

**10 MINUTES CAN CHANGE THE COURSE OF ASTHMA SELF-MANAGEMENT: BRIEF MOTIVATIONAL INTERVIEWING AND SHARED DECISION-MAKING**

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Big Sky Pulmonary Conference  
Thursday February 29, 2024

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**OBJECTIVES**

01

Differentiate between the concepts of brief interventions, motivational interviewing and shared decision-making

02

Describe the strength of the evidence in support of these approaches in asthma and related conditions

03

Apply the four-step 10-minute motivational interviewing and shared decision-making brief intervention

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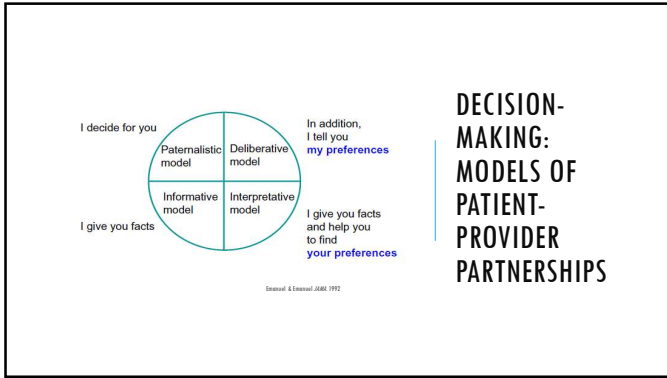
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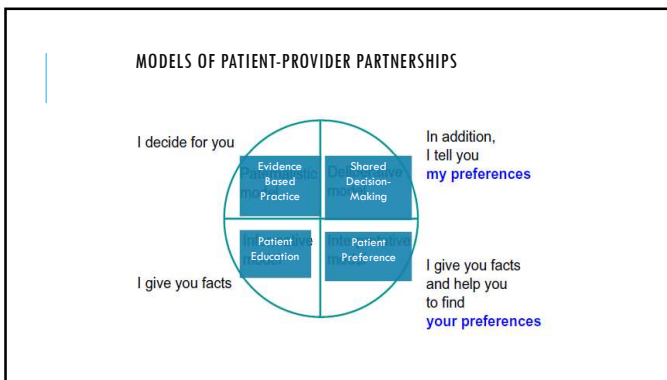
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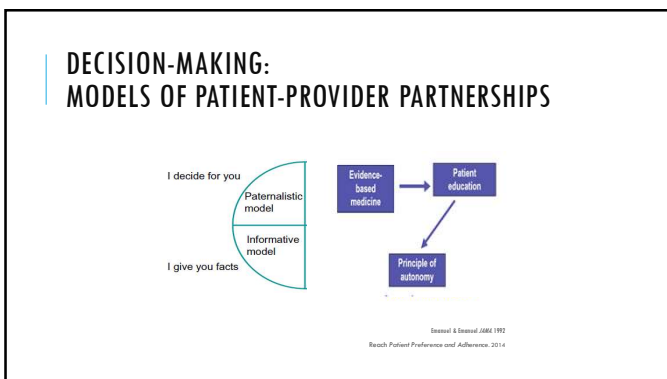
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**CLINICAL EVIDENCE - 2013**

- 3000 treatments evaluated
- 11% clearly beneficial
- 24% likely beneficial
- 50% have insufficient evidence
- 7% require trade-offs between benefits and harms
- 5% unlikely to be beneficial
- 3% likely to be ineffective or harmful

<https://bestpractice.bmj.com/info/us/evidence-information>




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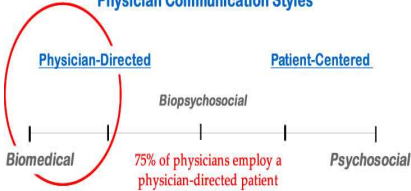
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**Physician Communication Styles**<sup>1</sup>



Biomedical | Physician-Directed | Biopsychosocial | Psychosocial | Patient-Centered

<sup>1</sup> Adapted from work of Roter, D. et al. JAMA 1997  
<sup>2</sup> Adapted from Wilkins, S. Mind the Gap 2013

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**MOTIVATIONAL INTERVIEWING, SHARED DECISION-MAKING AND BRIEF INTERVENTIONS** | Definitions

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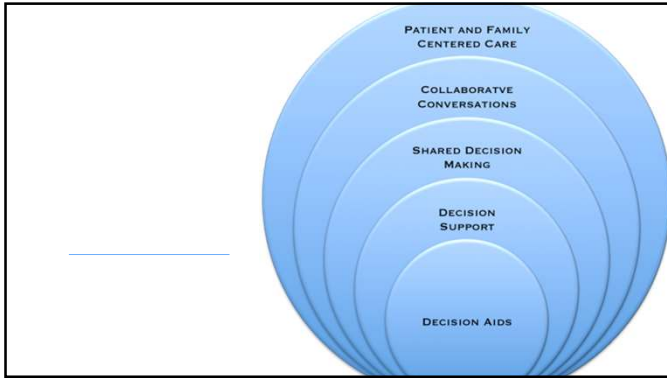
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DEFINITIONS

**Decision aid**

- Interventions that support patients by making their decisions explicit, providing information about options and associated benefits/harms, and helping clarify congruence between decisions and personal values<sup>1</sup>

**Decision support**

- CDS tools and systems help clinical teams by warning of potential problems, or providing suggestions for the clinical team and patient to consider<sup>2</sup>
- Non-directive support delivered by a trained healthcare provider to help people prepare to actively participate in making healthcare decisions (coaching, patient education)<sup>3</sup>

**Shared decision-making**

- An approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences<sup>4</sup>

1. Stacey et al., Cochrane Database Syst Rev 2017; 2. AHRQ; 3. Zhao et al BMC Med Inform Decis Mak 2022; Elwyn et al BMJ 2010

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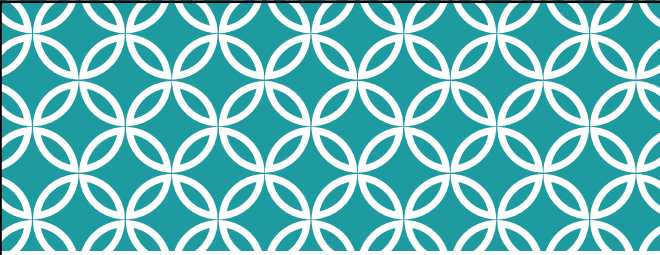
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**SHARED DECISION MAKING**

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**SHARED DECISION-MAKING**

Is disruptive to power dynamics<sup>1</sup>

Not all patients want to share in making the decisions; involvement varies by age, cultures or health choice<sup>2</sup>

Works best when there are more than one equally good option  
SCIT vs. INS and antihistamines

1. Elwyn et al BMJ 2017;359(4891); 2. WHO, 2008

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### THREE TALK MODEL OF SHARED DECISION MAKING

- **Team talk**
  - Let's work as a team to make a decision that suits you best
- **Option talk**
  - Let's compare the possible options
- **Decision talk**
  - Tell me what matters most to you for this decision

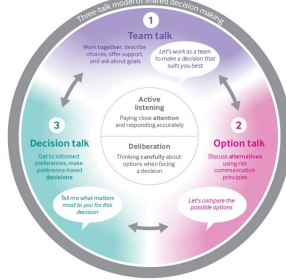


Fig 3 | Three talk model of shared decision making, 2017

Elwyn et al *BMJ* 2017;355:j4891

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### PREMISE FOR SHARED DECISION-MAKING

-  When providers understand patient preferences, they can facilitate discussion of the risks and merits, offering options to consider jointly
-  Helps to reconcile differences, leading to mutually agreed upon higher quality decisions that best match patients' needs with evidence-based recommendations
-  Building relationships is at the core of SDM

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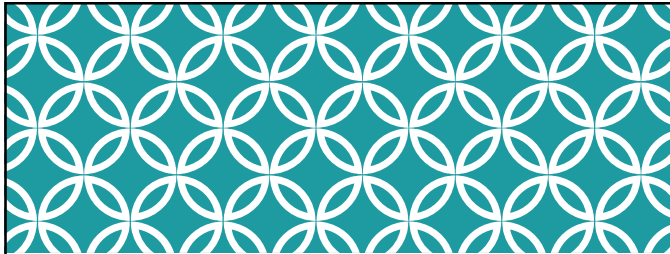
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### SHARED DECISION-MAKING

What's the evidence?

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**SHARED DECISION-MAKING IN ASTHMA**  
**— COCHRANE SYSTEMATIC REVIEW**

Four studies compared SDM to control in 1342 participants

Three studies recruited children with asthma and their caregivers

- Two involved use of an online portal, followed by face-to-face consultations
- The final study randomized pediatric general practice physicians to receive a seminar program promoting application of SDM principles

One trial delivered the SDM intervention to the medical practitioner

Three trials delivered the SDM intervention directly to the participant

Kew KM, Malik P, Aniruddhan K, Normansell R. Shared decision-making for people with asthma. Cochrane Database Syst Rev. 2017;10(10):CD012330. Published 2017 Oct 3. doi:10.1002/14651858.CD012330.pub2

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**EVIDENCE PYRAMID**

The diagram is a pyramid with seven horizontal layers. From top to bottom, the layers are: Systematic Reviews (yellow), Randomized Controlled Trials (orange), Cohort Studies (light green), Case Control Studies (green), Case Reports & Case Series (teal), Animals & Cell Studies (blue), and Anecdotal & Expert Opinion (dark blue). A small copyright notice is visible at the bottom right of the pyramid.

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## THE EVIDENCE FOR SHARED DECISION-MAKING IN ASTHMA

Individual studies demonstrated some benefits of SDM over control

- quality of life
- patient and parent satisfaction
- adherence to prescribed medication
- reduction in asthma-related healthcare visits
- improved asthma control

Kew KM, Malik P, Aniruddhan K, Normansell R. Shared decision-making for people with asthma. *Cochrane Database Syst Rev*. 2017;10(10):CD012330. Published 2017 Oct 3. doi:10.1002/14651858.CD012330.pub2

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## ONGOING SDM STUDIES IN ASTHMA

 Lee DL, Hammond JW, Finkel K, Gardner DD, Nelson B, Baptist AP. An Electronic Shared Decision-Making App to Improve Asthma Outcomes: A Randomized Controlled Trial. *J Allergy Clin Immunol Pract*. 2023;11(10):3116-3122.e5. doi:10.1016/j.jaip.2023.06.016

 George M, Bruzzese JM, Lynn S Sommers M, et al. Group-randomized trial of tailored brief shared decision-making to improve asthma control in urban black adults. *J Adv Nurs*. 2021;77(3):1501-1517. doi:10.1111/jan.14646

 Ludden T, O'Hare K, Shade L, Reeves K, Patterson CG, Tapp H. Implementation of Coach McLungs<sup>SM</sup> into primary care using a cluster randomized stepped wedge trial design. *BMC Med Inform Decis Mak*. 2022;22(1):285. Published 2022 Nov 4. doi:10.1186/s12911-022-02030-1

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## SDM IN COPD

Granados-Santiago M, Valenza MC, López-López L, Prados-Román E, Rodríguez-Torres J, Cabrera-Martos I. Shared decision-making and patient engagement program during acute exacerbation of COPD hospitalization: A randomized control trial. *Patient Educ Couns*. 2020;103(4):702-708. doi:10.1016/j.pec.2019.12.004

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**WHAT IF...**

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The patient makes a choice that increases their risk for poor outcomes  
Non-adherence – full or partial  
When there is one optimal choice, and they don't want it

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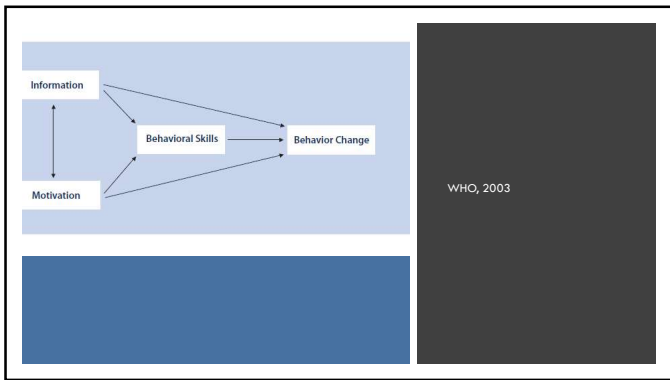
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**MOTIVATIONAL INTERVIEWING** |

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**MOTIVATIONAL INTERVIEWING**

“Particular way of talking with people about change and growth to strengthen their own motivation and commitment.”

MI is a micro-counseling approach for eliciting behavior change by helping clients explore and resolve ambivalence



Miller and Rollnick, 2023

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**MI SPIRIT**

- Eliciting and respecting the patient's ideas, perceptions and opinions
- Eliciting and reinforcing the patient's autonomy and choices
- Acceptance of the patient's decisions



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**AMBIGUITY IS NORMAL**

Cross talk

- Change talk – in favor of change
- Sustain talk – in favor of the status quo



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**THE FOUR PRINCIPLES OF MOTIVATIONAL INTERVIEWING**

Express	Express empathy
Develop	Develop discrepancy
Roll	Roll with resistance and avoid arguments
Support	Support self efficacy

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**FOUR MI STEPS**

- Engaging
- Focusing
- Evoking
- Planning

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**BREATHE (BRief intervention to Evaluate Asthma THERapy)**

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graph LR; Engaging[Engaging] --> Focusing[Focusing]; Focusing --> Evoking[Evoking]; Evoking --> Planning[Planning];
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R21 NR016507 George (PI); George et al J Adv Nurs. 2018

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### ONE MINUTE STEP 1 ENGAGING



They need to hear themselves say that they are agreeing to engage  
Will they say no?

Could we talk about your asthma management today?

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### THREE MINUTES STEP 2 FOCUSING



Both give feedback

See if the patient can draw the connection between suboptimal self-management and current symptoms/status using infographic (next slide); if the patient can't the clinician does it for them

You're not in it to win

- Curious but not invested

New behavior needs new reasons

What connection, if any, do you make between your asthma management and your symptoms/ER visit/etc?

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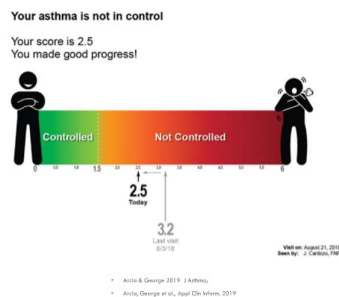
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### INFOGRAPHIC OF ASTHMA CONTROL QUESTIONNAIRE SCORE IS UNDERSTANDABLE AND CREATES BEHAVIORAL INTENTIONS




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### THREE MINUTES STEP 3 EVOKING

Enhance Motivation  
+ Motivational interviewing

Ask why?  
Have them scale motivation  
Reinforce the number they pick and the whys they provided  
Stay here until you have a list of reflections

On a scale of 1-10 where 1 is not ready at all and 10 is completely ready, how ready, when you walk out the door, to make the change we talked about today?

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If patient says any number  $\geq 2$ , ask "Why did you choose that number and not a lower one?"

If a patient says  $\leq 1$  or is unwilling to answer, ask "What would it take for you to become a "2"?"

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Fig 3 | Three talk model of shared decision making, 2017

Ewyn et al *BMJ* 2017;359:j4891

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### ONE MINUTE STEP 4 PLANNING



Reinforce good steps  
Remind them what they need to do and why  
Imagine (small steps to success)

This is what I've heard you say, you have agreed to ... because you want/it will lead to ... (summarize their most motivational reasons for change). Remind yourself everyday of these reasons and even add new ones to the list. This is an agreement between you and yourself because only you can decide it is important enough to you to make these changes

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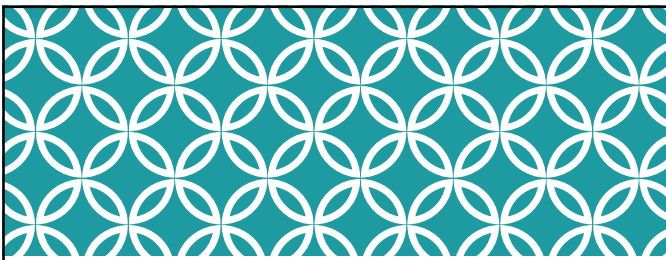
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### MOTIVATIONAL INTERVIEWING | What's the evidence?

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### MOTIVATIONAL INTERVIEWING IN COPD — COCHRANE SYSTEMATIC REVIEW

Motivational interviewing provided by a health professional can help to improve adherence to pharmacotherapy

Janjua S, Pike KC, Carr R, Coles A, Fortescue R, Batavia M. *Cochrane Database Syst Rev.* 2021;9(9):CD013381. Published 2021 Sep 8. doi:10.1002/14651858.CD013381.pub2

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Motivational Interviewing (MI) improved self-efficacy, asthma, self-management, and positive behavior change<sup>1</sup>  
MI improved adherence and symptom levels<sup>2</sup>  
Most evidence in smoking cessation (esp SUDs)

**MOTIVATIONAL INTERVIEWING IN ASTHMA –SYSTEMATIC REVIEW**

1. Gesinde B, Harry S. *Perspect Public Health*. 2018;138(6):329-335; 2. Schaefer MR, Kavookjian. *Patient Educ Couns*. 2017;100(12):2190-2199 .

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**BRIEF INTERVENTIONS**

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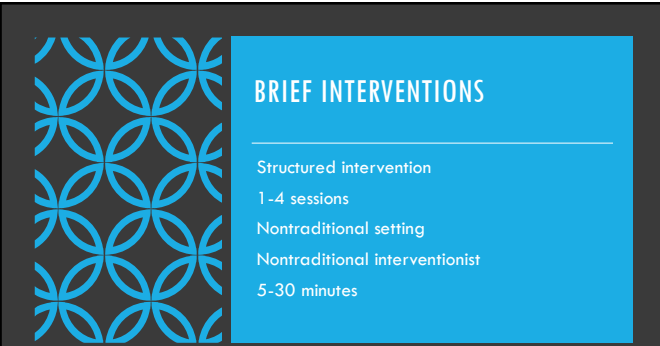
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**BRIEF INTERVENTIONS**

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Structured intervention  
1-4 sessions  
Nontraditional setting  
Nontraditional interventionist  
5-30 minutes

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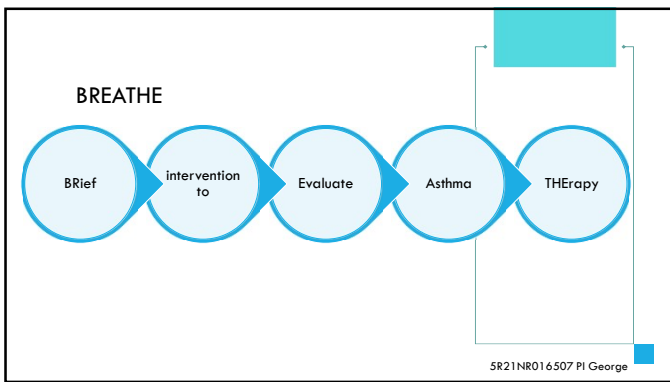
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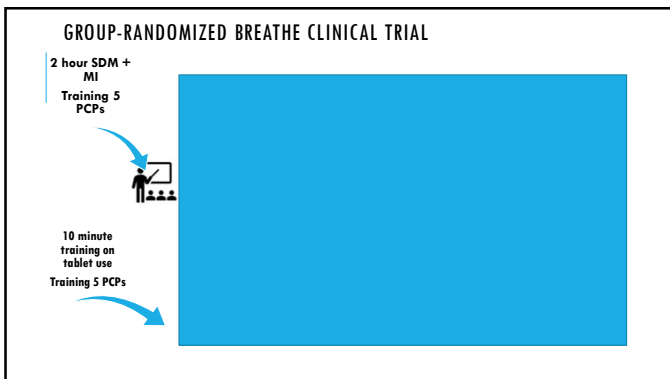
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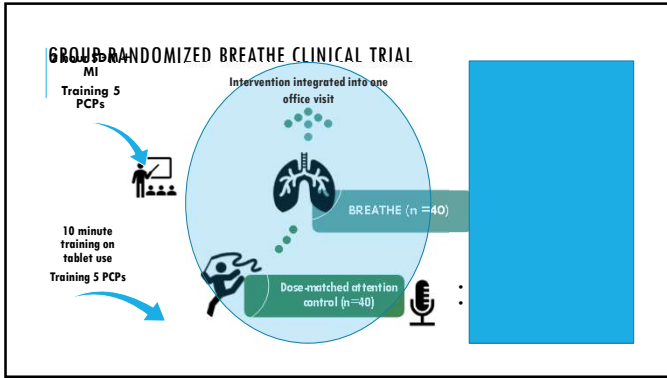
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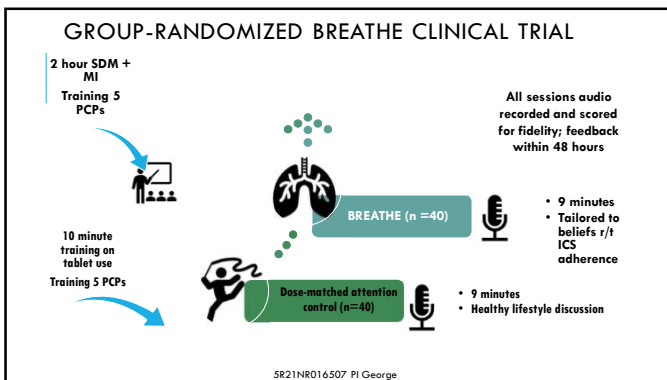
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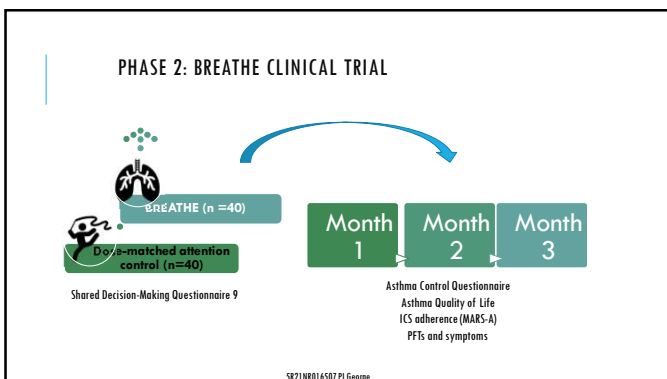
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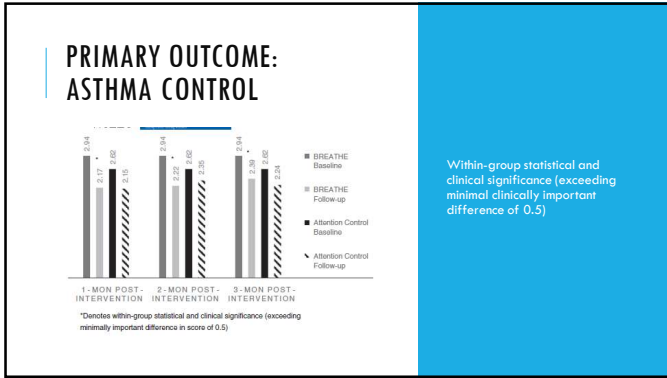
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### SECONDARY OUTCOMES

- Statistically higher perceived SDM in BREATHE group
- ICS adherence and asthma QoL improved in both groups
- Lung function did not improve in either group

### Implementation outcomes

- Retention 95%  
Data collection 90%
- Intervention delivery: 100% to BREATHE (9m 11s); 93% in AC (8m40s)
- Fidelity: Step 1=95.0% Step 2=96.6% Step 3=87.8% Step 4=73.7%

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### ONGOING RESEARCH

R01NR019275 PI George  
BREATHE: An efficacy-implementation trial of a brief shared decision-making intervention among Black adults with uncontrolled Asthma in Federally Qualified Health Centers (FGHC)  
N = 200

3R01NR019275-02S1 PI George  
Contextualizing Asthma Self-Management with Measures of Indoor Air Quality for Black Adults with Uncontrolled Asthma

1R21NR019668 MPis George [contact PI]/Bruzzeze  
The Development and Pilot Testing of a Caregiver-Child Shared Decision-Making Intervention to Improve Asthma in Urban Youth  
N = 60 dyads

5P20NR018072-03 MPis Stone/Shang  
The Development and Pilot Testing of a Brief Shared Decision-Making Intervention to Improve Palliative Care Outcomes for Adults with Advanced Lung Disease

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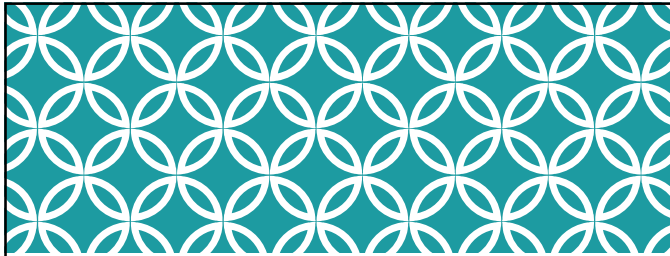
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**FOUR-STEP <10-MINUTE MOTIVATIONAL INTERVIEWING AND SHARED DECISION-MAKING BRIEF INTERVENTION** | You can do it!

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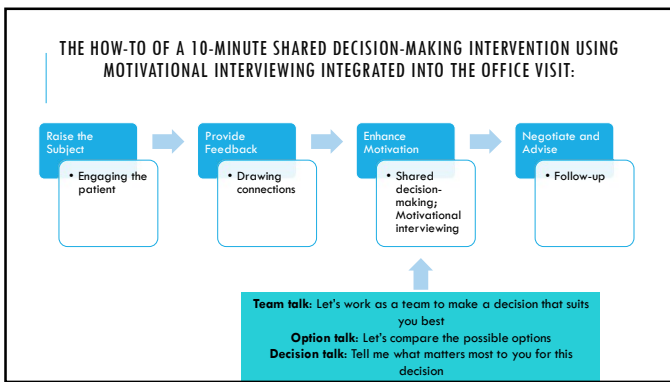
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