Operationalizing Shared Decision Making in Clinical Practice

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Learning Objectives

Upon completion of this activity, participants should be able to…

- Identify settings where Shared Decision Making (SDM) is appropriate
- Optimize risk communication
- Describe the “3 conversations” of SDM
- Consider a paradigm of ‘minimally disruptive medicine’ to improve the collaborative capacity of patients and families
- Leverage patient decision aids to facilitate SDM

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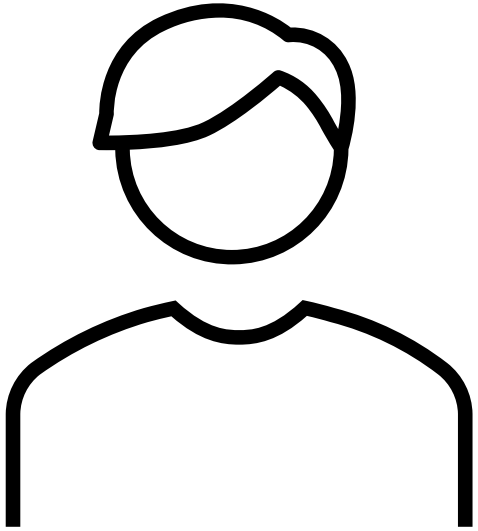
What is Shared Decision-Making?

Patients and clinicians work together to share the best possible evidence of clinical science, expertise, values, and preferences to deliver bespoke care in situations of clinical equipoise or conditional recommendations



Patient Expertise in their Values and Preferences

Clinician Expertise and Experience in Clinical Science

Equipoise

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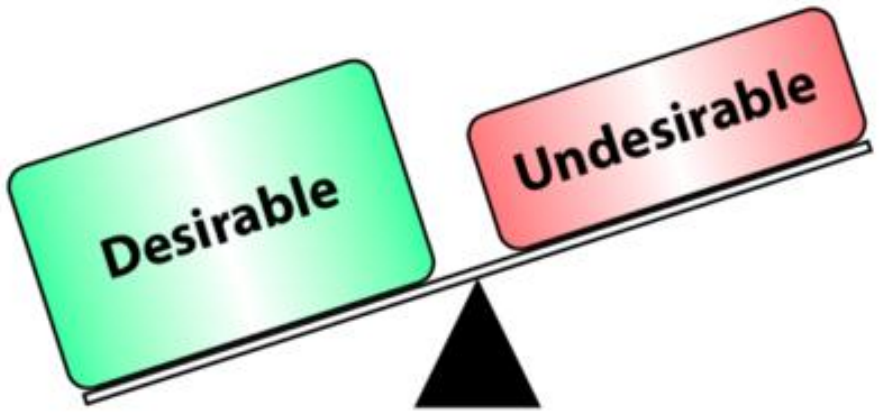
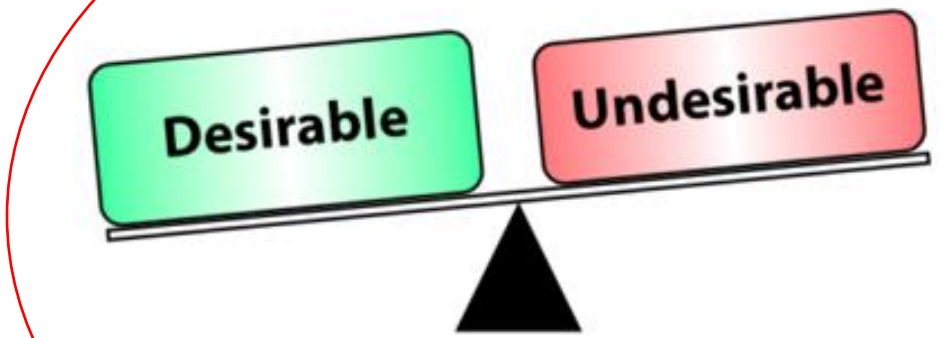
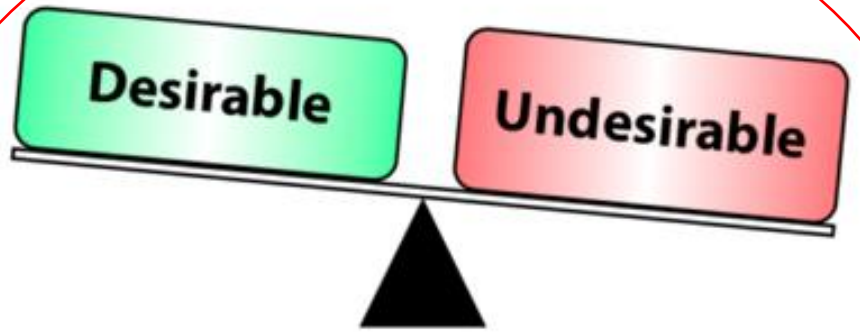
Strong vs. Conditional Recommendation



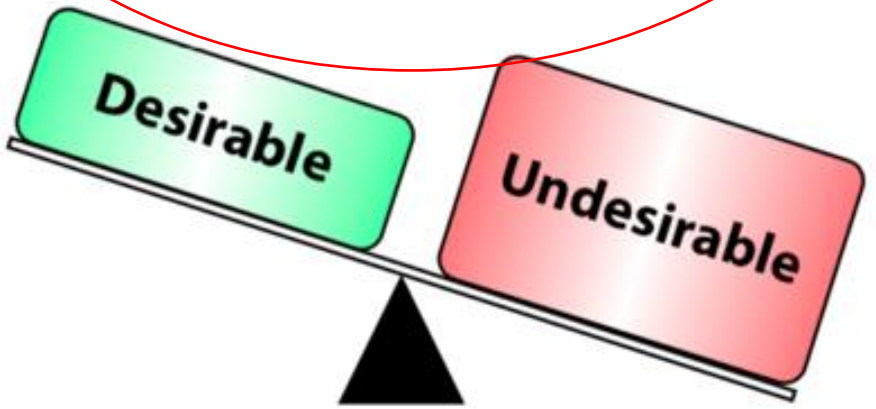
STRONG recommendation
IN FAVOR



CONDITIONAL recommendation
IN FAVOR



CONDITIONAL recommendation
AGAINST



STRONG recommendation
AGAINST

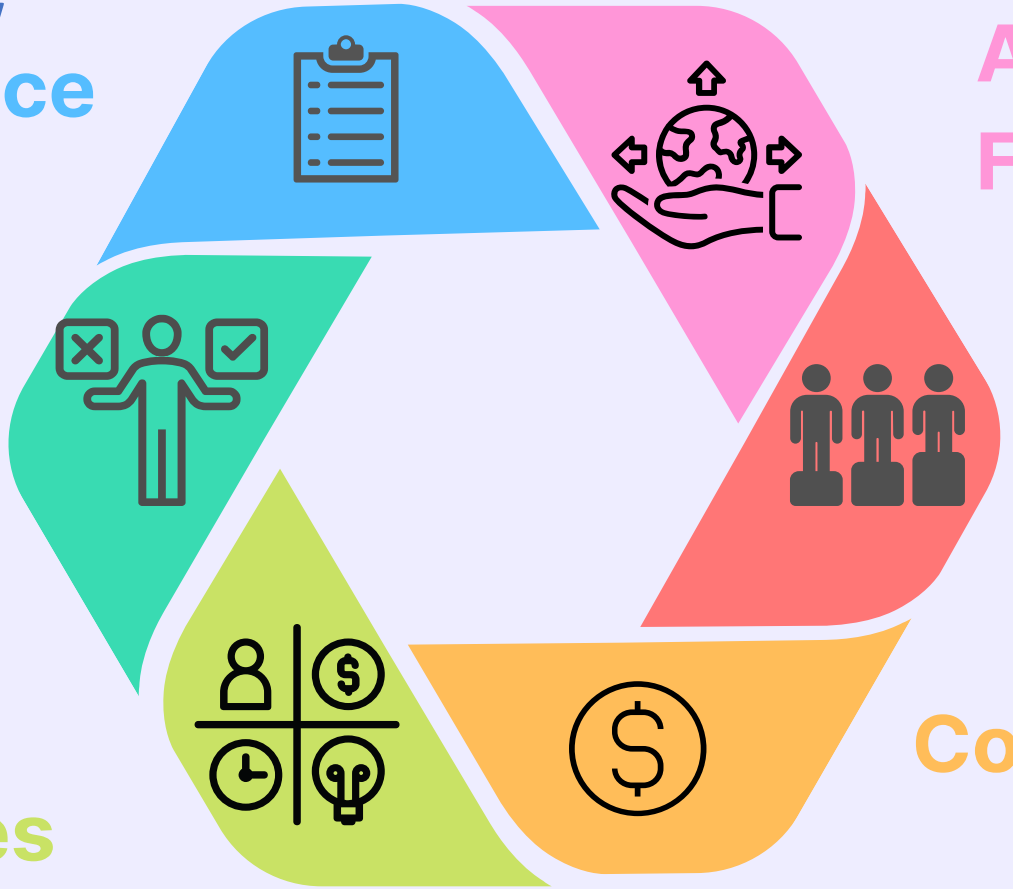
Shaker M et al. Making the Grade. Annals of Allergy, Asthma, Immunology. 2020

High, Moderate, Low, or Very Low

Certainty of Evidence

RCT vs cohort? Risk of bias? Imprecision? Inconsistency? Indirectness? Publication bias? Effect size? Dose-response? Confounding?

Patient Preference



Acceptability and Feasibility

Equity

Cost-Effectiveness

Resources

Guideline Recommendations Must Consider

Shaker et al. Estimating Value. Encyclopedia of Food Allergy 2023; Shaker et al. Value-Based Cost-Effective Care: The Role of the Allergist Immunologist. JACI IP. 2023. Shaker M et al. Making the Grade. Annals of Allergy, Asthma, Immunology. 2020

Joint Task Force on Practice Parameters

Practice parameter

The Joint Task Force on Practice Parameters GRADE guidelines for the medical management of chronic rhinosinusitis with nasal polyposis

Check for updates

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Scottsdale and Phoenix, Ariz; Hamilton and Kingston, Ontario, Canada; Cincinnati and Columbus, Ohio; Baltimore, Md; Aurora, Colo; St Louis, Mo; Tampa, Fla; Memphis, Tenn; Houston, Tex; Salt Lake City, Utah; Los Angeles, Calif; Lebanon, NH; Charleston, SC; Chicago, Ill; and New York, NY

These evidence-based guidelines support patients, clinicians, and other stakeholders in decisions about the use of intranasal corticosteroids (INCS), biologics, and aspirin therapy after desensitization (ATAD) for the management of chronic rhinosinusitis with nasal polyposis (CRSwNP). It is important to note that the current evidence on surgery for CRSwNP was not assessed for this guideline nor were management options other than INCS, biologics, and ATAD. The Allergy-Immunology Joint Task Force on Practice Parameters formed a multidisciplinary guideline panel balanced to include the views of multiple stakeholders and to minimize potential biases. Systematic reviews for each management option informed the guideline. The guideline panel used the Grading of Recommendations Assessment, Development and Evaluation approach to inform and develop recommendations. The guideline panel reached consensus on the following statements: (1) In people with CRSwNP, the guideline panel suggests INCS rather than no INCS (conditional recommendation, low certainty of evidence). (2) In people with CRSwNP, the guideline panel suggests biologics rather than no biologics (conditional recommendation, moderate certainty of evidence). (3) In people with aspirin (nonsteroidal anti-inflammatory drug)-exacerbated respiratory disease, the guideline panel suggests ATAD rather than no ATAD (conditional recommendation, moderate certainty of evidence). The conditions for each recommendation are discussed in the guideline. (J Allergy Clin Immunol 2023;151:386-98.)

Key words: *Chronic rhinosinusitis, nasal polyposis, aspirin, corticosteroids, biologics, clinical guideline*

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https://www.allergyparameters.org

Conditional Recommendations are Navigational Signals for Shared Decision Making

Communication and Shared Decisions

Understanding Risk and Communicating Uncertainty

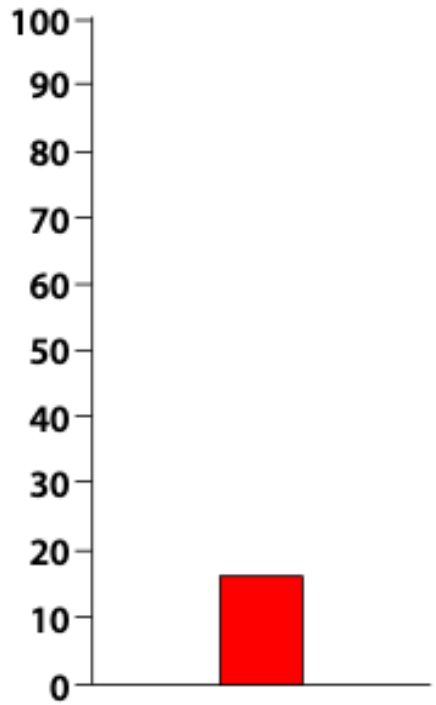
- Communicating uncertainty may lead to less decision satisfaction, but uncertainty is a part of medicine as much as it is a part of life
- Decisions can improve SMART communication
  - Specific
  - Measurable
  - Achievable
  - Realistic
  - Time sensitive

Politi M, Clark M, Ombao H, et al. Health Expect. 2011; Shaker M, Hsu Blatman K, Abrams E. Enaging patient partners. Ann Allergy Asthma Immunol. 2020

Communicating Risk

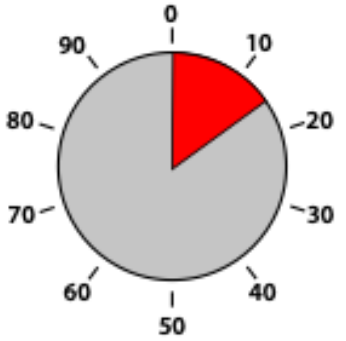
- Provide absolute risks
- Keep framing consistent
- Use visual aids
- Reduce cognitive overload

Bar Graph

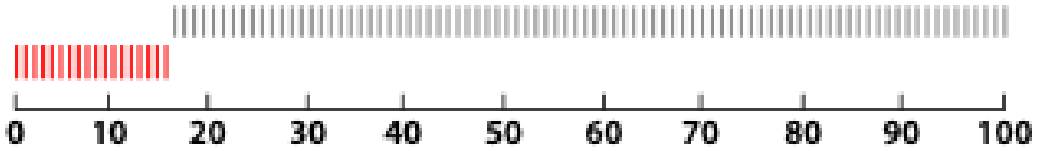


Pie Graph

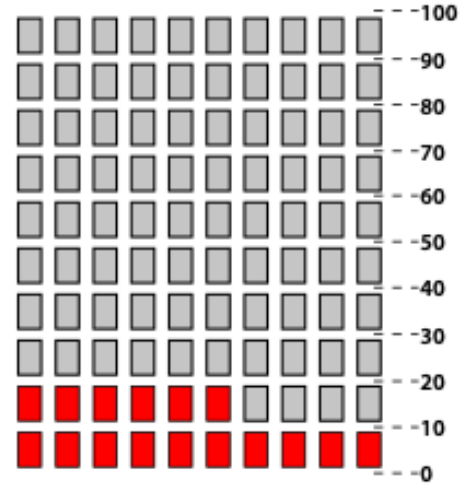
Clock Graph



Spark Plug



Pictograph



* Each Graph Represents 100 People

Needs Epinephrine

Shaker M, Hsu Blatman K, Abrams E. Engaging patient partners. Ann Allergy Asthma Immunol. 2020

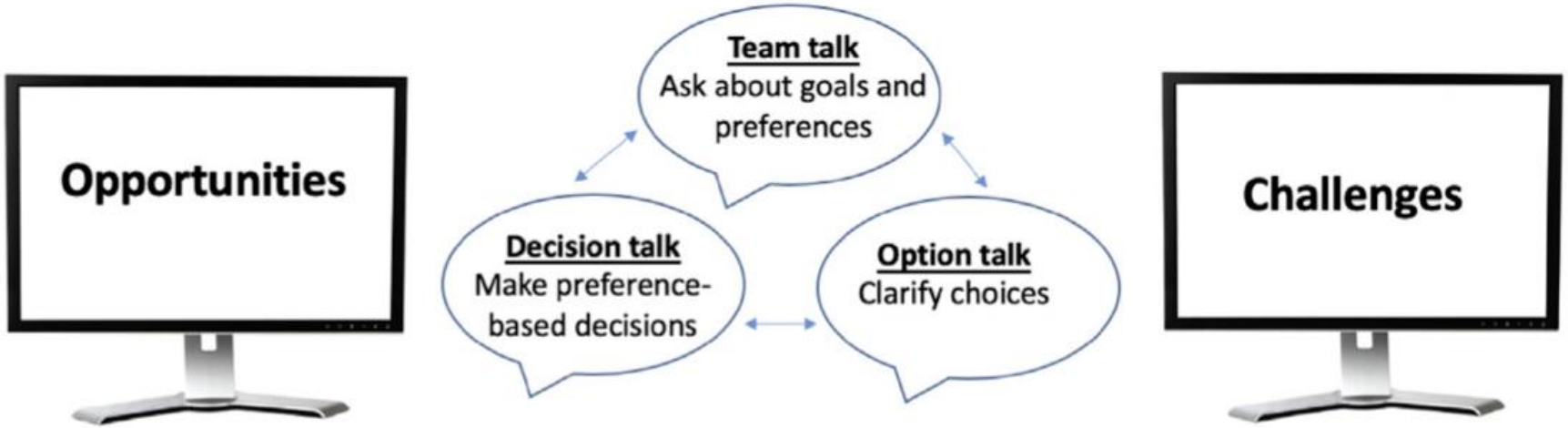
3 Conversations of Shared Decision Making

- Empowers
- Patient Partners
- Bi-directional information exchange
- Optimize the decision-making

Blaiss M, Steven G, Bender B. Shared decision making for the allergist. Ann Allergy Asthma Immunol. 2019

Special Case: SDM in the Virtual Space is Nuanced

Virtual Shared Decision Making

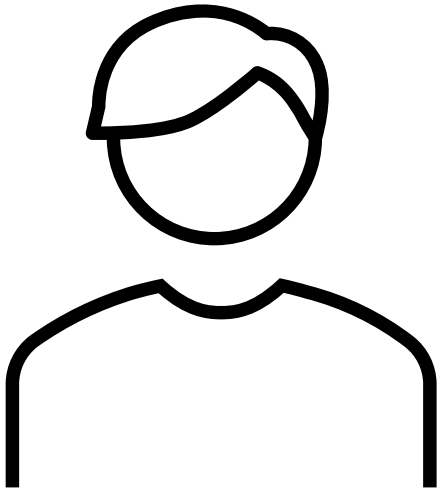


- Engage patients in their own home in an evidence-based, patient-informed decision.
- Allow patients time and space to make medical decisions when they are ready.
- Create opportunities for patients to access multiple platforms to use patient decision aids.
- Provide access to care team members through telehealth on an iterative basis as needed.

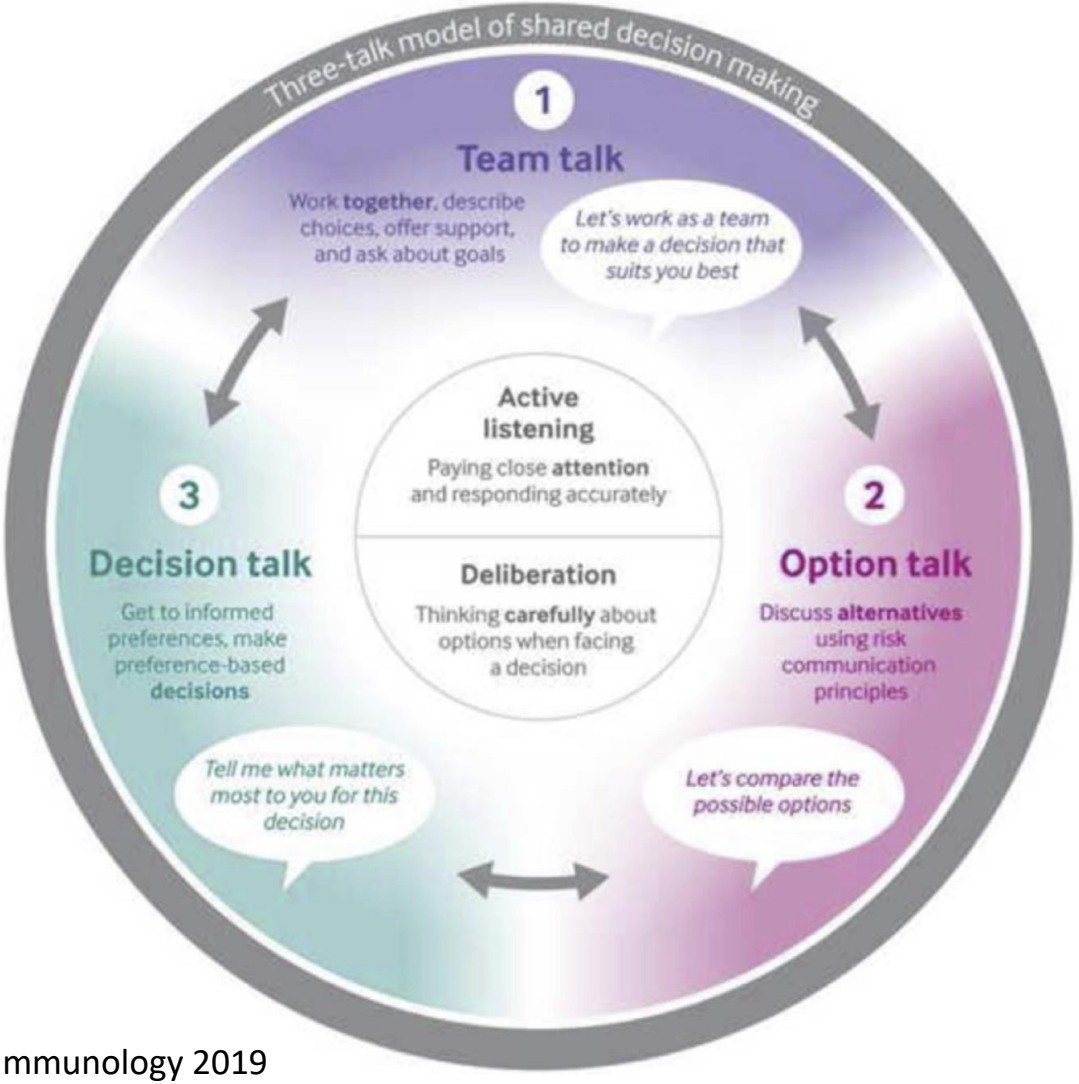
- Absence of face-to-face encounter can make it difficult to establish the foundational trust that is the basis of SDM.
- Fear of infection during the COVID-19 pandemic and use of personal protective equipment may hinder communication.
- Underdeveloped patient decision aids and access platforms create barriers to needed SDM infrastructure.
- Time demands on providers create conflicting priorities.

Abrams E, Shaker M, Oppenheimer J, et al. The Challenges and Opportunities of Shared Decision Making Highlighted by COVID 19. JACI IP 2020

The 3 Conversations of SDM are Iterative



Patient Expertise in their Values and Preferences



Clinician Expertise and Experience in Clinical Science

Blaiss et al. Annals of Allergy, Asthma, and Immunology 2019

The 3 Conversations of SDM are Iterative

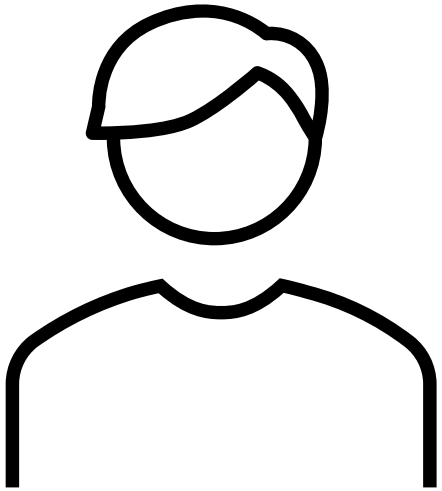
	Patient-important outcomes						Surrogate outcomes	
	HRQoL SNOT-22 (0-110)‡	Symptoms VAS (0-10 cm)	Smell UPSIT (0-40)†	Rescue OCS	Rescue polyp surgery	Adverse events	Nasal polyp size (0-8)	CT score LMK (0-24)
Standard care*	50.11	6.84	14.04	31.96%	21.05%	73.78%	5.94	18.35
Dupilumab	**-19.91** (-22.50, -17.32)	**-3.25** (-4.31, -2.18)	**10.96** (9.75, 12.17)	**-21.73** (-24.61, -18.22) RR 0.32 (0.23, 0.43)	**-16.35** (-18.13, -13.48) RR 0.22 (0.14, 0.36)	**0.13** (-8.12, 9.88) RR 1.00 (0.88, 1.13)	**-2.04** (-2.73, -1.35)	**-7.51** (-10.13, -4.89)
Omalizumab	**-16.09** (-19.88, -12.30)	**-2.09** (-3.15, -1.03)	**3.75** (2.14, 5.35)	**-12.46** (-23.65, 12.78) RR 0.61 (0.26, 1.40)	**-7.40** (-11.04, -2.43) RR 0.65 (0.48, 0.88)	**-2.60** (-15.58, 13.28) RR 0.96 (0.79, 1.18)	**-1.09** (-1.70, -0.49)	**-2.66** (-5.70, 0.37)
Mepolizumab	**-12.89** (-16.58, -9.19)	**-1.82** (-3.13, -0.50)	**6.13** (4.07, 8.19)	**-10.23** (-15.98, -2.88) RR 0.68 (0.50, 0.91)	**-12.33** (-15.56, -7.22) RR 0.41 (0.26, 0.66)	**-3.07** (-13.44, 9.07) RR 0.96 (0.82, 1.12)	**-1.06** (-1.79, -0.34)	
Benralizumab	**-7.68** (-12.09, -3.27)	**-1.15** (-2.47, 0.17)	**2.95** (1.02, 4.88)	**-9.91** (-16.30, -0.96) RR 0.69 (0.49, 0.97)	**-2.53** (-9.05, 7.16) RR 0.88 (0.57, 1.34)	**-1.48** (-13.28, 12.54) RR 0.98 (0.82, 1.17)	**-0.64** (-1.39, 0.12)	**-1.00** (-3.83, 1.83)
Reslizumab					**-18.82** (-20.93, 20.56) RR 0.11 (0.01, 1.98)	**-2.55** (-19.49, 19.18) RR 0.97 (0.74, 1.26)		
AK001						**2.54** (-27.11, 51.03) RR 1.03 (0.63, 1.69)	**-0.20** (-1.61, 1.21)	
Etokimab	**-1.30** (-8.99 to 6.40)					**188.14** (-59.76, 4879.1) RR 3.55 (0.19, 67.13)	**-0.33** (-1.58, 0.92)	
ASA Desensitization	**-10.61** (-14.51, -6.71)	**-2.74** (-3.92, -1.57)	**2.72** (-1.17, 6.61)		**-16.00** (-19.79, 0.21) RR 0.24 (0.06, 1.01)	**209.21** (8.30, 901.87) RR 3.84 (1.11, 13.22)	**-0.95** (-2.44, 0.55)	**-0.31** (-3.50, 2.88)

Classification of intervention (colour)				Certainty (shading)
Among most beneficial	Among intermediate beneficial	Among least beneficial/not clearly different from placebo	No data (blank)	High/moderate (solid)
Among most harmful	Among intermediate harmful			Low/very low (shaded)

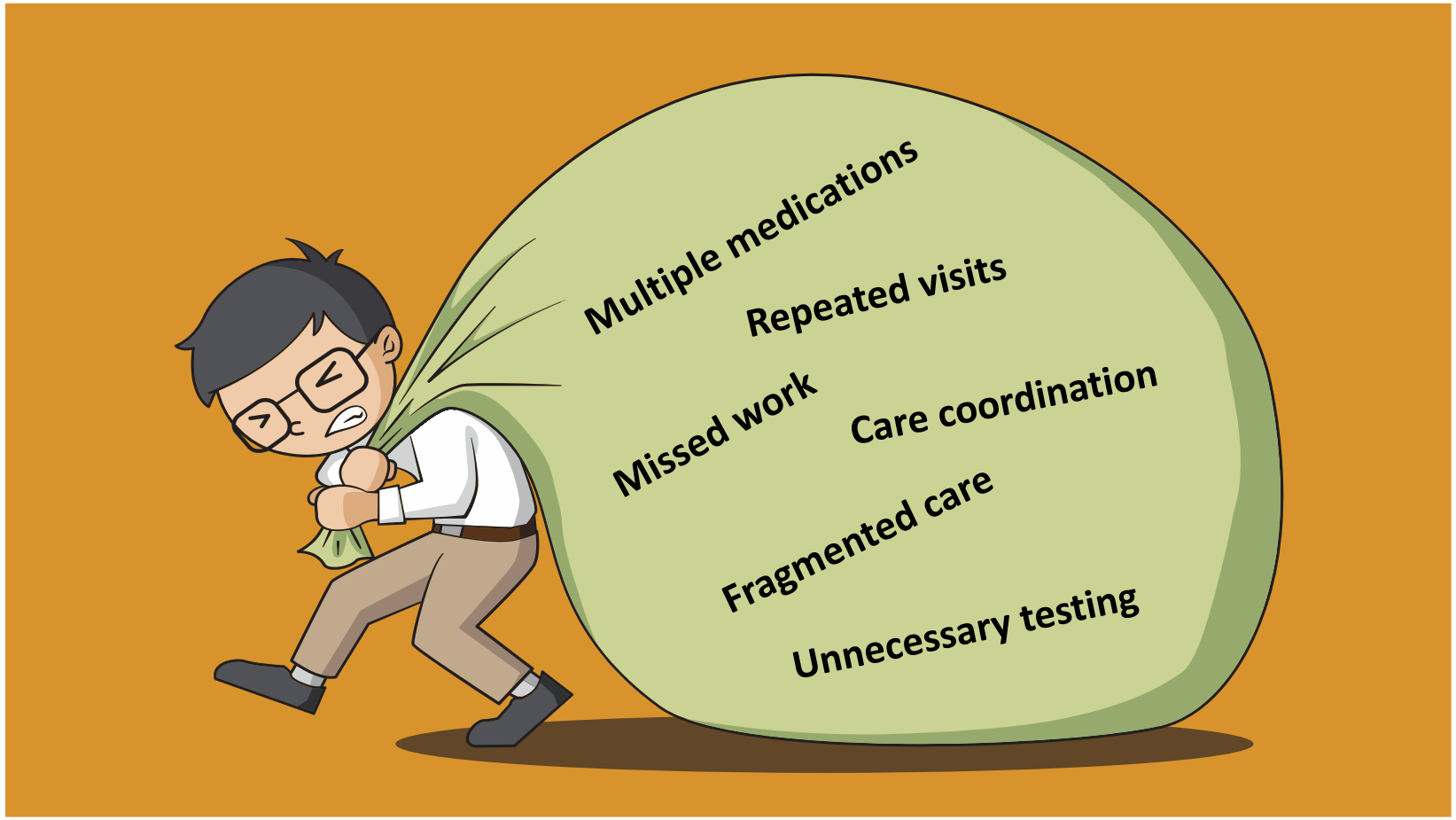
Clinician Expertise and Experience in Clinical Science

Rank M, Chu D, et al. JACI 2023

The 3 Conversations of SDM are Iterative



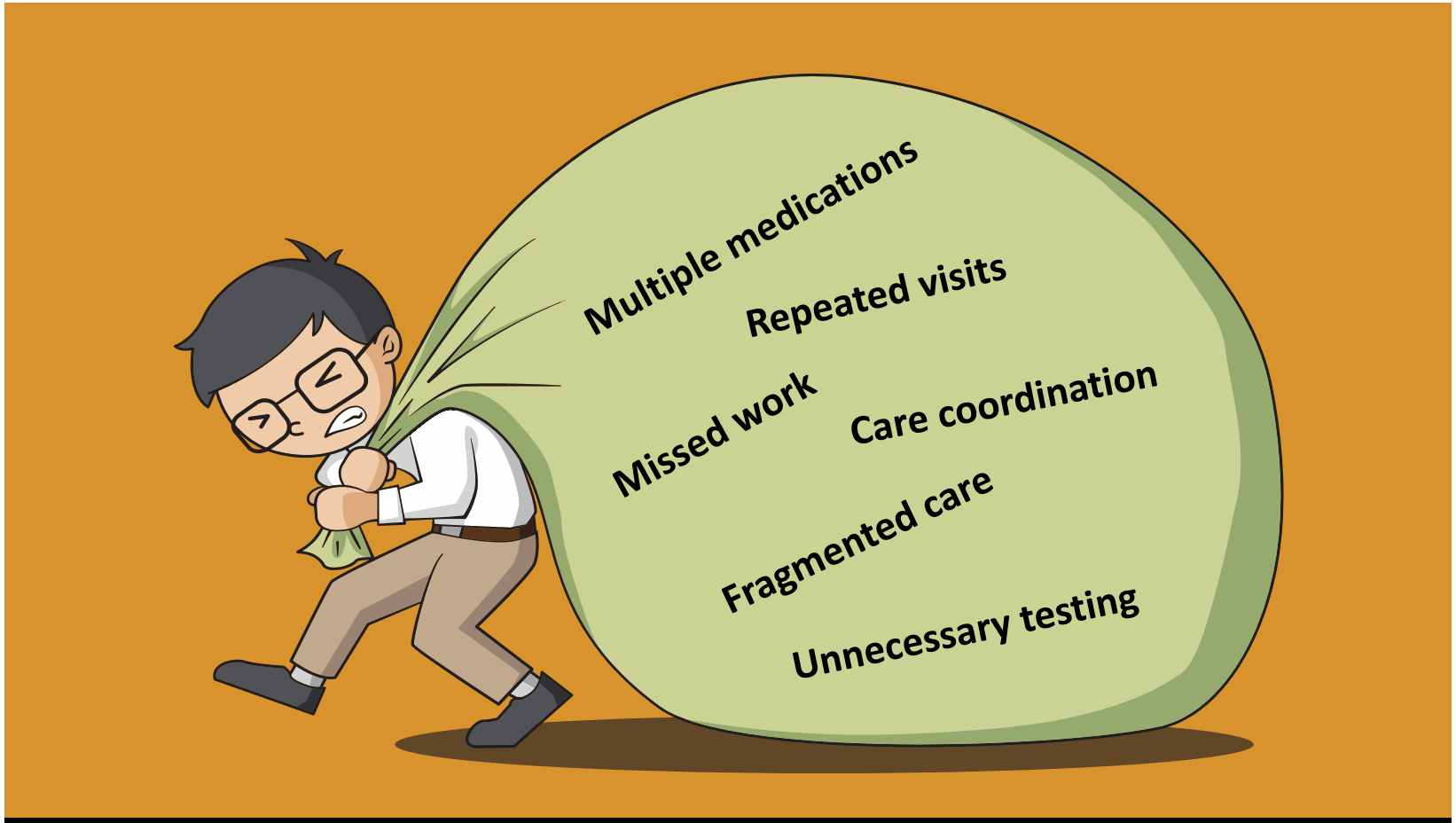
Patient Expertise in their Values and Preferences



Mustafa et al. Ann Allergy, Asthma, Immunol. 2024; Cartoon credit of D'Only 1/Shutterstock.com

Minimally Disruptive Medicine

- Awareness of patient burdens can help to maximize their collaborative capacity



Overwhelmed patients may be less able to partner in their own care

Mustafa et al. Ann Allergy, Asthma, Immunol. 2024; Cartoon credit of D'Only 1/Shutterstock.com

Sinusitis Parameter Table 3: SDM Considerations

1. INCS[8]

Clinical outcomes (comparison of different modalities: stent, spray, rinse, EDS, drops, nebulizer, injection vs placebo)

- Rinses and EDS improve quality of life
- Sprays, EDS, and stent improve symptoms
- Stent, spray, EDS, and drops improve smell
- Spray, EDS, and stent may reduce need for rescue surgery

Adverse effects

- No different than placebo

Additional issues: spray is over the counter and cost is not prohibitive to most

3. ATAD in patients with AERD[9]

Clinical outcomes compared to placebo

- Improves symptoms and quality of life
- No different than placebo for smell
- May not decrease need for OCS or rescue surgery

Adverse effects

- Bleeding risk and GI side effects more common than placebo (for every 10 people treated with ATAD, 1 will have an adverse sufficiently event enough to stop treatment)

Additional issues: affordable, long-term treatment

2. Biologics[9]

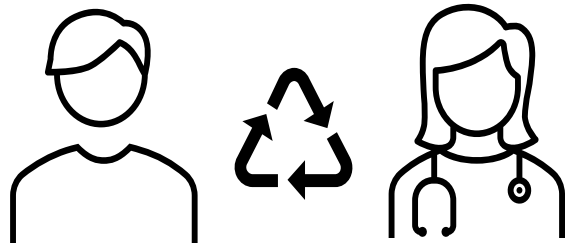
Clinical outcomes (comparison of benralizumab, dupilumab, mepolizumab, omalizumab vs placebo)

- Quality of life: dupilumab > omalizumab > mepolizumab > benralizumab
- Symptoms: dupilumab > omalizumab > mepolizumab
- Smell: dupilumab > mepolizumab > omalizumab > benralizumab
- Decrease in need for OCS: dupilumab > mepolizumab > benralizumab
- Decrease in need for surgery: dupilumab > mepolizumab > omalizumab

Adverse effects

- No different than placebo

Additional issues: very costly, needs long-term treatment, no comparison with surgery and whether it should be used with, before, or after surgery. May be considered more favorably in those with other comorbidities that are treated with biologics.

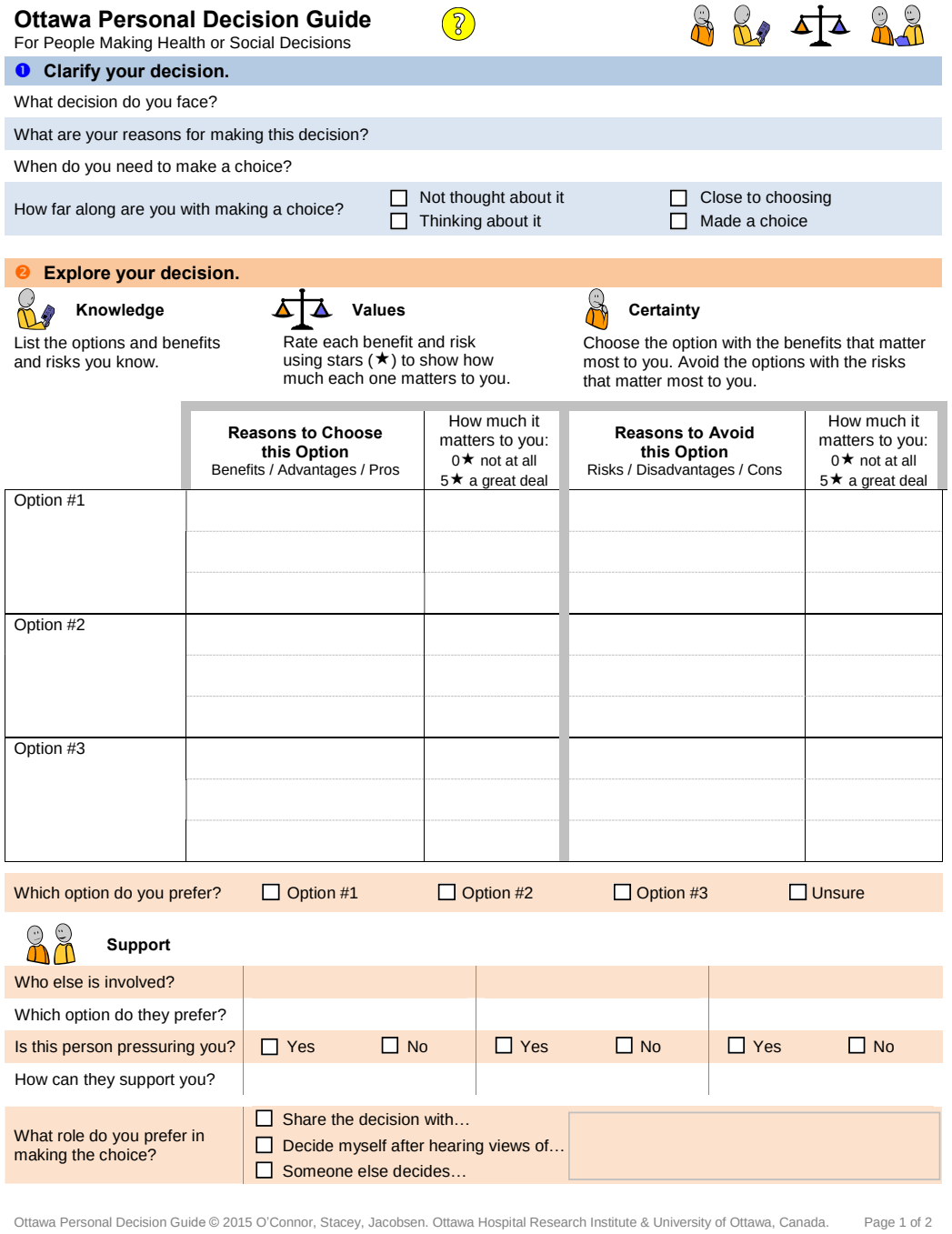


Rank M, Chu D, et al. JACI 2023

Patient Decision Aids

- Patient Decision Aids assist in clarification of patient values and preferences
- Generic and disease specific aids are published

https://decisionaid.ohri.ca/docs/das/OPDG.pdf



Ottawa Personal Decision Guide
For People Making Health or Social Decisions

1 Clarify your decision.

What decision do you face?

What are your reasons for making this decision?

When do you need to make a choice?

How far along are you with making a choice?
☐ Not thought about it ☐ Thinking about it ☐ Close to choosing ☐ Made a choice

2 Explore your decision.

Knowledge
List the options and benefits and risks you know.

Values
Rate each benefit and risk using stars (★) to show how much each one matters to you.

Certainty
Choose the option with the benefits that matter most to you. Avoid the options with the risks that matter most to you.

	Reasons to Choose this Option Benefits / Advantages / Pros	How much it matters to you: 0★ not at all 5★ a great deal	Reasons to Avoid this Option Risks / Disadvantages / Cons	How much it matters to you: 0★ not at all 5★ a great deal
Option #1				
Option #2				
Option #3				

Which option do you prefer? ☐ Option #1 ☐ Option #2 ☐ Option #3 ☐ Unsure

Support

Who else is involved?					
Which option do they prefer?					
Is this person pressuring you?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes ☐ No
How can they support you?					

What role do you prefer in making the choice?
☐ Share the decision with…
☐ Decide myself after hearing views of…
☐ Someone else decides…

Development and acceptability of a shared decision-making tool for commercial peanut allergy therapies

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Ann Allergy Asthma Immunol 125 (2020) 90–96

- In addition to the Greenhawt et al decision aid, tools are also available through the ACAAI
  - Atopic dermatitis
  - CRS w/ NP
  - Immunotherapy
  - Asthma

https://college.acaai.org/involving-your-patients-in-treatment-decisions/

Treatment Options for Peanut Allergy: A Decision Aid for Patients and Caregivers

Making a choice to start a therapy to treat your child's peanut allergy is an important decision. **There are no wrong choices you can make**. It may be helpful to discuss these options with family and friends and show them this shared decision making (SDM) aid to assist you in reaching a decision.

This decision-aid should help you to talk with your Allergist about treatment options that are best for you and your family. You should ask any and all questions you may have and express what your concerns are to your doctor.

What are your options:

Avoidance	Peanut oral immunotherapy (OIT)	Peanut epicutaneous immunotherapy (EPIT)
• You choose for your child to continue to strictly avoid peanut and carry emergency medication at all times. • Continued communication and avoidance strategies can help prevent accidental ingestion • Quality of life may be poor and anxiety around situations where your child is exposed to peanut high, potentially, in some. • Only 23 in 100 kids outgrow peanut allergy on their own.	• You choose for your child to eat small, increasing amounts of peanut up to a certain target level, under the direction of your doctor. • After reaching their target level of peanut in OIT, your child must continue to eat this amount every day (called a maintenance dose) to remain desensitized, or this protection will disappear. • Therapy is associated with 3-fold higher risk of a severe reaction than from just avoiding peanut naturally	• You choose for your child to wear a patch coated with peanut on their skin. The patch dose does not change. In the beginning, the number of hours your child wears the patch increases from a few hours a day to all day/night. • The patch must be worn every day or this protection will disappear.

BACK TO RESOURCES

Treating Chronic Rhinosinusitis with Nasal Polyps

Use this tool to help find relief

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Treatment for Nasal Polyps That Have Recurred After Sinus Surgery

If you've had surgery and your nasal polyps have come back, you and your doctor will talk about several options to provide relief, including another surgery. Together you will choose which treatment option works best for you, based on your health and your lifestyle. You may have better success if you use more than one treatment at the same time, especially if your condition is more severe or you have moderate or severe asthma.

This chart explains more about your treatment options.

- Corticosteroid nasal spray or rinse
- Fluticasone breath-powered corticosteroid device ([redacted])
- Surgery
- Biologics Dupilumab ([redacted]), Omalizumab ([redacted]), or Mepolizumab ([redacted])
- Sinus implants ([redacted])

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Your Turn

The next step is to talk about these treatments with your doctor. To help you figure out what might work best for you, answer the following statements, choosing Yes or No.

I don't mind getting an injection every two to four weeks	○ Yes	○ No
I am not concerned about using corticosteroid sprays every day	○ Yes	○ No
I am comfortable having surgery again	○ Yes	○ No
The cost of the treatment will factor into my decision to try it	○ Yes	○ No
I don't worry about long-term effects of medications	○ Yes	○ No
I am fine with the idea of medication left in my nose to treat my polyps	○ Yes	○ No
I am OK with having a procedure	○ Yes	○ No
Taking medications daily in my nose or by mouth would not be a problem	○ Yes	○ No

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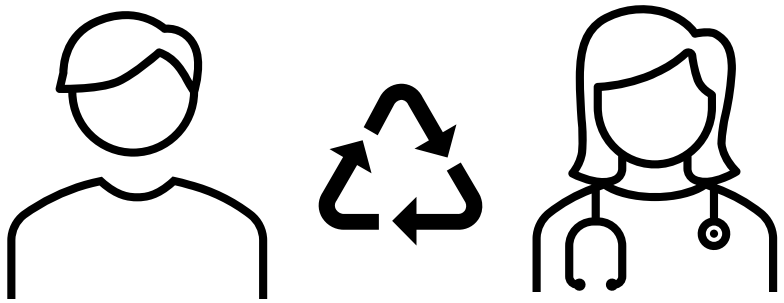
Effects of SDM



- Increased patient involvement
- Improved patient knowledge
- Increased realistic perception of outcomes
- Improved informed value-based choice
- Positive effect on patient-HCP communication
- Variable effect on length of consultation
- No apparent adverse effect on health outcomes or satisfaction

Bukstein D, Guerra D, Huwe T, Davis R. A review of shared decision making. Ann Allergy Asthma Immunol. 2020

Take Home Points

Conditional Recommendations are a navigational signal for SDM

SDM is a partnership to deliver bespoke care in the face of clinical equipoise or conditional recommendations

Team talk, option talk, and decision talk are iterative conversations of SDM

Take Home Points

Minimally disruptive medicine maximizes collaborative capacity of patient partners

Patient decision aids help clarify patient values and preferences

Thank You