RCM Team impact: briefing paper, July 2023

AIM-RSF Community Building & Training

Project: The Al for Multiple Long-term Conditions (AIM) research combines data science and Al methods with health, care and social science expertise to identify new clusters of disease and understand how multiple long-term conditions develop over the life course. The AIM-Research Support Facility (AIM-RSF) is part of £23 million investment from the National Institute for Health and Care Research, that connects researchers from seven AIM consortia to develop data standards, disseminate best practices, and build a community of researchers, patients and the public involved in AIM research.

Community: Theme 3 of AIM RSF is dedicated to community building and training to support mid and Early Career Researchers (ECRs) across the AIM consortia important for delivering real-world impact for the programme and beyond. Dr Eirini Zompa is an AIM-RSF Research Community Manager (RCM). Her role with a focus on Open Collaboration practices is crucial for ensuring the overall success of the AIM-RSF. The main goals of this theme are to 1) break down silos between individual research consortia; 2) develop new collaborations and advocate for reproducible and open science practices; and 3) change the culture of research in the new field of multiple-long term condition research.

How is community management accelerating research and collaboration?

- Building skills for the future: Through community engagement and targeted surveys, the RCM identified the data science and reproducibility skills needed among the AIM ECR community. She designed and delivered 10+ workshops on programming skills, data analysis, version control, FAIR research outputs and collaborative research practices. Training materials are developed on GitHub and archived for wider use. These workshops drew co-facilitators from the community to ensure that they can deliver training for their peers in the future.
- Convening capability: The RCM has provided tailored activities and resources to facilitate collaboration among the PhD researchers, postdocs, research fellows, clinical researchers and research infrastructure staff across the AIM consortia. The ECR lunchtime sessions enable researchers to present their project plans, discuss different areas of research and demonstrate data science tools of shared interests. The RCM also adapted *The Turing Way* Collaboration Café model to enable exchange between ECRs and senior researchers in AIM. In the coming months, several in-person events will convene AIM researchers to catalyse stronger networking and collaboration.

How is RCM embedding open practices in the Turing projects?

- Transparent reporting: The RCM co-established and co-maintains <u>a GitHub organisation</u> to share resources with the AIM consortia securely (accessible internally) and reusable resources openly. Internal reporting ensures the protection of sensitive information while enabling asynchronous sharing of resources and learnings from team meetings, presentations and discussions. The RCM also created a <u>Zenodo community</u> page to support the FAIR (Findable, Accessible, Interoperable and Reusable) outputs from the AIM research. 20+ outputs including presentations, training materials and illustrations among other resources have been shared under open licence.
- Impact beyond the project: Researchers in AIM-RSF have benefited from the RCM's efforts around open science and reproducibility, who also recommend resources and training videos beyond the project (e.g. 700+ cumulative views on YouTube to date). She liaised with the Academic Service team at the institute contributing to the Enrichment Student Guide and advised the Statistical Methods in Multimorbidity community that inspired a Zenodo community to share resources from their work. Through *The Turing Way*, she delivered 6+ talks and workshops, including for the Center of Doctoral Training, BCSWomen Lovelace colloquium, Edinburgh Open Science Festival and a Fireside Chat, promoting best practices to broader audiences.

"Eirini has been instrumental in the development of the ECR network, creating a supportive and open community that encourages cooperation and learning from each other. She developed technical training tailored to the AIM teams to ensure that they follow best practices in reproducible research. Overall, community management work helps establish AIM RSF as a supportive, collaborative and open initiative that helps individual AIM teams achieve more than the sum of their parts."

Evelina Gabasova, Principal Research Data Scientist, Co-lead Investigator of AIM RSF: Theme 3