## Impact of technological advances on the care of patients with arrhythmias

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The advancement of technology has significantly impacted the care of patients with arrhythmias, leading to improved diagnosis, monitoring, and treatment of this heart condition. The introduction of advanced medical devices, such as smart monitors and wearable technologies, has allowed real-time monitoring of cardiac activity, enabling prompt intervention in case of irregularities. Technological progress has also led to the development of sophisticated algorithms for analyzing heart rhythm data, enabling more precise diagnosis and personalized treatment. Telemedicine has become a common practice, allowing patients to regularly communicate with their healthcare providers online, reducing costs and improving the accessibility of medical care. Furthermore, technological advancement has resulted in the development of minimally invasive surgical techniques, such as ablation and the implantation of cardiac pacemakers, reducing the risk of complications and shortening the recovery time for patients. All these innovations together contribute to an improved quality of life for patients with arrhythmias and reduce the risk of serious complications associated with this condition.<sup>13</sup>

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- Leclercq C, Witt H, Hindricks G, Katra RP, Albert D, Belliger A, et al. Wearables, telemedicine, and artificial intelligence in arrhythmias and heart failure: Proceedings of the European Society of Cardiology Cardiovascular Round Table. Europace. 2022 Oct 13;24(9):1372-1383. https://doi.org/10.1093/europace/euac052
- Sohrabi C, Ahsan S, Briasoulis A, Androulakis E, Siasos G, Srinivasan NT, et al. Contemporary management of heart failure patients with reduced ejection fraction: the role of implantable devices and catheter ablation. Rev Cardiovasc Med. 2021 Jun 30;22(2):415-428. https://doi.org/10.31083/i.rcm2202047
- 3. Hindricks G, Potpara T, Dagres N, Arbelo E, Bax JJ, Blomström-Lundqvist C, et al; ESC Scientific Document Group. 2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS): The Task Force for the diagnosis and management of atrial fibrillation of the European Society of Cardiology (ESC) Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC. Eur Heart J. 2021 Feb 1;42(5):373-498. https://doi.org/10.1093/eurheartj/ehaa612

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