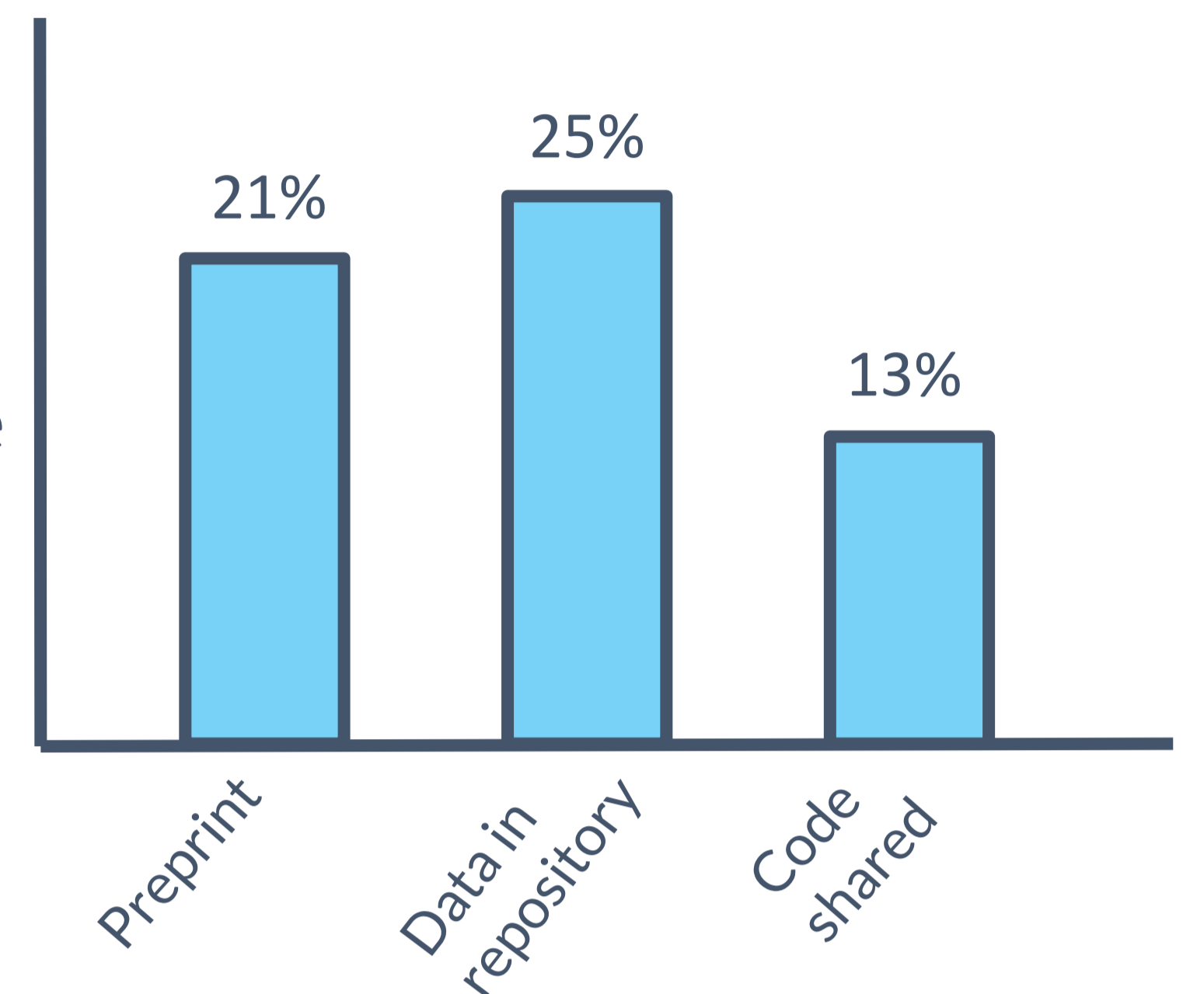# How do we measure success for Open Research?

Establish Principles for monitoring Open practices

1. Informed by community standards
2. Pragmatism over idealism
3. Interoperability and inclusivity
4. Scalable and efficient
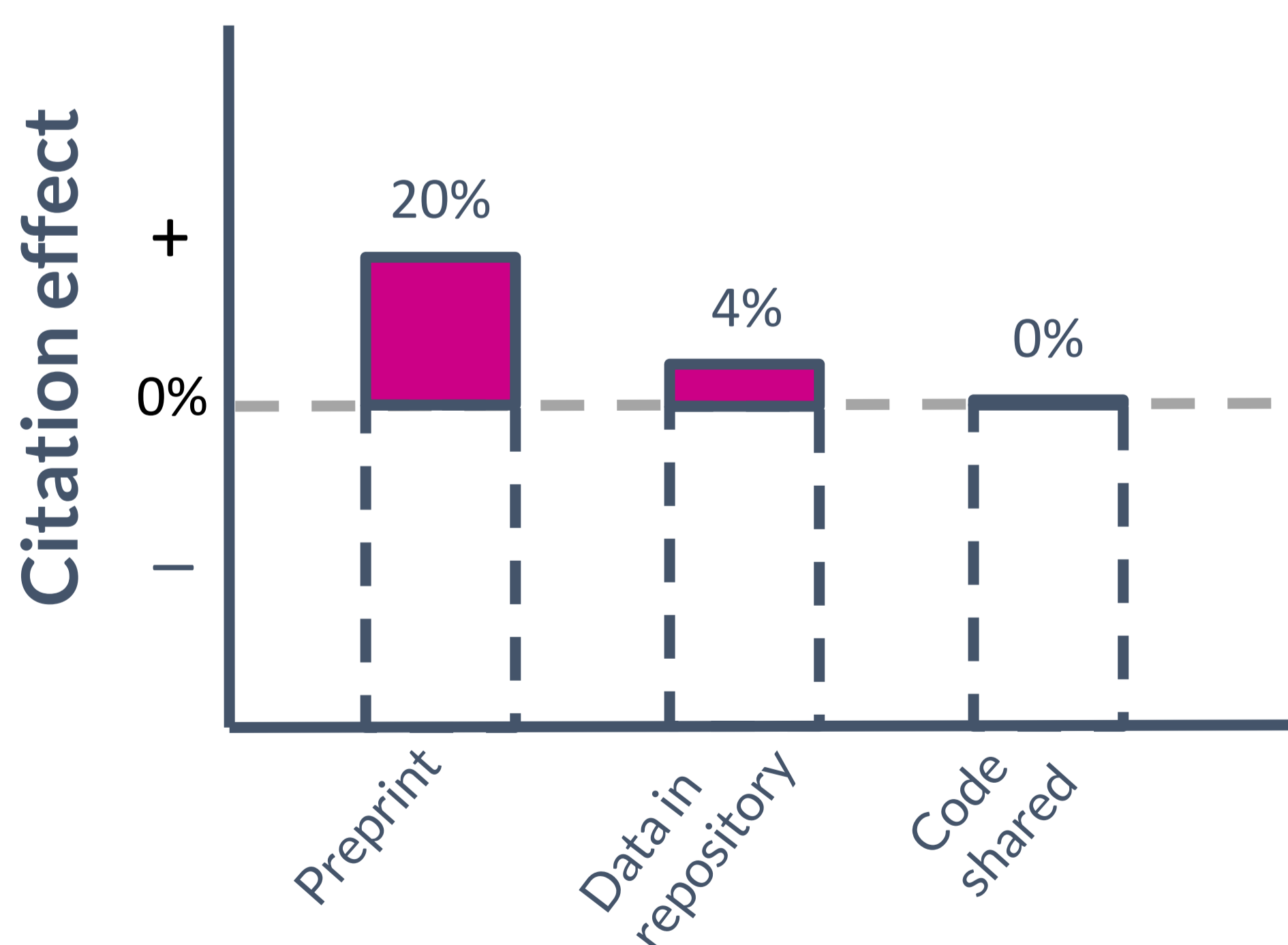5. Use an Open Science approach
6. Responsible use

Monitor Prevalence of Open practices

% Research articles with Open practice 2018-23

There is a growing need for reliable data on the extent to which Open Research (or Open Science) practices are being adopted and the impact (effects) of adopting these practices: to better understand researchers, support institutional planning, and to evaluate the effectiveness of interventions that are intended to change research culture and practice. The 2021 UNESCO recommendation on Open Science has necessitated the establishment of a global Open Science monitoring framework, and progress has in parallel been made at the national level in France, with the French Open Science Monitor. Further, research institutions in the UK will begin piloting, in 2024, new ways to monitor indicators of open research (science). Scholarly publishers and funding agencies with progressive policies on open science, beyond open access to publications, are also establishing monitoring approaches. The non-profit open access publisher PLOS in 2022 launched 'Open Science Indicators', (OSI) an initiative that tracks adoption of Open Science practices – such as sharing data, code, protocols and preprints – over time in the scholarly literature supported by artificial intelligence. These OSIs were reused in the UK Committee on Research Integrity's (UKCORI) 2023 report on research integrity in the UK, as a way to benchmark aspects of the transparency of UK research. In 2024, PLOS is using OSI to begin to understand the impact of Open Science practices, such as on citations in collaboration with researchers at University of Bologna and HEIG-VD. PLOS, DataSeer and other solution providers are collaborating with the UK Reproducibility Network (UKRN) to begin piloting new ways to monitor indicators of open research (science), as part of the UKRN Open Research Indicators pilots.

Monitor Impact of Open practices

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Take a picture to access the PLOS Open Science Indicators dataset and methods

Or visit:
doi.org/10.6084/m9.figshare.21687686