

# BRIDGING THE GAP: DESIGNING A TRANSFERABLE DISEASE-MODIFYING THERAPY PATHWAY FOR ALZHEIMER'S DEMENTIA

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## BACKGROUND & OBJECTIVES

### CLINICAL CONTEXT

Regulatory approval of disease-modifying therapies (DMTs) by Health Canada marks a major paradigm shift in Alzheimer's care. Unlike traditional oral treatments, DMTs introduce significant clinical and operational complexities:

- Extensive pre-treatment eligibility screening & biomarker confirmation
- Intravenous infusion delivery infrastructure
- Rigorous safety monitoring for Amyloid-Related Imaging Abnormalities (ARIA)

**System Challenge:** Our medium-sized city lacked a centralized academic neurocognitive clinic and dedicated trial unit. A multi-site hospital framework was essential to ensure patient safety and operational readiness.

**Objective:** Create and operationalize a standardized, multi-specialty clinical pathway for appropriate referral, workup, delivery, and monitoring of DMTs in Alzheimer's disease.

## METHODS & CO-DESIGN

### METHODOLOGY

An iterative, participatory, co-design methodology was utilized to create the DMT pathway.

#### Multispecialty Steering Committee:

Care of Elderly

Diagnostic Imaging

Family Medicine

Genetics

Geriatric Medicine

Lab Medicine

Neurology

**Environmental Scan & Gap Analysis:** Local resources were evaluated against international appropriate use recommendations and peer-reviewed literature to identify system gaps and to design custom workflows where gaps existed.

**Iterative Feedback:** Successive rounds of participatory feedback was used to refine the local pathway.

## STANDARDIZED DMT CARE CONTINUUM & PATIENT JOURNEY

1

### Referral & Triage

Standardized multi-specialty referral criteria

2

### Eligibility Workup

Amyloid verification, APOE status, and baseline MRI

3

### Infusion Delivery

Coordinated infusion site scheduling and delivery

4

### Follow Up and ARIA Surveillance

Longitudinal clinic follow up and MRI surveillance

## RESULTS & KEY DELIVERABLES

### KEY OUTPUTS

The co-design process yielded an operationalized DMT pathway and tangible clinical support tools across local health sites:

- **Diagnostic Imaging Triage:** Standardized booking and triaging process tailored for eligibility screening and ARIA surveillance.
- **Biomarker Lab Workflows:** Laboratory processes created and optimized for blood and CSF biomarkers.
- **Care Continuum Mapping:** Defined clinical responsibilities from referral to longitudinal monitoring.
- **Multilevel Guidance:** Actionable decision-support for primary, secondary, and tertiary care clinicians.

## CONCLUSION & IMPACT

### SUMMARY

**Scalable & Transferable Blueprint:** Offers an adaptable model for other centers seeking to provide safe access to emerging dementia therapeutics.

- **Optimized Local Resources:** Built necessary clinical infrastructure without requiring a centralized academic clinic.
- **Standardized Best Practices:** Enhances patient safety, equity of access, and system-wide preparedness.