

Australian Research Data Commons

Successes and Challenges of a Multi-State Electronic Medical Record to OMOP Conversion Project in Australia.

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Background:

In 2021, 2.4 million patient records from the University of Melbourne Primary Care Repository were **CONVERTED**

Number of OMOP converted Patients 2021 to 2024

to OMOP

- This provided IMPETUS to convert hospital data in Cerner and EPIC into OMOP using ARDC Grant Funding
- This enabled the FORMATION of partnerships across Australia
- With the overarching AIM to share training, methods and governance across partners.

Methods:

- The project was funded by an ARDC public sector bridges \bullet grant.
- The team conducted various activities to promote the \bullet adoption of the OMOP common data model.
- These activities included partnering with the OHDSI \bullet Australian chapter to conduct training and webinars to raise awareness and provide training to health data professionals by promoting the free-to-use Eden Academy. Additionally, the project facilitated the sharing of **ETL** scripts across organisational boundaries to encourage resource and expertise sharing between institutions.



The project followed FAIR principles and created a digital object identifier (DOI) for the combined dataset. https://doi.org/10.26188/6295c4a5d7c5c

Results:

- The project made significant strides in increasing the adoption of the OMOP common data model in Australia,
- Challenges included raising institutional awareness of the common data model and finding skilled workers familiar with Cerner and Epic systems.
- Full conversion of clinical datasets is yet to be realized due to governance and awareness issues.

Successes

- We built a strong Community of practice.
- We shared ETL scripts across the Community.
- We demonstrated the Utility of OMOP across University and Hospital settings - research evidence and enable operational reporting.
- We developed a **shared governance model**. \bullet
- Resource sharing, ETL script and mapping sharing. Challenges
- Lack of skilled staff we found the only way to make any progress was to move hospital IT staff into research roles
- Raising awareness of the value of the CDM with decision makers.

Conclusion

- We have 2.4 million patient records converted with a possible 6 million plus in the next 12 months.
- The on-going operational funding model for the "research data layer" remains an open question.
- The value of the OMOP CDM must be emphasized to hospitals and government to increase adoption.

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