# The Path to the Future: Updates from the RWE Core Action Team (CAT) on the progress of RWE in Canada

#### **CAPT Conference 2019**

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- overview of joint-RWE Workshop
- development of RWE Core Action Team (CAT)
- objectives of the RWE CAT
- use of RWE by CADTH
- next steps for CADTH and RWE CAT

# Overview of joint-RWE Workshop

Defining "Decision-Grade" Real World Evidence and its Role in the Canadian Context: A Design Sprint

- held in Toronto October 2018 at the CAPT conference
- joint collaboration between Health Canada/CADTH/IHE/CAPT
- a total of 87 participants including representation from:
  - regulators
  - public payers
  - 。 academia
  - patient advocates

- HTA
- clinicians/HCPs
- industry

- the objectives of the workshop were to:
  - identify the value and applications of RWE in supporting pharmaceutical regulatory and reimbursement decisionmaking
  - identify the conditions upon which RWE will be considered of sufficient quality to inform decision-making

- participants were divided into two groups by case studies:
  - one scenario in the oncology space
  - another in the rare disease domain

- summary of key points:
  - current evidentiary requirements are challenging and potentially not feasible for drugs used in the treatment of rare diseases and in oncology
  - RWE should be used as a supplement or complement to current evidence standards and not "in lieu of"
  - regulatory and HTA bodies should engage with manufacturers pre- and post market for RWE initiatives as appropriate

- summary of key points:
  - prescriptive guidance is challenging so instead articulate good process and guidance on quality of evidence to ensure useful RWE
  - Health Canada and CADTH expressed commitment to working with all stakeholders across a product's full life cycle and to ensure a consistent and transparent approach

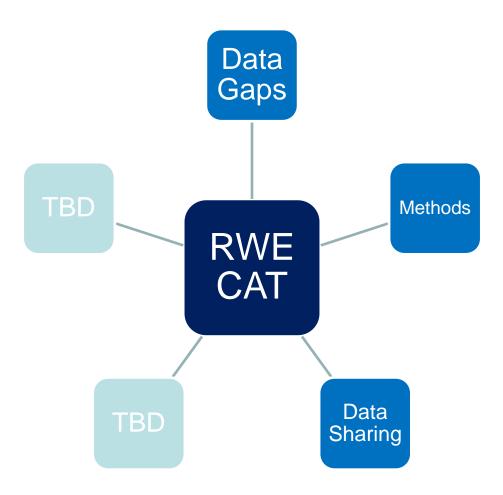
# Development of RWE Core Action Team (CAT)

established in November 2018 after RWE workshop

- the RWE Core Action Team (CAT) comprises representatives from:
  - $_{\circ}$  CADTH
  - Health Canada
  - Institut national d'excellence en santé et en services sociaux (INESSS)
  - pan-Canadian Pharmaceutical Alliance (pCPA)
  - Canadian Institutes of Health Research (CIHR)
  - Drug Safety & Effectiveness Network (DSEN-CIHR)
  - Canadian Institute for Health Information (CIHI)
  - Canadian Pharmaceutical Industry (1 with expertise in regulatory issues and 1 with expertise in market access/HTA)
  - Canadian health research sector (2 representatives with expertise in RWE)

- objectives of the RWE CAT include:
  - create a forum for stakeholders to have dialogue and awareness of initiatives nationally
  - form an advisory body that will help guide and support the development of a pan-Canadian approach to the use of RWE
  - identify where RWE can add value to regulatory and reimbursement decision-makers throughout a technology's lifecycle

- Action Teams or Working Groups will be established to work on priority areas
- membership will include some CAT members along with appropriate key external stakeholders/representatives
- priority areas of the RWE CAT <u>could</u> include:
  - define and address data gaps across the product lifecycle
  - methodological capacity and standards
  - optimize data sharing among partners in Canada



- RWE CAT has recently welcomed new leadership
  - Nicole Mittman (CADTH VP Evidence Standards)
  - Marc Mes (Health Canada Director General, MHPD)
- RWE CAT for medical devices is currently under development
- next steps of the RWE CAT include:
  - development of short-term and long-term objectives
  - review and dissemination of RWE guidance docs and strategies from HTA & HC
  - Initiate first action team for agreed upon topic/barrier

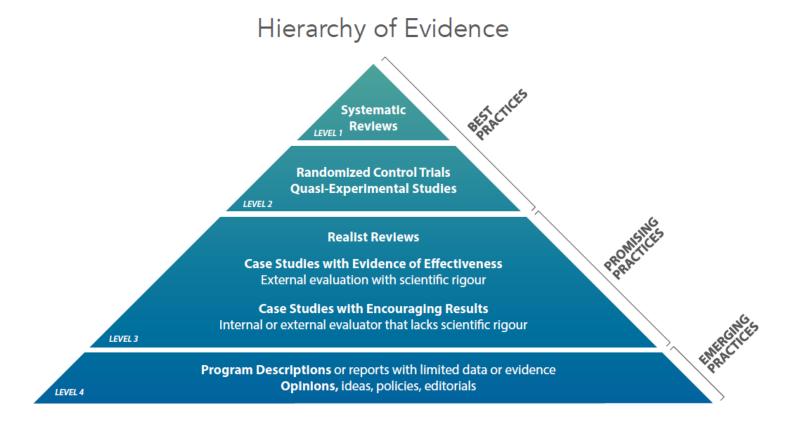
# Use of RWE by CADTH

#### **Current State of RWE**

 CADTH <u>continues</u> to use RWD/E throughout the product lifecycle

Pre-market Post-market

 continue to accept RWE in CDR drug submission as part of evidence bundle (hierarchy of evidence)



#### **Current State of RWE**

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Pre-market Post-market

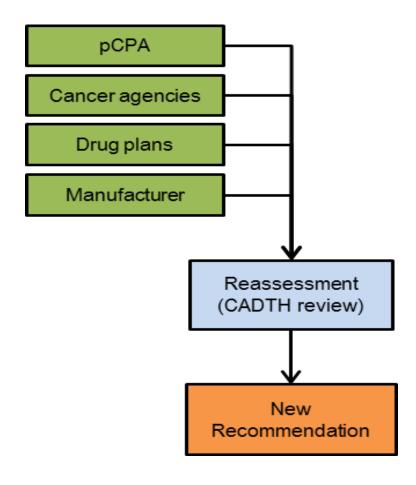
- continue to accept RWE in CDR drug submission as part of evidence bundle (hierarchy of evidence)
- continue to utilize in pharmacoeconomic modeling
- used to inform policy/research question within HTA

- continue to use RWE for rapid response & OU/HTA
- pERC has issued conditional coverage recommendations
- development of reassessment framework

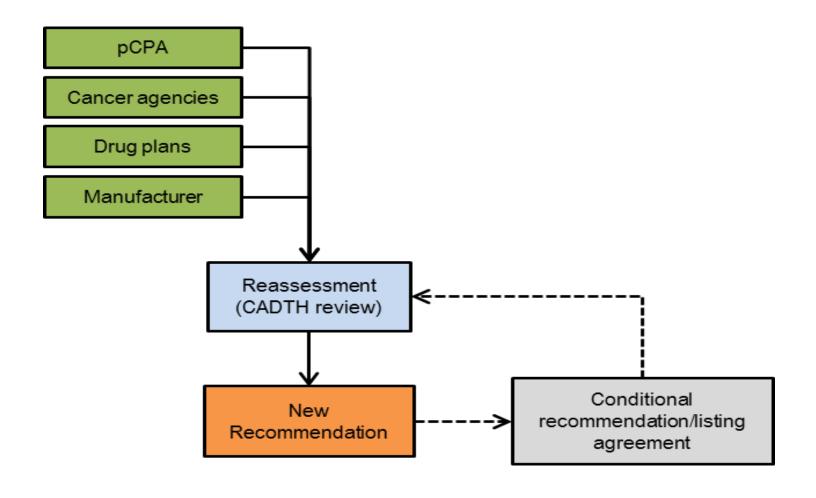
#### Reassessment

- a key goal of CADTH's Strategic Plan is to adopt a life-cycle approach to HTA
  - a key component to life-cycle approach is reassessment
- CADTH has developed a Reassessment Framework
- will need to consider "Health Canada Notice of Compliance"

#### Reassessment



#### Reassessment



## **Next Steps**

 continue collaborative development of a joint-RWE action plan and framework

improve transparency and consistency

 continue dialogue and development to improve system readiness for RWE across the product lifecycle



#### **Elephants and Data**

#### Mina Tadrous, PharmD MS PhD

- 1. Women's College Hospital, Toronto
- 2. Ontario Drug Policy Research Network, Toronto, ON
- 3. ICES, Toronto, ON
- 4. Leslie Dan Faculty of Pharmacy, University of Toronto



#### Disclosures



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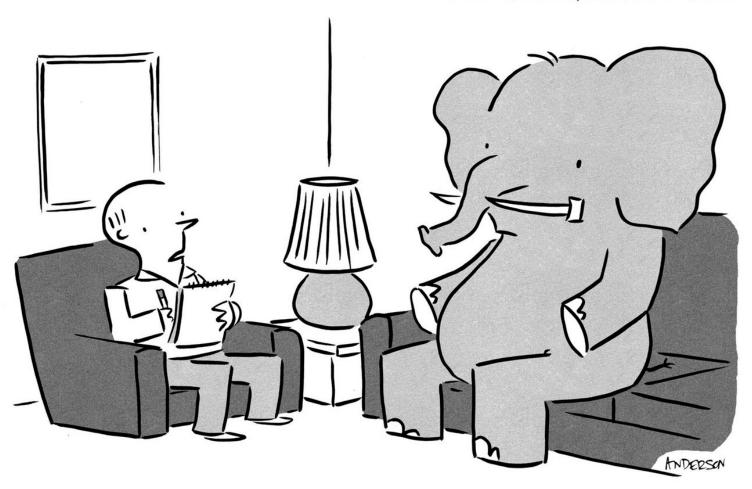
- 1. Ontario Ministry of Health and Long-Term Care (MOHLTC)
- Ontario Strategy for Patient-Oriented Research (SPOR) Support Unit, which is supported by the Canadian Institutes of Health Research (CIHR) and the Province of Ontario
- 3. Institute for Clinical Evaluative Sciences (ICES)

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"Let's try some role playing. I'll be the elephant in the room and you address me."

## Policy-based CER Example



- Omalizumab (Xolair) is a humanized monoclonal antibody targeting immunoglobulin E (IgE).
- Indicated in adults and adolescents for the treatment of moderate to severe persistent asthma and chronic idiopathic urticaria.





#### Does it work?

Ann Allergy Asthma Immunol xxx (2017) 1-7



Contents lists available at ScienceDirect



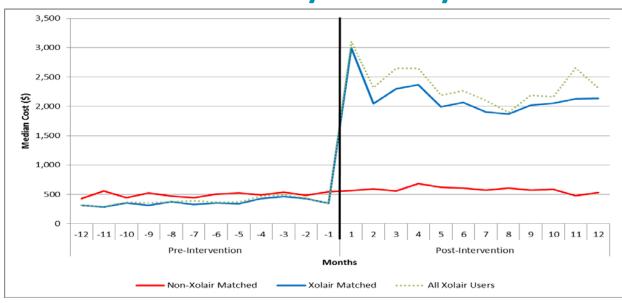
#### Real-world health care utilization and effectiveness of omalizumab for the treatment of severe asthma

Mina Tadrous, PharmD, PhD \*· †, ‡; Wayne Khuu, MPH †; Gerald Lebovic, PhD \*· §; Matthew B. Stanbrook, MD, PhD †, §; Diana Martins, MSc †; J. Michael Paterson, MSc †, §; Muhammad M. Mamdani, PharmD, MA, MPH †, ‡, §, David N. Juurlink, MD, PhD †, §, ¶; Tara Gomes, MHSc, PhD \*, †, ‡, §





# Results - Primary Analysis

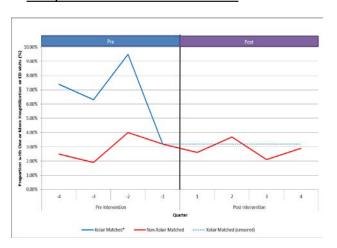


Group	Pre-Intervention Median Cost Per Month (Range)	Post- Intervention	Pre-Post Comparison		
		Median Cost Per Month (Range)	Change in Average Cost (\$)	p-Value	
Omalizumab	\$361 (\$289- \$463)	\$2,157 (\$1,867-\$2,996)	\$1,796	p<0.0001	
Non-Users	\$496 (\$432-\$557)	\$581 (\$476- \$684)	\$85	p= 0.59	

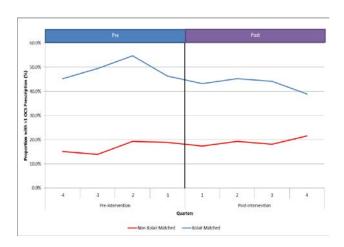


# **Secondary Outcomes**

#### **Hospitalizations and ED visits**



#### **OCS Prescriptions**

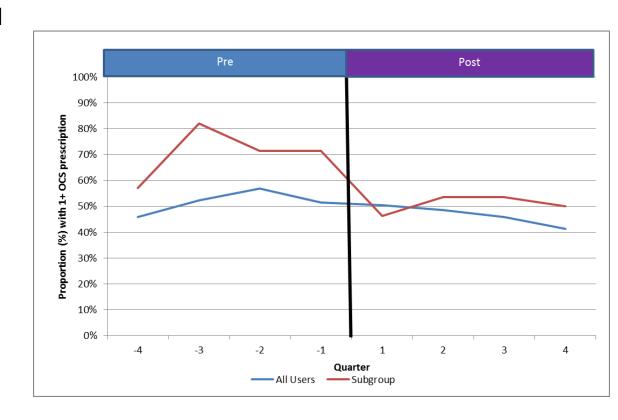


	Group	Pre-Intervention Average	Post- Intervention	Pre-Post Comparison	
Outcome		Proportion	Average Proportion	Change in	p-Value
		(Range)	(Range)	Proportion	p-value
Hospitalization	Omalizumab	6.6% (3.2%-9.5%)	*	*	p=0.44
	Non-User	2.9% (1.9%-4.0%)	2.8% (2.1%-3.7%)	- 0.1%	p=0.99
OCS use	Omalizumab	49.0% (45.3%-54.7%)	42.9% (38.9%-45.3%)	- 6.1%	p=0.99
	Non-User	16.8% (13.9%-19.3%)	19.1% (17.4%-21.6%)	2.3%	p=0.22

## **Sensitivity Analyses**



- Results consistent with primary analysis across all outcomes except OCS prescriptions
- OCS prescriptions: statistically significant reduction in the relative rates (spike) of OCS prescriptions in the subgroup of ICS+LABA users (p=0.03)
- Statistically significant differences in the rate of change (slope) of OCS prescriptions found in all users (p=0.03)







#### Not a data or methods issue



#### To move forward we need:

- 1. Need Leadership
  - Organizations to take ownership
  - Develop a mandate
  - Develop frameworks and standards
  - Market Entry vs re-assessment

#### Not a data or methods issue



- 2. Candid conversations about competing interests (all sides!)
  - Who will conduct the analyses?
  - Dealing with disagreement
  - Liability



"I GATHER YOU TWO ARE HAVING A LITTLE DISAGREEMENT, EH?"

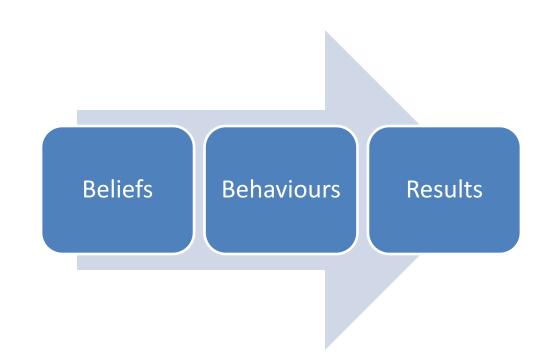
#### Not a data or methods issue



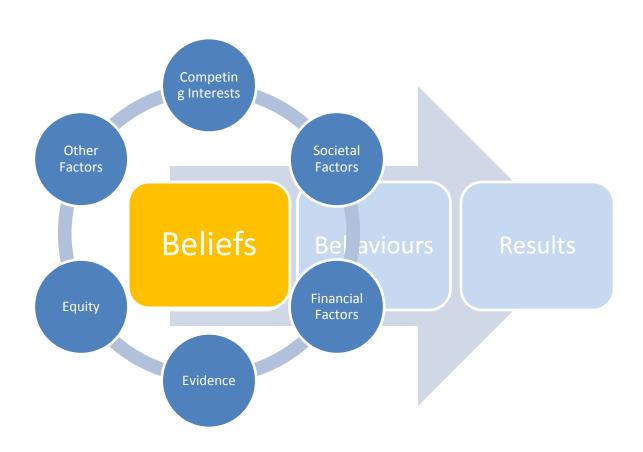
- 3. Show me the money!
  - Flow of money
  - Build capacity
  - Data Access















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#### **Disclaimers**

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Opinions expressed in this presentation aim to represent industry position based on input from working groups in industry associations

#### RWE CAT

- Co-creation: all perspectives together, with industry as a partner at the table
  - Clarity on roles and responsibilities for RWD generation
- RWE on its own is not a goal: how can it best be used?
- Setting up now for the future when RWE can benefit patients
  - Access to data, integration of databases
  - Methodological standards
  - Incorporation in HTM/reimbursement processes

## Perspectives on RWE

- Sometimes experimenting is the best way to get started
  - Learnings could help improve process
  - We need to agree that we all not get it right the first time, but there is room to evolve and improve, together
- RWE generation is resource intensive (\$, time) so we all need to be choiceful
  - Uncertainty in Canada
  - Global context
- Early dialogue with all relevant parties will be key to ensure fit-for-purpose evidence generation