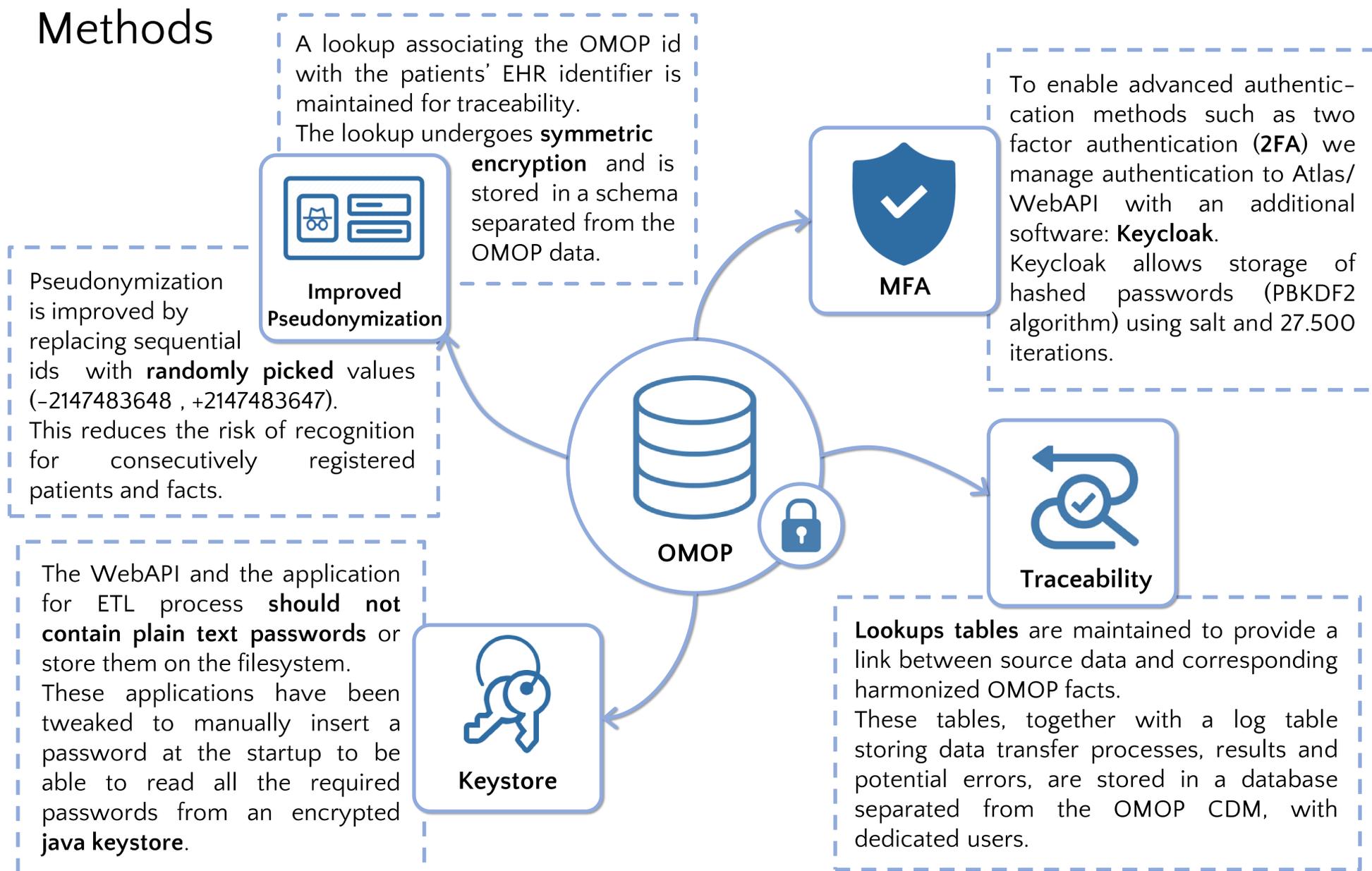


An improved OMOP infrastructure to provide greater security

Additional technical data protection measures to improve the security of an OMOP/OHDSI infrastructure

Background: According to the evaluation criteria by EDPB (European Data Protection Board), the implementation of an OMOP infrastructure is to be considered high risk due to its processing of sensitive data and to the large-scale data processing involved. We present additional security/privacy preserving measures identified and implemented to complement those already considered best practices within the OHDSI community.

Methods



Results: The described technical data protection measures have been included in the DPIA (Data protection impact assessment) template created within "OHDSI Italia" node, reviewed by DPOs from clinical centers. They have been included in the DPIAs related to the implementation of OMOP in several Italian centers. These measures have also been included in the BIOMERIS information security management system certified by ISO/IEC 27001:2022 for consulting services related to OMOP.

