

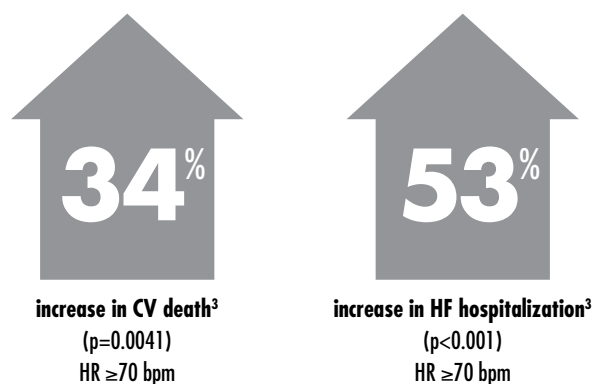


Clinical Importance of Heart Rate Management

Heart Rate (HR): A Single Predictor of Mortality/Readmission

- In post-MI patients, elevated HR is associated with poor outcomes, such as non-fatal MI or non-fatal stroke.¹
- In CHF patients, risk of CV death or HF readmission increases by 3% with every elevated beat.²

Low-EF, CAD Patients With Elevated HR (70 bpm or Greater) Have Increased Risk for **CV Death** and **HF Readmission**³



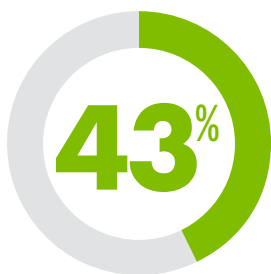
Heart Rate Can Reflect Effectiveness of GDMT

- Multiple society guidelines suggest additional medications should be considered if targeted HR of 70 bpm or less cannot be achieved with beta-blockers in heart failure patients.^{4,5}

Early Reduction of HR Associated With Improved Outcomes

- Early reduction of HR at 1 month (9.5-15.3 bpm) improves long-term survival rate and MI recurrence.⁶
- Each 10 bpm reduction in HR at 1 month is estimated to reduce relative risk of CV death by 30%.⁶

Challenge Achieving Target Heart Rate



At the end of WCD use (median 73 days), **43% of patients do not reach 70 bpm**, indicating they may not have been effectively managed with a beta-blocker.⁷



Clinical Importance of Heart Rate Management

Heart Rate Control Alert

Set Customized Thresholds and Identify Elevated HR



Daily



Night Time



3* out of 3* Days



Heart rate is calculated as the average rate in a 5-minute interval
Maximum daily heart rate is calculated as the highest 5-minute interval in a 24-hour period
Night time heart rate is the median of 5-minute intervals between 12am–4am

*Default settings are shown. These settings can be customized.

Alerts and Notifications Designed to Fit Your Workflow

- Heart Rate Control Alerts can be viewed online or via optional notifications when patients' daily maximum HR and night time HR exceed thresholds.



Online



Text



Email



Phone



Fax

¹ Kolloch R, Legler U.F., Champion A, et al. Impact of resting heart rate on outcomes in hypertensive patients with coronary artery disease: findings from the INternational Verapamil-SR/trandolapril Study (INVEST). Eur Heart J. 2008;29(10):1327-1334.

² Böhm M, Swedberg K, Komajda M, et al. Heart rate as a risk factor in chronic heart failure (SHIFT): the association between heart rate and outcomes in a randomised placebo-controlled trial. The Lancet. 2010;376(9744): 886-894.

³ Fox K, Ford I, Steg P, et al. Heart rate as a prognostic risk factor in patients with coronary artery disease and left-ventricular systolic dysfunction (BEAUTIFUL): a subgroup analysis of a randomized controlled trial. The Lancet. 2008; 817-21.

⁴ Ponikowski P, Voors AA, Anker SD, et al. ESC Scientific Document Group; 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). Eur Heart J. 2016;37(27): 2129-2200.

⁵ Yancy CW, Jessup M, Bozkurt B, et al. 2017 ACC/AHA/HFSA Focused Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. Circulation. 2017;136:e137-e161.

⁶ Cucherat M, et al. Quantitative relationship between resting heart rate reduction and magnitude of clinical benefits in post-myocardial infarction: a meta-regression of randomized clinical trials, European Heart Journal. 2007;28(24):3012-3019

⁷ Jungbauer CJ, Maier LS, Emoto K, et al. Achieving Guideline-Directed Heart Rate Control Early Posthospitalization, Am J of Cardiology, 2019