

# TOWARD OPTIMAL ASTHMA MANAGEMENT: FROM BARRIERS TO SOLUTIONS

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*On behalf of the Research group  
**Barriers to optimal asthma  
management by physicians***



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# ISSUE: THE CARE-GAP

## OPTIMAL CARE

Guided self-management reduce the risk of hospital admission by 36% (Gibson et al 2006). It entails:

- 1) daily controller medication(s)
- 2) written action plan
- 3) environmental control
- 4) regular reassessment of asthma control
- 5) asthma education

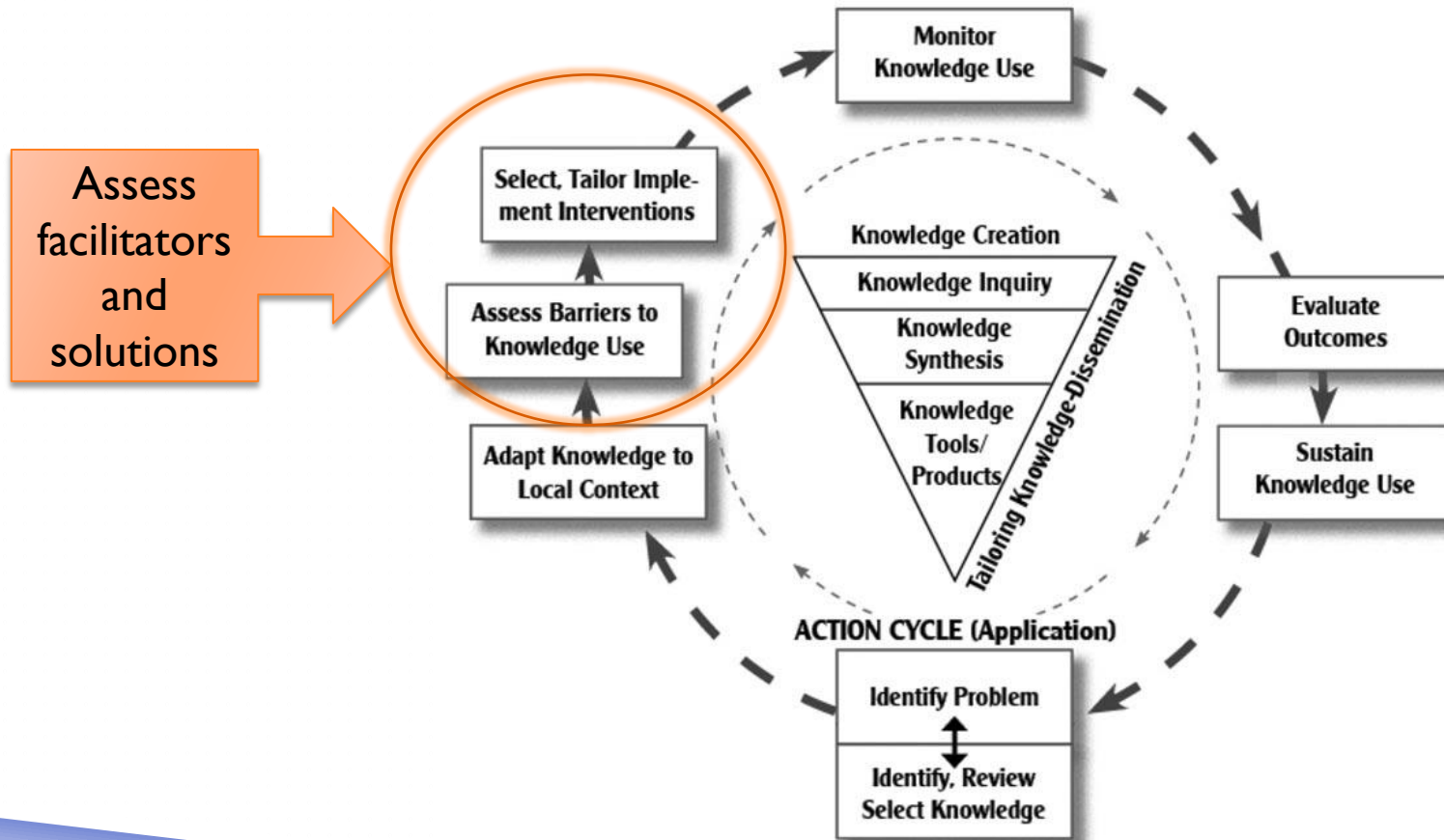
From: *Canadian Respiratory Guidelines 2010*

## ACTUAL CARE

Only 39% of 463 physicians based their treatment recommendations on the Canadian asthma guidelines

From: FitzGerald & al. 2006

# APPROACH TO KNOWLEDGE TRANSLATION



From: I. D. Graham et al., 2006.

# METHODS

## Mixed methods design

PHASE 1 : Qualitative face-to-face semi-structured interviews (Montreal area)

PHASE 2 : Quantitative survey completed by physicians (Province of Quebec)

# OBJECTIVES & RATIONALE

- ▶ Explore barriers, facilitators, and solutions identified by physicians regarding :
  - a) prescribing of long term inhaled corticosteroids.
  - b) use of a written action plan
- ▶ **Propose a taxonomy of facilitators and solutions identified by physicians dealing with asthmatic patients.**
  - ▶ The taxonomy will serve to structure a questionnaire to ascertain the endorsement rate of proposed facilitators and solutions by a large cohort of physicians of different specialities.

# PARTICIPANTS

## PHYSICIANS INVOLVED IN ASTHMA CARE

### 5 different specialities

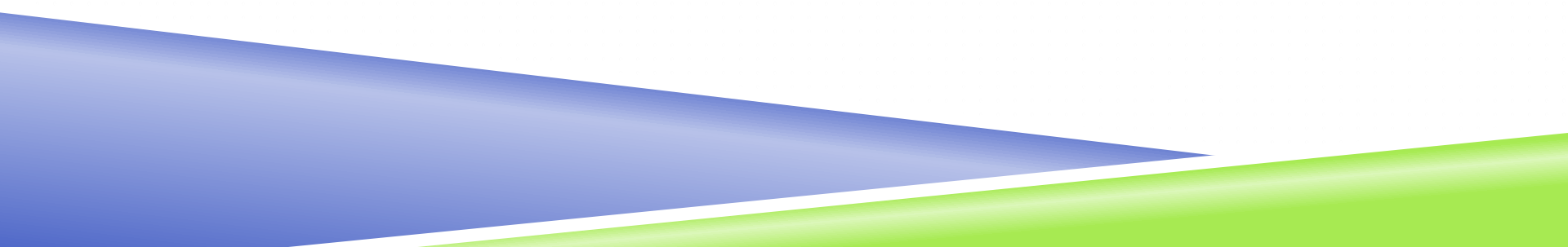
- ✦ Respiriology
- ✦ Allergy
- ✦ Emergency Medicine
- ✦ Paediatrics
- ✦ Family Medicine

### Balanced across for :

- ✦ Sex
- ✦ Years of practice
- ✦ Academic/non academic setting
- ✦ Rural/urban (*less than 100 km from CHU Sainte-Justine, Montreal*)

# DATA COLLECTION

## INDIVIDUAL SEMI-STRUCTURED INTERVIEWS

- ⊕ Perception of asthma / treatment goals
  - ⊕ Prescription practices
  - ⊕ Recommendations in case of exacerbations/use of a written action plan
  - ⊕ Change of practice
  - ⊕ Doctor-Patient Relationship
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# DATA ANALYSIS

## 4 STEPS

1. From the interviews' transcripts, two team members extracted quotes pertaining to facilitators and solutions to optimal asthma management ;
2. The two team members independently proposed a classification based on interview-elicited facilitators and solutions ;
3. Discrepancies were resolved by consensus or the input from a third team member;
4. Taxonomy was refined accordingly.

Notions :

Facilitators:

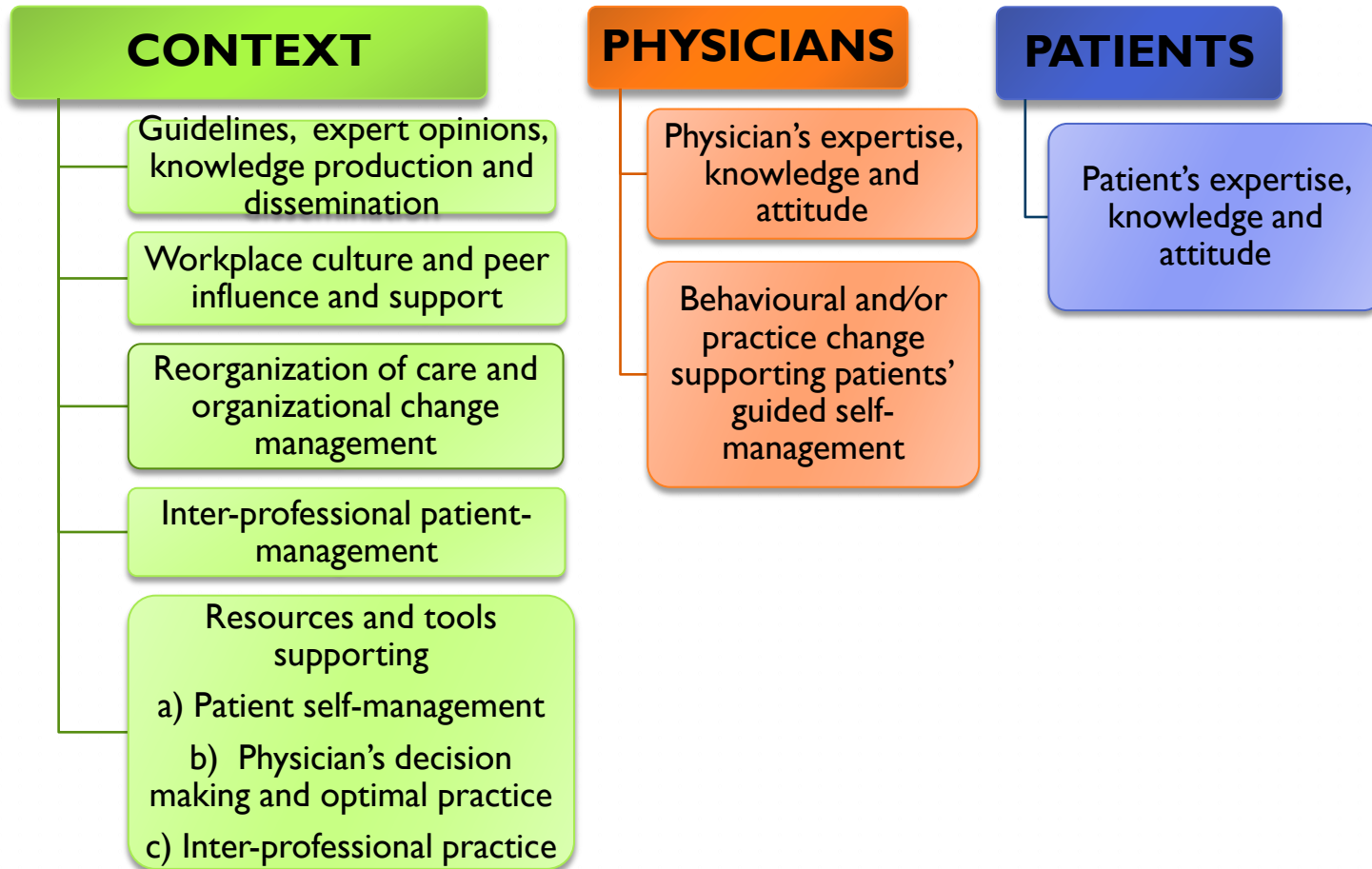
*proposed,*  
*contemplated*

Solutions:

*experienced,*  
*proven*



# RESULTS



# CONTEXT : GUIDELINES, EXPERT OPINIONS, KNOWLEDGE PRODUCTION AND DISSEMINATION

(Daily controller medication)

*It's pragmatic, not just theoretical. When he has projected its curves, it demonstrates a significant deterioration of a vital organ. This is when I realized that it was imperative to treat it with inhaled steroids. It convinced me instantly.*

MD-01, Allergist

# CONTEXT: REORGANIZATION OF CARE AND ORGANIZATIONAL CHANGE MANAGEMENT

(General)

*Not many centers offer emergency appointments for their own patients, so people are forced to knock on doors of walk-in clinics and hospital emergency services (...)*

*When physicians are paid based on a flat rate, time pressure is not as much present, so the management is optimized.*

MD-34, Allergist

## CONTEXT: INTER-PROFESSIONAL PATIENT MANAGEMENT

(Daily controller medication)

*When the family doctor refers a patient to a specialist, it helps if the specialists gives him feedback. If one of my patient is followed by a respirologist who writes me clearly that he wants me to continue the treatment he initiates, I will continue.*

MD-28, Family doctor

## CONTEXT: RESOURCES AND TOOLS

(Daily controller medication)

*Spirometry. It's something objective that parents can see, yes, and we'll see after 2-3 weeks of corticosteroid treatment that there is a real change. Yes, it makes my job easier.*

MD-13 paediatrician

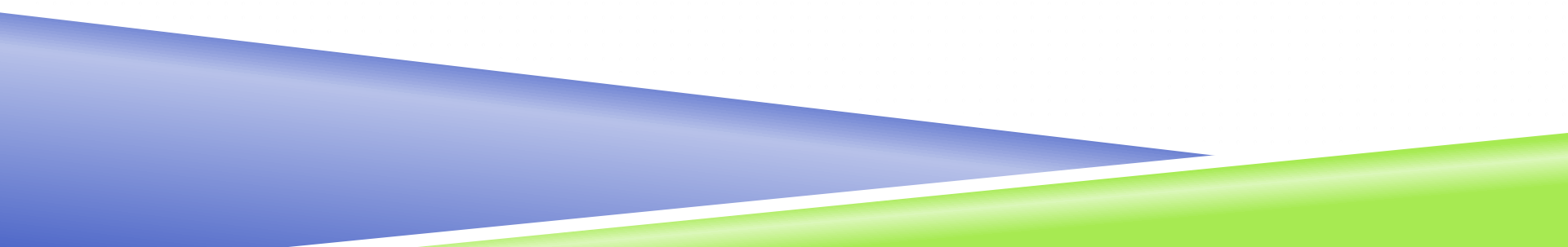


# CONTEXT: RESOURCES AND TOOLS

(General)

*The Written action plan allows patients to be more involved in their disease. And it's a good tool for interdisciplinary work.*

MD-35, Allergist



# PHYSICIANS: PHYSICIAN'S EXPERTISE, KNOWLEDGE AND ATTITUDES

(General)

*I think the patient is more willing to listen to what I have to say about prevention when I see him as a patient, but also as a person who have projects and who is engaged in things he loves.*

MD-02, respirologist



# PATIENTS: PATIENTS' EXPERIENCES, KNOWLEDGE AND ATTITUDES

(General)


*An asthmatic patient who has recurrent episodes, chronic illness, he must support his condition to some degree (...) he must know when it is decompensated, the risk factors and all that*

MD-22 – Emergency physician

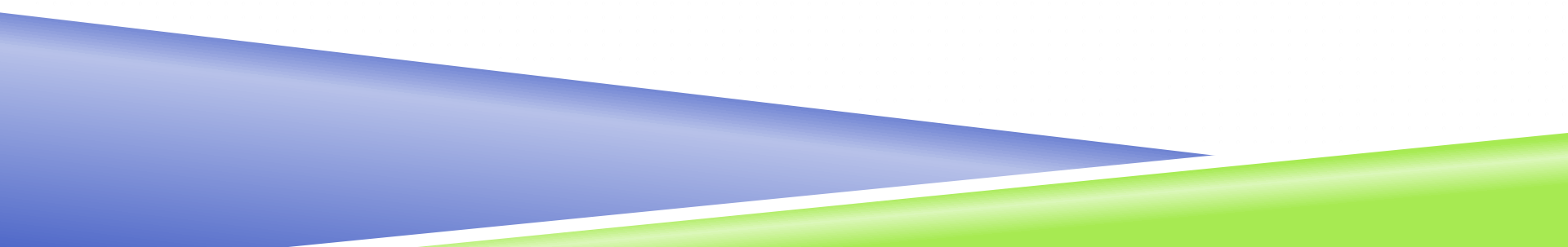




# STRENGTHS

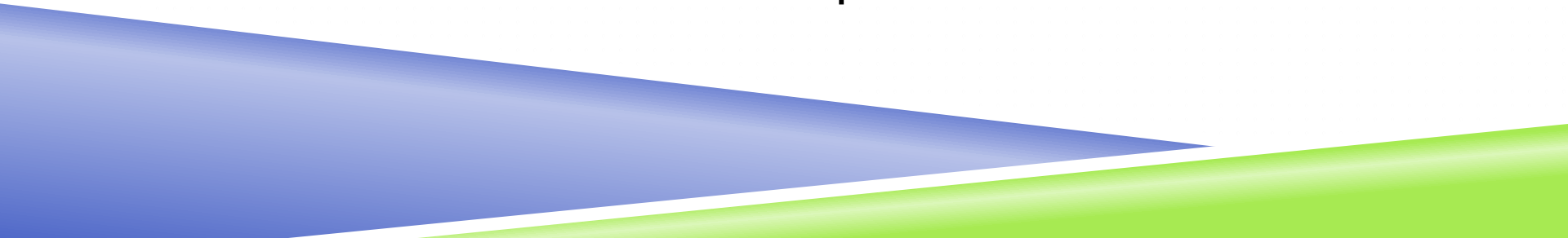
- ▶ Solutions are proposed by physicians rather than being proposed by researchers;
  - ▶ A wide range of specialties, and a variety of contexts are represented;
  - ▶ Results were produced independently by two analysts' and were further discussed in larger team.
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# LIMITATIONS

- ▶ The potential success of the proposed solutions need to be confirmed by the literature  
E.g.: there is limited evidence of efficacy for primary care based clinics for asthma (Baishnab E, & Karner C, 2012)
  - ▶ The sample size is small so the results should be validated with a larger number of participants
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# CONCLUSIONS

## THE PROPOSED CLASSIFICATION :

- ⊕ Prove to be useful to capture most of the facilitators and solutions, as identified by physicians.
  - ⊕ Differentiate between 3 categories of facilitators and solutions: (1) context ; (2) physicians and (3) patients.
    - ⊕ Physicians' talked mostly about factors related to the context and factors that are more directly related to their own practice.
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# FUTURE DIRECTIONS

## Comparative analysis

- ▶ Between different specialties

## Quantitative survey

- ▶ The proposed taxonomy will serve to structure a questionnaire to ascertain the endorsement rate of proposed facilitators and solutions by a large cohort of physicians of different specialities working in the Province of Quebec.

# RESEARCH TEAM

## **Principal investigator:**

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## **Funding**

CIHR / IRSCs

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**...and participants.**