



VHA Innovation Ecosystem

Collaboration Pathways for Advancing Data Access:

Data & Analytics Resources for Researchers

Amanda Lienau

VA



U.S. Department
of Veterans Affairs





VA Pathfinder

The Front Door for Vendors and Innovators Interested in Working with the VA

[Pathfinder.va.gov](https://pathfinder.va.gov)

- ✓ **LEARN**
Navigate VA opportunities and find **tailored resources** about how to sell and innovate with VA
- ✓ **SUBMIT**
Guides users through the process of **submitting their ideas, products, and services** for VA review
- ✓ **ENGAGE:**
Connects submitters with the **relevant VA staff members**

VA



U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Healthcare Innovation and Learning

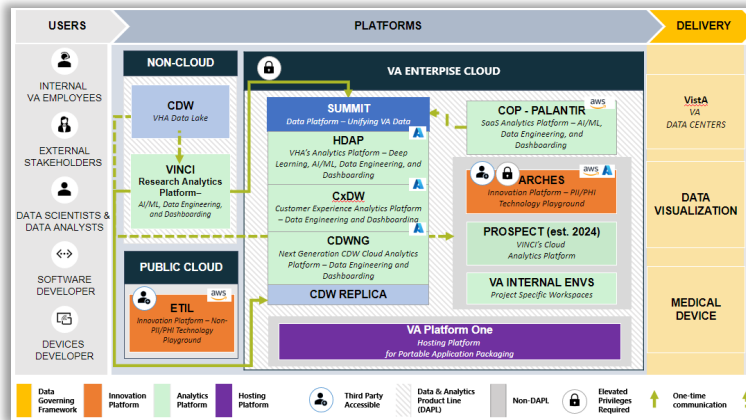
Innovati

#VAInnovation

DATA PLAYBOOK

Guiding Innovators Toward the VA Product or Service Offering that Best Suits their Data Analytics Needs

<https://dva.gov.sharepoint.com/sites/VHAOHILDataInnovation/SitePages/Data-Playbook-Overview.aspx>



VA ENVIRONMENT OVERVIEW

Learn How the VA Innovation Community Interacts with Various Data Analytics Solutions

VA PRODUCT	QUICK DESCRIPTION	SAMPLE BUSINESS NEEDS									
		ONBOARDING ~ 90 DAYS	ADDITIONAL APPROVALS	BPO DATA	SYNTHETIC DATA	RESEARCH REQUIREMENTS	ACCESSIBILITY (END-USER)	VIRTUAL DESKTOP / OS	VERTICAL RESPONSE	CONTAINERIZATION	RESEARCH TRANSLATION TO REG. CARE
ARCHES	PII/PHI data analytics platform within VA network	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMERGING TECHNOLOGIES INNOVATION LAB (ETIL)	Innovation lab outside of VA network (No PII/PHI allowed)	✓	✓	PLANNED	✓	✓	✓	✓	✓	✓	✓
SUMMIT DATA PLATFORM (SDP) (HDAP, CxDW, CDWNG)	Internal tool for analytics, AI/ML, and visualization	✓	✓	PLANNED	✓	✓	✓	✓	✓	✓	✓
VA COMMON OPERATING PLATFORM (COP)	Leveraging enterprise-wide-VA data and customized analytics to inform decision making	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VA INFORMATICS & COMPUTING INFRASTRUCTURE (VINCI)	Data access, analytic tools, and consultation services for medical research projects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VA PLATFORM ONE (VAPO) - (Hosting Platform)	Packaging software code into a single executable bundle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

USE CASE MATCHING

Find the Right VA Product Based on your Business Needs

ARCHES | A data platform where users can readily access usable data to improve care for Veterans

The cloud-native platform, complete with a rich set of computational tools, harnesses the power of collaboration and innovation to provide a one-stop data workshop for VA employees. Data in ARCHES is automated, and code based – so users can build, test, deploy, monitor, and review data with ease, all within their workstations.

HIGHLIGHTS

- COLLABORATIVE**
Users can build models and share resources with security and protection.
- INNOVATIVE**
Modern practices and faster IT infrastructures create an agile environment for innovation.
- IMPACTFUL**
Our network of innovators can use ARCHES to create data-driven solutions that improve patient care and treatments.

USE CASES

- Use Agile MD**
Making risk scores more specific and integrating into VistA to flag patients that are the highest risk.
- Reduce Administrative Burden Using NLP**
Extracting document types and patient identifiers from fax and email documents to import into VistA.
- Apply ML and AI Techniques to Predict Heart Disease**
Prediction of clinical trajectories of HF in Veterans and recommendation of timely interventions using synthetic data.
- Compare Primary Care Preventative CKD**
Using Synthetic data to compare algorithms for CKD, AKI, and eGFR.

TOOLS & CAPABILITIES

AI Development	General Development	Security Features
<ul style="list-style-type: none"> Model Training Interactive Notebooks ML Applications 	<ul style="list-style-type: none"> Orchestration Integrated Development Environment Use for Research Reproducible Conclusions 	<ul style="list-style-type: none"> Identity and Role-based Access Control Pragm. lookups for Data and Networks

Data Capabilities
Access to Patient-Level and Synthetic Data | Data Mgmt. | BPO Data

ONBOARDING | ~45 BUSINESS DAYS

DID YOU KNOW
Synthetic data increases access and enhances Veteran privacy.

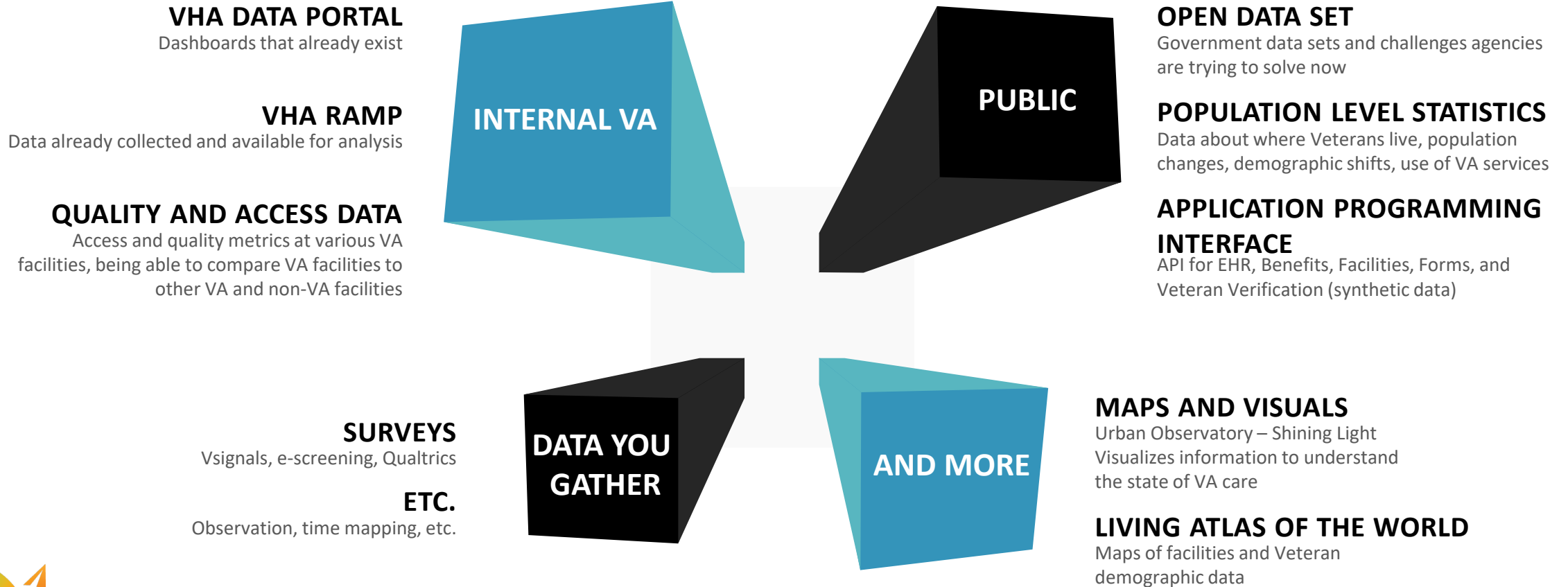
[LEARN MORE](#)

PRODUCT AND PLATFORM OVERVIEWS

Review High-level Product Descriptions of Tools, Capabilities, and Use Cases

DATA PLAYBOOK – DATA SOURCES

Discover the Variety of Data at your Fingertips for Research or Operations



SELF-SERVICE SHAREPOINT

Data and Analytics Innovation Resource Site

<https://dva.gov.sharepoint.com/sites/VHAOHILDataInnovation>

✓ ONBOARDING PROCESS OVERVIEWS

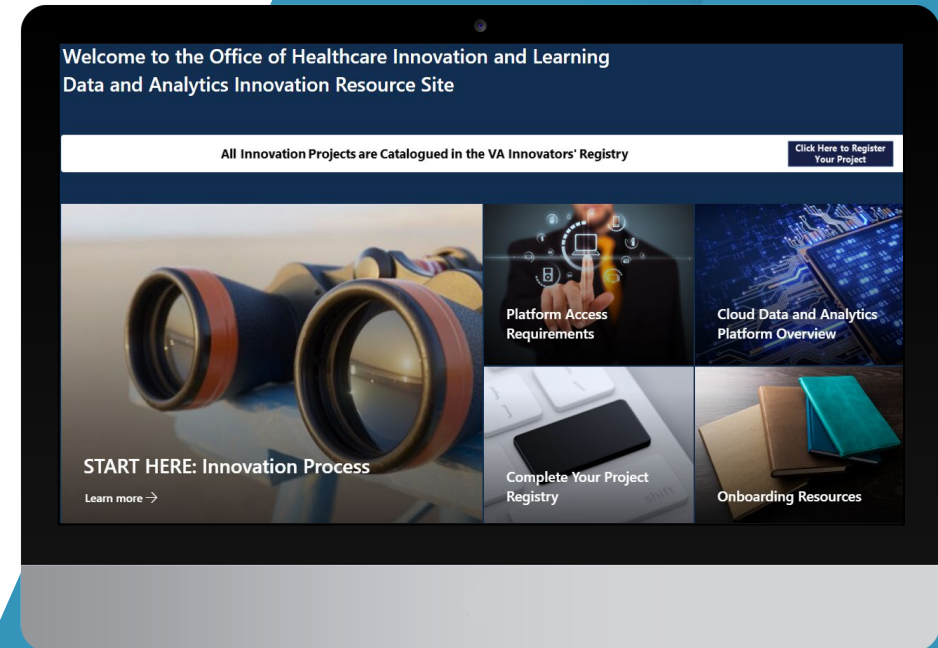
- Summaries and Requirements for Accessing ARCHES and the Emerging Technologies Innovation Lab (ETIL)
- Reference Tools to Guide Innovators to Analytics Products Best Suited for Business Needs

✓ DATA SOURCES

- Descriptions of Available Data Sources for VA Innovation Project Use
- E.g., Where to Find, Permissions Required, and Appropriateness

✓ TUTORIALS & RESOURCES

- Product Demos
- Best Practices
- Data Playbook
- Reference Guides
- VA Innovation Registry
- Data & Analytics CoP



VHA Innovation Ecosystem



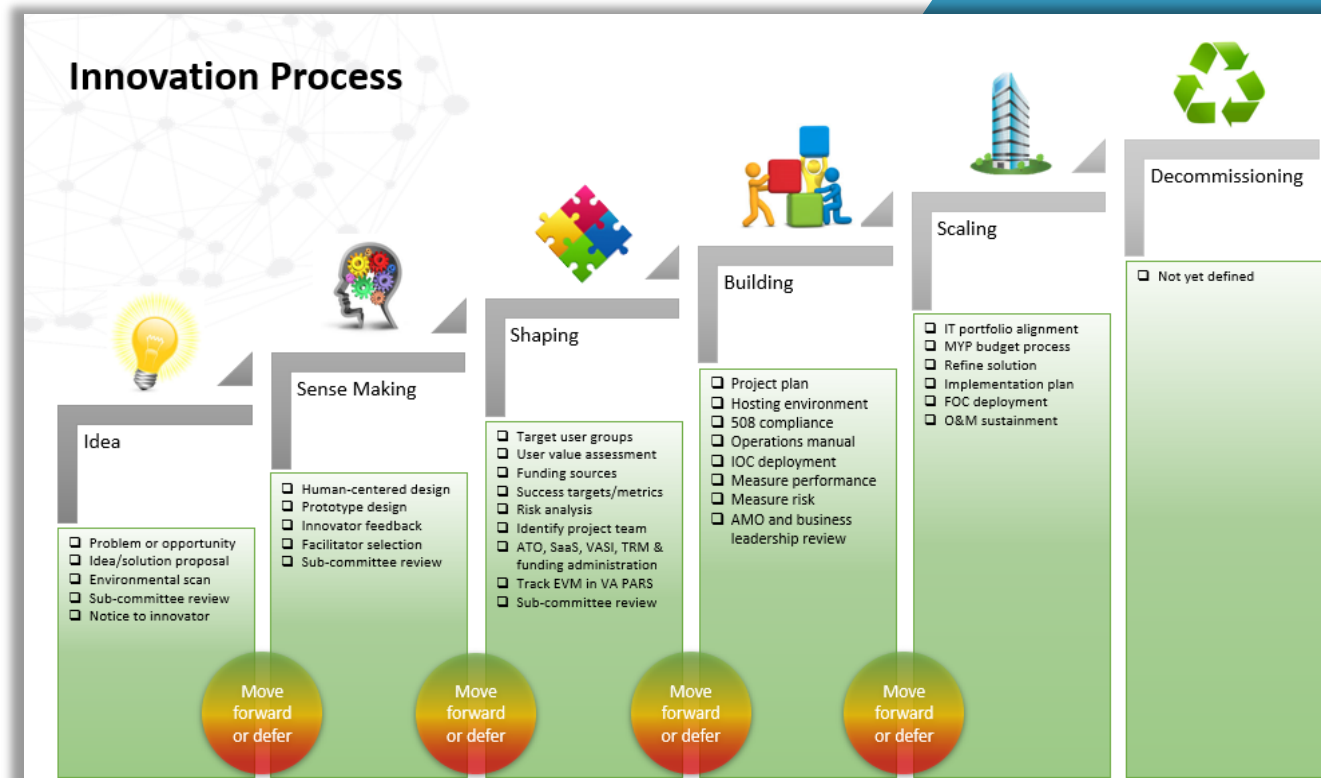
U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Healthcare Innovation and Learning

#VAInnovation

VA INNOVATION UNIT SERVICES

[Welcome to the VA OIT Innovation Unit](#)
[\(sharepoint.com\)](#)

- ✓ Helping you **define, shape, and launch your idea** through stakeholder research, journey mapping, user experience design, engineering and testing, and contractual negotiations
- ✓ We give you a **test environment** to host your idea, and engineering and testing support to build and release it
E.g., Where to Find, Permissions Required, and Appropriateness
- ✓ We provide **enabling software and tools**



VHA Innovation Ecosystem

VA

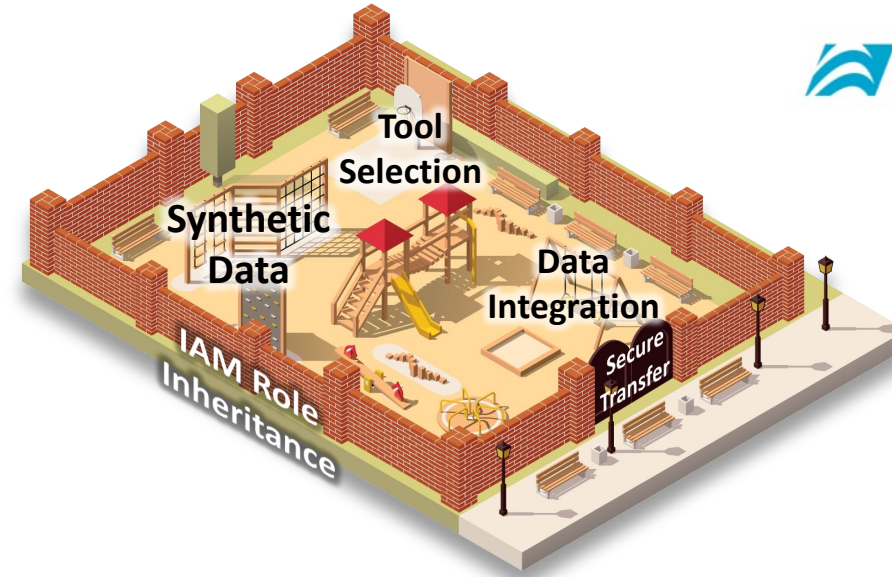


U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Healthcare Innovation and Learning

#VAInnovation

The Walled Playground

Balancing the Needs of Data Producers and Consumers



Users can build models and share resources with security and protection

COLLABORATIVE

Modern practices and faster IT infrastructure create an agile environment for innovation

INNOVATIVE

A network of innovators can use ARCHES to create data-driven solutions that improve patient care and treatments

IMPACTFUL