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Accelerating progress in cardiology: embracing open science

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Open science is not only compelling but also essential for the advancement of cardiology. Open science encompasses open-access publishing, data sharing and open source. It embodies a set of practices aiming for greater transparency and collaboration in research (figure 1). It is pivotal for driving innovation, ensuring research integrity and democratising access to scientific knowledge. The societal impact of open science extends beyond the scientific community, reaching also patients at the heart of our research. Open access to research findings is empowering patients to make informed decisions about their care.

Open science enhances research in multiple ways: importantly, it augments reach. For instance, open-access publishing has been linked to higher citation rates, often receiving more media coverage and more downloads, all contributing to increased visibility and a wider reach and impact of the research.[1] Open science can enhance the quality of research through rigorous prepublication and postpublication peer review and open discussion.[2] The COVID-19 pandemic has underscored the benefits of these open science principles: accelerating research efforts, avoiding 'research waste' and improveing transparency and credibility.[3]

This study of Cobey *et al* reports on a survey exploring open science practices among international cardiology researchers sheds light on crucial insights.[4] While there is a general awareness of open science, there exists a notable gap especially in training and implementation. This gap underscores the urgent need for structured educational resources and institutional support to empower the adoption of open science practices in cardiology research.

The survey serves as a foundational step towards understanding the current landscape of open science in cardiology. Moving forward, it is crucial to continue promoting open science practices, providing the necessary support and resources and recognising the substantial benefits they offer. As we embrace open science, we pave the way for a more collaborative, transparent and impactful future in cardiovascular research. Defining and reducing barriers for open science, including improved training, is essential as also stated by the recent UNESCO recommendations and should be a collaborative approach involving funders, research institutions and journals to create a supportive environment.[5]

Open Heart is committed to playing a role in this endeavour by fostering a culture of openness and collaboration within the cardiology community. At *Open Heart*, we strongly encourage that data underlying a research paper be made publicly available, and all research articles must contain a 'data availability statement'.

Embracing open science is imperative for the future of cardiovascular medicine. I urge our readers, cardiologists and cardiovascular researchers to embrace open science practices and to advocate for their adoption in our field, for example, by publishing your research open access in order to make it publicly available, by

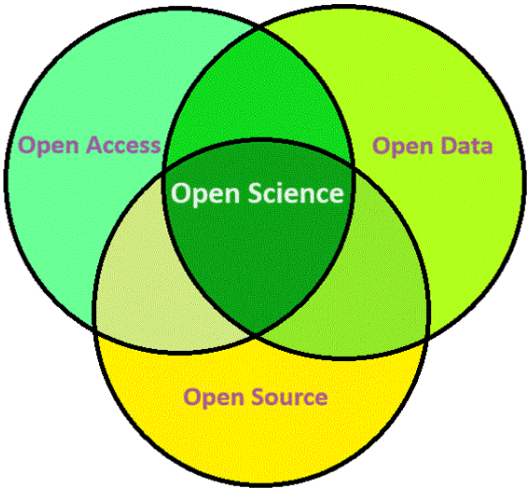

Figure 1 The main components of open science.

reading open access research articles and by sharing your research data as far as possible. Together, we can accelerate progress in cardiology and improve the lives of our patients.

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