

# Building infrastructure to support outcomes-based agreements in Canada: Can an outcomes-based agreement in oncology be operationalized using administrative health data?

CADTH Symposium Panel Session  
November 3, 2021

Panelists: Chris Cameron, Alex Chambers, Winson Cheung, Eva Villalba  
Moderator: Allison Wills

Support for the research discussed by this panel was provided by the  
*Real-World Evidence and Outcomes-Based Agreements Working Group.*



# Moderator



Allison Wills

Partner, 20Sense, and  
Co-Chair of the Real-  
World Evidence and  
Outcomes-Based  
Agreements Working  
Group

## Disclosure

- Employed by 20Sense.
- Co-chair of the Real-World Evidence and Outcomes-Based Agreements Working Group.
- Support for the research discussed by this panel was provided by the Real-World Evidence and Outcomes-Based Agreements Working Group.

# Background

## What is an outcomes-based agreement?

Definition:

An agreement between a manufacturer and a payer in which the manufacturer will issue a refund or rebate to the payer based on how well the therapy performs in a real-world patient population, measured against an agreed-upon, pre-defined set of benchmarks.

What are OBAs addressing?

- OBAs are a solution to address uncertainties that create barriers to timely patient access to therapies.
- OBAs are not a replacement for clinical trials.
- OBAs are not appropriate for all drugs. When possible, simple market access agreements are preferable.

# Panel background

## Oncology, OBAs, and RWD

- With the number of promising therapies with imperfect data increasing, particularly in rare disease and precision oncology, coupled with long reimbursement timelines, timely access for patients to novel therapies has become increasingly challenging.
- Outcomes-based agreements (OBAs) are a potential solution to provide early access for patients to therapies with associated uncertainties, while mitigating the risk for payers of non-performance in the real world.
- OBAs have yet to fully gain traction in Canada. Concerns of appropriate real-world data (RWD) availability, an increase in administrative burden, and a lack of resources, infrastructure, and know-how to operationalize such agreements have been highlighted as barriers.
- In parallel, Canada's RWD infrastructure has been advancing with Alberta emerging as a health data leader, with advanced infrastructure, broad data capture, and resources to support oncology analytics (the O2 Group).

# Research objectives

## Operationalizing an OBA in Canada: RWD

### Research questions:

**Can an outcomes-based agreement in oncology be operationalized using administrative health data? Is it feasible to collect the RWD?**

#### Objective 1:

Evaluate which health outcomes are suitable for OBAs; and determine if health outcomes can be tracked with existing infrastructure.

#### Objective 2:

Determine how data tracking can be operationalized for the purpose of an OBA.

# Research focus and approach

## Operationalizing an OBA in Canada: RWD

Research on how to operationalize an OBA, from a real-world data perspective.

✓ **In scope:** Oncology, Alberta, O2, and patient support program infrastructure.

× **Out of scope:** Actual patient or drug-specific data; drug examples.

- Core project team:
  - Dr. Winson Cheung, O2, Alberta oncologist, oncology data expert.
  - Chris Cameron, PhD, Senior Vice President, Value and Evidence at EVERSANA.
  - Arif Mitha and Allison Wills, 20Sense, Co-Chairs of the Real-World Evidence and Outcomes-Based Agreements Working Group.
  - Member representatives of the Real-World Evidence and Outcomes-Based Agreements Working Group including AstraZeneca, Bayer, BioScript Solutions, Janssen, Pfizer, Novartis, and 20Sense.

# Today's panel discussion

## Objectives and key learnings

Panelists will discuss key factors to be considered when operationalizing outcomes-based agreements using the health outcomes and processes identified from the research.

From this panel discussion, attendees will be able to answer the questions:

1.

Which [health outcomes](#) are feasible to track to generate real-world data for the purpose of supporting an outcomes-based agreement in oncology?

2.

What steps are included in the [process of operationalizing](#) an outcomes-based agreement?

3.

What [key factors must be considered](#) when operationalizing an outcomes-based agreement, from the clinician, data expert, HTA, patient, and industry perspectives?

# Panelists



**Chris Cameron**

PhD, Senior Vice  
President, Value and  
Evidence, EVERSANA



**Alex Chambers**

Manager, National  
Oncology Policy, Novartis  
Oncology



**Dr. Winson Cheung**

Principal Director at O2,  
Cancer Control Alberta;  
Professor of Medicine  
and Oncology, University  
of Calgary, Senior  
Medical Oncologist,  
Alberta Health Services.



**Eva Villalba**

MBA, MSc.  
Executive Director,  
Quebec Cancer Coalition



**Discussion:**

**Do you see a need for  
outcomes-based  
agreements in Canada?  
What is different now vs.  
previous years?**



# Panelist Introductions



## Dr. Winson Cheung

Principal Director at O2,  
Cancer Control Alberta;  
Professor of Medicine  
and Oncology, University  
of Calgary, Senior  
Medical Oncologist,  
Alberta Health Services.

## Disclosure

- No conflict of interest to declare.

### Discussion:

Do you see a need for  
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What is different now vs.  
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# Panelist Introductions



Eva Villalba

MBA, MSc.  
Executive Director,  
Quebec Cancer  
Coalition

## Disclosure

- No conflict of interest to declare.

### Discussion:

Do you see a need for  
outcomes-based  
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# Panelist Introductions



**Alex Chambers**

Manager, National  
Oncology Policy, Novartis  
Oncology

## Disclosure

- Employed by Novartis Pharmaceuticals Inc.
- Former CADTH staff.

### Discussion:

Do you see a need for  
outcomes-based  
agreements in Canada?  
What is different now vs.  
previous years?



# Panelist Introductions



**Chris Cameron**

PhD, Senior Vice  
President, Value and  
Evidence, EVERSANA

## Disclosure

- Employed by EVERSANA.
- Shareholder of EVERSANA which is a global life sciences commercial services company.
- Former CADTH staff.

### Discussion:

Do you see a need for outcomes-based agreements in Canada?  
What is different now vs. previous years?



# Research Results

## Health outcomes data suitable for OBAs

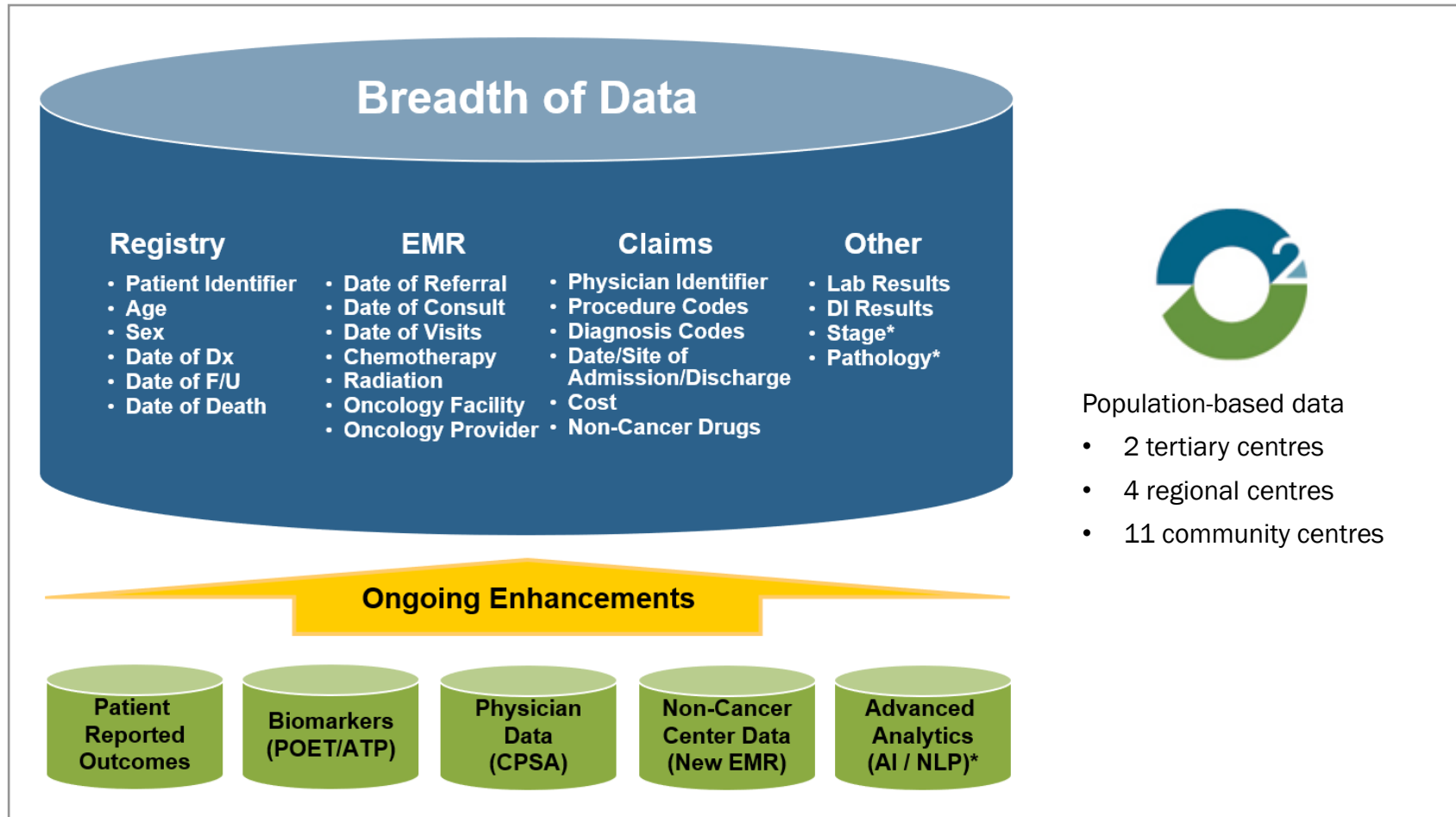
Objective 1: Evaluate which health outcomes are suitable for OBAs; and determine if health outcomes can be tracked with existing infrastructure.

Discussion:

**Why conduct this research  
with Alberta administrative  
health data?**



# Alberta Data Overview



Source: O2



# Results: Health outcomes data suitable for OBAs

## Two health outcomes were identified as suitable

Health Outcome	Suitable for an OBA?	Data Readiness Accessible for an OBA, complete and accurate.	Data Interpretation Health outcome is clear and simple.	Data Timeframe Can be collected in a reasonable timeframe.
1 Overall Survival (OS)	Yes	<ul style="list-style-type: none"> <li>• AB Cancer Registry</li> <li>• Data has been used in published studies</li> </ul>	<ul style="list-style-type: none"> <li>• Binary data point, easy to interpret</li> </ul>	<ul style="list-style-type: none"> <li>• 6-month time lag in AB</li> <li>• 12 months or longer in other provinces</li> </ul>
2 Time to Next Treatment (TTNT)	Yes	<ul style="list-style-type: none"> <li>• AB PIN database contains all Rx's dispensed in AB (all payers)</li> <li>• Data has been used in published studies</li> </ul>	<ul style="list-style-type: none"> <li>• Algorithm required for specific treatment pattern</li> </ul>	<ul style="list-style-type: none"> <li>• 1-month time lag in AB</li> </ul>
3 Progression Free Survival (PFS)	No	<ul style="list-style-type: none"> <li>• AB Administrative data</li> <li>• Incomplete: Timing of tests are not standardized</li> </ul>	<ul style="list-style-type: none"> <li>• Interpretation of results recorded in data are not standardized</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
4 Patient-Reported Outcomes (PROs)	No – future potential	<ul style="list-style-type: none"> <li>• AB administrative data: ESAS, EQ5D surveys.</li> <li>• Incomplete: Not administered to all patients.</li> <li>• No published studies.</li> </ul>	<ul style="list-style-type: none"> <li>• EQ5D and ESAS frequently included in HTA submissions</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
5 Return to Work	No	<ul style="list-style-type: none"> <li>• Data not available</li> </ul>	<ul style="list-style-type: none"> <li>• Patient may choose not to return to work</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>

Figure 2: Health outcomes data readiness, interpretation, and timeframes

**Discussion:**  
**Are there situations or examples that come to mind where these health outcomes could be used to support an OBA?**

Health Outcome	Suitable for an OBA?
1 Overall Survival (OS)	Yes
2 Time to Next Treatment (TTNT)	Yes
3 Progression Free Survival (PFS)	No
4 Patient-Reported Outcomes (PROs)	No – future potential
5 Return to Work	No



# OBA Data Tracking Example

## Overall Survival (OS)

### OS Details

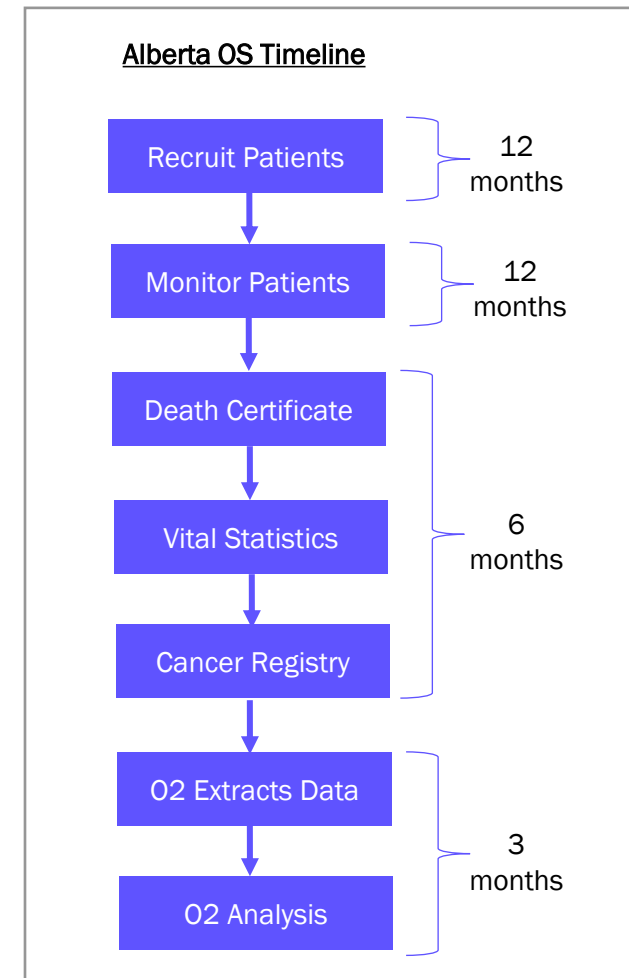
- Objective event; ease of interpretation; **1 data point**.
- Diagnosis with **relatively short anticipated OS** could be a good fit for an OBA.

### OS Timelines

#### Example

- Patients are recruited over **12 months**.
- Survival status is monitored for **12 months**.
- Data collection logistics to receive information on survival status takes approx. **6 months**.
- Analysis time required takes approx. **3 months**.

→ **Total estimated time required an OBA data tracking: 3 years.**



**Discussion:**

**What are your thoughts on the OS data tracking example for an OBA?**



# Research Results

## Process to operationalize RWD for OBAs

Objective 2: Determine how data tracking can be operationalized for the purpose of an OBA, by designing an OBA data process.

# Results: Process to operationalize RWD for OBAs

## 3 OBA data processes have been identified

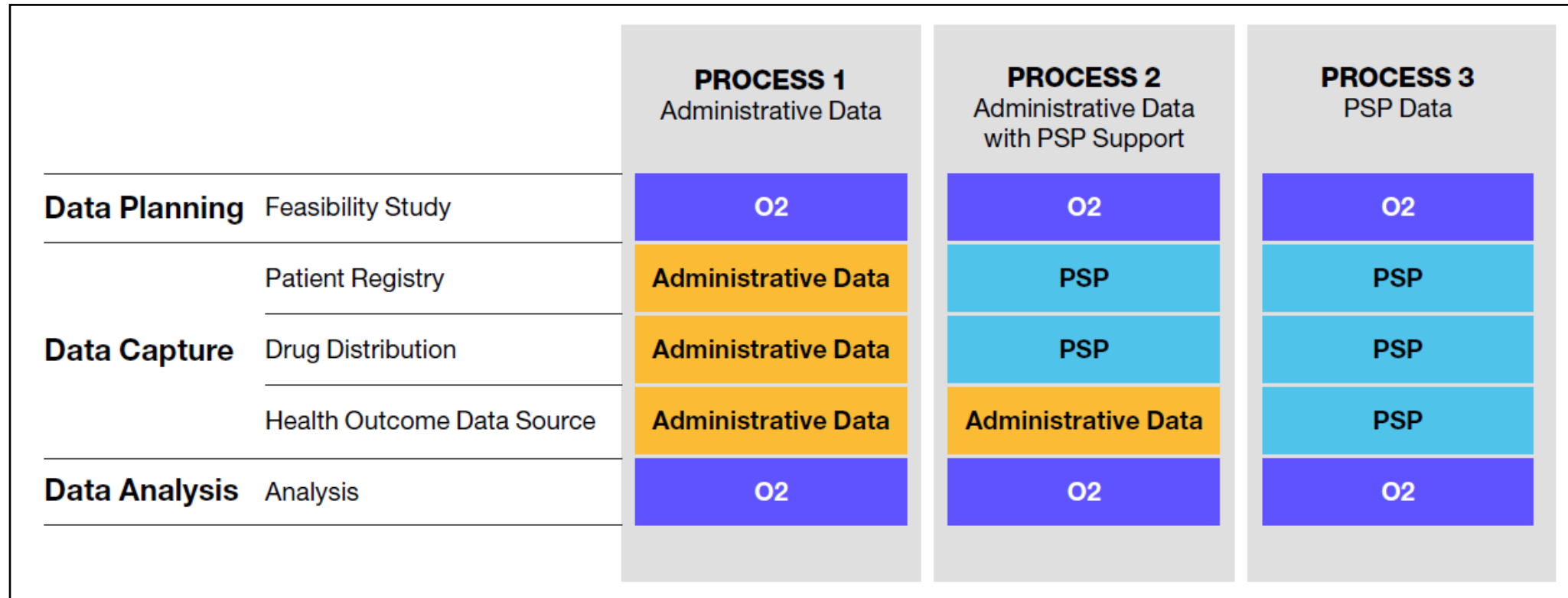


Figure 3: Process design for data collection to support outcomes-based agreements in Canada

# Results: Process to operationalize RWD for OBAs

## Data Planning: Feasibility study

A feasibility study is conducted to determine if health outcome data can be collected to meet the needs of an OBA?

- YES/NO
- The result of the feasibility study will be a key input when the payer and manufacturer are designing the OBA.

### Feasibility study questions to answer:

1. Which health outcomes are possible for the drug?
2. Is the RWD available? Data source?
3. Is the patient population sufficient?
4. What is the anticipated timeline to complete the data portion of the OBA?

### Feasibility study process:

1. Data expert engaged for perform feasibility study.
2. Timing of feasibility study.
3. Ethics Committee approval to access data for feasibility study, and for the OBA.

**Discussion:**  
**What other considerations  
come to mind about the  
OBA RWD feasibility  
study?**





# Results: Process to operationalize RWD for OBAs

## Process 2 and 3 leverage PSP infrastructure

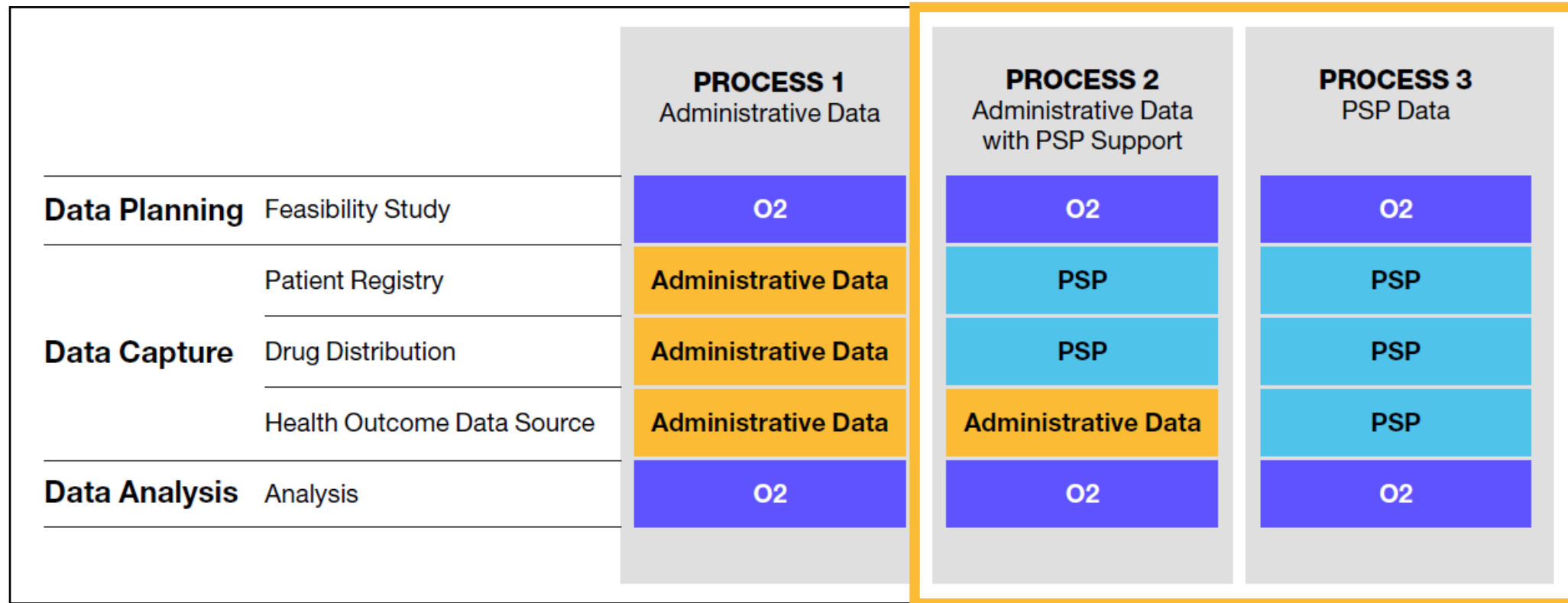


Figure 3: Process design for data collection to support outcomes-based agreements in Canada

**Discussion:**

**What are the pros and cons of leveraging the PSP infrastructure for OBAs (vs. administrative data)?**



# Research Results Summary of Results and Key Insights

# Operationalizing an OBA in Canada: RWD

## Summary of Results & Key Insights

1. It is feasible to collect RWD to support OBAs, using Alberta administrative health data in oncology: OS & TTNT.
2. Minimal additional resources and infrastructure are required from the public system to collect data to support OBAs.
  - In some scenarios, administrative data infrastructure is already in place; and PSP infrastructure and data could supplement, where appropriate.
3. The total estimated timeframe required to collect RWD and report for OBAs is 2.5 – 3 years.
4. The recommended first step when considering an OBA is to perform an RWD feasibility study by a data expert.

Final thoughts:

**Can an outcomes-based agreement in oncology be operationalized using administrative health data? **Yes****



# Q&A



# Panelists



**Chris Cameron**

PhD, Senior Vice  
President, Value and  
Evidence, EVERSANA



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