Strengthening Health Analytics in Alberta: Current State and Future Opportunities

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Outline

1. Strengthening Health Analytics – Introduction
2. Health Analytic Landscape
3. Alberta Health Analytic Infrastructure
4. Enabling Data Access
5. Strengthening Analytics Through Partnerships
6. Final Remarks

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Strengthening Health Analytics - Introduction

How can we make the most of our data?

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Data is an:

Asset

Obligation

Investment

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Background

- There is an increasing focus on working cross ministry to create efficiencies in policy and program development
- Opportunities exist to reduce duplication and red tape associated with data access
- Private and public sector stakeholders have commented on difficulties accessing data
- Three main outcomes:
  - Better cross ministry data sharing (creating efficiencies)
  - Enable stronger access for academia (supporting innovation)
  - Commercialization of data (creating opportunities for Albertans)

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Strengthening Health Analytics – Objectives

- In June 2020, Alberta Health engaged EY to support their goal of strengthening Health Analytics in the province.

- The project will strive to fully maximize the benefit of Alberta's health data assets by developing a provincial data and analytics strategy and associated implementation plans. Four deliverables will be developed over the two phases of work:

1. **Health Analytics Strategy**

   Build on Alberta Health and AHS knowledge to shape a vision that drives innovation and a strategic plan that opens up new ways to use data while removing legacy barriers

2. **Data Access Safe Haven Implementation Plan**

   Use insights from leading practice around the world to develop implementation plans for a data safe haven that is tailored to Alberta's unique context

3. **Innovation and Economic Growth Plan**

   Develop implementation plans to leverage Alberta Health's data as an asset, creating sustainability in the long term

4. **Analytic Capacity Development Plan**

   Identify opportunities to build additional internal capabilities and work with the universities to create a pipeline of skilled analytics graduates

Phase 1 (Jul – Oct 2020)

Phase 2 (Oct 2020 – Feb 2021)

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Health Analytic Landscape

Alberta Health Focus

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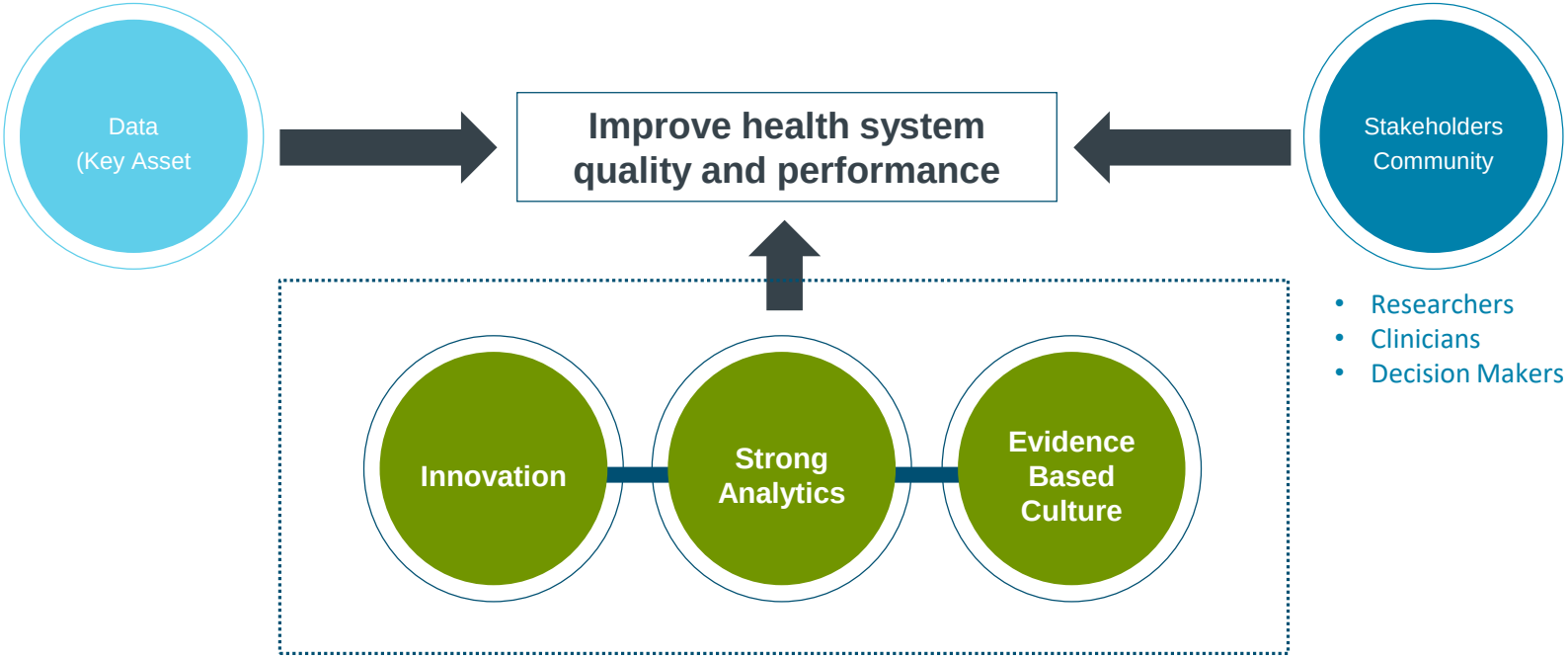
Background



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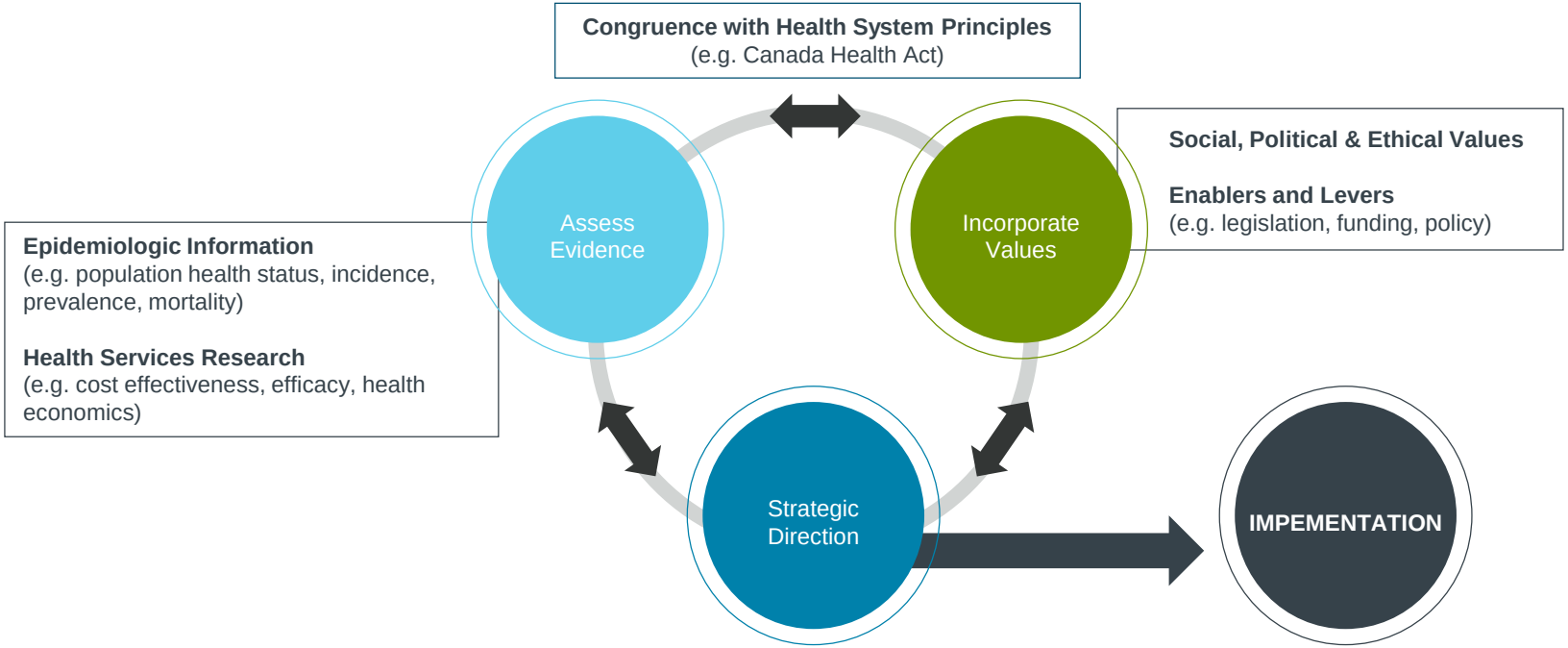
Setting the Context



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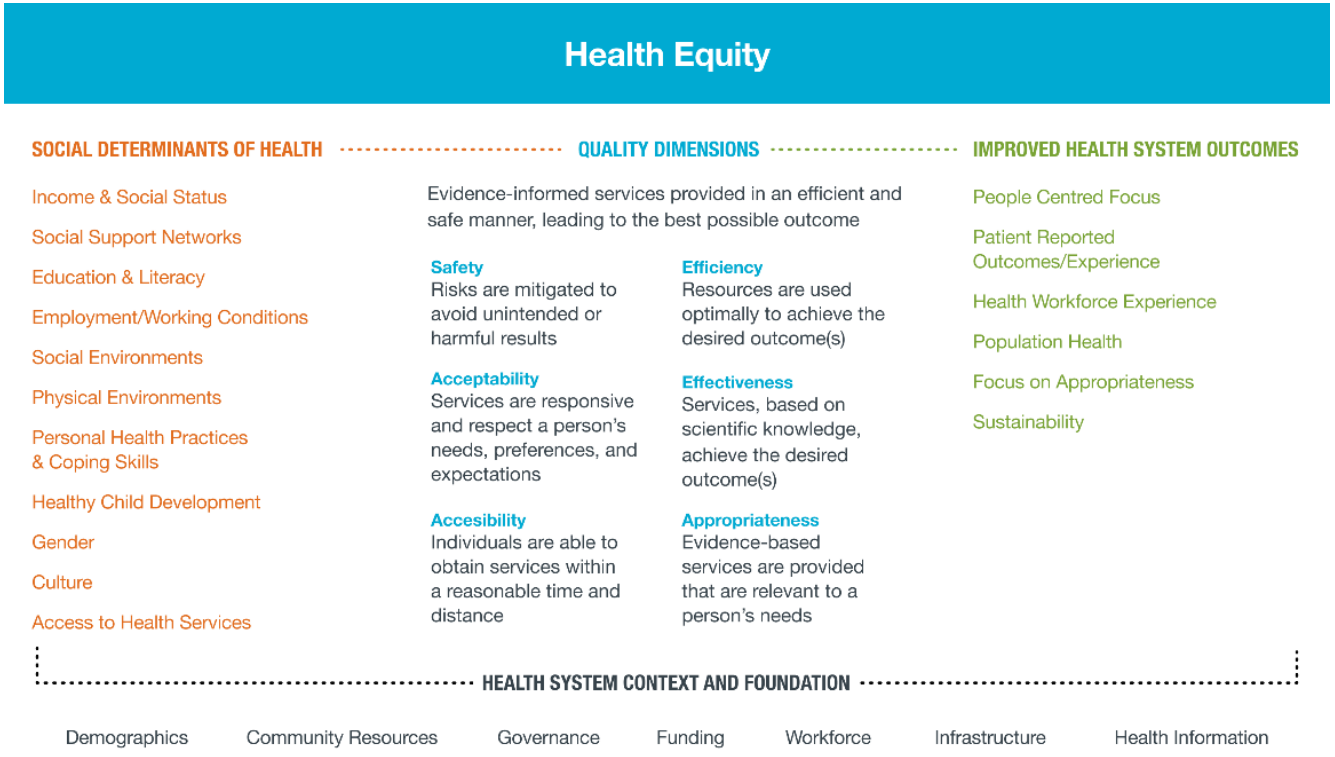
Health System Context – Alberta



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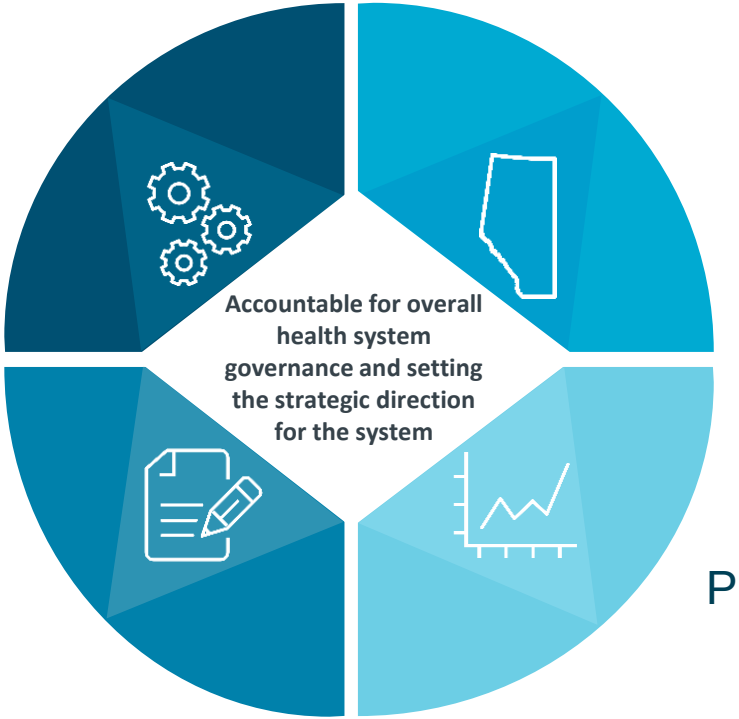
Alberta Health

1
Assessment

2
Policy Development



3
Assurance

4
Provincial Analytic Leadership

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Alberta Health Analytic Infrastructure

What does this look like in real life?

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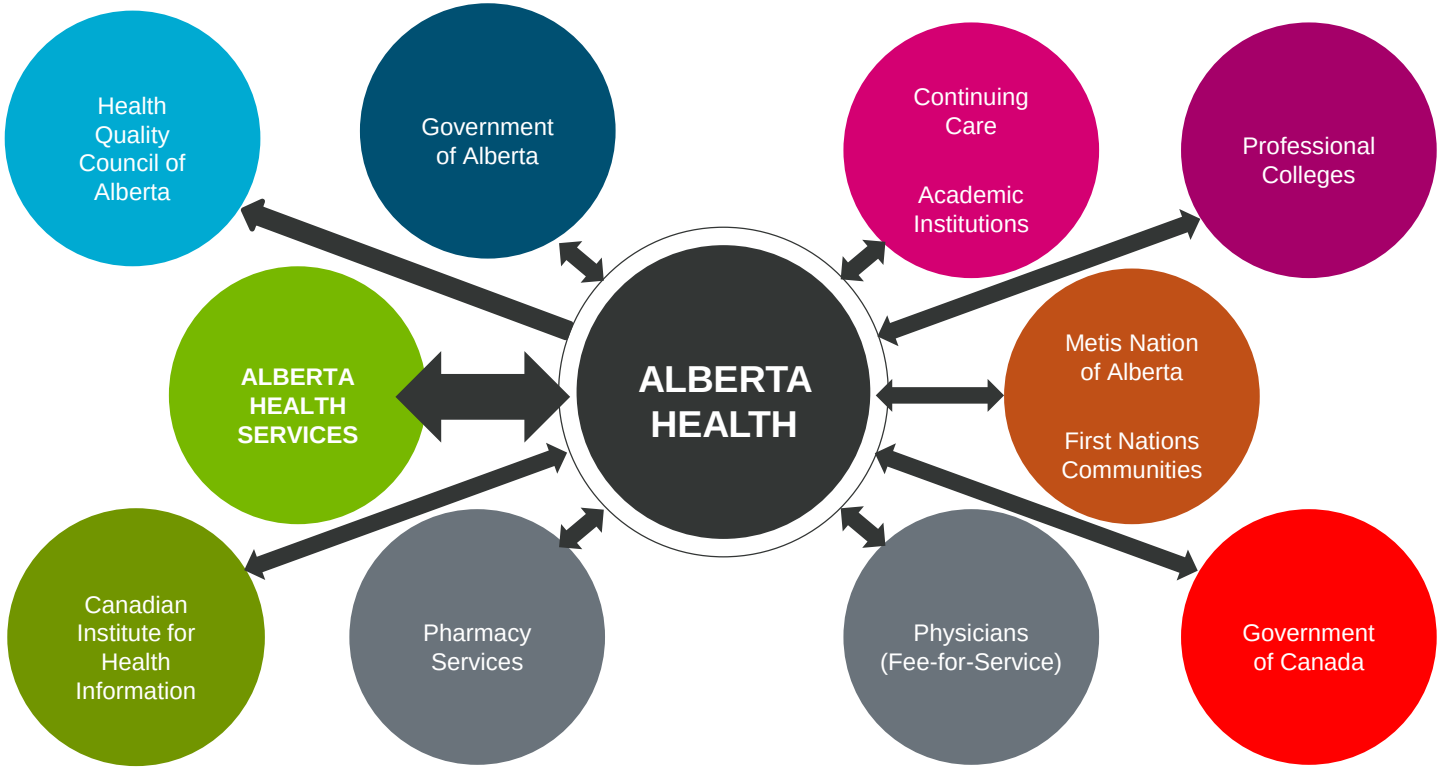
High Level Data Flows – Alberta Health Lens



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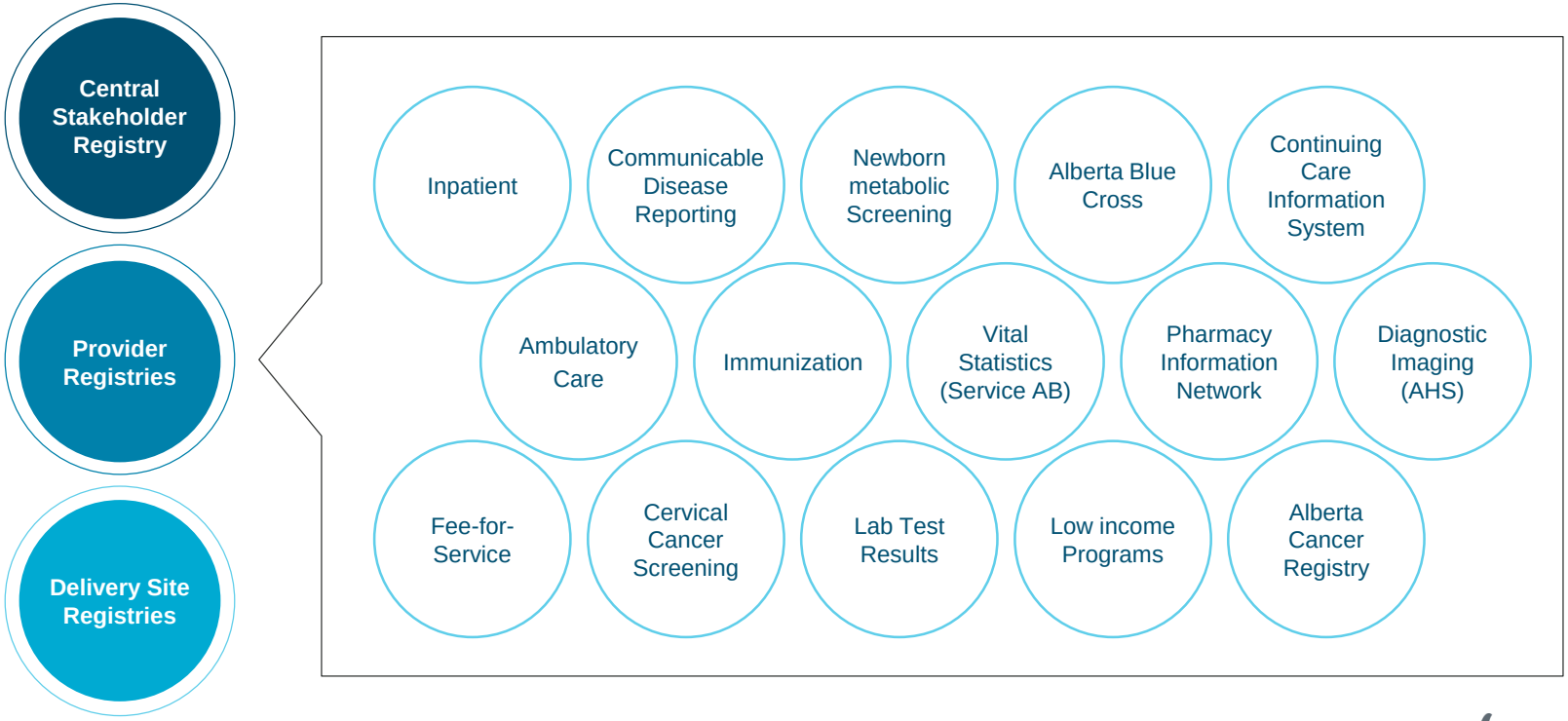
Selected Health Data Sources – Alberta Health



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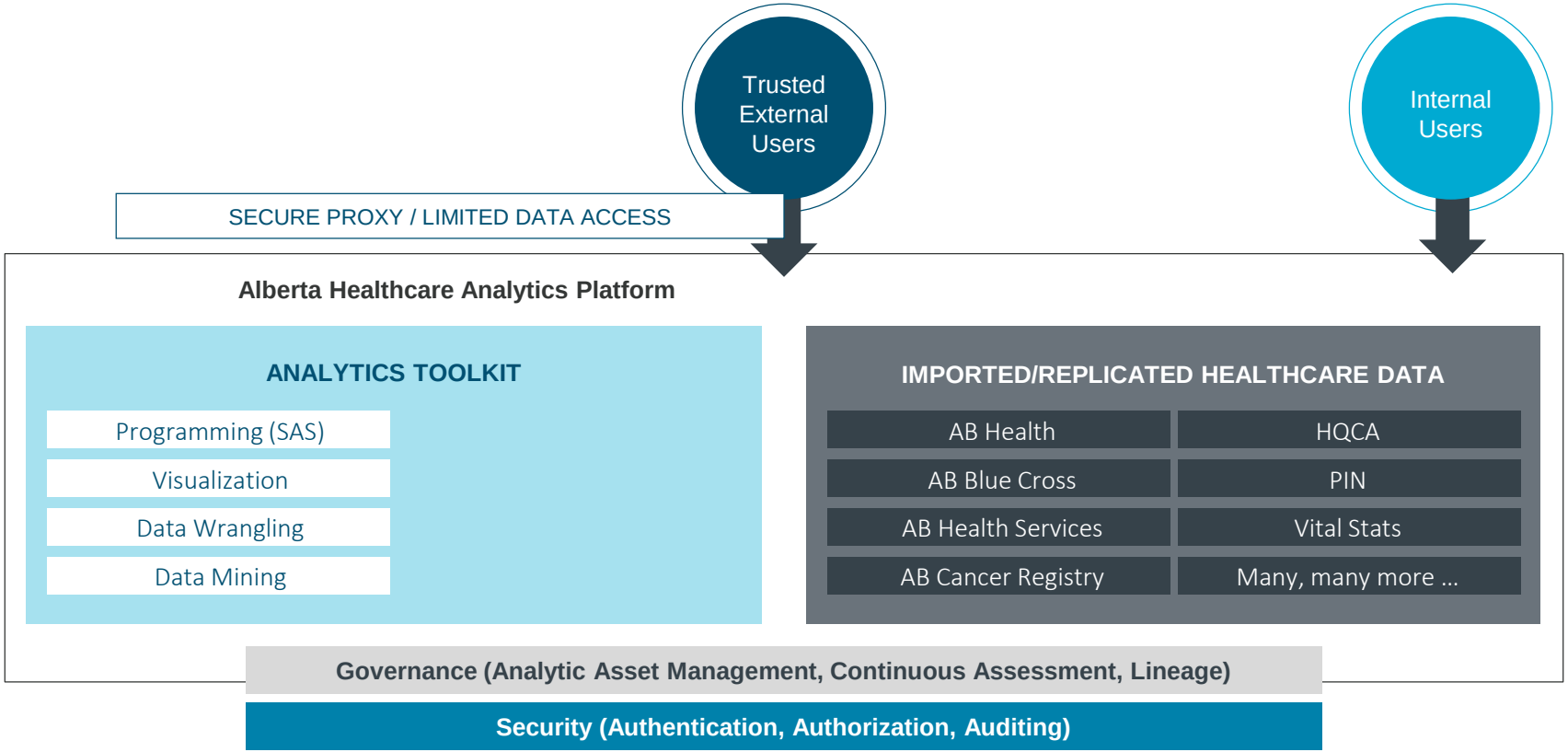
AB Healthcare Analytics Platform - Today



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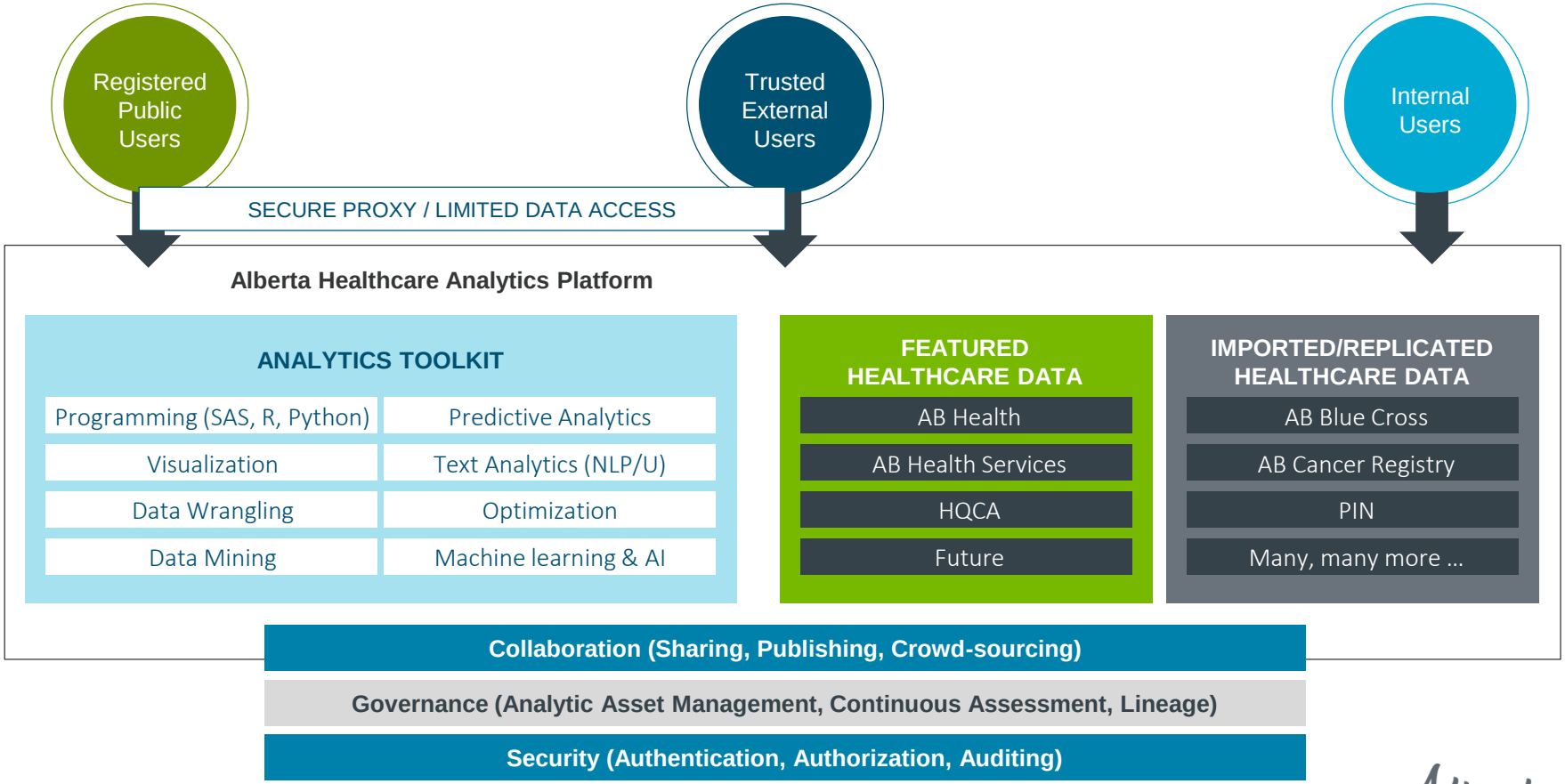
AB Healthcare Analytics Platform – Target State



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Enabling Data Access

Empowering Our Stakeholders

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Vision and Value

Vision

Mobilization of health and non-health data to create knowledge that drives change, research and innovation for improved health system performance, leading to improved health and quality of life outcomes for Albertans.

Value

- Improved care and health outcomes for patients
- Improved health policy and priority setting
- Foster industry investments and partnerships
- Support research that continuously improves the quality of health services

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Strategic Themes

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Data Safe Haven Defined

- A Data Safe Haven is a trusted place for holding and analyzing data, with clear governance and controls in place to minimize privacy risks, while maximizing value to stakeholders
- Health will be expanding access to its data warehouse to better support GOA Ministries, professional associations and colleges, academic institutions, non-governmental organizations, and private sector companies

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Rationale for a Data Access Safe Haven

- Improved access to data, both health and non-health, provides better evidence to support coordinated cross-government policy and program development
- The Office of the Information and Privacy Commissioner (OIPC) has a preference for the use of data safe havens to improve access, while protecting individual privacy
- The AH data warehouse is a highly secure environment that can be leveraged to meet the goal of improving access and contributing to the overall success of the GOA
- A single, federated approach can meet the access demands efficiently
- Approach reduces resource requirements and ensures legislative and privacy requirements are met

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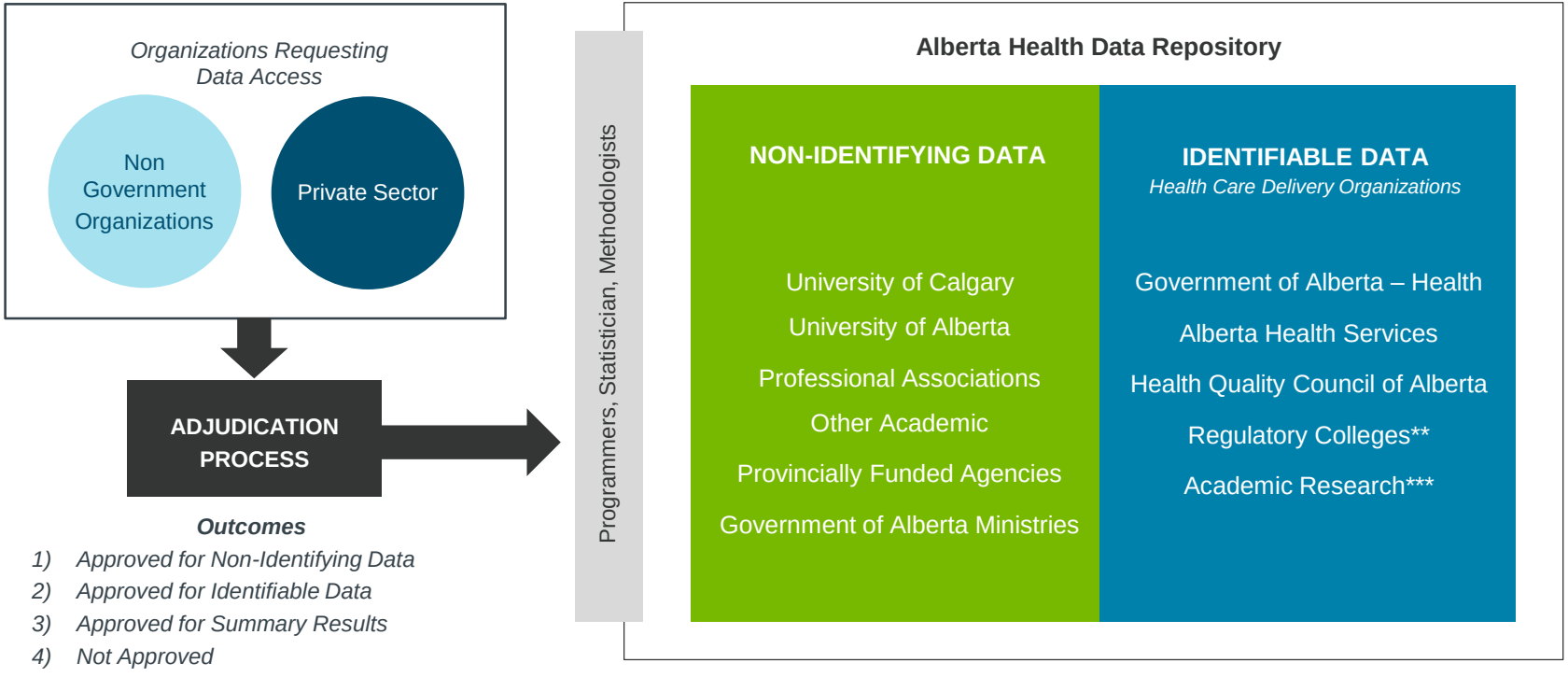
Establishing the Alberta Health Corporate Data Warehouse as a Data Access Safe Haven



** Limited direct access to data to support Legislated regulatory role only.
*** Limited access to studies requiring identifiable, and approved by ethics board.

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Strengthening Analytics Through Partnerships

Innovation and Economic Growth Plan

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Shifting Organizational Cultures

- Consistent messaging on roles and responsibilities
- Sharing data is the default setting
- A high performing health system, must have high performing components
- Open information sharing a key to driving cultural change and improved collaboration

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Fostering Partnerships Focused on:

Creating an stakeholder partnerships

Assisting the developing a single provincial analytic infrastructure

Establishing Alberta as a Health Analytics Innovation Centre of Excellence

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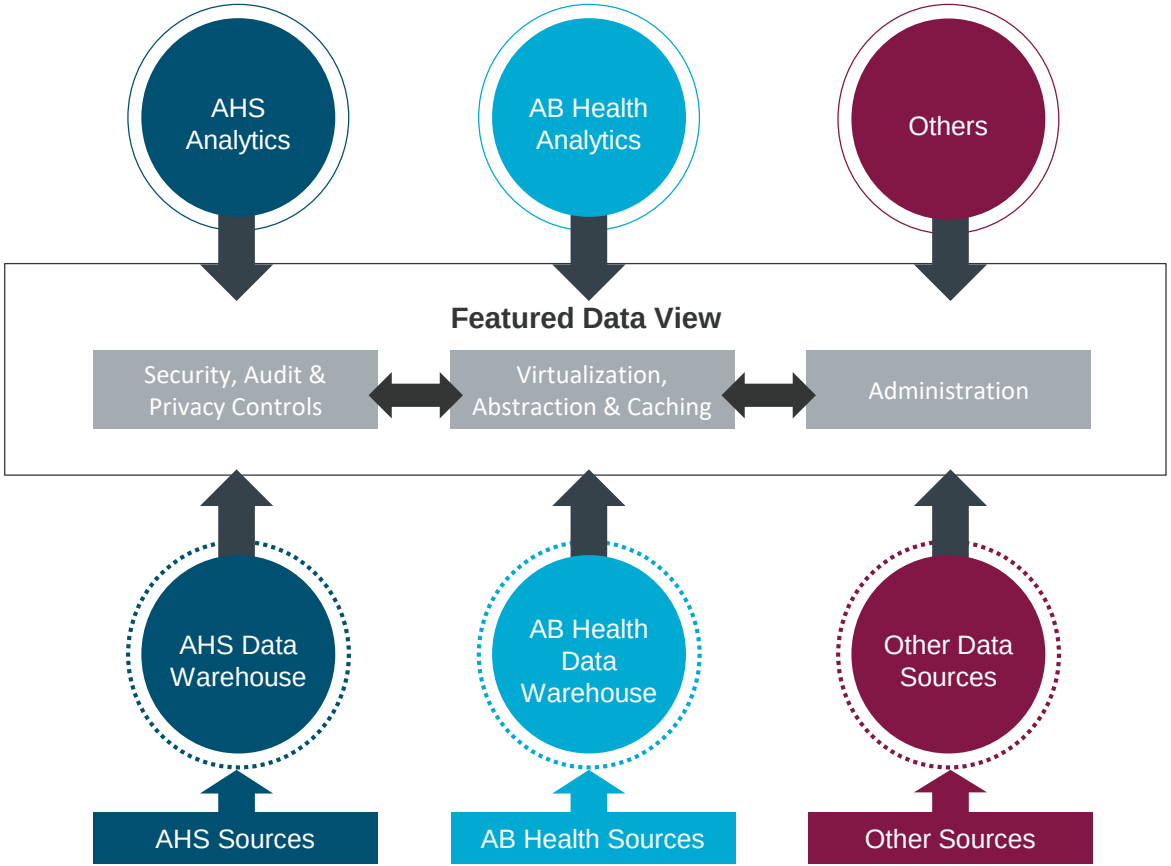
Leveraging Existing Investments



Advantages

- ✓ Timely access to cross-organization data
- ✓ Reduced data duplication / redundancy
- ✓ Analytical views
- ✓ Inbuilt controls to manage security and privacy

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Final Remarks

Classification: Public

Concluding Thoughts

Focus on values

Analytics is foundational to improved Decision Making

Enabling access and use of data is key

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Analytics is about driving better decisions to improve the health system, ultimately improving health status and quality of life.

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