A systematic review and meta-analysis on the association between quality of hospital care and readmission rates in patients with heart failure

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In recent years, readmission rates have been increasingly used as a measure of quality of hospital care for patients with heart failure. The aim of this systematic review is to assess the scientific evidence regarding the relation between hospital readmission rates and quality of hospital care for patients with heart failure.

We defined quality of hospital care for patients with heart failure by adhering to the performance measures developed by the American College of Cardiology (ACC)/American Heart Association (AHA). Relevant articles published in English and indexed in the bibliographic databases Embase, Medline OvidSP, Web of Science, Cochrane Central, and PubMed were reviewed.

Of the 2,638 studies identified, 18 were included. They varied widely in their methodology, data sources used, and study populations. We found mixed but rather limited evidence that there is a relationship between the ACC/AHA process measures and the rate of readmission. Four of 10 studies showed a significant correlation of readmission rate with "angiotensin-converting enzyme inhibitor/angiotensin receptor blocker use." Three of 9 studies showed a significant correlation between readmission rates and "evaluation of left ventricular systolic function." One of 7 studies showed a significant correlation with "smoking cessation counseling," and 2 of 8 showed a significant correlation with "providing discharge instructions." No evidence was found for a relationship between readmission rates and the performance measure "warfarin for atrial fibrillation.

In conclusion, readmission rates after heart failure are mostly not related to the tested indicators. It is unclear whether in-hospital quality of care is the key determinate of the readmission rate or whether readmissions are likely influenced more by post-discharge care.

Biography

Claudia Fischer has completed her Ph.D. at the Erasmus Medical Center in Rotterdam, the Netherlands. She has a background in Health Science (specialized in lifestyle and chronic disorders), Public Health and Health Care Management. Her main research focus is on outcomes research and quality of care. She presented at numerous international conferences, published in reputed scientific journals and has been serving as a reviewer in different peer-reviewed journals. Currently, Claudia Fischer is working as a research scientist at Philips Research in Cambridge, UK.

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