I Cardiac Rehabilitation Intervention in Patients Undergoing Coronary Artery Bypass Grafting. *Heart Science Journal*, *3*(4), 4–8. https://doi.org/10.21776/ub.hsj.2022.003.04. 2

Han, P., Yu, H., Xie, F., Li, M., Chen, X., Yu, X., Li, J., Liu, X., Shao, B., Liu, J., Liu, Y., Liu, Z., Liu, X., & Guo, Q. (2022). Effects of early rehabilitation on functional outcomes in patients after coronary artery bypass graft surgery: a randomized controlled trial. *Journal of International Medical Research*, *50*(3). https://doi.org/10.1177/03000605221087031

Joice, M. G., Bhowmick, S., & Amanatullah, D. F. (2017). Perioperative Physiotherapy in Total Knee Arthroplasty. *Orthopedics*, *40*(5). https://doi.org/10.3928/01477447-20170518- 03

Kryvyakin, O., & Shuba, L. (2021). Actuality of modern remote rehabilitation (literature review). *Experimental and Clinical Medicine*, *90*(3), 44–55. https://doi.org/10.35339/ekm.2021.90.3.krs

Lin, Y., Chen, Q., Wang, R., Zhang, B., Huang, R., & Bai, Y. (2025). Continuity of care in lumbar disc herniation: a systematic review and meta- analysis providing a deeper look into postoperative efficacy. *Frontiers in Medicine*, *12*. https://doi.org/10.3389/fmed.2025.1536391 Liu, H., Wilton, S. B., Southern, D. A., Knudtson,

M. L., Maitland, A., Hauer, T., Arena, R., Rouleau, C., James, M. T., Stone, J., &

Aggarwal, S. (2019). Automated Referral to Cardiac Rehabilitation After Coronary Artery Bypass Grafting Is Associated With Modest Improvement in Program Completion. *Canadian Journal of Cardiology*, *35*(11), 1491–1498. https://doi.org/10.1016/j.cjca.2019.08.008 Masoumi, S. Z., Kazemi, F., Khani, S., Seifpanahi-

Shabani, H., Garousian, M., Ghabeshi, M., Razmara, F., & Roshanaei, G. (2017). Evaluating the Effect of Cardiac Rehabilitation Care Plan on Quality of Life of Patients Undergoing Coronary Artery Bypass Graft Surgery. *International Journal of Cardiovascular Practice*, *2*(2), 1–7. https://doi.org/10.21859/ijcp-020204

Nadeak, S. E., Adam, M., & Maria, R. (2021). Efektivitas Terapi Musik terhadap Kecemasan dan Nyeri Pasien Coronary Artery Bypass Graft. *Journal of Telenursing (JOTING)*, *3*(2), 711–717. https://doi.org/10.31539/joting.v3i2.2955 Nangliya, R. M., Boob, M. A., Phansopkar, P., &

Somaiya, K. (2023). Optimizing cardiac therapeutic intervention strategies for patients undergoing Coronary Artery Bypass Graft (CABG) surgery towards recovery and quality of life enhancement: A case study. *Medical Science*, *27*(138), 1–8. https://doi.org/10.54905/disssi/v27i138/e315 ms3131

Nicolas, B., Leblong, E., Fraudet, B., Gallien, P., & Piette, P. (2024). Telerehabilitation solutions in patient pathways: An overview of systematic reviews. *DIGITAL HEALTH*, *10*. https://doi.org/10.1177/20552076241294110

Nikolaev, V. A., & Nikolaev, A. A. (2022). Recent trends in telerehabilitation of stroke patients: A narrative review. *NeuroRehabilitation*, *51*(1), 1–22. https://doi.org/10.3233/NRE-210330

Nogueira Junior, R. C. (2025). Postoperative Rehabilitation Strategies: Approaches to Reducing Complications and Accelerating Patient Recovery. In *Saberes em Movimento* (pp. 66–71). Seven Editora. https://doi.org/10.56238/livrosindi20252 8- 010

Oshomoji, O. I., Ajiroba, J. O., Semudara, S. O., & Olayemi, M. A. (2024). Tele-rehabilitation in African rural areas: a systematic review. *Bulletin of Faculty of Physical Therapy*, *29*(1), 89. https://doi.org/10.1186/s43161- 024-00256-w

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ (Clinical Research Ed.)*, *372*, n71. https://doi.org/10.1136/bmj.n71

Prasetyaningrum, W., Akbar, M. R., & Prawesti, A. (2021). Faktor yang Memengaruhi Kualitas Hidup Pasien Paska Bedah Pintas Arteri Koroner. *Jurnal Kesehatan*, *12*(1), 83–92. https://doi.org/10.26630/jk.v12i1.2277

Promsarn, S., Ketpan, W., Pankratuk, R., & Suraprapapich, P. (2024). Review article: Telerehabilitation interventions for rehabilitation and management of post- COVID-19 patients: A comprehensive review. *Journal of Associated Medical Sciences*, *57*(3), 184–191. https://doi.org/10.12982/JAMS.2024.060

Rakhshan, M., Toufigh, A., Dehghani, A., & Yaktatalab, S. (2019). Effect of Cardiac Rehabilitation on Sexual Satisfaction Among Patients After Coronary Artery Bypass Graft Surgery. *Journal of Cardiopulmonary Rehabilitation and Prevention*, *39*(6), E26– E30. https://doi.org/10.1097/HCR.0000000000000 434

Restipa, L., Arif, Y., & Donisnita, D. (2022). Discharge Planning Dan Permberdayaan Keluarga Model Homecare Service Dengan Pendekatan Continuity Of Care (Hcs-Coc) Terhadap Kualitas Hidup Pasien Stroke Iskemik. *JIK JURNAL ILMU KESEHATAN*, *6*(1), 198. https://doi.org/10.33757/jik.v6i1.516

Seo, Y. G., Jang, M. J., Park, W. H., Hong, K. P., & Sung, J. (2017). Inpatient cardiac rehabilitation programs' exercise therapy for patients undergoing cardiac surgery: National Korean Questionnaire Survey. *Journal of Exercise Rehabilitation*, *13*(1), 76–83. https://doi.org/10.12965/jer.1732806.403

Sharon, S. M. (2024). CARDIAC REHABILITATION. In *Futuristic Trends in Medical Sciences Volume 3 Book 9* (pp. 165– 175). Iterative International Publisher, Selfypage Developers Pvt Ltd. https://doi.org/10.58532/V3BFMS9P1CH20

Shin, J. Y., Kim, H. J., Cho, B., Yang, Y. J., & Yun, J. M. (2022). Analysis of Continuity of Care and Its Related Factors in Diabetic Patients: A Cross-Sectional Study. *Korean Journal of Family Medicine*, *43*(4), 246–253. https://doi.org/10.4082/kjfm.21.0145

Subih, M., Alhadidi, M., Alrahahleh, M., Eldien, A. S., & Alfawaeer, Z. (2024). *A Systematic Review of Cardiac Rehabilitation Programs for Patient with Coronary Artery Bypass Grafts Surgery*. https://doi.org/10.22541/au.170670531.1509 0580/v1

Tedjasukmana, D. (2019). Rehabilitation Perioperative Cardiac Surgery. *Proceedings of the 11th National Congress and the 18th Annual Scientific Meeting of Indonesian Physical Medicine and Rehabilitation Association*, 168–171. https://doi.org/10.5220/0009087401680171

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1), 45. https://doi.org/10.1186/1471-2288-8-45

Tsaloglidou, A. (2019). Understanding Cardiac Rehabilitation.*American Journal of Biomedical Science & Research*, *4*(6), 439– 441. https://doi.org/10.34297/AJBSR.2019.04.000 851

Velez, M., Lugo-Agudelo, L. H., Patiño Lugo, D. F., Glenton, C., Posada, A. M., Mesa Franco, L. F., Negrini, S., Kiekens, C., Spir Brunal, M. A., Roberg, A.-S. B., & Cruz Sarmiento, K. M. (2023). Factors that influence the provision of home-based rehabilitation services for people needing rehabilitation: a qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*, *2023*(2). https://doi.org/10.1002/14651858.CD014823

Vrijhoef, H. J. (2023). Continuity drives care coordination. *International Journal of Care Coordination*, *26*(1), 3–4. https://doi.org/10.1177/20534345231159949

World Health Organization. (2021). *Cardiovascular diseases (CVDs)*. World Health Organization.