

THINKING OUTSIDE THE BOX: STRATEGIES FOR IMPROVING ASTHMA CARE

Gregory Metz, MD

Oklahoma Allergy and Asthma Clinic

Clinical Assistant Professor, University of Oklahoma College of Medicine

OBJECTIVES

- Recognize the importance of narrative competence in providing effective, patient-centered care for asthmatics.
- Apply skills learned to identify and address barriers to medication adherence.
- Discuss clinical pearls for asthma self-management.

No disclosures

CLINICAL APPROACH TO ASTHMA CARE¹

1. Assess severity and control
2. Patient education
3. Address environmental and other factors
4. Medications

Narrative approach to asthma enhances these guidelines by:

- Recognizing our patients' illness experiences
- Promoting a team-based method for asthma care
- Cultivating improved self-management skills

¹ National Heart, Lung and Blood Institute (NHLBI) (2007) www.nhlbi.nih.gov/files/docs/guidelines/04_sec3_comp.pdf

NARRATIVE MEDICINE: HISTORICAL PERSPECTIVE

Aristotle described 3 fundamental realms of medicine:

1. EPISTEME- scientific knowledge
2. TECHNE- craft knowledge
3. PHRONESIS- ethics, wisdom, practical knowledge

Over time, medicine has placed greater and greater attention to EPISTEME at the expense of PHRONESIS

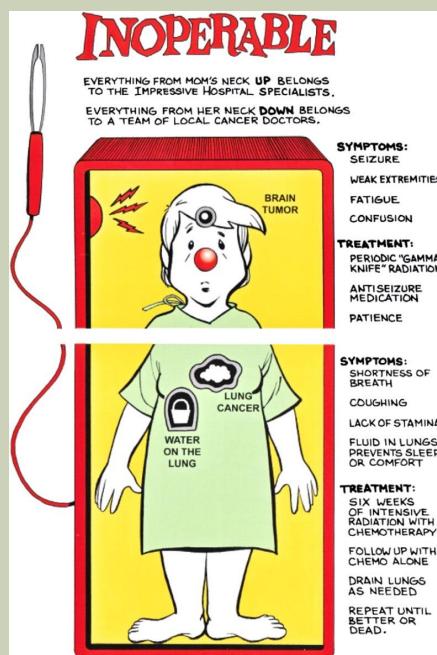
NARRATIVE COMPETENCE IN ASTHMA

- Modern medicine focuses on scientific and clinical information
- Increased reliance on tests and labs
- Decreased use of oral story telling, description of patient's experiences

"Sick people need [health care providers] who can understand their diseases, treat their medical problems, and accompany them through their illnesses¹"

¹ Charon R. Narrative medicine: A model for empathy, reflection, profession, and trust. *The Journal of the American Medical Association* 286 (15): 1897-1902.

Fies B. Mom's cancer.



- “Instead of being accompanied through the uncertainties and indignities of illness by a trusted guide who knows them, patients find they are referred from one specialist and one procedure to another, perhaps receiving technically adequate care, but being abandoned with the consequences and dread of illness”¹
- Narrative medicine seeks to strengthen therapeutic alliances/trust through the act of storytelling and empathic listening
- Health care providers must hear patient’s stories of illness to better understand their perspective, engage the patient to participate in his/her care and to align educational pursuits with patient knowledge gaps

¹Charon, R. Narrative Medicine: Honoring the Stories of Illness.

WHY ARE NARRATIVES IMPORTANT¹?

- Self-understanding develops through narration
- Represent how patients experience illness
- The act of narration is inherently therapeutic/medicinal²
- Encourage empathy
- Promote understanding and team-based relationships between the patient and health care provider
- Supply clues to what is going on
- Allow for the construction of meaning /rewriting illness narrative
- Encourage a holistic approach to management
- Patient centered treatment plan

¹ Greenhalgh T, Hurwitz B. Narrative based medicine: why study narrative? BMJ. 1999 Jan 2;318(7175):48-50.

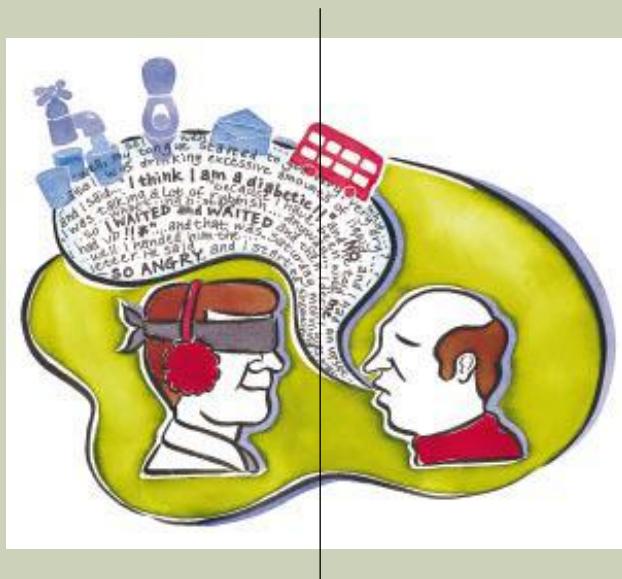
² Smyth JM, Stone AA, et al. Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis. JAMA 1999;281:1304-9.

WHAT HAPPENS WITHOUT NARRATIVES¹?

- Patient may not tell the entire story
- Patient may feel unheard/abandoned
- Patient may not ask most important questions
- Work-up can be unfocused, costly
- Patient may be viewed as non-adherent
- Failure to develop therapeutic alliance
- Clinician can feel professionally dissatisfied/burnt out

¹Engel J, Zarconi J et al. Narratives in Health Care. Radcliffe Publishing 2008;167-169.

ARE WE LISTENING TO PATIENT'S STORIES?



FACTORS CONTRIBUTING TO DIVISIONS BETWEEN PATIENTS AND PROVIDERS¹

■ The contexts of illness

- Health care providers view disease in the context of biologic or pathophysiologic abnormalities
- In contrast, patients may view disease in framework of their lives or other factors (religious/cultural/social beliefs)

■ Beliefs about disease causality

- Divergent understanding of the reasons for disease
- Beliefs may be in contrast to one another
- Incongruent ideas regarding causality may negatively affect adherence

■ The emotions of blame, fear and suffering

- Illness involves more than biologic abnormalities and all aspects of disease must be attended to in order to adequately treat disease

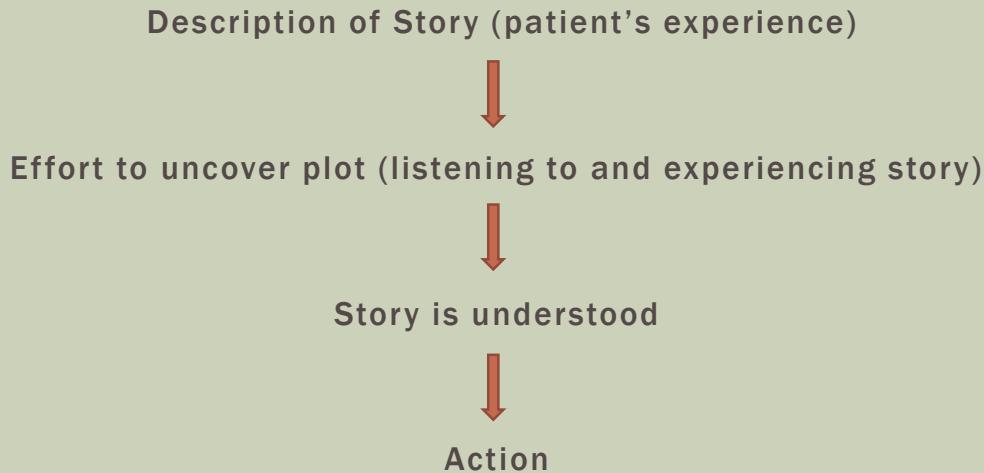
¹Charon, R. Narrative Medicine: Honoring the Stories of Illness.

NARRATIVE MEDICINE

- Building narrative skills allows us to hear, absorb, interpret and be moved by our patient's stories¹
- When patients feel heard, they are more likely to engage in their health care and in turn be more adherent to therapies
- “Narratives of illness provide a framework for approaching a patient's problems holistically and may uncover diagnostic and therapeutic options”¹

¹Charon, R. Narrative Medicine: Honoring the Stories of Illness.

CONSTRUCT OF A NARRATIVE



NARRATIVE MEDICINE

- Healing process begins with the act of narration of illness “pathographies”
- Health care providers must listen/hear/incorporate these stories
 - May be verbal, direct
 - May be verbal, indirect (images, metaphors, allusions)¹
 - May be non-verbal
 - Posture
 - Body language
 - Facial expression
 - Proxemics (spatial cues)
 - Chronemics (time clues)
 - The experience of illness may not follow temporal sequence, may have to take circuitous path to obtain the story¹
- Health care providers often “spoil the patient’s narrative” by interfering with both content and form by “forcing it into medicine’s preferred outline and sequence”¹
 - Forcing story to follow standard medical HPI format (we’ll get to that in a minute...)
 - Standard asthma questions
 - How often using rescue
 - Nocturnal pulm symptoms?
 - ED visits?
 - Oral steroid use?

¹Charon, R. Narrative Medicine: Honoring the Stories of Illness.

NARRATIVE MEDICINE

- Utilizes many senses including attentive listening, close watching of the patient as he/she narrates the story and physical examination of the body (stereophonic listening)

- Key Features

- Attention/full concentration on the patient
- “Suspension of self”
- Representation
- Affiliation

Diagnostic listening/authentic engagement



Elwyn G, Gwyn R. Narrative based medicine: stories we hear and stories we tell: analysing talk in clinical practice. BMJ. 1999 Jan 16;318(7177):186-8.

MULTIPLE LAYERS OF STORIES

- Experiential text
 - Patient's point of view

- Narrative text
 - Health care provider's perception based on information given

- Perceptual text
 - Physical exam findings

- Instrumental text
 - Lab/test findings

HOW DO WE PRACTICE NARRATIVELY COMPETENT MEDICAL CARE?

- Doctor-patient dyad formed during first encounter
 - Care must be taken to 'get in right' from the beginning
- Practicing narratively competent medicine not only helps our patients but also enriches our experience as healers/caretakers

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE¹

Ask open-ended questions

- *What would you like me to know about your asthma?*
- *What worries you most about your asthma?*
- *What do you want to do that you currently can't b/c of your asthma?*
- *What do you expect from treatment?*
- *What do you think is going on?"*
- *What is one thing you haven't asked or told me?"*

¹Peterkin A. Practical strategies for practicing narrative-based medicine. Can Fam Physician. Jan 2012; 58(1): 63-64.
²Kalitzkus V, Matthiessen PF. Narrative-based medicine: potential, pitfalls, and practice. Perm J. 2009 Winter;13(1):80-6.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE¹

Do not interrupt

- Average clinician interrupts patients in <15 seconds
- 1-2 minutes is enough for most patients to tell their concerns²
 - Giving patients “*the golden minute*”³
 - Can allow for more productive engagement of patient

1 Peterkin A. Practical strategies for practicing narrative-based medicine. *Can Fam Physician*. Jan 2012; 58(1): 63–64.

2 Kalitzkus V, Matthiessen PF. Narrative-based medicine: potential, pitfalls, and practice. *Perm J*. 2009 Winter;13(1):80-6.

3 Owton H, Allen-Collinson J, Siriwardena AN. Using a narrative approach to enhance clinical care for patients with asthma. *Chest*. 2015 Mar 19;14-2630.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE¹

Have patients write about their illness

- Have patient write 1/2 page about his/her asthma, what causes it, how it affects his/her life

Stereophonically listen to your patients

- Maintain eye contact
- Don’t be distracted by technology (looking at computer)

Be aware of body language

- Are you open to the patient’s narrative?
- Do not rush into the exam room and appear hurried

¹Peterkin A. Practical strategies for practicing narrative-based medicine. *Can Fam Physician*. Jan 2012; 58(1): 63–64.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE¹

- Implement non-verbal encouragement (nodding, eye contact)
- Verbal summarizing (echoing)
 - “So what you are saying is ... “

Owton H, Allen-Collinson J, Siriwardena AN. Using a narrative approach to enhance clinical care for patients with asthma. *Chest*. 2015 Mar 19;14-2630.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE

Practice Motivational Interviewing

- Interaction that encourages patients to verbalize health care goals and direct the agenda
- Establishing a relationship, guiding agenda, assessment of importance/confidence/readiness, exploring barriers and planning action

Be aware of health literacy challenges

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE

Use self-administered questionnaires/other tools to prompt discussions about beliefs and behaviors surrounding asthma and therapy

- George et al recently published a study looking at use of the CAM-A Instrument (complementary and alternative medicine in asthma) that patients filled out to identify CAM endorsement or negative ICS beliefs¹
- Purpose was to prompt providers to initiate discussions about topics that affect asthma therapy adherence¹
 - Negative ICS beliefs and CAM endorsement were associated with uncontrolled asthma in the cohort of asthmatics studied
 - Without using the instrument, providers rarely (if ever) addressed the issues of CAM endorsement or negative ICS beliefs
 - Helped providers identify and address beliefs that impaired asthma therapies
 - Interestingly, the visits where CAM use/negative ICS beliefs were directly addressed did not last longer than typical visits (just more directed dialogue)

¹George M, Topaz M, Rand C, et al. Inhaled corticosteroid beliefs, complementary and alternative medicine, and uncontrolled asthma in urban minority adults. *J Allergy Clin Immunol*. 2014 Sep 10. pii: S0091-6749(14)01048-3.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE

Ask about (and be mindful of) psychological dysfunction that can occur with asthma (“ABCs”)

Affective

- Increased anxiety and depression compared to general population¹
- Link between negative affect and asthma exacerbations²
- Depression is associated with non-adherence³

Behavioral

- Maladaptive breathing behaviors can complicate asthma⁴

Cognitive

- “external locus of control” associated with severe asthma⁴
- Decline in cognitive processing can negatively impact asthma control⁴

Remember
your ABCs

¹ Scott KM, Vor Korff M, Ormel J, et al. Mental Disorders among adults with asthma: results from the World Mental Health Survey. *Gen Hosp Psychiatry* 2007;29:123-33.
² Ritz T, Kullowatz A, Goldman MD, et al. Airway response to emotional stimuli in asthma: the role of the cholinergic pathway. *J Appl Physiol* 2010;108:1542-1549.

³ Cluley S, Cochrane GM. Psychological disorder in asthma is associated with poor control and poor adherence to inhaled steroids. *Respir Med* 2001;95:37-39.

⁴ Yil AC, Koh MS. A review of psychological dysfunction in asthma: affective, behavioral and cognitive factors. *J Asthma*. 2013 Nov;50(9):915-21.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE

Incorporate information from pts narratives to help re-story their lives

- *Narrative Wreckage to Reconstruction*¹
- Write out treatment goals together
- Formulate action plans based on pt. experiences

¹ Hunter KM. Doctor's stories: The narrative structure of medical knowledge. Princeton. Princeton University Press; 1991.

STRATEGIES TO IMPROVE NARRATIVE COMPETENCE¹

View non-adherence as blocked narrative

¹Peterkin A. Practical strategies for practicing narrative-based medicine. Can Fam Physician. Jan 2012; 58(1): 63-64.

MEDICATION ADHERENCE

Medication adherence involves many components:

1. Patients must fill the medications at the pharmacy and begin using them (fulfillment)
 - a. ~15% of prescriptions in US are never filled¹
 - b. Large drop off rate at initial fill and first refill
2. Patients must use the medication properly (prn instead of daily, are they using the MDI correctly, etc)
3. Patients must continue to take the prescribed medication as directed (may start off taking the medications as prescribed, but over time, patient may stop the medications on his/her own)

¹ Gadkari AS1, McHorney CA. Medication nonfulfillment rates and reasons: narrative systematic review. *Curr Med Res Opin*. 2010 Mar;26(3):683-705.

NONADHERENCE

Can be intentional (pt actively chooses not to take) or unintentional (pt forgets to take):

- a. Intervention is different
- b. May need further discussion on why patient chooses not to take medications
- c. May need to link therapies with daily activities such as take 2 puffs of ICS with breakfast and dinner

ADHERENCE AND ASTHMA

- Adherence rates for ICS reported 44%-72%¹
- ~10% patients using ICS continued to fill prescription 1 year after first fill^{2,3}
- ~60% of asthma-related hospitalizations can be attributed to poor adherence to medication regimen⁴
- Numerous studies of chronic diseases highlight overall low rate of adherence to chronic therapy

1 Apter AJ, Boston RC, George M, et al. Modifiable barriers to adherence to inhaled steroids among adults with asthma: it's not just black and white. JACI 2003;111:1219-1226.
2 Bender BG, Pedan A, Varasteh LT. Adherence and persistence with fluticasone propionate/salmeterol combination therapy. JACI 2006;118:899-904.
3 Marceau C, Lemiere C, Berbiche D, et al. Persistence, adherence and effectiveness of combination therapy among adult patients with asthma. JACI 2006;118:574-581.
4 Barnes CB, Ulrik CS. Asthma and Adherence to Inhaled Corticosteroids: Current Status and Future Perspectives. Respir Care. 2014 Aug;12.

BARRIERS TO ADHERENCE

- Cost
- Problems with using the devices
- Poor training
- Complexity of medication regimen
- Not understanding instructions
- Time constraints
- Inappropriate expectations
- Fear of side effects/dependency (may be unexpressed)
- Anger
- Failure to buy into diagnosis and treatment plan
- Patient underestimation of severity
- Ambivalence
- Religious issues
- Cultural perceptions

NARRATIVE MEDICINE: SUMMARY

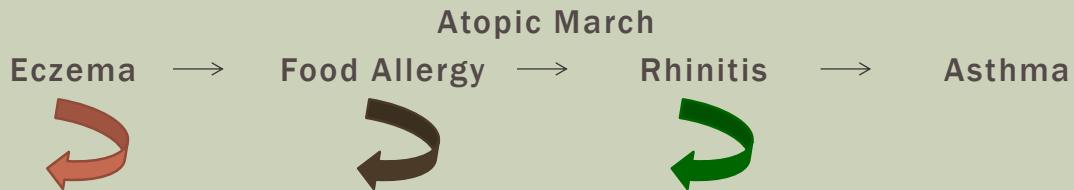
- In order to provide effective and holistic asthma care, we must listen to our patients, understand why they are doing what they do and align our educational pursuits with their knowledge gaps
- There is always a story behind why someone is not taking his/her medications as prescribed
- Remember:
 - An ACT score or lung function test alone is NOT the complete story
 - Health care providers are often “unreliable narrators of other people’s stories”(R. Charon).
 - In order to “hear” the story, we must let our patients tell it!

OTHER STRATEGIES FOR IMPROVING ASTHMA CARE

- Preventing Exacerbations:
 - Avoid allergic triggers (don't forget animals, mice, roach, mold)
 - Prevent viral infections (washing hands, vaccinations)
- Avoid irritant triggers
 - Tobacco smoke – MUST COMPLETELY AVOID
- Good nutrition
- Exercise¹
- Using non-traditional teaching methods
 - Mobile health interventions²
 - Telemedicine/Telecounselling³
- Prevention?

¹ Meyer, Günther S, Volmer T et al. A 12-month, moderate-intensity exercise training program improves fitness and quality of life in adults with asthma: a controlled trial. *BMC Pulm Med.* 2015 May 7;15(1):56
² Mosnaim G, Li H, Martin M, et al. A tailored mobile health intervention to improve adherence and asthma control in minority adolescents. *J Allergy Clin Immunol Pract.* 2015 Mar-Apr;3(2):288-290
³ Brown W, Odenthal D. The uses of telemedicine to improve asthma control. *J Allergy Clin Immunol Pract.* 2015 Mar-Apr;3(2):300-301.

PREVENTION?



¹Daily use of moisturizer during the first 32 weeks of life reduced the risk of atopic dermatitis

²Early introduction of peanuts in high risk children aged 4-11 months reduced the risk of peanut allergy at age 5 years (LEAP Trial)

³Allergen immunotherapy in children with AR reduced the risk of developing asthma (PAT Study)

REFERENCES

¹Horimukai K, Morita K, Narita M, et al. Application of moisturizer to neonates prevents development of atopic dermatitis. *J Allergy Clin Immunol*. 2014 Oct;134(4):824-830

²Du Toit G, Roberts G, Sayre P et al. Randomized trial of peanut consumption in infants at risk for peanut allergy. *N Engl J Med*. 2015 Feb 26;372(9):803-13.

³Jacobsen L, Niggemann B, Dreborg S, et al. Specific immunotherapy has long-term preventive effect of seasonal and perennial asthma: 10-year follow-up on the PAT study. *Allergy*. 2007 Aug;62(8):943-8.

ASTHMA SELF-MANAGEMENT

Empowers patients with the knowledge, skills and tools to be active participants in their own healthcare

HOW CAN WE “ACE” IT?

A - Assess

- Readiness
- Confidence

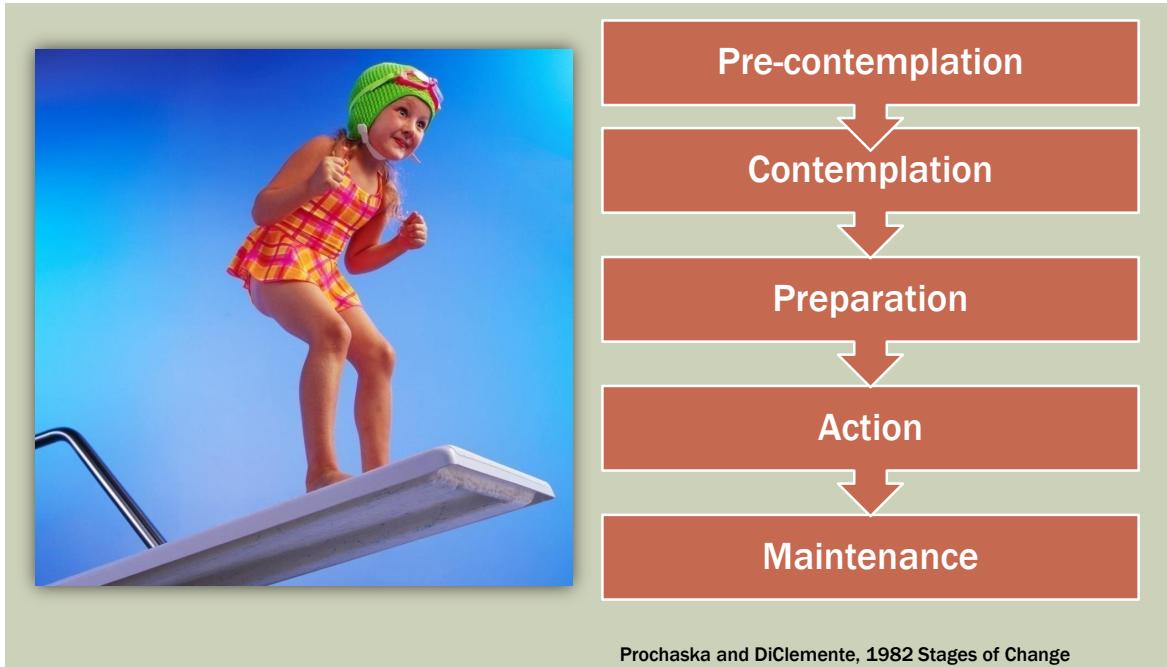
C - Consider

- Barriers to self-management

E - Engage

- Using those teachable moments throughout the visit

ASSESS: READINESS, CONFIDENCE



CONSIDER: BARRIERS

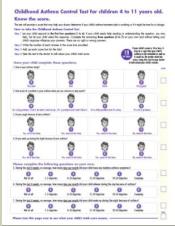
- Socioeconomic barriers
- Learning styles
- Language/Disabilities
- Literacy level
- Health Literacy level
- Cultural Influence
- Physical barriers



ENGAGE: USING THOSE TEACHABLE MOMENTS

“Tell me and I forget, teach me and I may remember, involve me and I learn.”

-Benjamin Franklin



SELF MANAGEMENT

- Promote understanding of asthma as a chronic disease
 - Narrative approach can help us identify barriers to understanding
- Helps patients recognize symptoms and treat accordingly
 - Assists patients in determining if asthma is controlled
 - Peak flow recordings
 - Asthma Action Plans
 - When/where to seek medical care
- Empowers patients
 - Combats “external locus of control” mindset
 - Team approach to re-writing patient’s illness narrative

THANK YOU

Karen Gregory

DNP, APRN-C, RRT, AE-C

Dee Mallam

RN, AE-C

QUESTIONS?