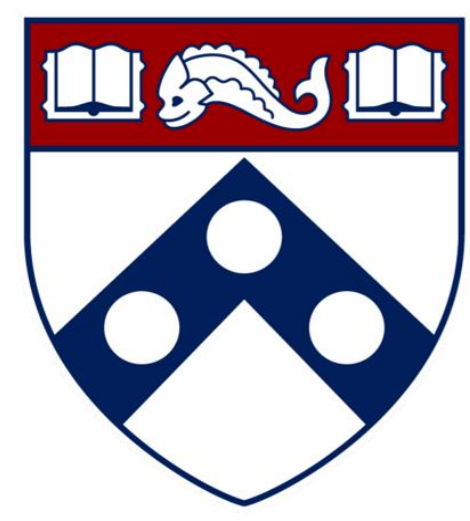




Public Health Planning and Response to Cancer Cluster Investigations

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OVERVIEW

Modernizing Virginia's response framework for unusual cancer patterns.

Unusual Cancer Patterns and Cancer Clusters

An unusual cancer pattern (UCP) is a greater than expected number of cancer cases that share a Similar etiology

- Among a similar group of people
- Within a similar time frame.

A cancer cluster is a type of UCP within a similar region of interest.¹

The Complexity of Studying Unusual Cancer Patterns

Unlike infectious disease outbreak clusters, which typically feature short incubation periods and distinct sources, investigations in UCPs and cancer clusters have immense epidemiological hurdles because of long latency periods and multifactorial non-infectious causes. Historically, these investigations have costed significant time and resources from local and state health departments, rarely giving a definite causative answer. A review of 428 U.S. cancer cluster investigations over a period of 20 years found:

- 13% confirmed an increase in cancer incidence
- 3 investigations linked a cancer cluster to an environmental exposure
- 1 investigation had a definite cause

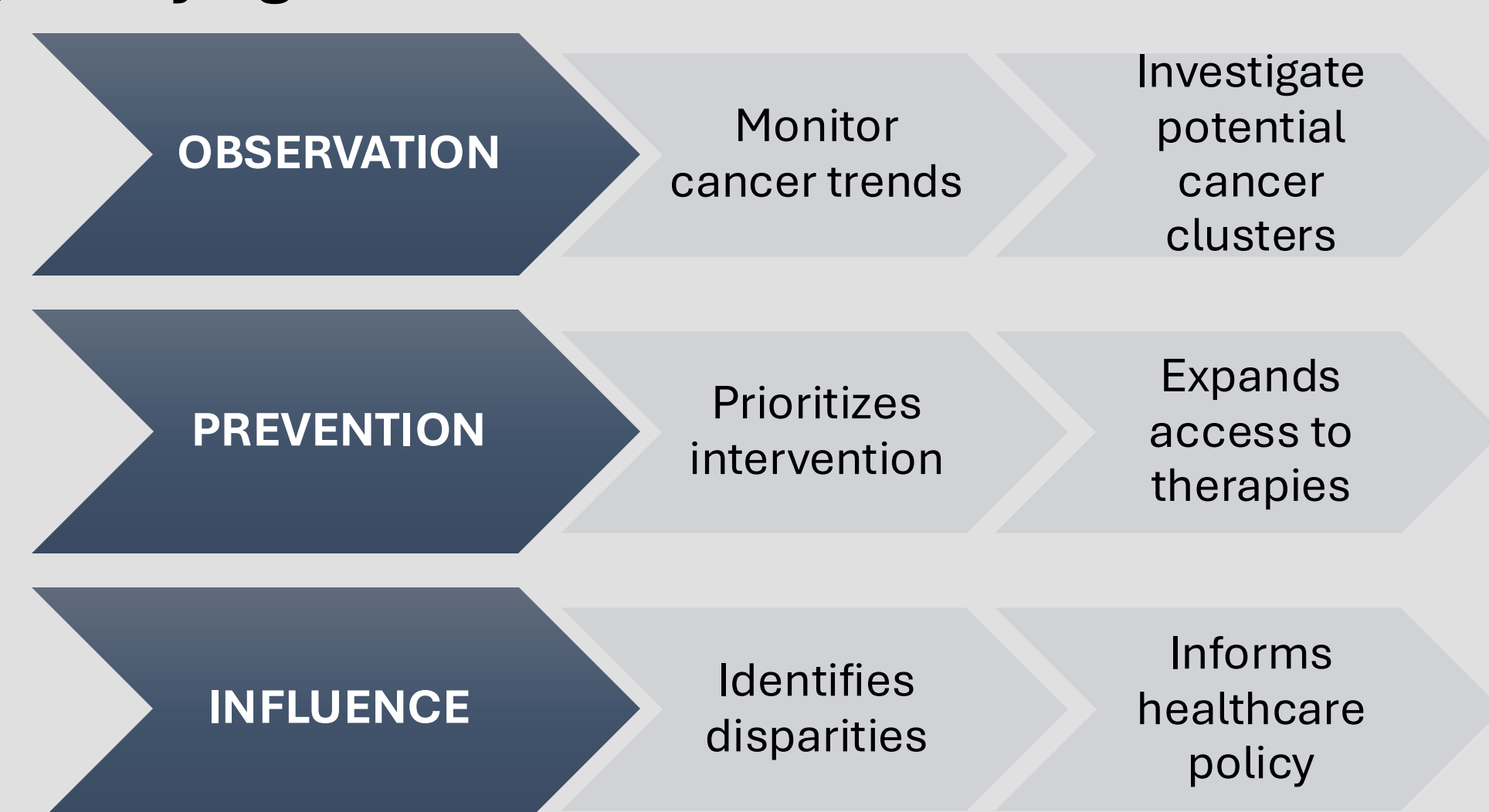
The Need for Modernization

- It is crucial to continue studying UCPs to keep the public and scientific community up to date as well as to increase our general understanding of the disease.
- As much as UCP and cancer cluster investigations are scientific and data-driven, proper communication, accountability, and transparency with the public is important.
- A clear SOP that focuses on *standardization, trust and transparency, accountability, and optimization* ensures that states can respond to public concerns of UCPs with consistency, manage community expectations, establish clear baselines for further investigation, and maintain scientific rigor.

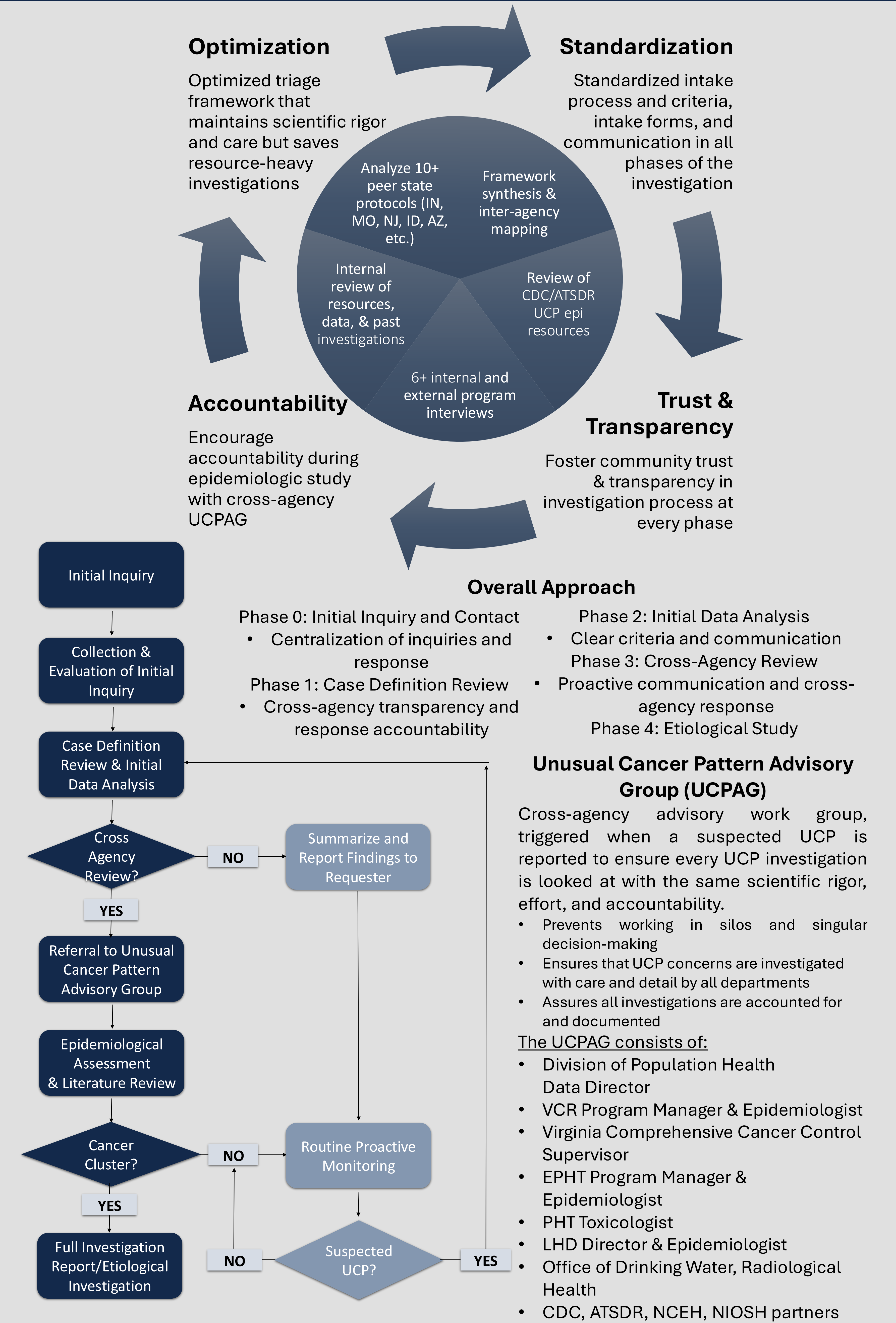
The Virginia Cancer Registry

The Virginia Cancer Registry (VCR) responds to all cancer inquiries. The VCR is the statewide population-based registry of data for individuals diagnosed or treated in Virginia or Virginia residents who have received cancer care out of state. The VCR is a partner in statewide activities to promote cancer prevention, early detection, and successful treatment and care.

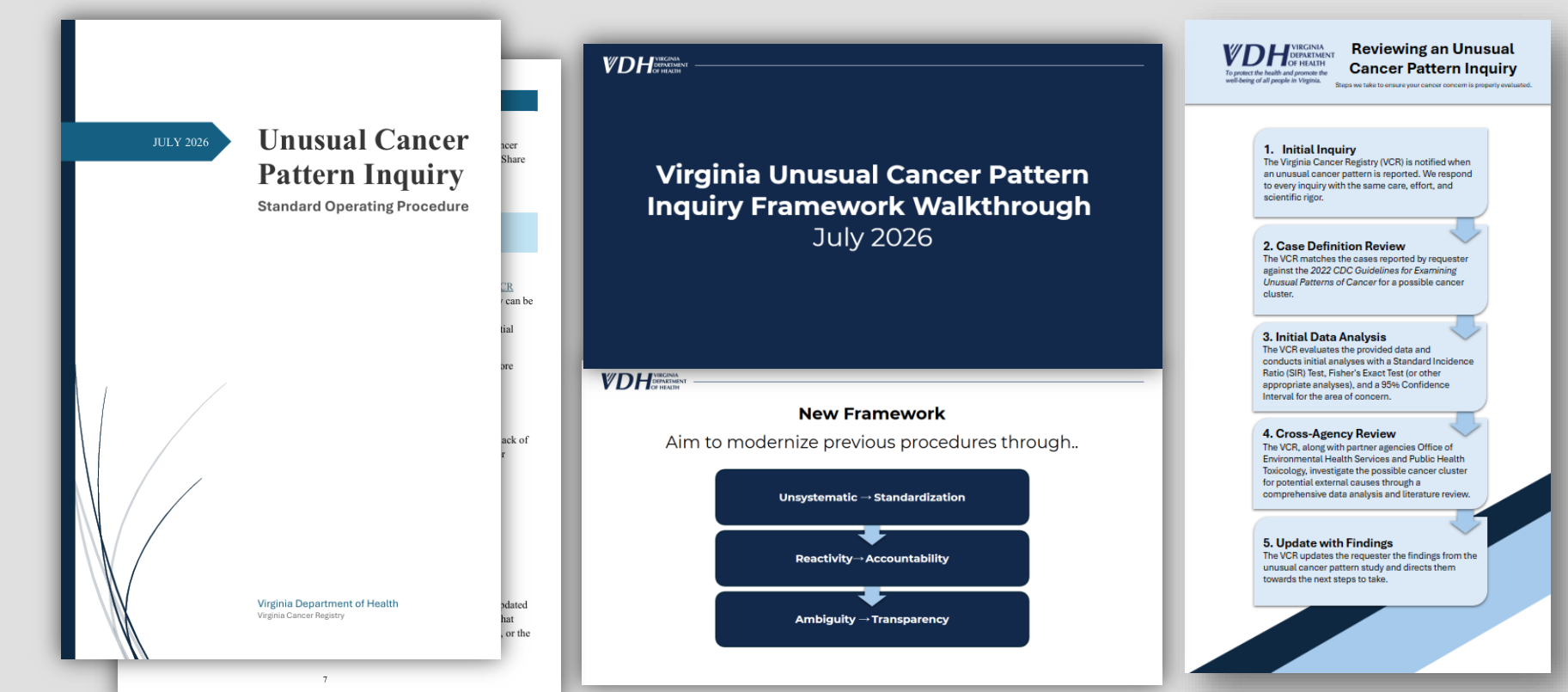
Why Studying Cancer Data Matters



APPROACH & METHODS



OUTCOMES & IMPACT



Comprehensive SOP: Developed 1st draft of Virginia's Updated Comprehensive SOP for Cancer Cluster Investigations

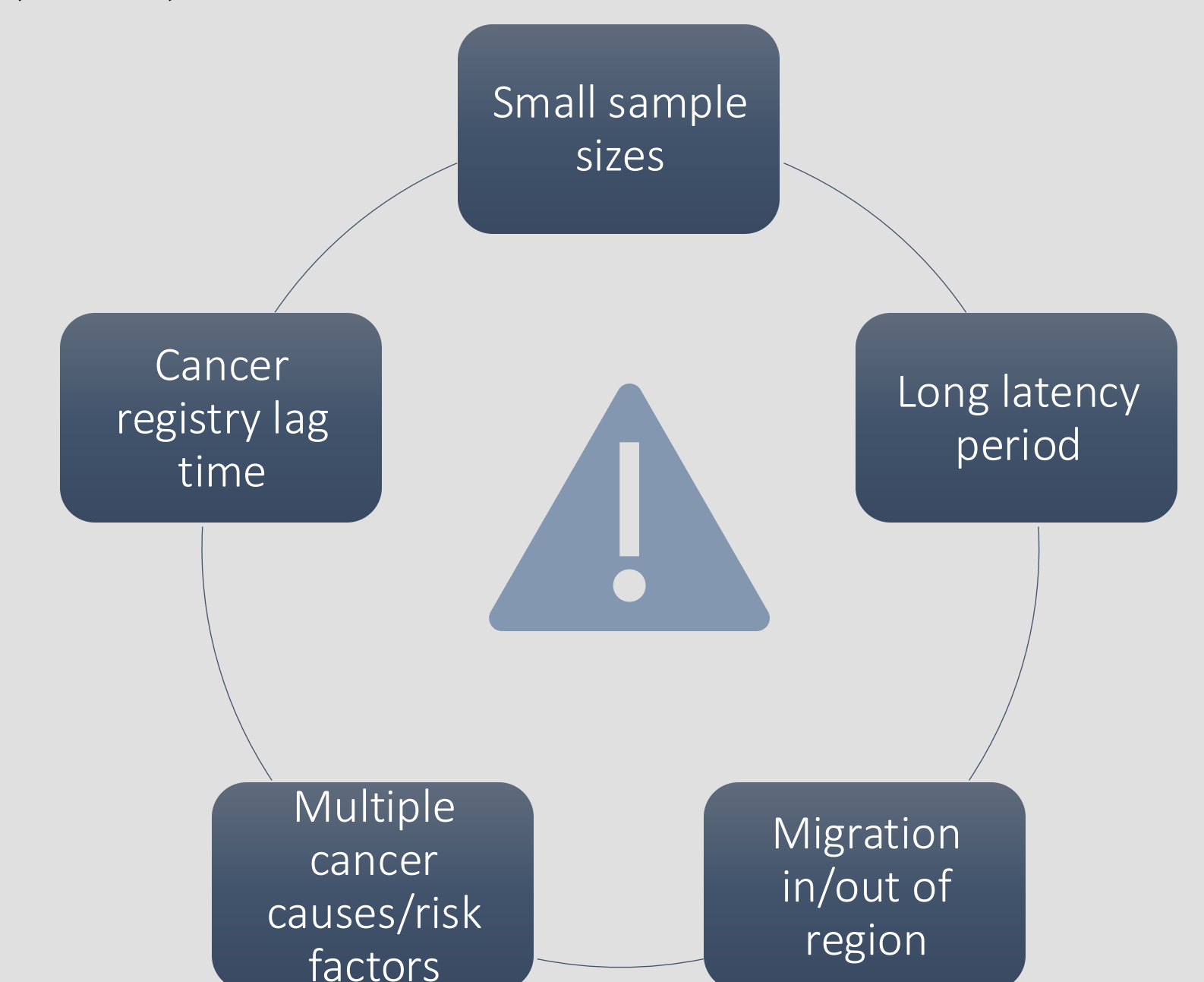
Training Deck: Created SOP walkthrough slides for internal and external agency transparency

Public Infographics: Created public-facing infographics and process design flowcharts on the investigation steps to increase transparency

- Transition from an unstructured response model to a standardized triage framework without siloed decision making while promoting transparency and accountability.
- The SOP and communication frameworks will undergo review before being implemented to train internal and external program partners in a UCP investigation.

LIMITATIONS

In contrast with infectious disease investigations like measles and tuberculosis, investigating unusual cancer patterns and cancer clusters at the local, state, and national levels can be difficult because of...



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1. Centers for Disease Control and Prevention. (2026, May 6). About unusual patterns of cancer. <https://www.cdc.gov/cancer-environment/about/index.html>