

Shared decision making in a busy clinical practice

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Objectives

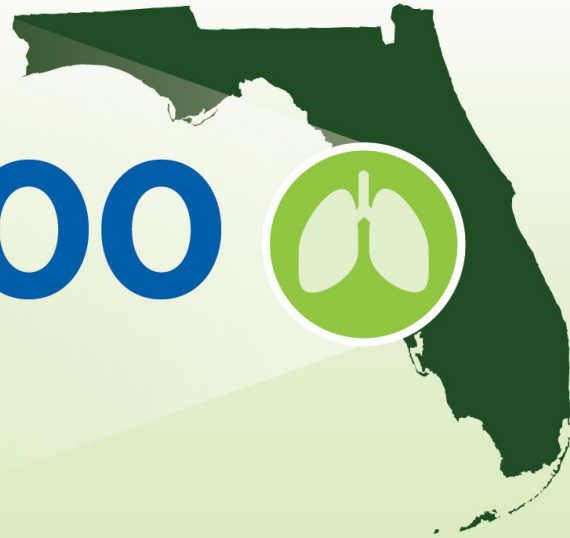
- Briefly discuss factors that impact asthma control.
- Focus on medication adherence
- Discuss a framework for shared decision making

GOALS

About

1,275,000

**people in
Florida
have asthma.**



With proper treatment, people with asthma can lead full and active lives.

Learn more at nhlbi.nih.gov/breathebetter

Source: CDC Behavioral Risk Factor Surveillance System (BRFSS) Survey Data, 2019.



**LEARN MORE
BREATHE BETTER**

1 All data from the Centers for Disease Control and Prevention, Asthma Surveillance Data <https://www.cdc.gov/asthma/asthmadata.htm>. Accessed March 4, 2020.

Asthma Facts¹



1 in 13 Americans has asthma



19 million adults



6 million children



**Increasing since
early 1980s** in all
age, sex, and racial groups



Highest prevalence in
lowest income households



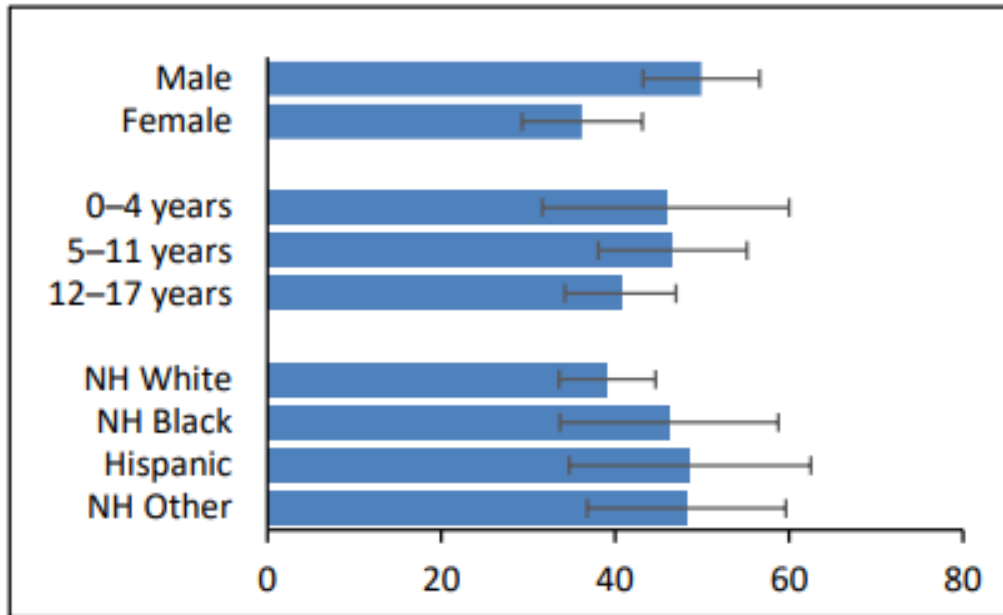
Most prevalent
among black and Puerto Rican
children and adults



1/2 of people
with asthma had an
asthma attack in past year

44% of children with current asthma had uncontrolled asthma 2018-2020

Percentage With Uncontrolled Asthma by Demographics



Abbreviations: NH, Non-Hispanic; SE, Standard error; CI, confidence interval

Source: Behavioral Risk Factors Surveillance System (BRFSS)—Child Asthma Call-back Survey Data, 2018-2020

*National Asthma Education and Prevention Program Expert panel report 3: Guidelines for the Diagnosis and Management of Asthma, 2007. Available at: https://www.ncbi.nlm.nih.gov/books/NBK7232/pdf/Bookshelf_NBK7232.pdf

STATE [§]	Children With Current [†] and Uncontrolled Asthma [*]		
	%	95% CI	SE
Total [¶]	44.0	38.9–49.2	2.63
CA	37.9	24.5–53.4	7.57
CT	37.7	27.1–49.7	5.85
FL	42.0	28.3–56.6	7.27
GA	60.3	43.5–74.9	8.25
HI	33.5	21.0–48.9	7.25
IN	32.3	22.2–44.4	5.74
KS	52.9	42.0–63.5	5.57
ME	49.5	37.2–61.8	6.39
MI	47.8	39.0–56.8	4.56
MN	38.7	29.6–48.7	4.91
MO	47.9	33.2–63.0	7.82
MT	37.4	23.4–54.0	8.03
NE	42.4	29.7–56.2	6.93
NM	37.0	23.5–52.9	7.71
NY	62.1	44.1–77.2	8.74
OH	37.8	26.4–50.7	6.33
PA	36.3	23.0–52.2	7.63
RI	40.7	25.4–58.1	8.63
UT	54.5	44.7–63.9	4.94
VT	53.7	41.4–65.6	6.28
WI	36.4	23.7–51.3	7.18

Asthma Control

- Enrolled 1,682 patients with asthma referred from primary care to specialist for first time - primary objectives
 - Determine the appropriateness of prescribed treatment
 - Presence of poor adherence
 - Critical mistakes in the inhalation technique
- Study the relationship between these factors and poor asthma control.





1 **Asthma knowledge questionnaire.** Percentage of correct responses to asthma knowledge questionnaire (self-administered).

Table 2. Prevalence of modifiable factors associated with asthma control.

Factor	n (%)	Number of patients evaluated
Inadequate prescription (GINA)		
Yes	604 (35.9)	1681
No	1077 (64.1)	1681
Adherence according to Morisky–Green questionnaire		
Adherent	522 (31.5)	1658
Non-adherent	1136 (68.5)	1658
Adherence according to TAI		
Adherent	381 (23.2)	1639
Non-adherent	1258 (76.8)	1639
Critical inhaler mistakes		
No errors	1394 (83.0)	1680
≥1 error	286 (17.0)	1680

GINA Global Initiative for Asthma, *TAI* Test of Adherence to Inhalers.

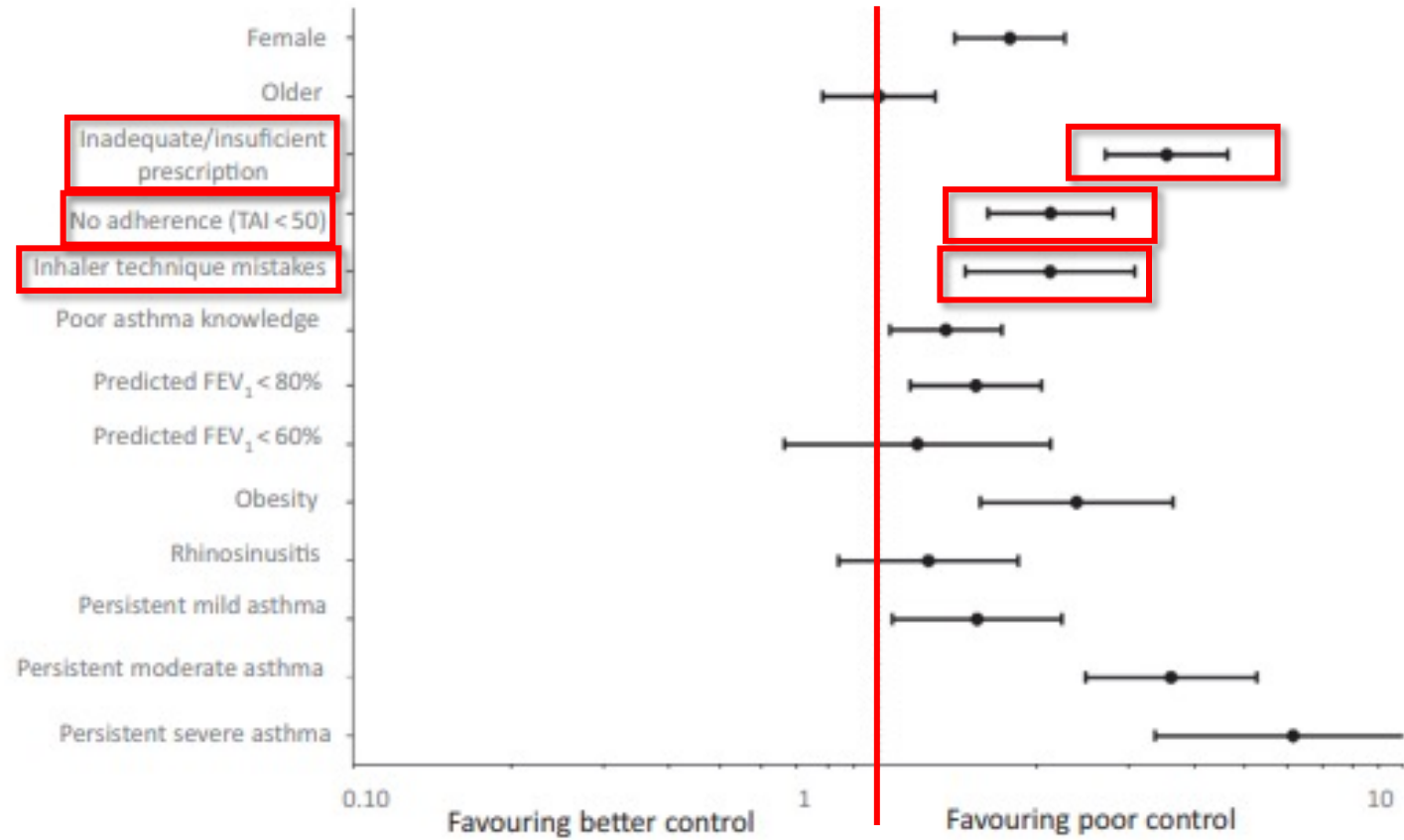


Fig. 2 Binary logistic regression model with poor asthma control (ACT < 21) as dependent variable. This figure represents factors associated with poor asthma control.

Table 3. Relation between asthma control by ACT criteria and modifiable factors associated with poor control.

Modified factor	Control (ACT criteria)		OR (95% CI)	n (%)	p
	Poor	Good			
Prescription					
Inadequate (A)	498 (82.5%)	106 (17.5%)	3.65 (2.87–4.65)	604 (36)	<0.0001
Adequate	606 (56.3%)	471 (43.7%)		1077 (64)	
Adherence (TAI)					
Poor (B)	866 (68.8%)	392 (31.2%)	1.80 (1.42–2.27)	1258 (74.7)	<0.0001
Good	210 (55.1%)	171 (44.9%)		381 (22.7)	
Critical mistakes					
One or more (C)	238 (83.2%)	48 (16.8%)	3.03 (2.18–4.21)	286 (17.0)	<0.0001
None	865 (62.1%)	529 (37.9%)		1394 (83.0)	
A + B	399 (85.2%)	69 (14.8%)	4.16 (3.14–5.50)	468 (27.8)	<0.0001
A + C	119 (90.1%)	13 (9.9%)	5.23 (2.92–9.36)	132 (7.8)	<0.0001
B + C	202 (84.9%)	36 (15.1%)	3.36 (2.32–4.86)	238 (14.1)	<0.0001
A + B + C	101 (93.5%)	7 (6.5%)	8.23 (3.80–17.83)	108 (6.4)	<0.0001

ACT Asthma Control Test, TAI Test of Adherence to Inhalers.

Underuse of controller medications for asthma is common

Provider underdiagnosis

Provider undertreatment

Patient medication nonadherence



Poor adherence to ICS tx has been estimated to account for up to 60% of asthma -related hospitalizations.



Adherence to asthma/COPD medications is the lowest for all medication groups



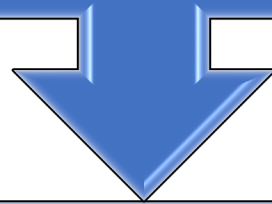
Optimal asthma control entails adherence rates to medication >75% of the time.

Makela MJ et al. Adherence to inhaled therapies, health outcomes and costs in patients with asthma and COPD. *Respir Med.* 2013; 107: 1481-1490

Williams et al. Patients with asthma who do not fill their inhaled corticosteroids: a study of primary nonadherence. *J Allergy Clin Immunol.* 2007; 120:1153-1159

Lasmar et al Adherence rates to inhaled corticosteroids and their impact on asthma. *Allergy.* 2009; 64:784-789

Medication adherence is defined by the WHO as “the degree to which use of medications by the patient corresponds with the prescribed regimen”



3 types of nonadherence

Erratic (also called sporadic)

- Reflects forgetfulness

Intelligent (or deliberate)

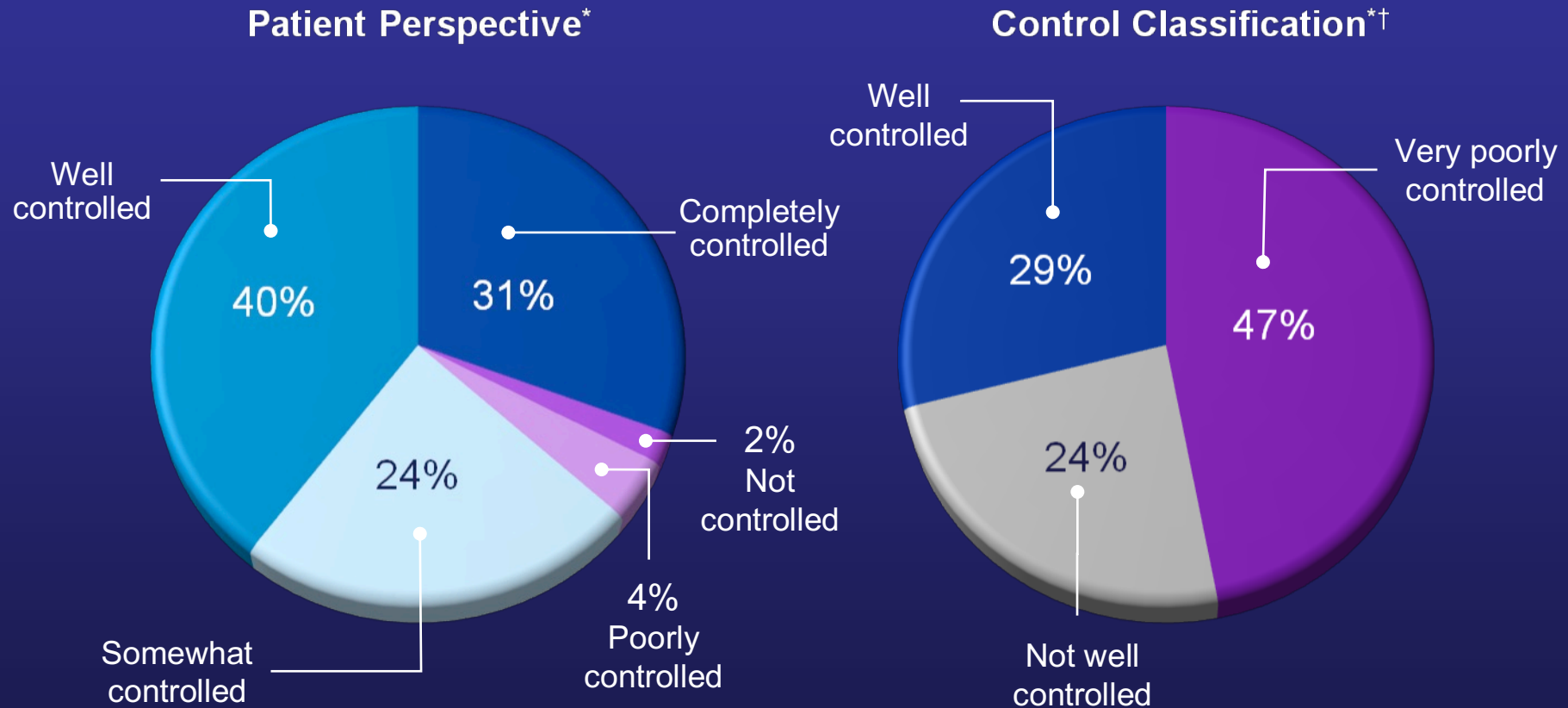
- Reflects a reasoned choice for not taking medication (i.e. fear of side effects)

Unwitting (unconscious)

- Reflects the failure to understand fully the specifics of the plan
- Necessity for adherence

Patients' Perceptions of Asthma Control Are Discordant with Objective Measures of Control

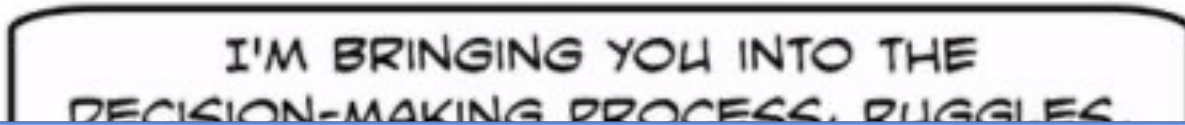
Asthma control in the past 4 weeks



*Current asthma patients aged ≥ 12 years surveyed: unweighted N=2500.

†Control classification based on NAEPP EPR-3.

Shared Decision Making



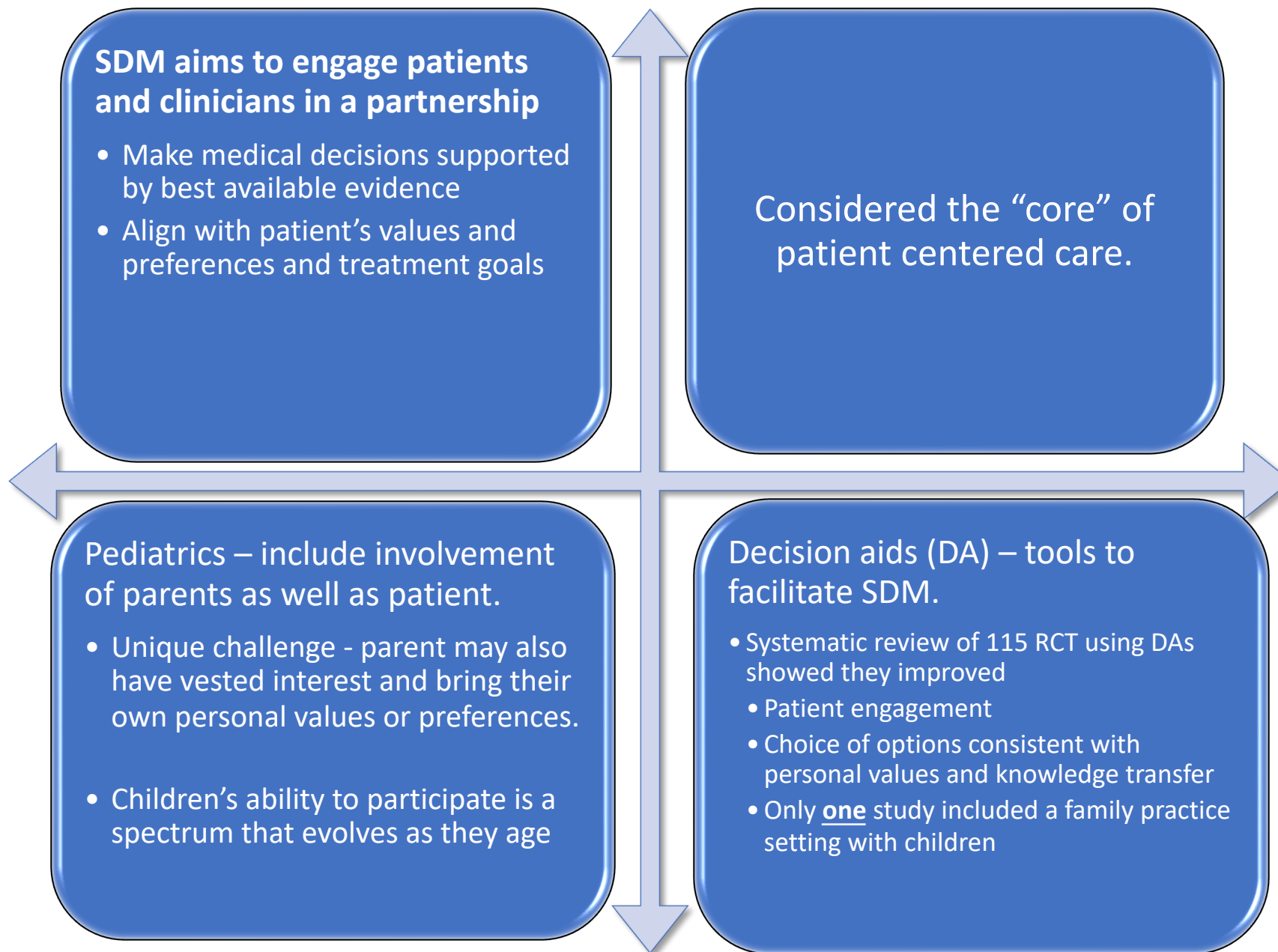
I'M BRINGING YOU INTO THE
DECISION-MAKING PROCESS, RUGGLES

Process by which a healthcare choice is made by the patient (caregiver, significant other or both) together with one or more healthcare providers.

Knowing and understanding the best available evidence and the risks/benefits across all available options while ensuring that the patient's values are taken into account.

Complex set of behaviors

Certain behaviors that involved parties must adopt for SDM to occur in clinical practice.



9 essential
elements of SDM
behaviors for
healthcare
providers

- Define and explain the healthcare problem
- Present options
- Discuss the pros and cons (risks, benefits, costs)
- Clarify patient values and preferences
- Discuss patient ability and self-efficacy
- Present what is known and make recommendations
- Check and clarify the patients understanding
- Make or explicitly defer a decision
- Arrange a follow up.

Why do it?

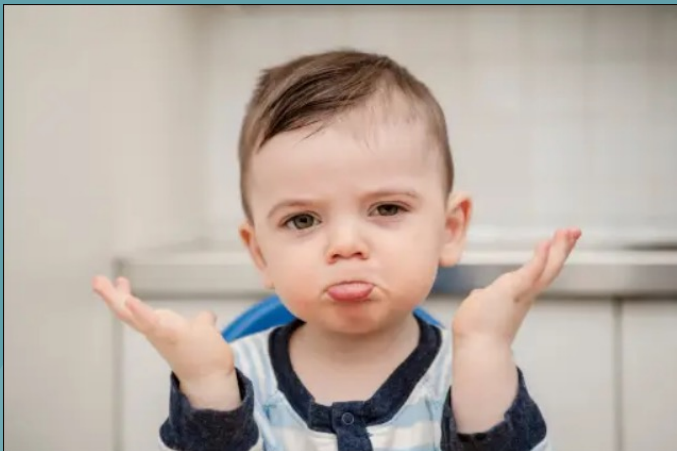
Patient/family involvement is considered a right.

May reduce the overuse of options not clearly associated with benefit for all.

May increase the use of options with clear benefit for most people.

May reduce unwarranted healthcare practice variations

May foster sustainability by increasing patient/family ownership of their own healthcare.

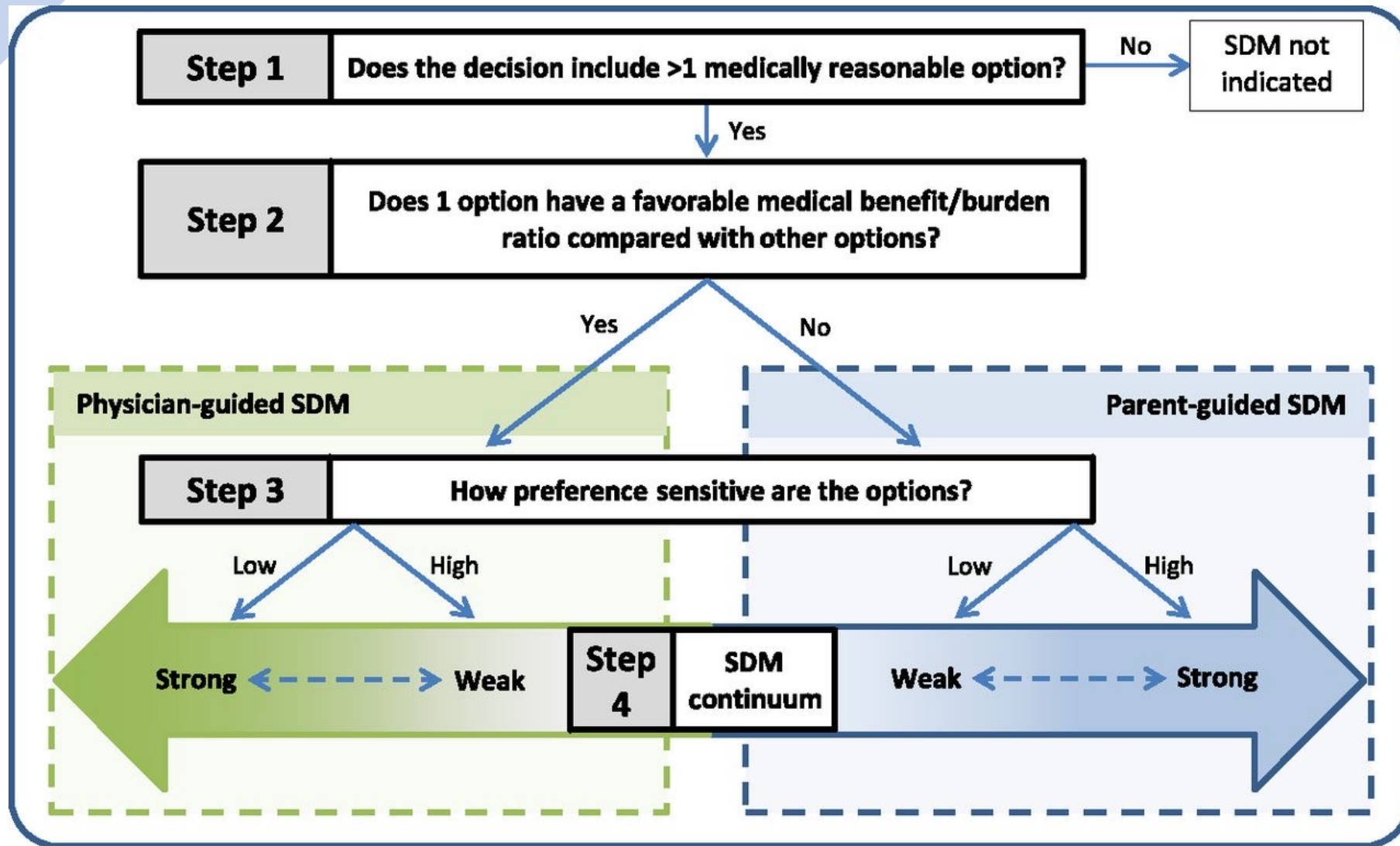


Shared decision-making (SDM) in pediatrics is poorly understood.

Common features of pediatric decision-making are not completely addressed in current SDM models

- Principal SDM participant is the patient's caregiver
- May have limitations on decision-making authority.
- To address this gap, AAP presented a practical 4-step framework.

A 4-Step Framework for Shared Decision-making in Pediatrics



Step 1: Only one treatment choice available – discussion centered around the available treatment option.

- Ex: Child presents with moderate/severe acute asthma exacerbation.
 - SABA + Systemic steroids is medically reasonable
 - Non-SDM, physician-controlled approach.
 - Education regarding intervention with risks and benefits
- What is medically reasonable should remain distinct from appropriateness of parent's response.
- What is considered medically reasonable can be difficult if no consensus regarding SOC.
- SOC may not be evidenced-based – scant evidence available.

SDM may still be appropriate if only one medically reasonable option available based on level of severity.

- Ex: use of antihistamine for allergy symptoms

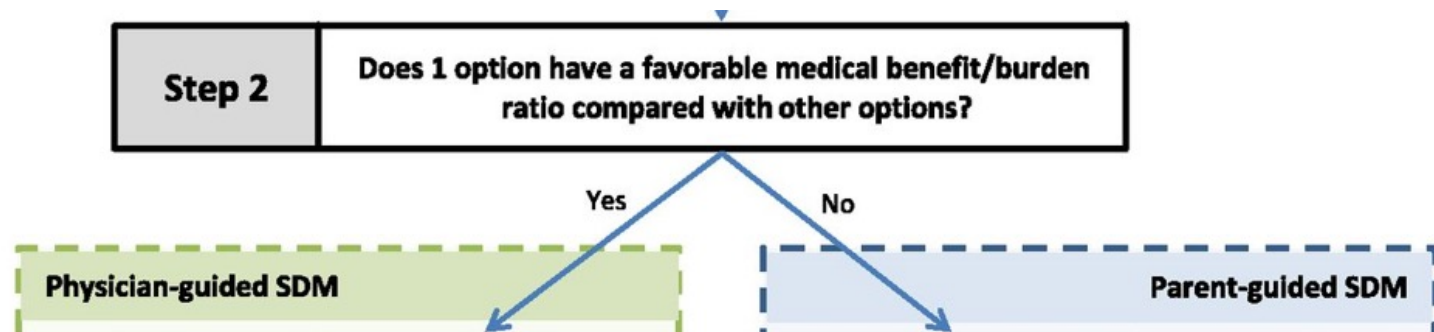
Issues deciding if more than one option exists

- What constitutes real choice?
 - Is there more than one option considered SOC?
 - Are options equally evidenced-based?
 - Are options equally reimbursed/covered by insurance?
- Sometimes these factors are not easily distinguished.
 - Value judgements sometimes masquerade as medical fact
- Real choice – more than one medically reasonable option (c/w with SOC).
 - SOC guides professional practice
 - Sets a standard – level of care other physicians would provide in similar circumstance.
 - SOC generally based on evidenced-based medicine.
 - Safety and efficacy based on quality evidence.



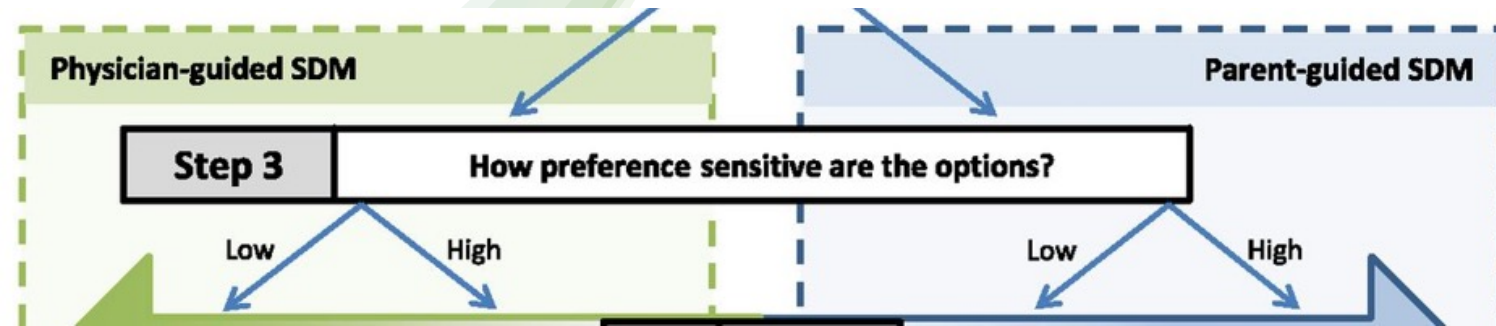
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Step 2 – Assess the medical risk/benefit ratio



- If one option has a more favorable risk/benefit ratio – appropriate for physician to have more directive role in SDM. (Physician-guided).
 - What is a “favorable option”
 - Involves a judgement based on:
 - Evidenced based probabilities
 - Magnitude of medical benefit
 - Burden of options
 - Assessment of certainty
 - In absence of evidence, physician can use experience or expert opinion but need to be careful.
 - Primary obligation to promote health and welfare of patient
 - Duty to promote public health.
 - Need to include public health consideration in risk/benefit assessment (ex: antibiotic stewardship)

Step 3: How preference sensitive are the options?



- Determine the parental/patient preferences.
 - Ensure that parental/patient values align with the chosen option.
 - Shift away from historical paternalism (“physician knows best”).
- If several medically reasonable options
 - Obligation to respect the rights of the patient
 - Incorporate parental/patient preferences into decision making
 - Sometimes the best choice depends on how the parent values the risks and benefits.
- Not simply ask what the parent wants to do.

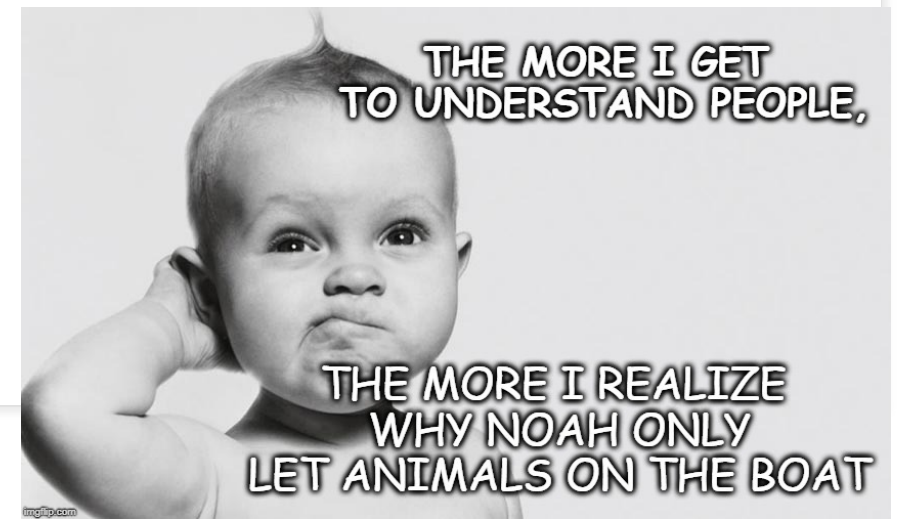
The ideal:

“a caring physician who integrates the information and relevant values to make a recommendation and, through discussion, attempts to persuade the family to accept the recommendation as the intervention that best proposes his/her overall well-being.



Emanuel et al. Four models of the physician-patient relationship. JAMA. 1992; 267 (16):2221-2226

Why?



- A person's values and preferences are rarely clear or stable.
 - What one values is an ongoing process subject to one's capacity for change and reflection.
- The process is relational
 - Much of who we are and what we value is rooted in our relationship and interaction with others
- The expanded role is a balance between patient autonomy and physician obligation to promote patient's health and well-being.
 - Simply eliciting parent values and preferences is not enough.
 - Physicians do not coerce, manipulate or are confrontational.
 - Physicians should acknowledge and communicate their own biases
- Empower the physician to be involved in helping parents to assess the worthiness of certain values/decisions and prevent physicians from making presumptions.
 - Ask the parent why
 - Have an open dialogue



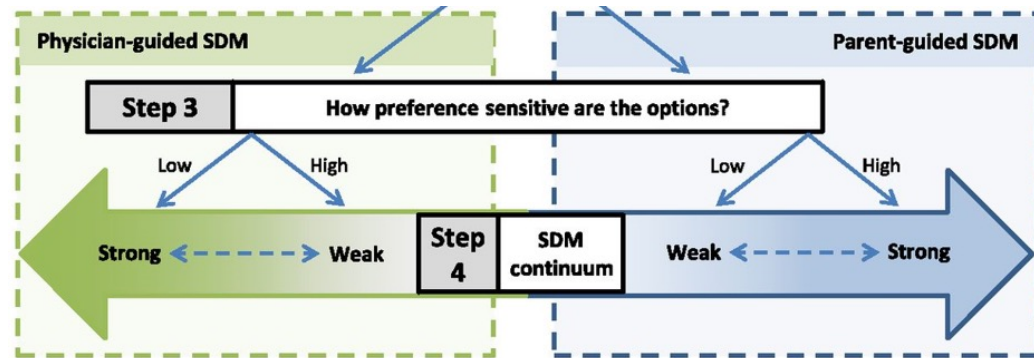
Challenges

This can be time consuming


Some parents may not routinely examine their values or be able to easily articulate them.

Some physicians may not feel comfortable with these more expansive conversations.

Step 4 – continuum of shared decision making



- Ranging from more strongly physician guided to more strongly parent guided with the middle being more mutual.
 - The strong physician-guided end assumes that there is more than one option and that one of the options has a more favorable medical risk/benefit ratio and parental preferences are minimal.
 - The strong parent-guided end assumes that there is more than one option and none of the options are more favorable based on medical evidence or risk/benefit and parental preferences are strong.



Other
factors that
impact the
decision.

- Urgency of the decision
- Is the decision an isolated event or longitudinal.
 - Chronic disease management like asthma or diabetes
 - Goal is understanding and compliance
- Is the decision implemented by the physician or the parent/patient.
- The clinical scenario may change over time (severity of disease etc).

END OF PRESENTATION



ANY QUESTIONS?

makeameme.org

The end