

IEEE P2795: Standard for Shared Analytics Across Secure and Unsecured Networks

Cj Rieser Ph.D.
cjrieser@ieee.org

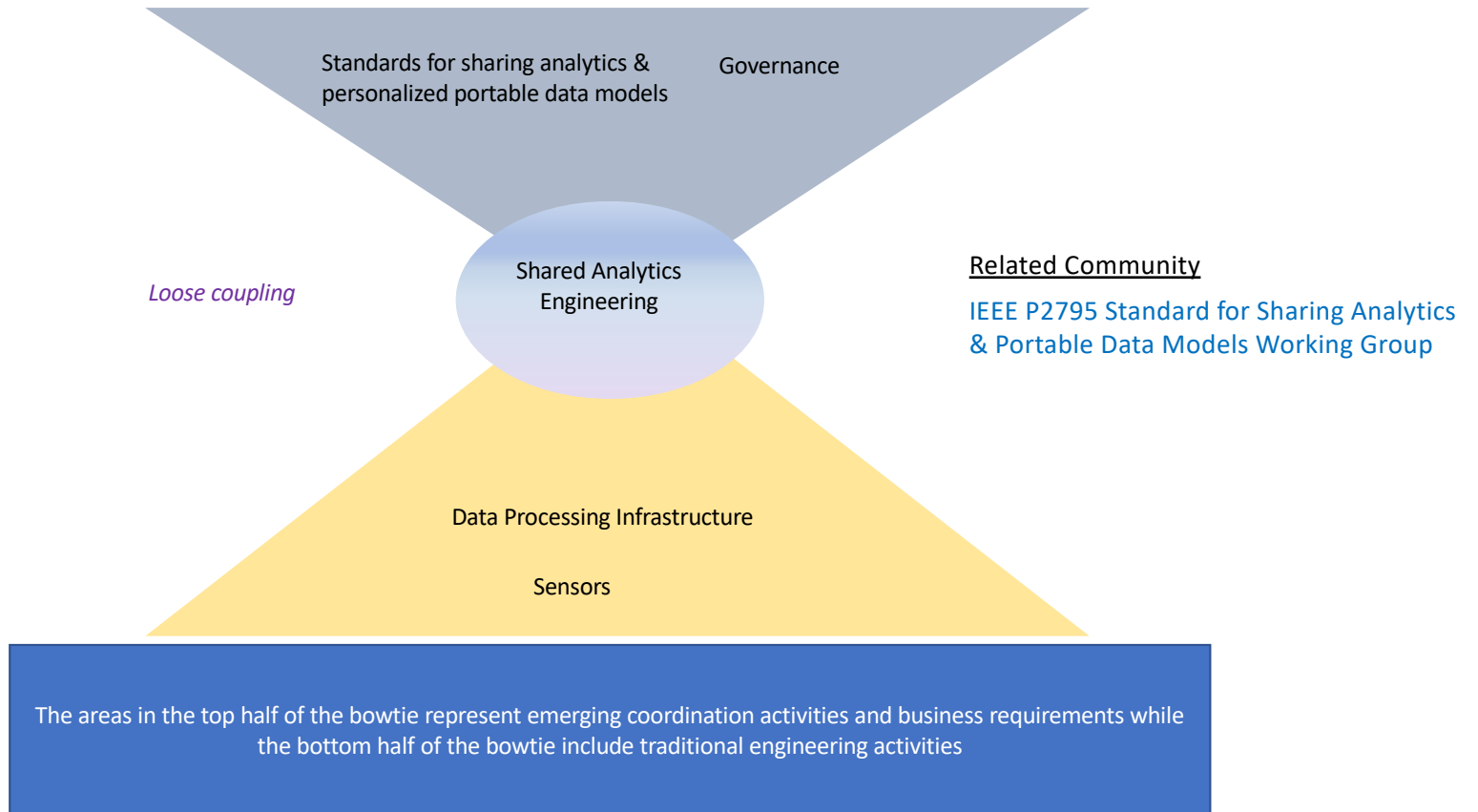
IEEE Engineering In Medicine
Standards Steering Committee Meeting
Friday, April 17, 2020 10am

Why Standardize how to Share Analytics and Portable Data Models?

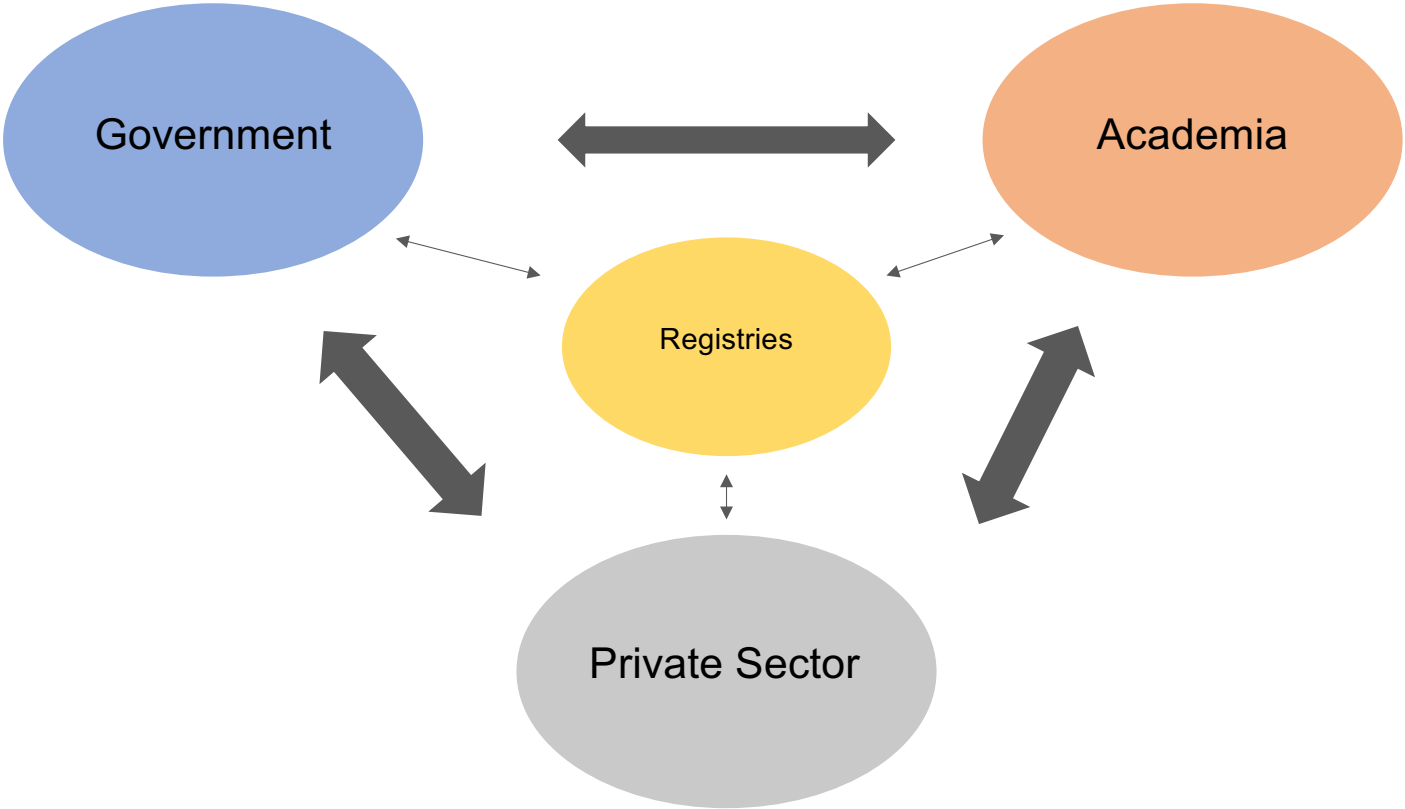
- Shared analytics allows for big data approaches across providers, without breaking rules of privacy
- Standardization of shared analytics would allow many organizations to participate in a distributed analytics network independent from each node's individual architecture

Standardized non-proprietary approaches to enable health IT products to provide privacy preserving analytic interoperability are needed ... driving the need for IEEE P2795 compliant meta-data allowing trusted analytic exchange

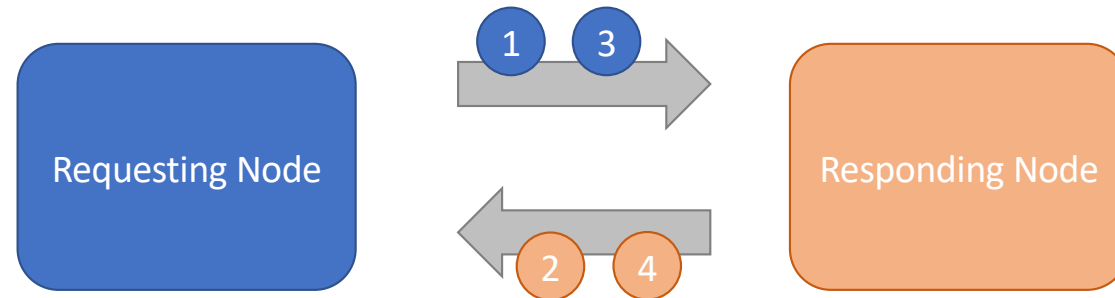
New Approach: Shared Analytics Engineering



Envisioned Transitions of Care Enabled by Sharing Analytics and Portable Data Models



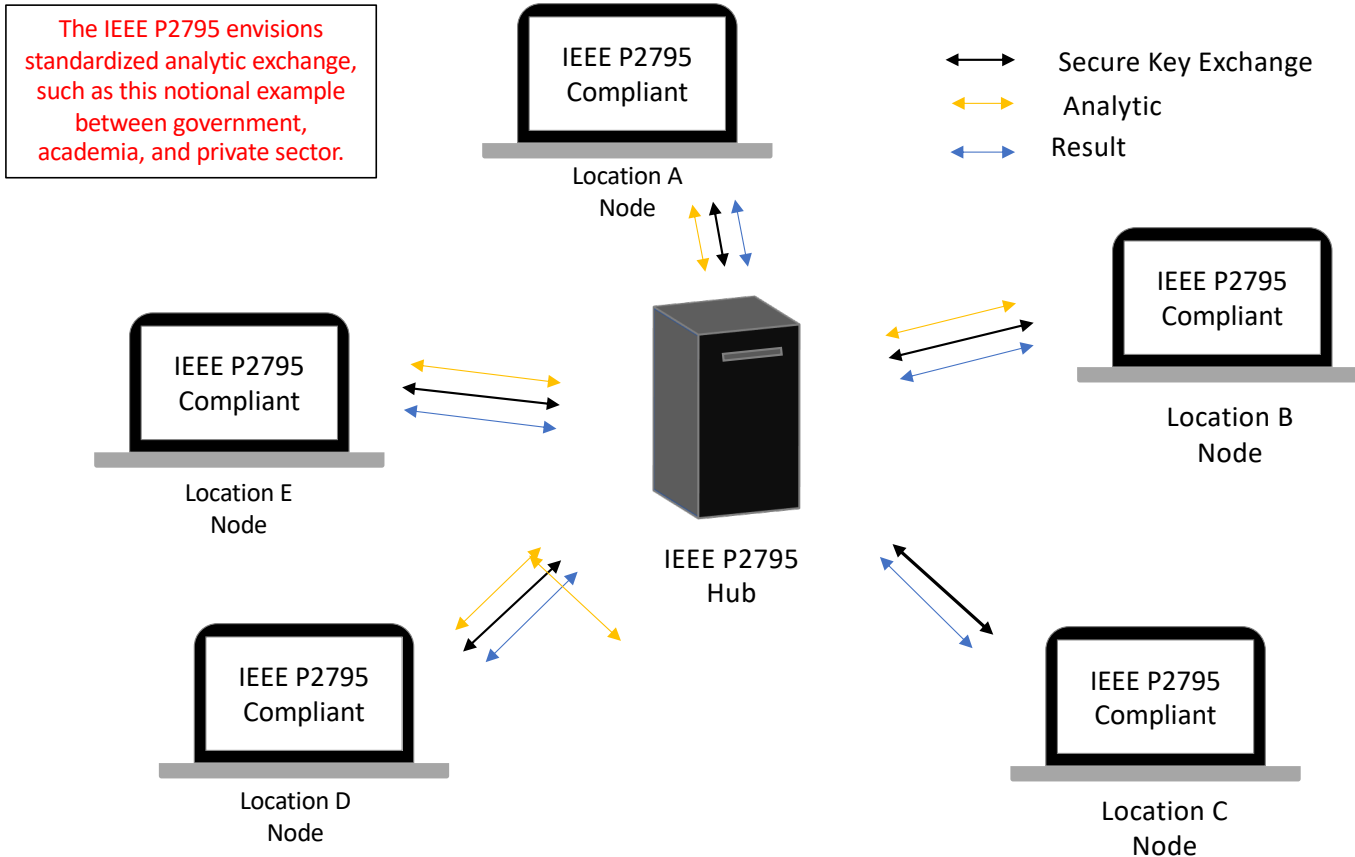
Proposed Four Step IEEE P2795 Analytic Exchange



- 1 Send out request looking for data model and processing capacity that fits application requirements
- 2 Send response indicating relevant data model and processing capacity is present
- 3 Send vetted analytic
- 4 Return vetted analytic output (results)

The IEEE standard for shared analytics aims to standardize interactions between nodes that are required for distributed analytic exchange.

Notional IEEE P2795 Network Architecture and Data Flow



IEEE P2795 shared analytic and portable data model standard use cases and workflows

