

Implementing A Real-world Data Platform For Dementia Research In Latin America



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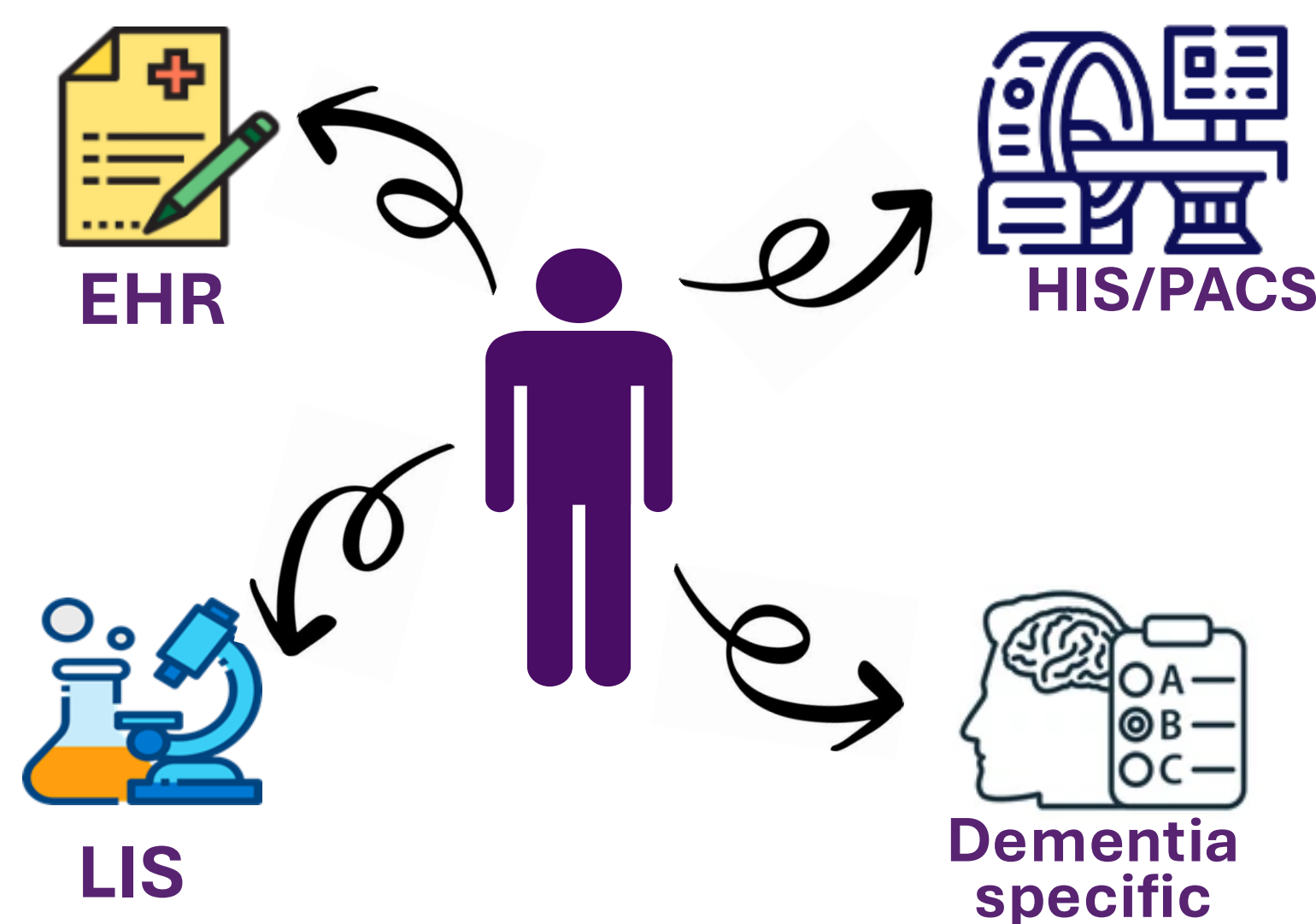
The heterogeneity of existing Electronic Health Records requires flexibility for rapid integration and the identification of key adoption assets (reports, surveys) that can save time for clinical teams.

INTRODUCTION



The REMEMVER Network (Chile)

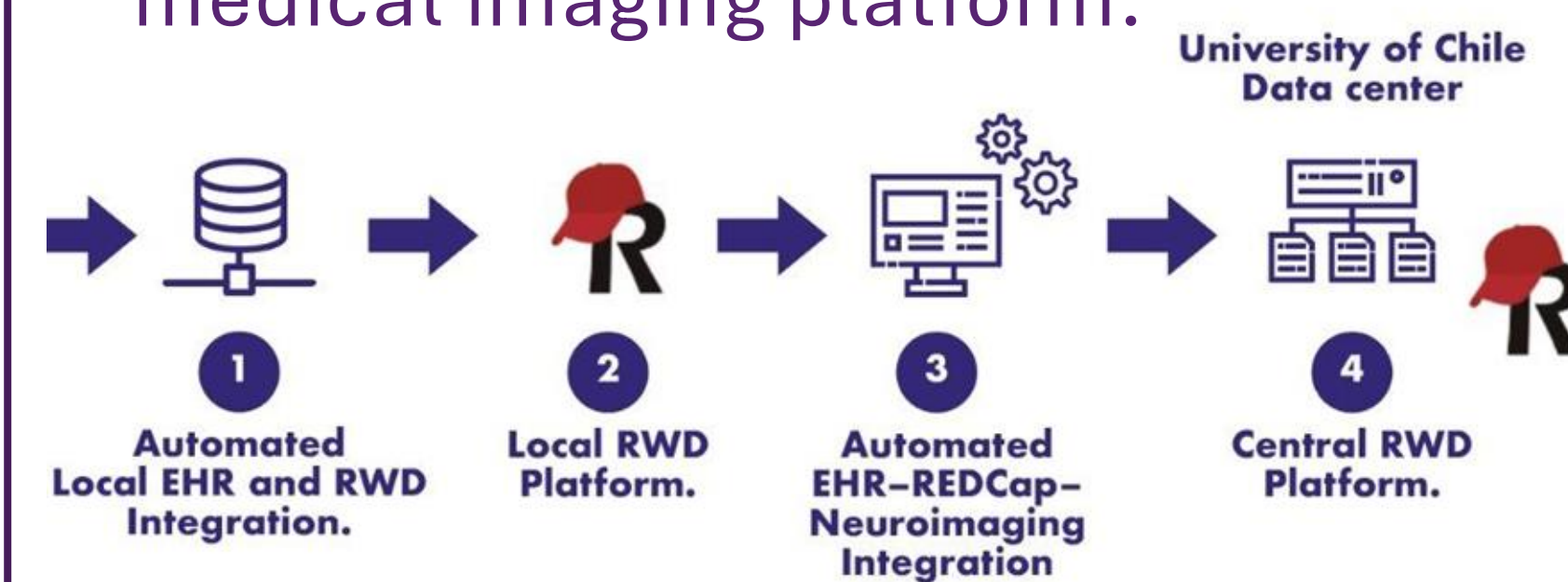
A collaborative public initiative funded by the Alzheimer's Association, aimed at standardizing dementia care practices and developing a Real-World Data (RWD) registry for dementia in Chile.



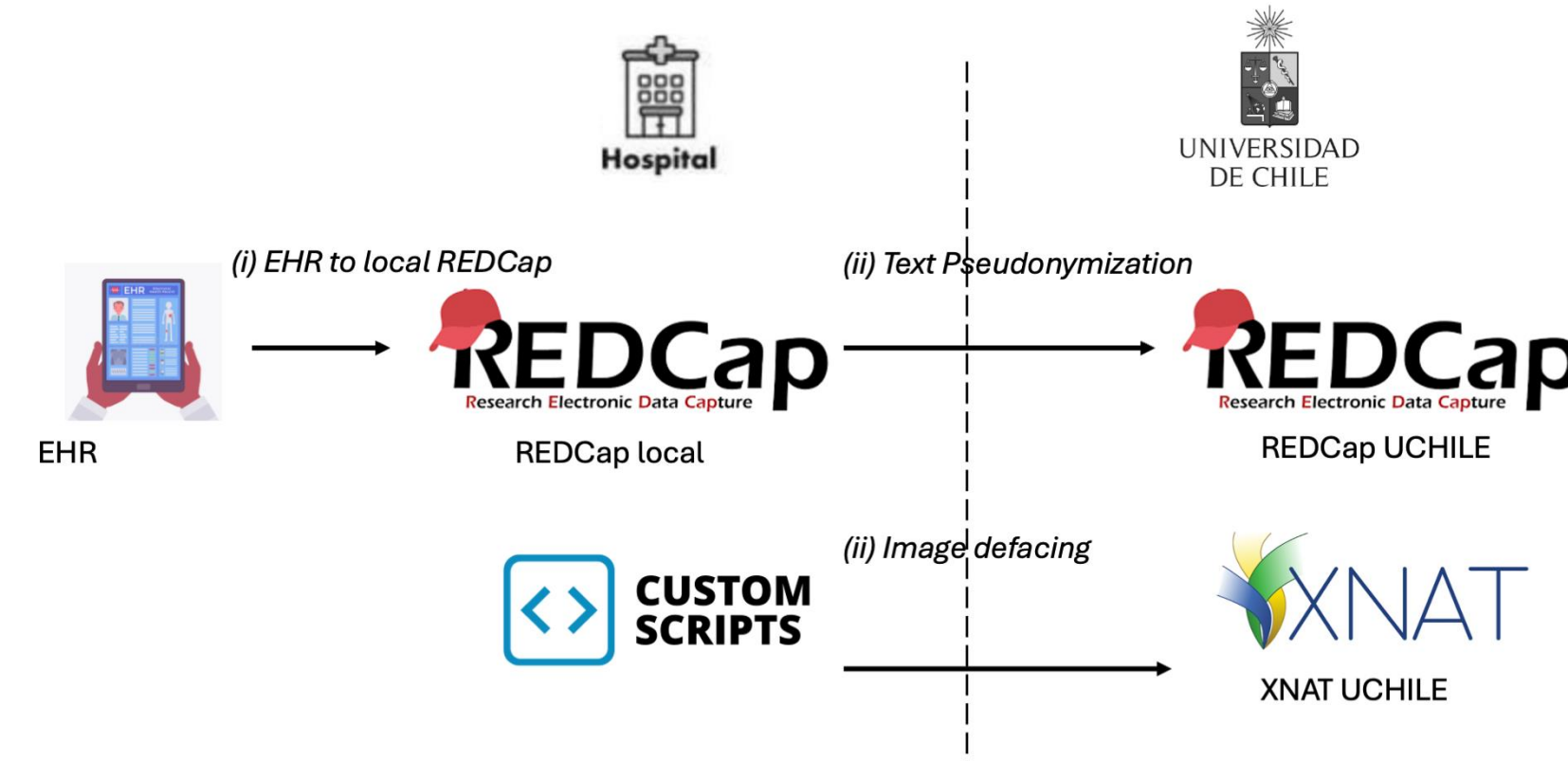
7 of 7 Hospitals in REMEMVER use different Electronic Health Records (EHR), Radiology Information Systems (RIS/PACS), and Lab systems (LIS). There is no common syntactic or semantic standard to annotate patient record or follow-up.

METHODS

Integration of: EHR, REDCap-based dementia registry capturing routine clinical encounters, and XNAT medical imaging platform.



The platform architecture consists of a **federated architecture**. **Local platforms** handle **sensitive** information, while **central** instances handle only **pseudonymized** information.

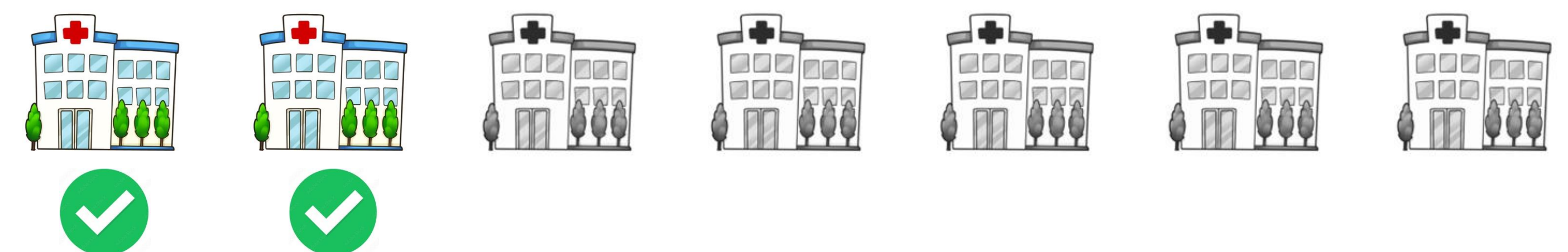


Key processes: (i) **EHR to local REDCap**, (ii) **Text analysis + pseudonymization**, (iii) **image defacing**.

Data harmonization aligns with local and international initiatives: ADNI, GAAIN, and follows FAIR principles.

RESULTS

After 9 months, we have partially implemented the proposed methodology in 2 centers: the largest memory center in Chile (Hospital Salvador, Santiago), and a major regional hospital (Valdivia).



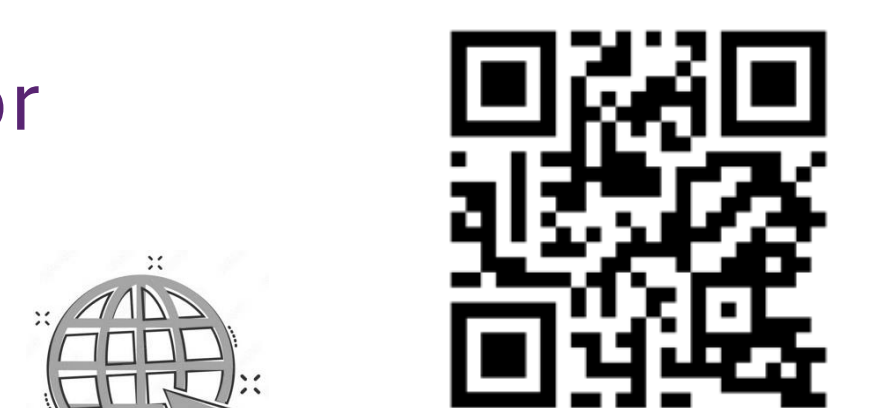
Key findings:

- Harmonization should drive system/process design. Training motivates clinical teams and ease adoption of new tools.
- Organize REDCap instances by clinical profile to simplify usage.
- REDCap clinical reports/surveys are a key adoption asset.
- Flexible automated integration options (API, reports).
- Our Federated approach requires local pseudonymization capacity.
- Automatic AI-based text extraction (diagnosis, comorbidities) requires context beyond clinical notes (domain knowledge).

CONCLUSIONS

REMEMVER is establishing the first RWD platform for dementia in Latin America, generating multimodal, harmonized, and internationally aligned data from a diverse and underserved population.

The platform will serve as a scalable model for expansion to other Latin American countries.



<http://www.rememver.cl>



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