

Promoting Osteopathic Principles and Practice

Every Patient, Every Day...

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Associate Dean for Clinical Education, Heritage College

Chief Academic Officer, CORE

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Disclosures

- Author of “Promoting Osteopathic Thought in Clinical Education, Every Patient, Every Day...”
- Recovering specialist
 - Pulmonary medicine, private practice
- Developing osteopath
- Chairman, ACGME Osteopathic Principles Committee

Let's make it interactive!

- For open ended questions:

Respond at Pollev.com/robertcain899

or

Text Robertcain899 to 22333 then enter your response
(up to 300 characters)

- For multiple choice questions:

Respond at Pollev.com/robertcain899

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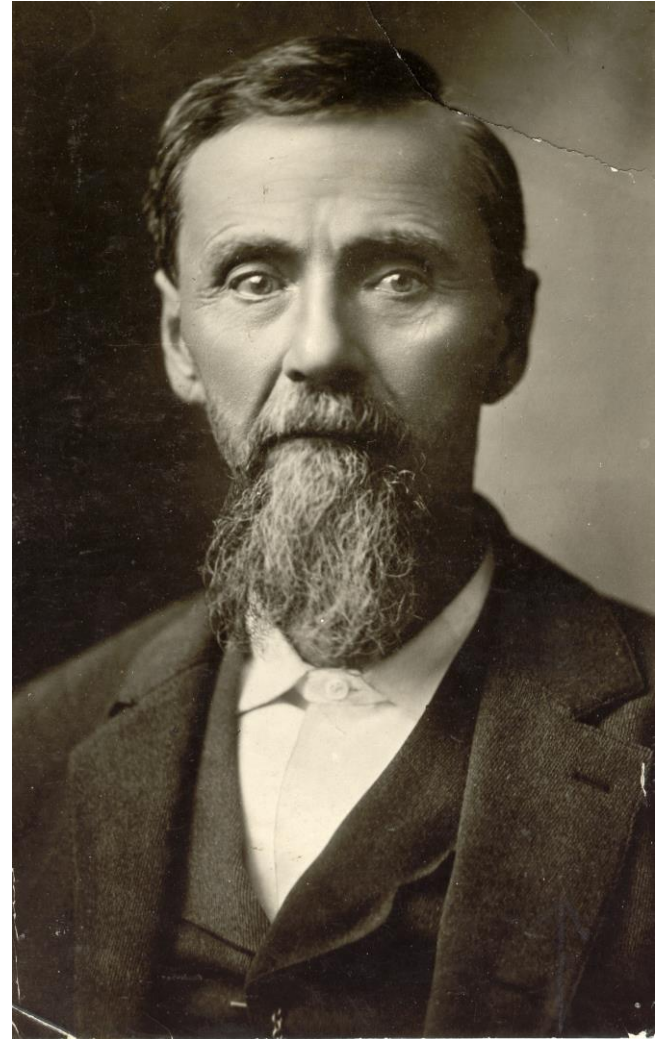
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How many of you are attracted
to the idea of leading or creating
change in health care?

A profession with a mission...

“The object of this corporation is to establish a College of Osteopathy, the design of which is *to improve our present system of surgery, obstetrics, and treatment of diseases generally*, and place the same on a more rational and scientific basis.”

Legal Charter of the American School of Osteopathy, State of Missouri, circa 1894



Andrew Taylor Still

Museum of Osteopathic Medicine,
SM [1985.1023.08]

Osteopathic Medicine

Why, How, and What

	Principles and Practices			
Why	To improve our present system of surgery, obstetrics, and treatment of diseases generally			
How	Promotes structural health of the body	Assists innate mechanisms of the human body to function as intended	Recognizes the inter-relationship of mind, body, and spirit	Remains focused on the patient, not on their problem
What	Incorporates manual manipulation of somatic structures	Removes impediments to health and promotes a healing environment	Emphasizes primary care “Thinks differently”	Incorporates professional touch and empathic listening

Objectives

Upon the completion of this session, attendees will be able to:

1. Reflect upon osteopathic principles and practice as a foundation for holistic health care
2. Describe a thought process for helping patients to achieve their health potential
3. Acknowledge challenges limiting a thought process for helping patients to achieve their health potential
4. Better recognize opportunities to promote osteopathic principles and practice for every patient, every day

“Determinants of Health”



Structure-function relationships
Genetics
Immune system function
Nutritional state
Sleep quality/rest-fatigue balance
Functional state/level of activity and physical conditioning
Body habitus
Psychosocial health
Abuses/Behaviors

“Determinants of Health”

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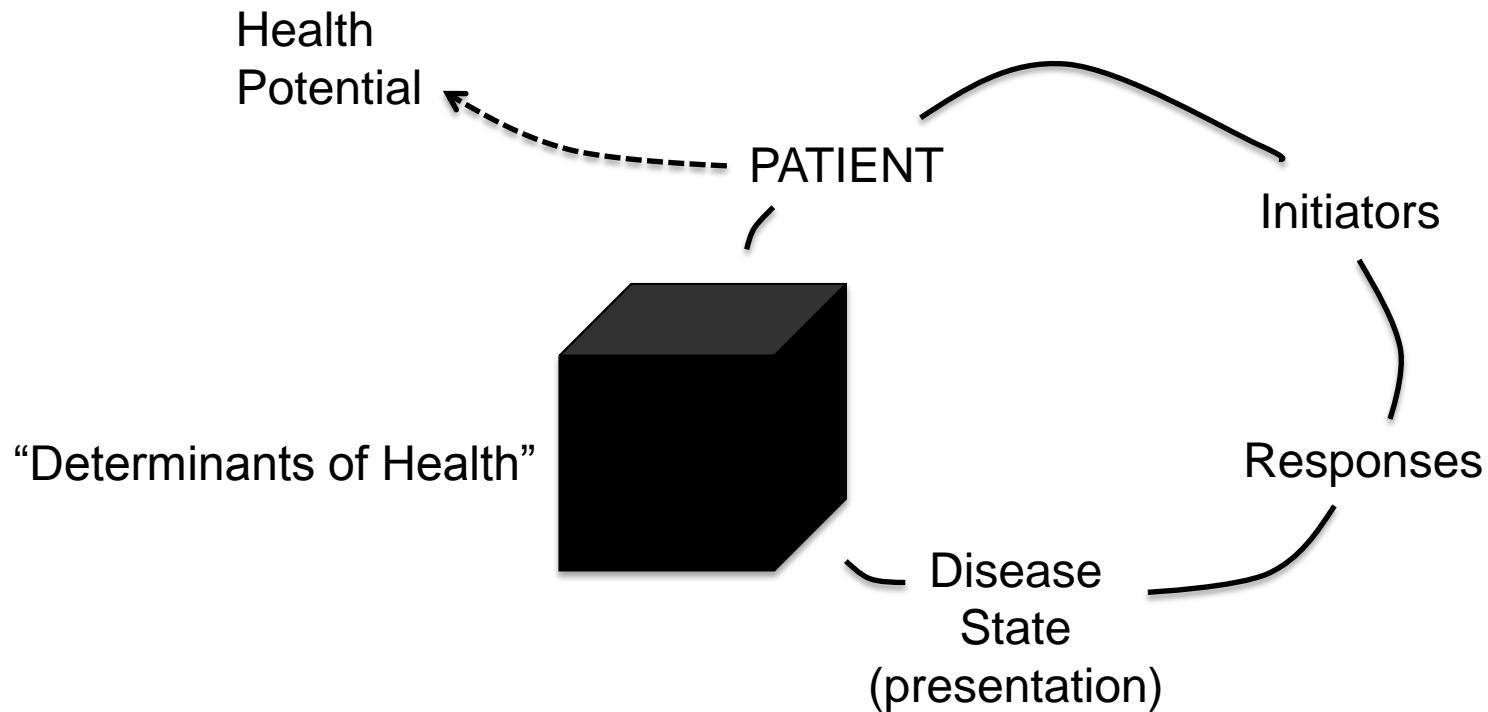
“The way we see the problem
is the problem...”

Where is the least amount of training offered in most medical schools and residencies?

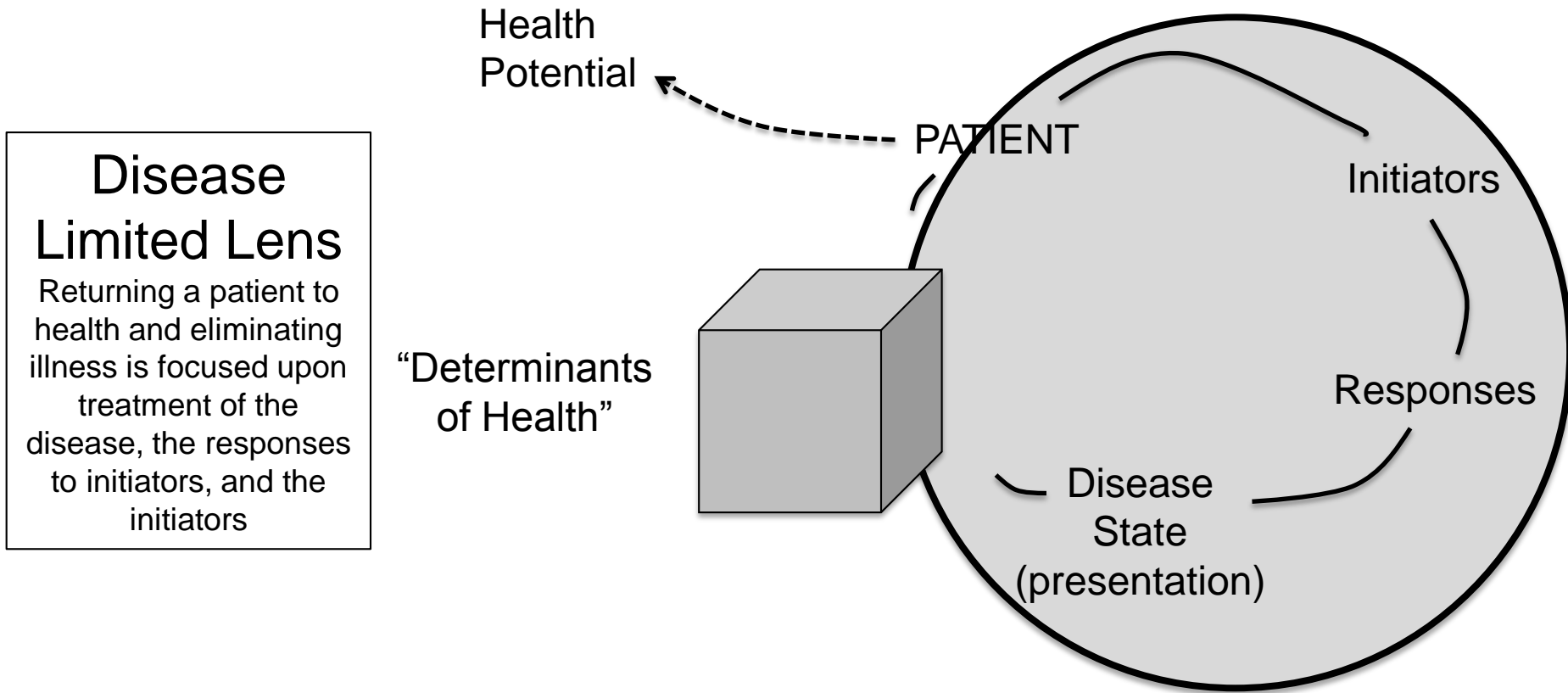
Where is the least amount of training offered in most medical schools and residencies?

A focus on the determinants of health and promoting or maintaining the health of a patient...***health care***

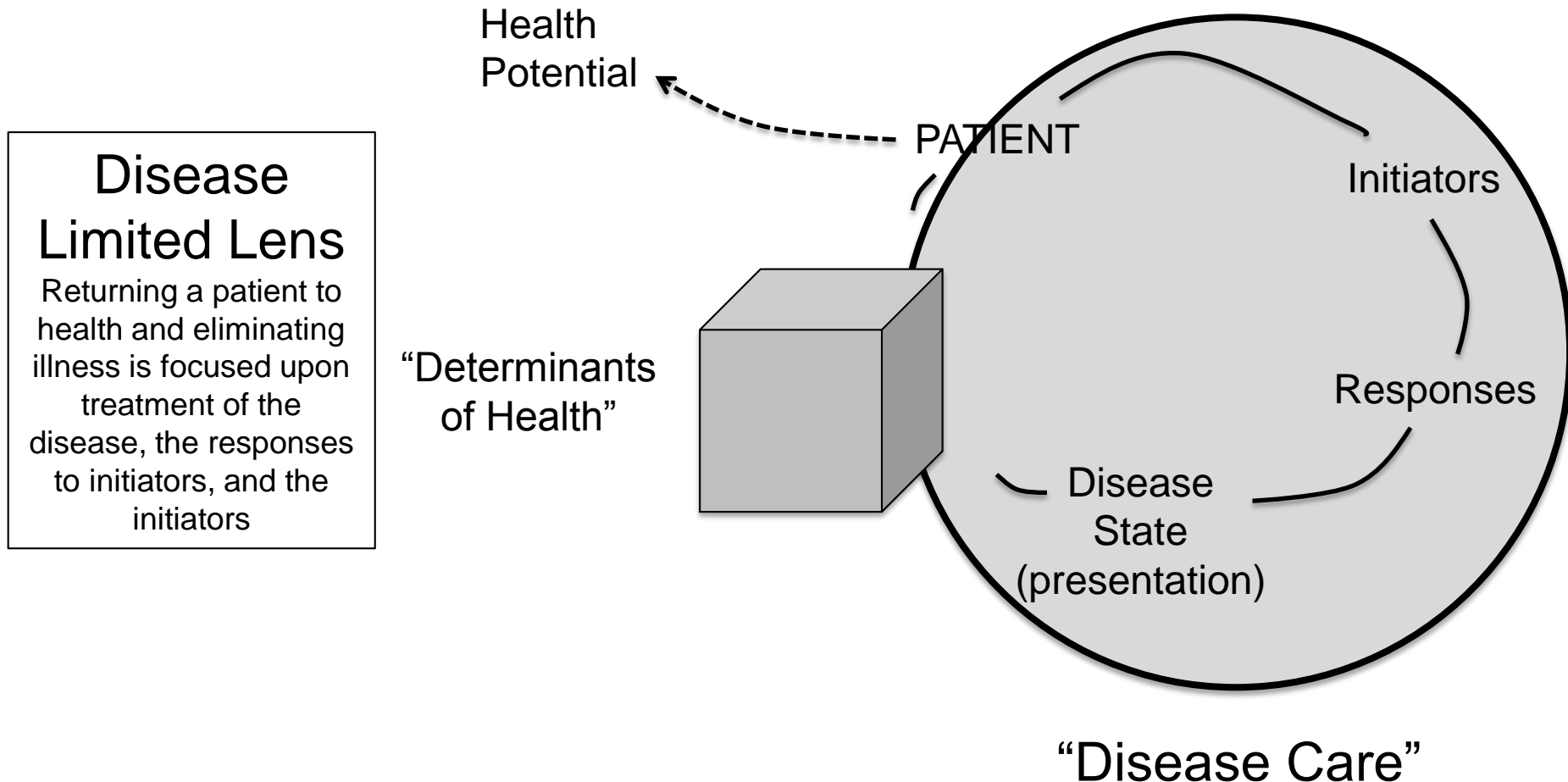
Developing a Health-oriented Approach to Patient Care



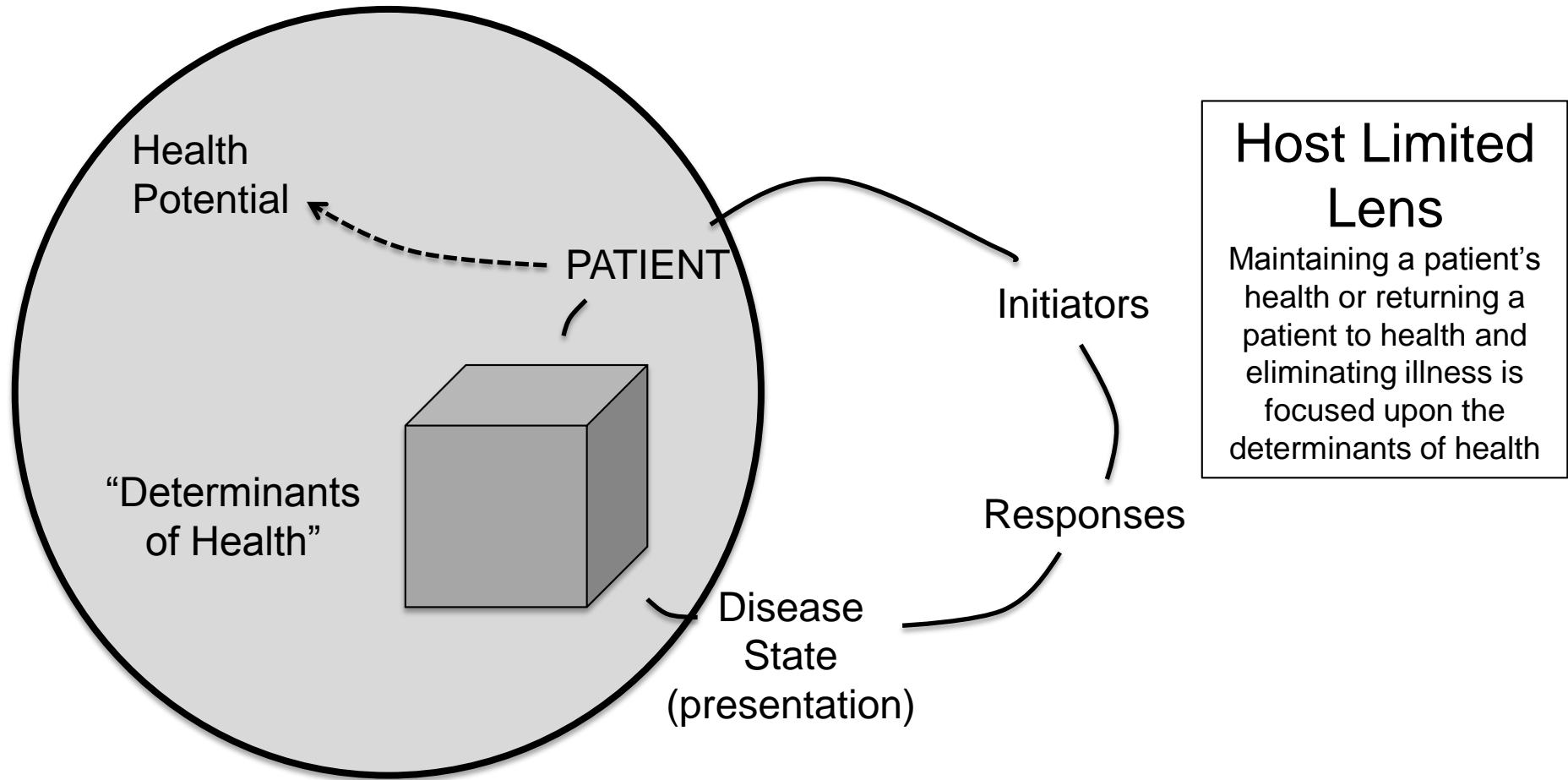
Developing a Health-oriented Approach to Patient Care



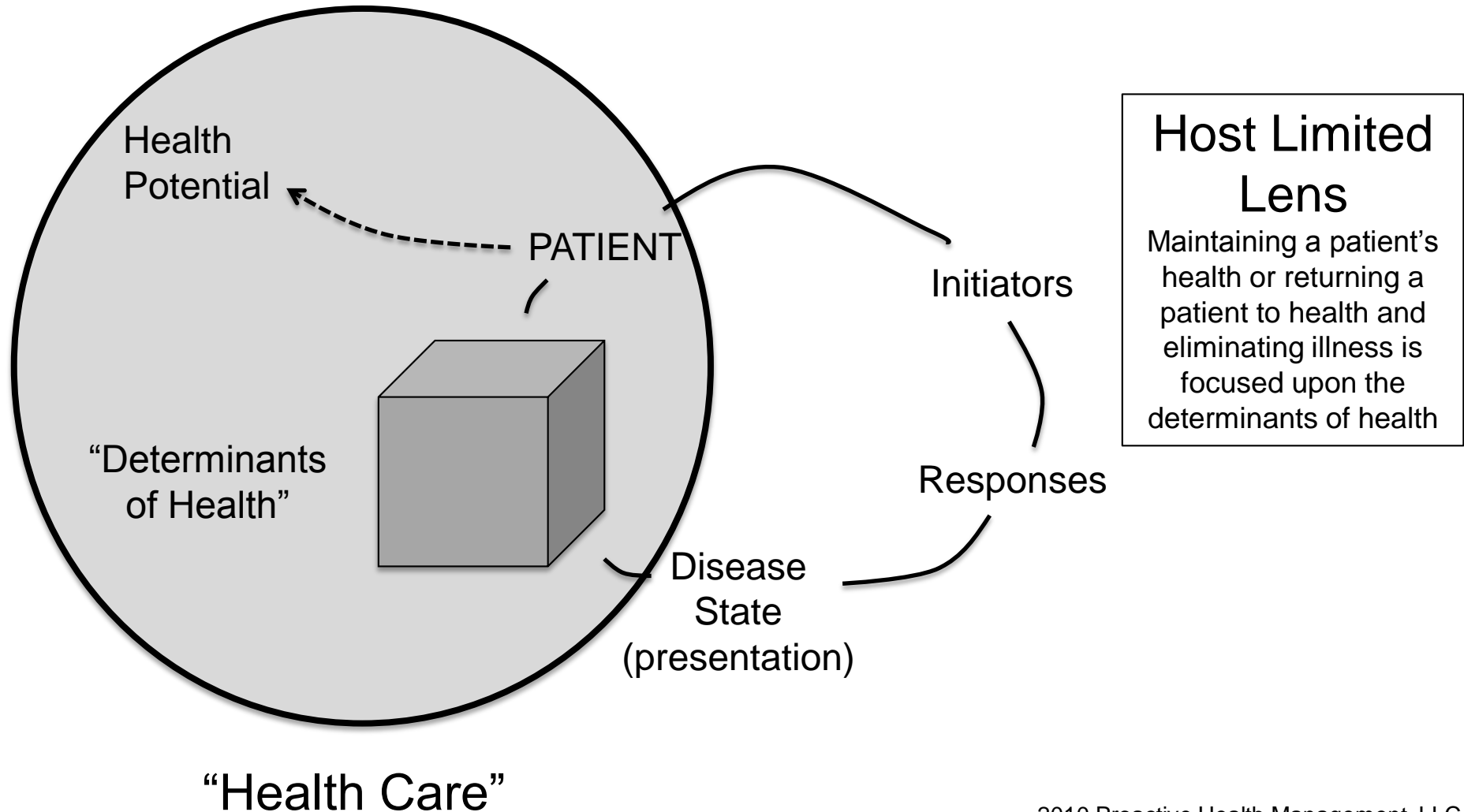
Developing a Health-oriented Approach to Patient Care



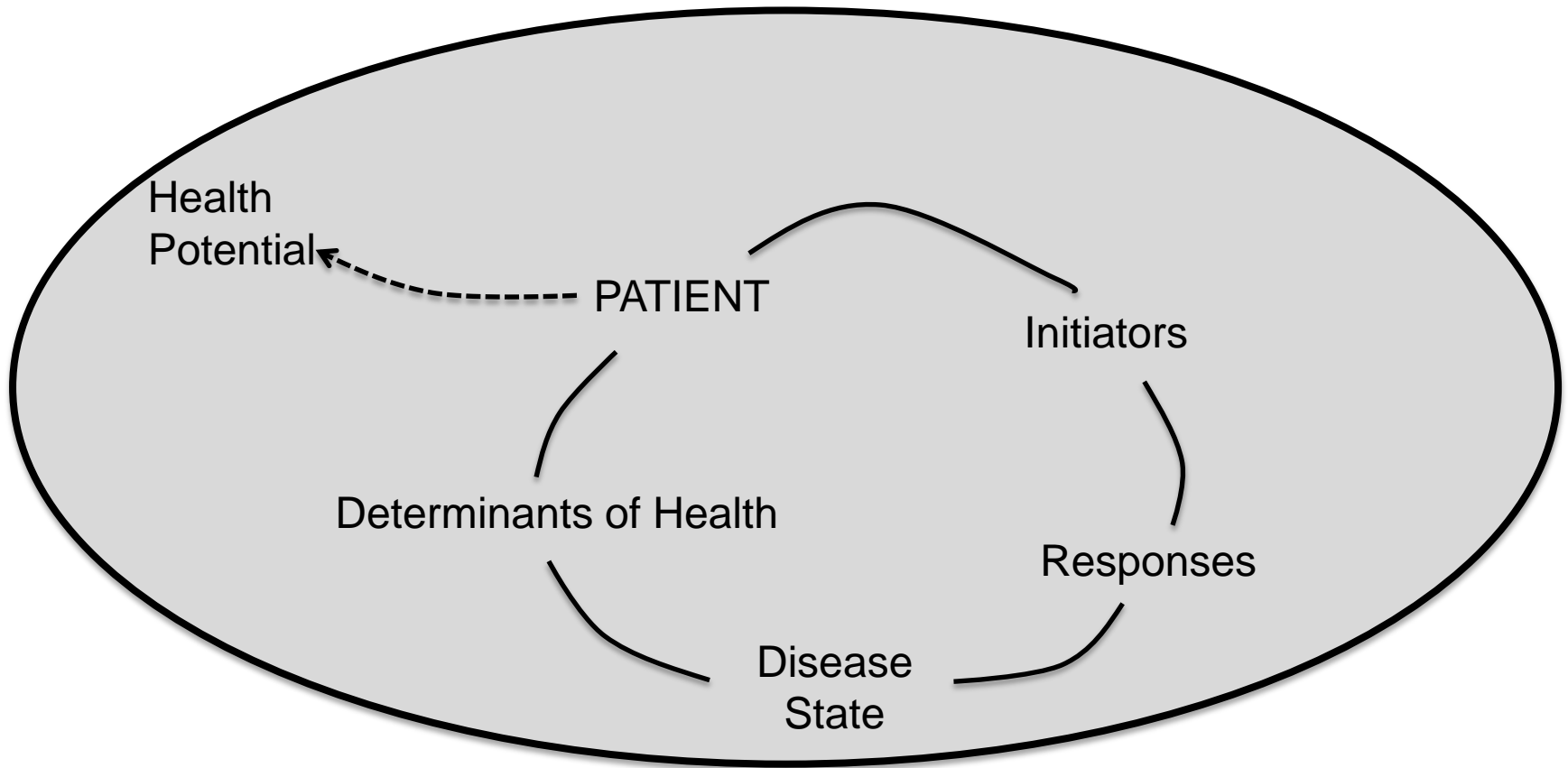
Developing a Health-oriented Approach to Patient Care



Developing a Health-oriented Approach to Patient Care



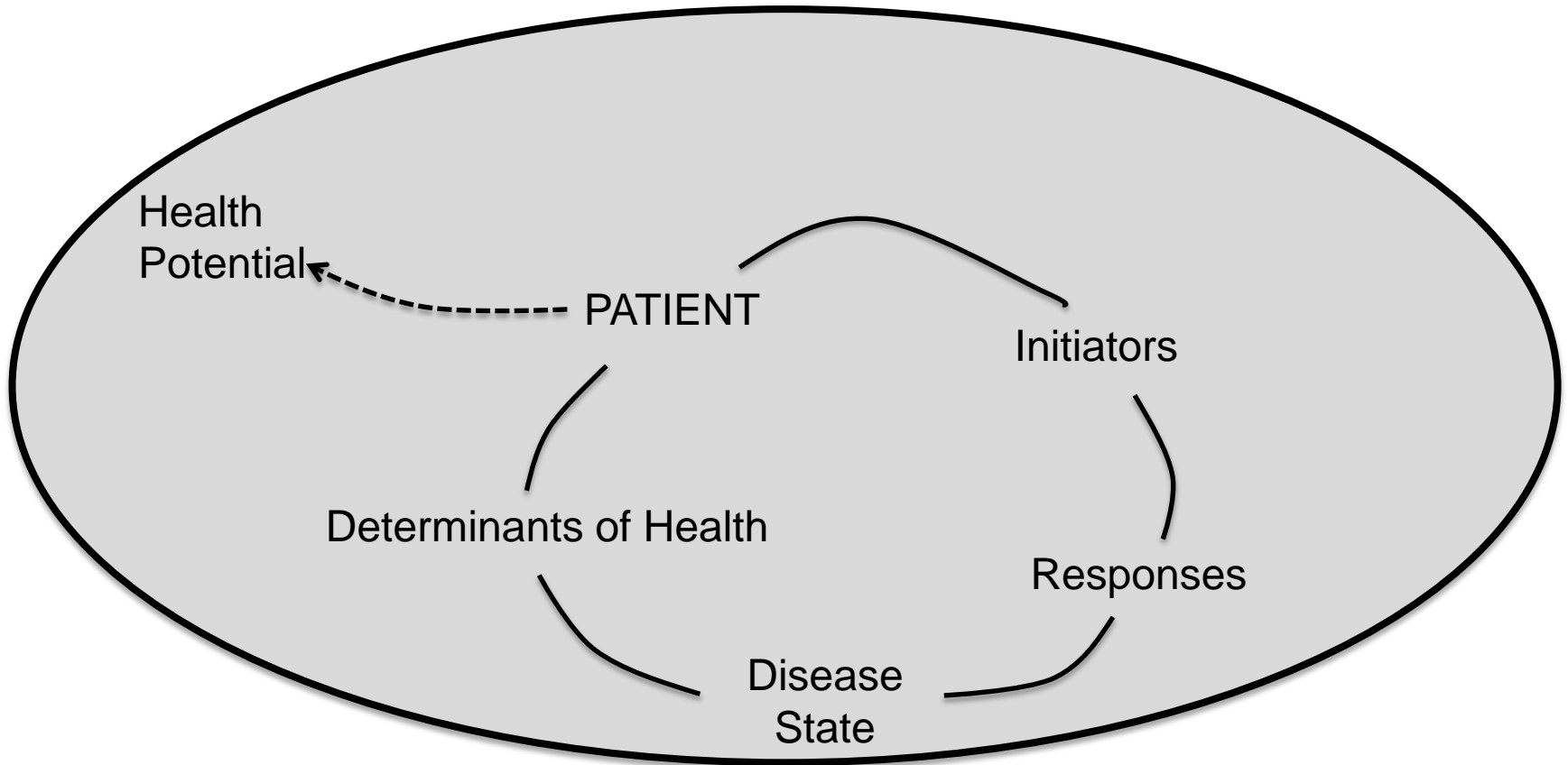
Developing a Health-oriented Approach to Patient Care



Host + Disease Lens

Returning a patient to health and eliminating illness is focused upon treatment of both
the host and the disease

Developing a Health-oriented Approach to Patient Care



“Holistic Health Care”
(osteopathic)

Osteopathic Medicine

Why, How, and What

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What about structural health?

Structure-Function Relationships

- The model presented potentially allows for rational application of OMT in patient care

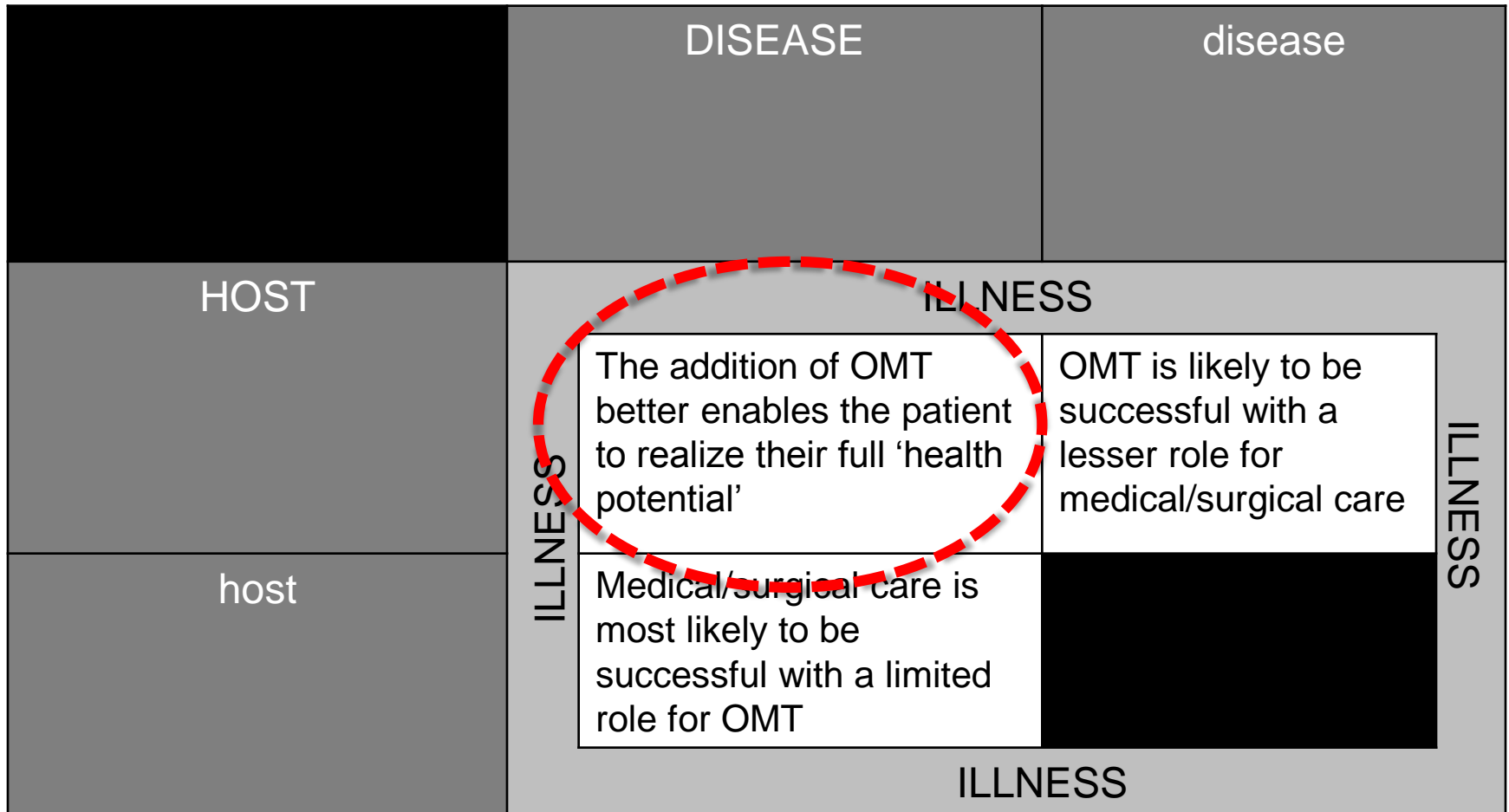
The Role of Structural Health

Rational Application of OMT

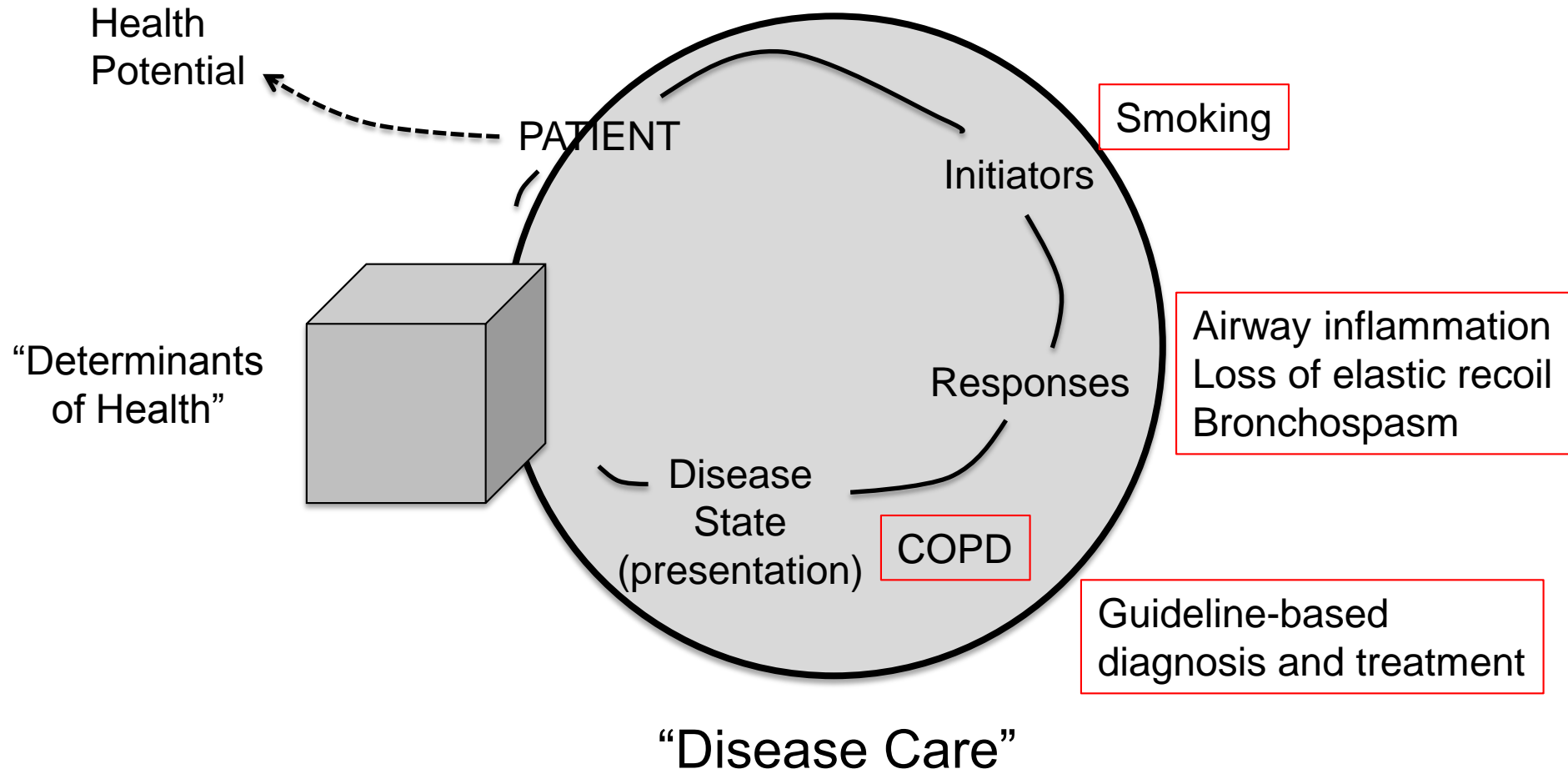
	DISEASE	disease
HOST	ILLNESS	
host	ILLNESS	ILLNESS
	<p>The addition of OMT better enables the patient to realize their full 'health potential'</p>	<p>OMT is likely to be successful with a lesser role for medical/surgical care</p>
	<p>Medical/surgical care is most likely to be successful with a limited role for OMT</p>	
	ILLNESS	

The Role of Structural Health

Rational Application of OMT



Developing a Health-oriented Approach to Patient Care



Indications for OMT

- The presence of somatic dysfunction with the ability to impair normal human physiology that is amenable to OMT
 - Body systems with a significant musculoskeletal component are at risk for somatic dysfunction and therefore may benefit from OMT
- We should not use OMT simply because we can
- We likely should not apply generic techniques to a diagnosis

A Classification of Somatic Dysfunction and Potential Roles for OMT

		Modality		
		Primary OMT	Adjunctive OMT	Preventive OMT
Type of Somatic Dysfunction	Primary Acquired	Acute low back injury	Acute low back injury	
	Secondary Acquired		Disease-associated (COPD)	Disease-associated (COPD)
	Induced		Post-surgical	


Based upon the work of Edward Stiles, DO
Pikeville College-School of Osteopathic Medicine

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Recognizing somatic dysfunction as a potential contributor to COPD symptoms



no more than 3 words, share your thoughts about the role of OMT for the treatment of COPD.

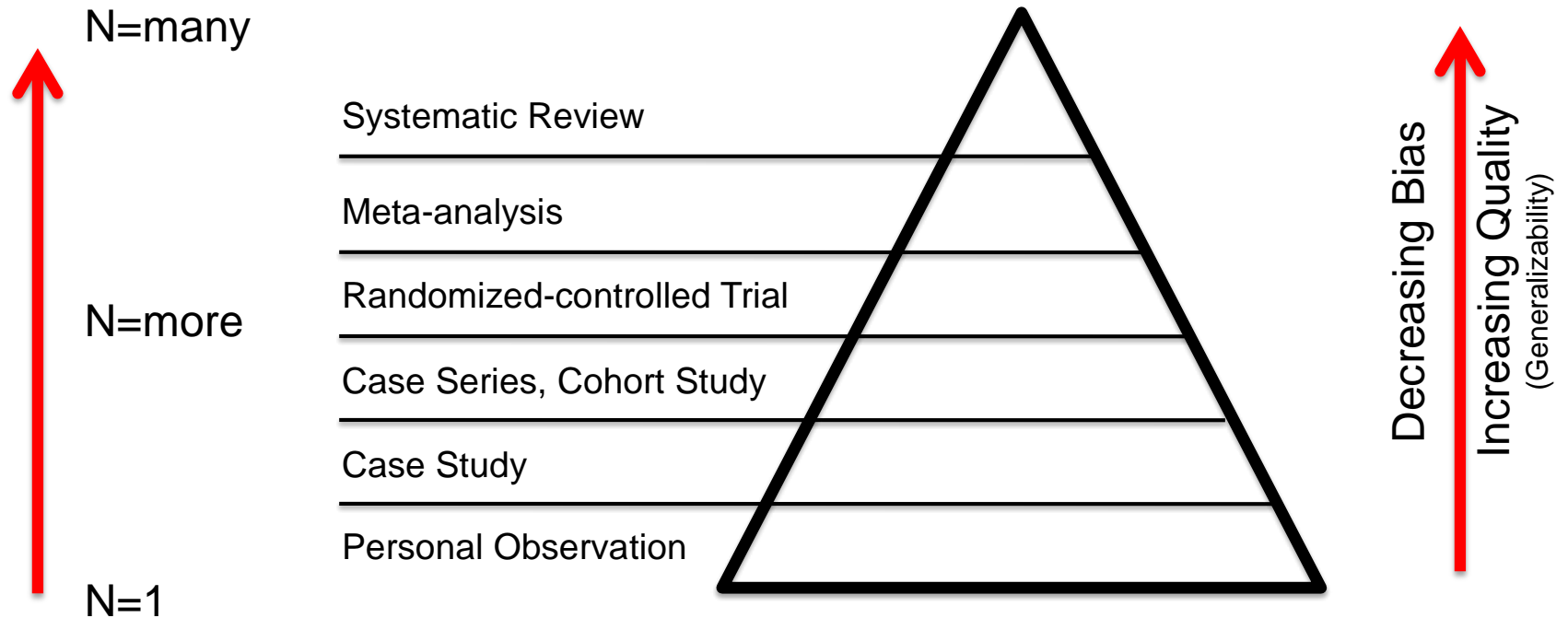


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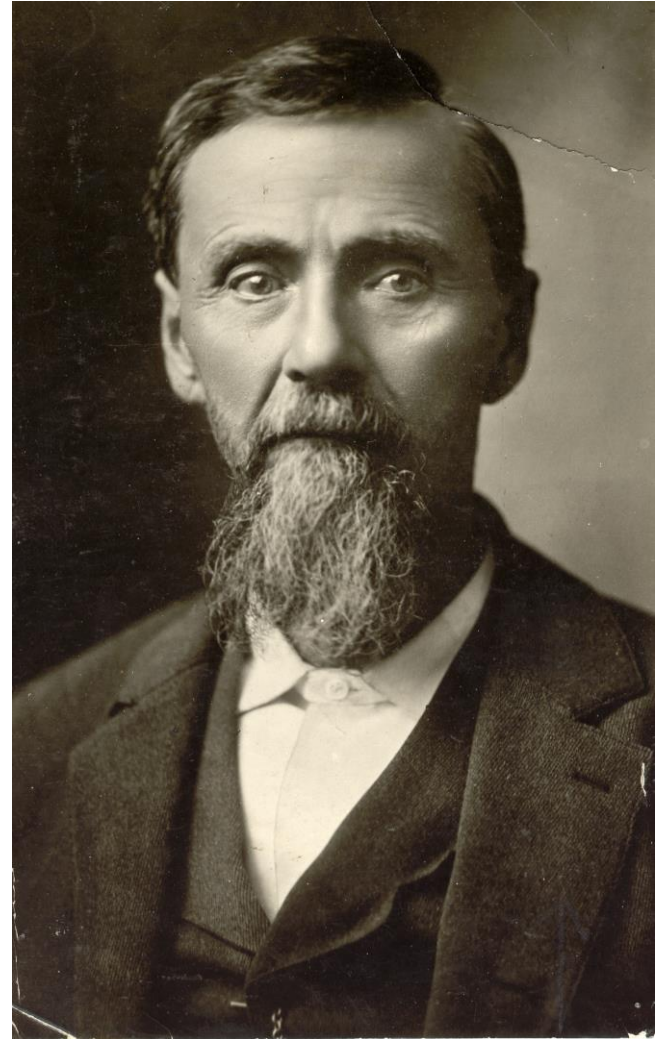
An Evidence Pyramid



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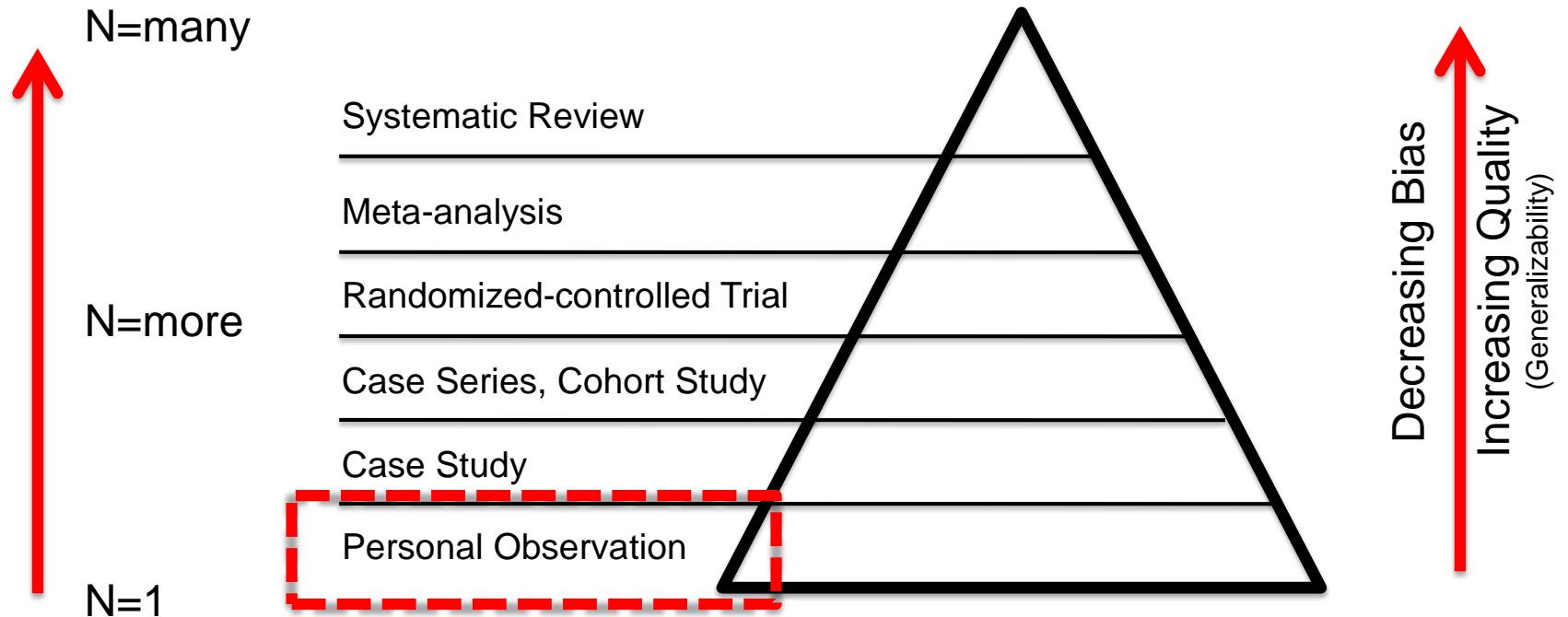
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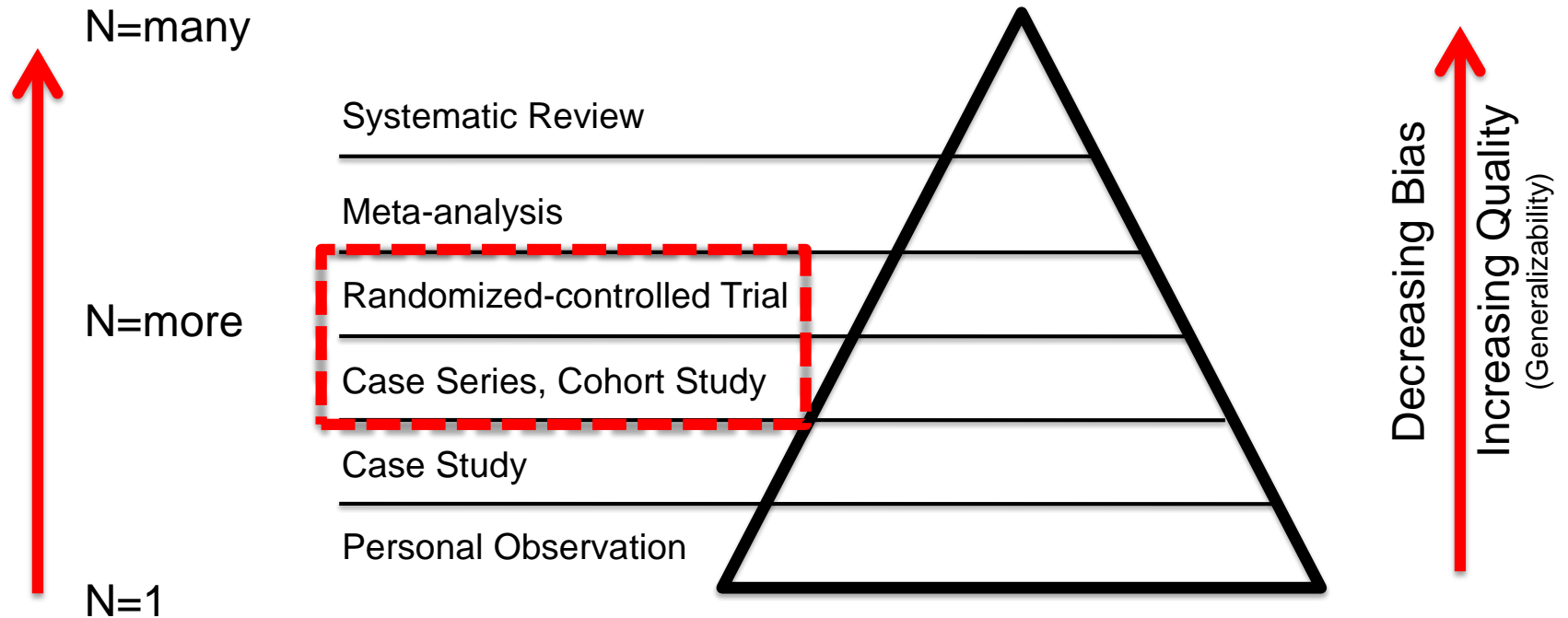
Andrew Taylor Still

Museum of Osteopathic Medicine,
SM [1985.1023.08]

An Evidence Pyramid



An Evidence Pyramid



Scholarship

- Ernest L. Boyer, Scholarship Reconsidered, Priorities of the Professorate, The Carnegie Foundation for the Advancement of Teaching, 1990
 - Discovery
 - Integration
 - Application
 - Teaching

THE SCHOLARSHIP OF INTEGRATION

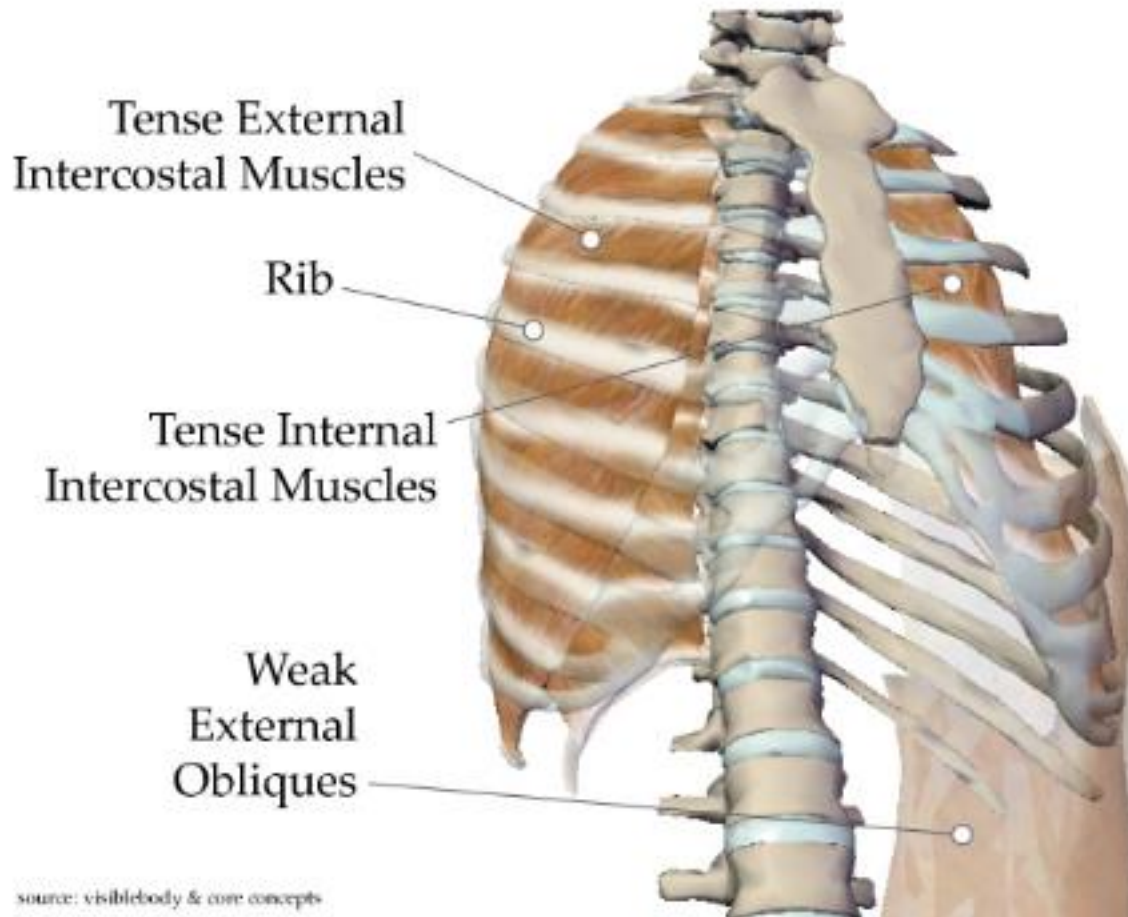
“In proposing the scholarship of integration, we underscore the need for scholars who give meaning to isolated facts, putting them in perspective. By integration, we mean making connections across the disciplines, placing specialties in a larger context, illuminating data in a revealing way, often education non-specialists too.”

“The connectedness of things is what the educator contemplates to the limit of his capacity. No human capacity is great enough to permit a vision of the world as simple, but if the educator does not aim at the vision, no one else will...”

References

1. Loring S, Garcia-Jacques M, Malhotra A, Pulmonary characteristics in COPD and mechanisms of increased work of breathing, *Journal of Applied Physiology*, 107 (1), 309-314, 2009
2. Cazzola M, Biscione, G, Pasqua F, Crigna G, Appodia M, Cardacci V, Ferri L, Use of 6-min and 12-min walking test for assessing the efficacy of formoterol in COPD, *Respiratory Medicine*, 102 (10), 1425-1430, 2008
3. Cazzola M, Biscione, G, Pasqua F, Crigna G, Appodia M, Cardacci V, Ferri L, Use of 6-min and 12-min walking test for assessing the efficacy of formoterol in COPD, *Respiratory Medicine*, 102 (10), 1425-1430, 2008
4. Zanotti E, Berardinelli P, Bizzarri C, Civardi A, Manstretta A, Rossetti S, Fracchia C, Osteopathic manipulative treatment effectiveness in severe chronic obstructive pulmonary disease: a pilot study, *Complement Ther Med*, 20 (1-2), 16-22, 2012

Muscle Inhibited Rib Movement



“Extrinsic”
Restrictions

Integrating reference 1-Loring S, Garcia-Jacques M, Malhotra A, Pulmonary characteristics in COPD and mechanisms of increased work of breathing, Journal of Applied Physiology, 107 (1), 309-314, 2009

Rib Dysfunction

Exhalation Somatic Dysfunction

Inhalation Somatic Dysfunction

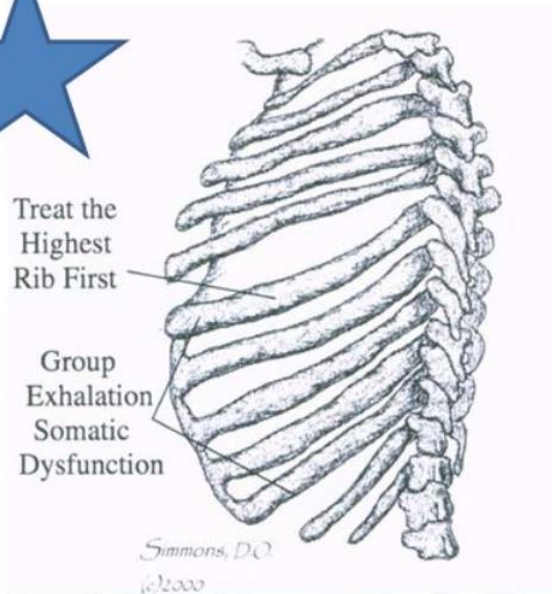


FIGURE 9-6: Exhalation somatic dysfunction.

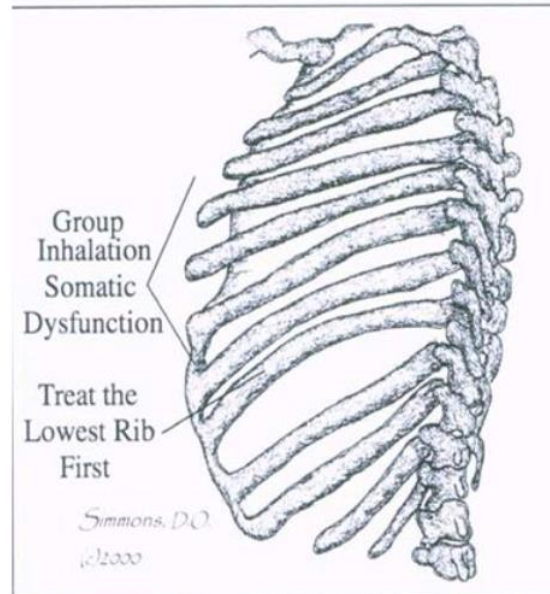
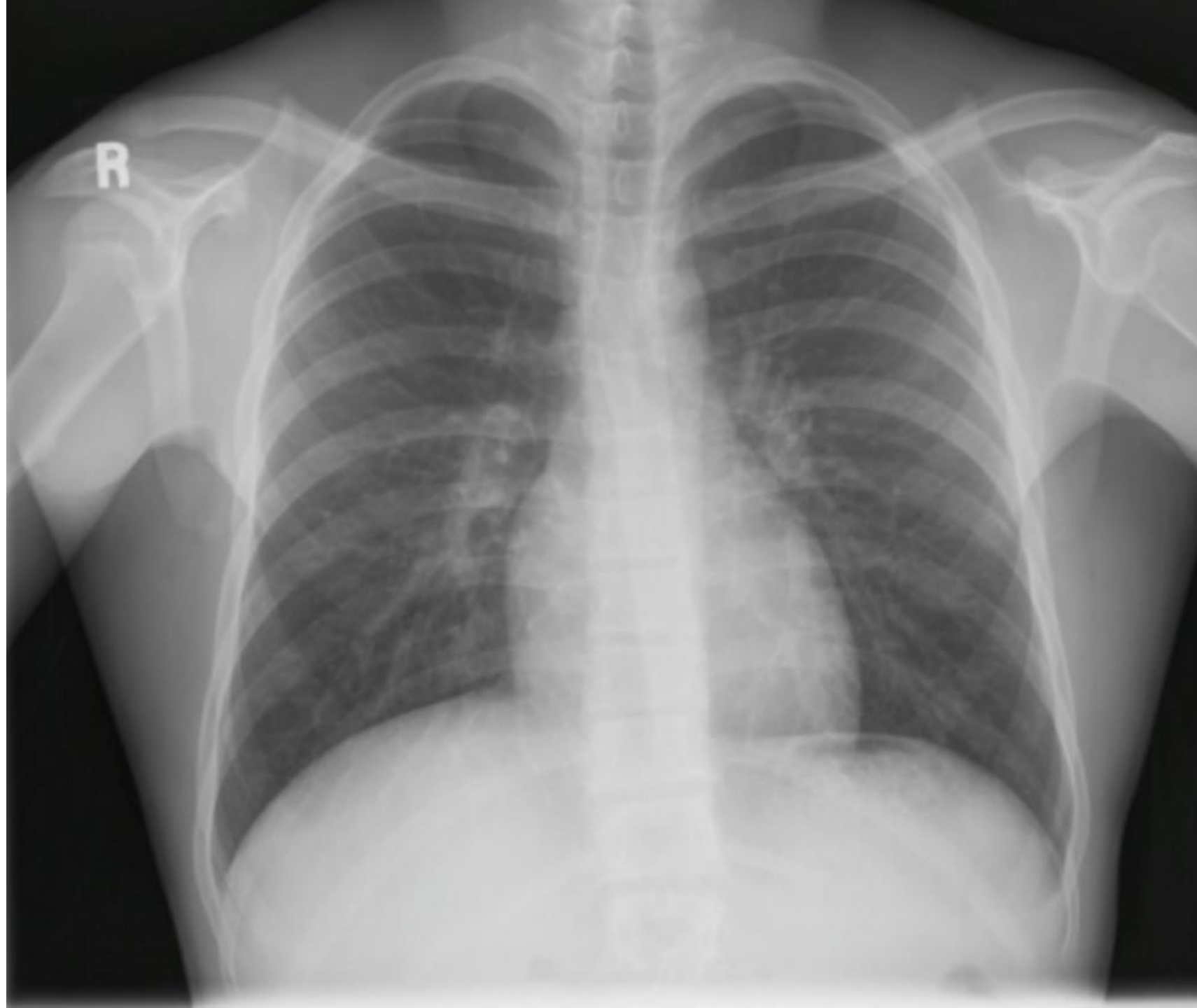


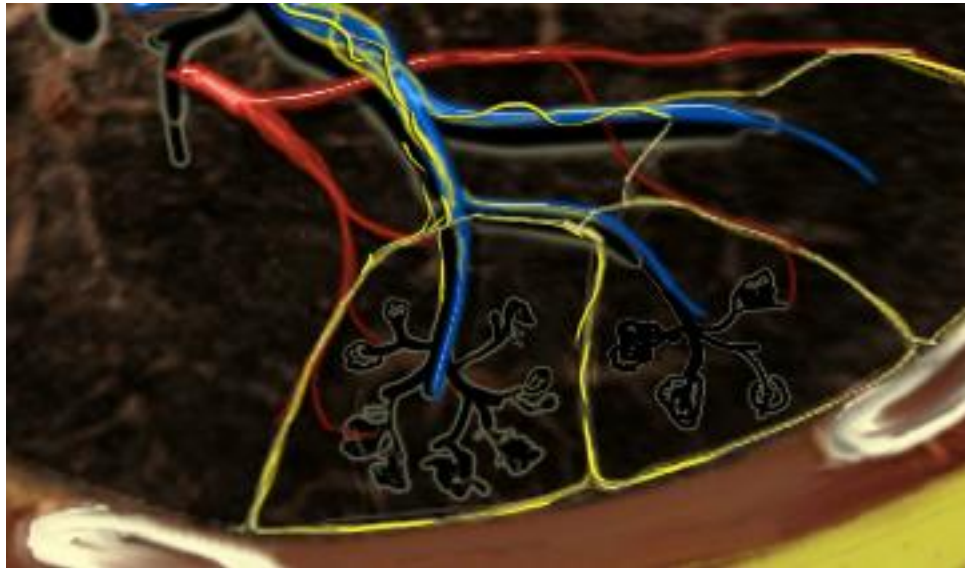
FIGURE 9-5: Inhalation somatic dysfunction.

“Extrinsic”
Restrictions

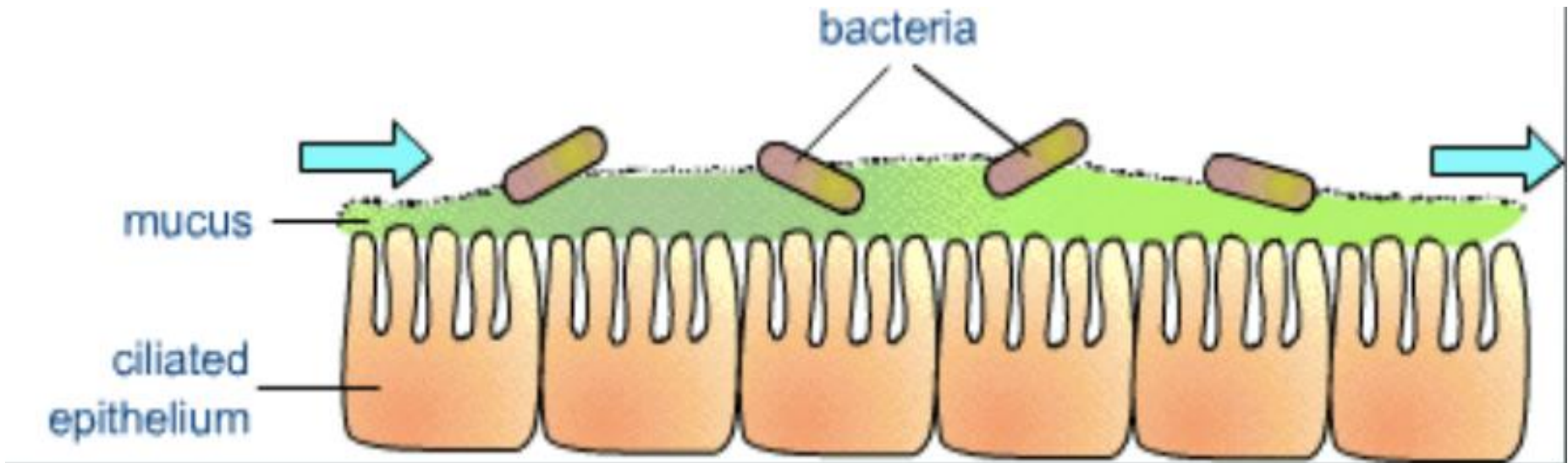
Integrating reference 1-Loring S, Garcia-Jacques M, Malhotra A, Pulmonary characteristics in COPD and mechanisms of increased work of breathing, Journal of Applied Physiology, 107 (1), 309-314, 2009



Pulmonary Architecture



Mucociliary Escalator

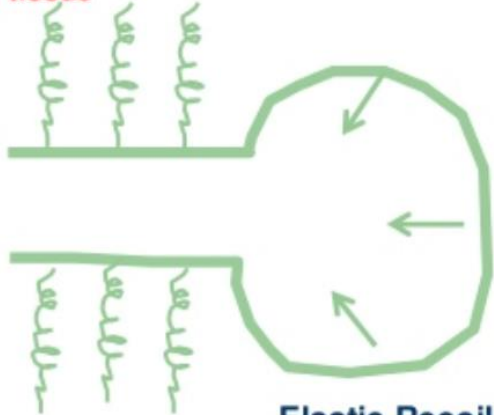


Impaired clearance of secretions can occur arising from any event or dysfunction that disturbs normal airway clearance mechanisms

- Chronic Bronchitis predominant
- Airway obstruction is the main problem



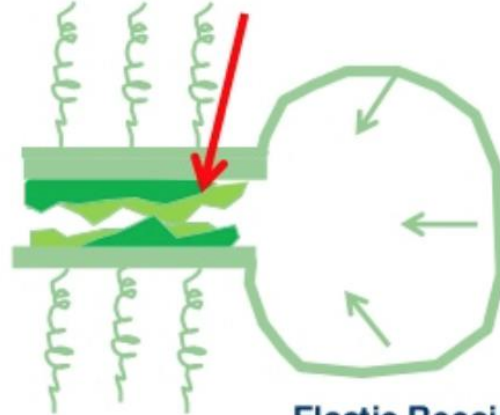
Airway supported
by connective
tissue



Elastic Recoil

Normal

Increased airway resistance
due to thickened wall and
secretions



Elastic Recoil

Chronic Bronchitis

Airway Resistance

Integrating reference 1-Loring S, Garcia-Jacques M, Malhotra A, Pulmonary characteristics in COPD and mechanisms of increased work of breathing, Journal of Applied Physiology, 107 (1), 309-314, 2009

Improvement in 6-minute walk distance associated
with treatment with tiotropium bromide is approximately

20m

30m

40m

50m

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Functional improvement following use of an inhaled bronchodilator

- Cazzola M, Biscione, G, Pasqua F, Crigna G, Appodia M, Cardacci V, Ferri L, Use of 6-min and 12-min walking test for assessing the efficacy of formoterol in COPD, Respiratory Medicine, 102 (10), 1425-1430, 2008
 - 22 stable patients
 - Stage II to stage IV (predominantly GOLD stage III)
 - Increased 6 minute walk distance by a mean of 54 meters at 6 weeks
- Prakash O, Kumar R, Rahman M, Gaur S, The clinico-physiological effect of inhaled Tiotropium Bromide and inhaled Ipratropium Bromide in severe Chronic Obstructive Pulmonary Disease, Indian J Allergy Asthma Immunol, 20(2), 105-111, 2006
 - 32 patients
 - Severe COPD (GOLD)
 - Increased 6 minute walk distance by a mean of 57 meter at 6 weeks (Tiotropium)

Using Scholarly Questions to Promote Osteopathic Principles and Practices for *Every Patient, Every Day...*

- In a patient with COPD, does the addition of OMT to pulmonary rehabilitation (as compared to standard pulmonary rehabilitation) improve exercise tolerance?

Integrating reference 3-Zanotti E, Berardinelli P, Bizzarri C, Civardi A, Manstretta A, Rossetti S, Fracchia C, Osteopathic manipulative treatment effectiveness in severe chronic obstructive pulmonary disease: a pilot study, *Complement Ther Med*, 20 (1-2), 16-22, 2012

Improvement in 6-minute walk distance associated with pulmonary rehabilitation plus OMT is approximately

10m

20m

30m

40m

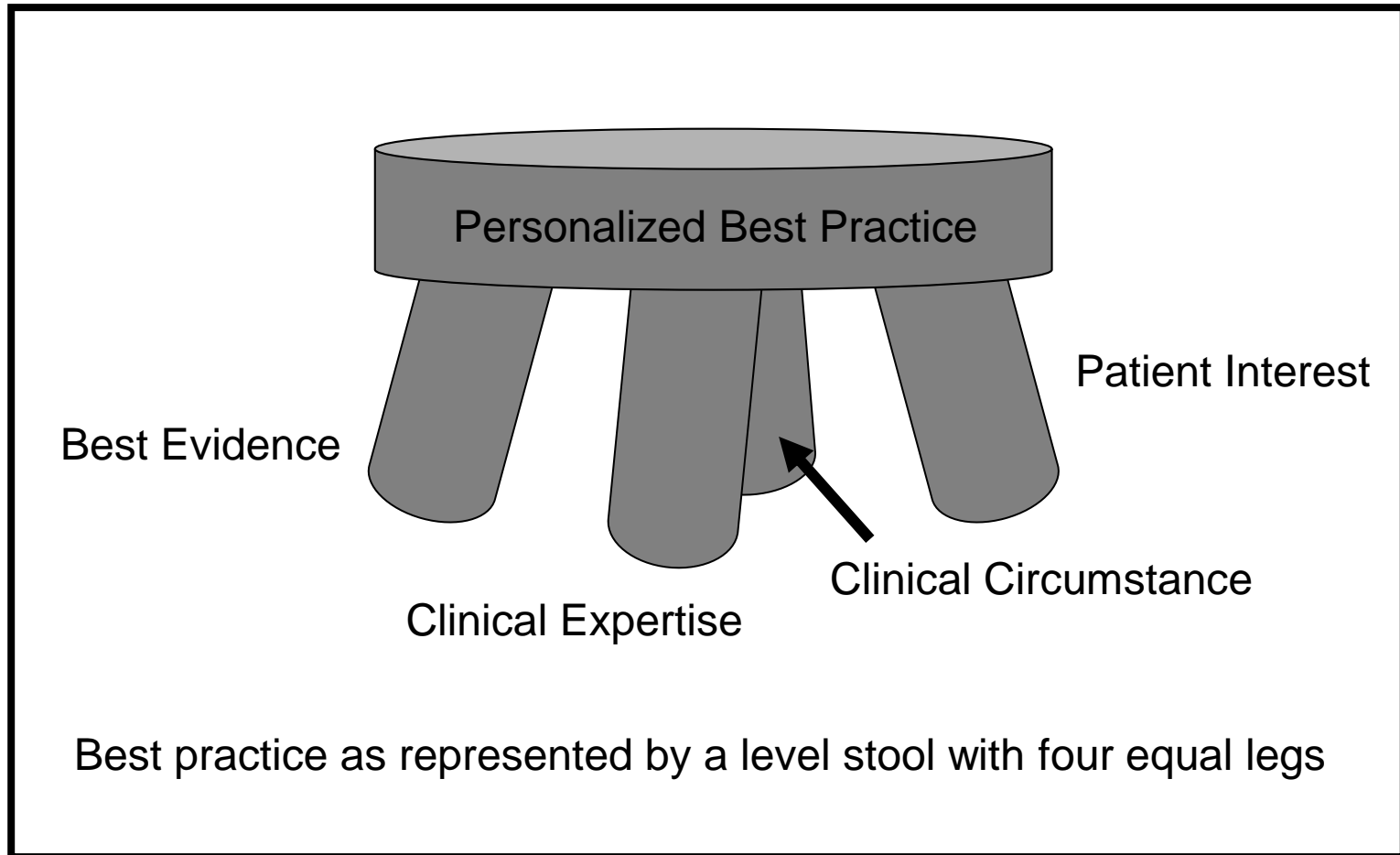
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Functional Improvement Associated with Application of OMT

- Zanotti E, Berardinelli P, Bizzarri C, Civardi A, Manstretta A, Rossetti S, Fracchia C, Osteopathic manipulative treatment effectiveness in severe chronic obstructive pulmonary disease: a pilot study, Complement Ther Med, 20 (1-2), 16-22, 2012
 - 20 stable patients treated with standard bronchodilator therapy
 - Stage III, severe COPD (GOLD)
 - Treatment group Increased 6 minute walk distance by 49 meters compared to control group

Creating a Personalized Best Practice: The Components of Evidence-based Practice



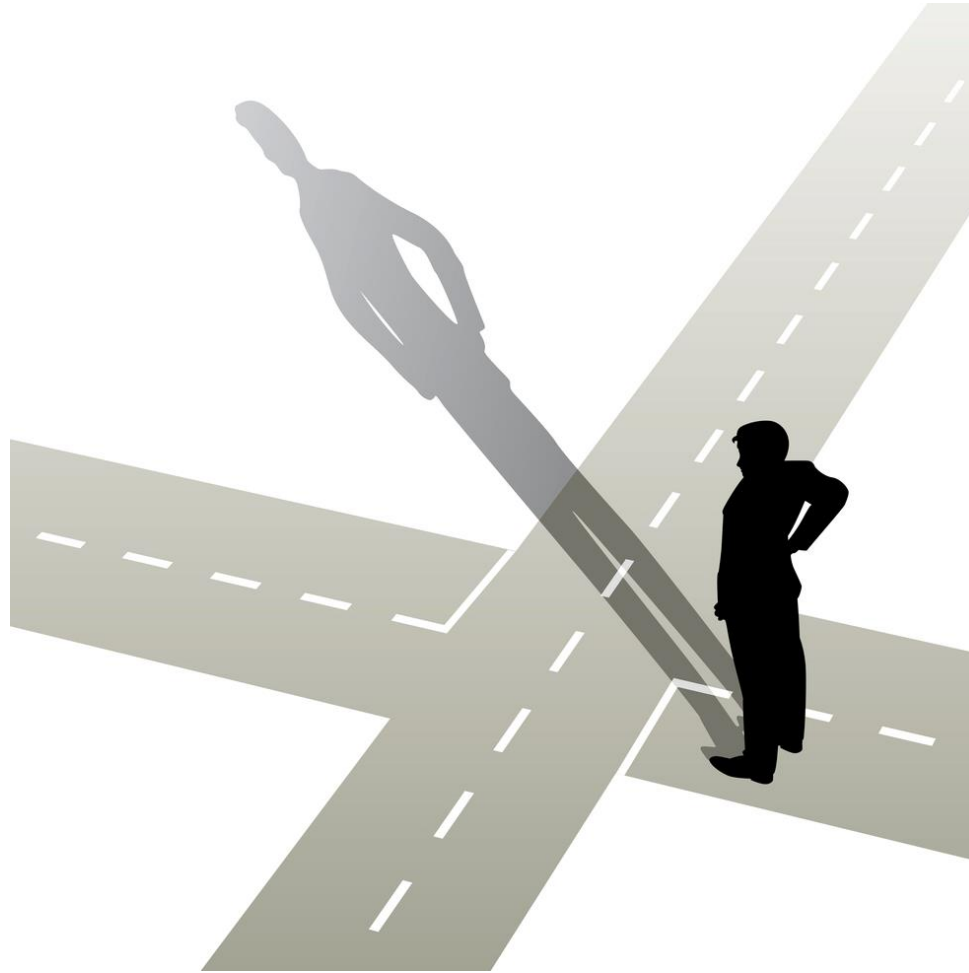
Cain, R, Promoting Osteopathic Thought in Clinical Education: A Patient-centered, Systems Approach to Health and Illness, 1st Edition, iTunes eBook, 2012

Brunner-La Rocca et al., Challenges in *personalized* management of chronic diseases—heart failure as prominent example to advance the care process , The EPMA Journal (2016) 7:2

Promoting Osteopathic Principles and Practice

3 Steps for Success

1. Approach patients from the perspective of delivering holistic health care, not disease care
 - Ask about and understand the patient's determinants of health
2. Set expectations
 - Think about the role of structural health
 - Look for and treat somatic dysfunction
3. Demonstrate inquiry and improvement
 - Use scholarly questions as a development tool

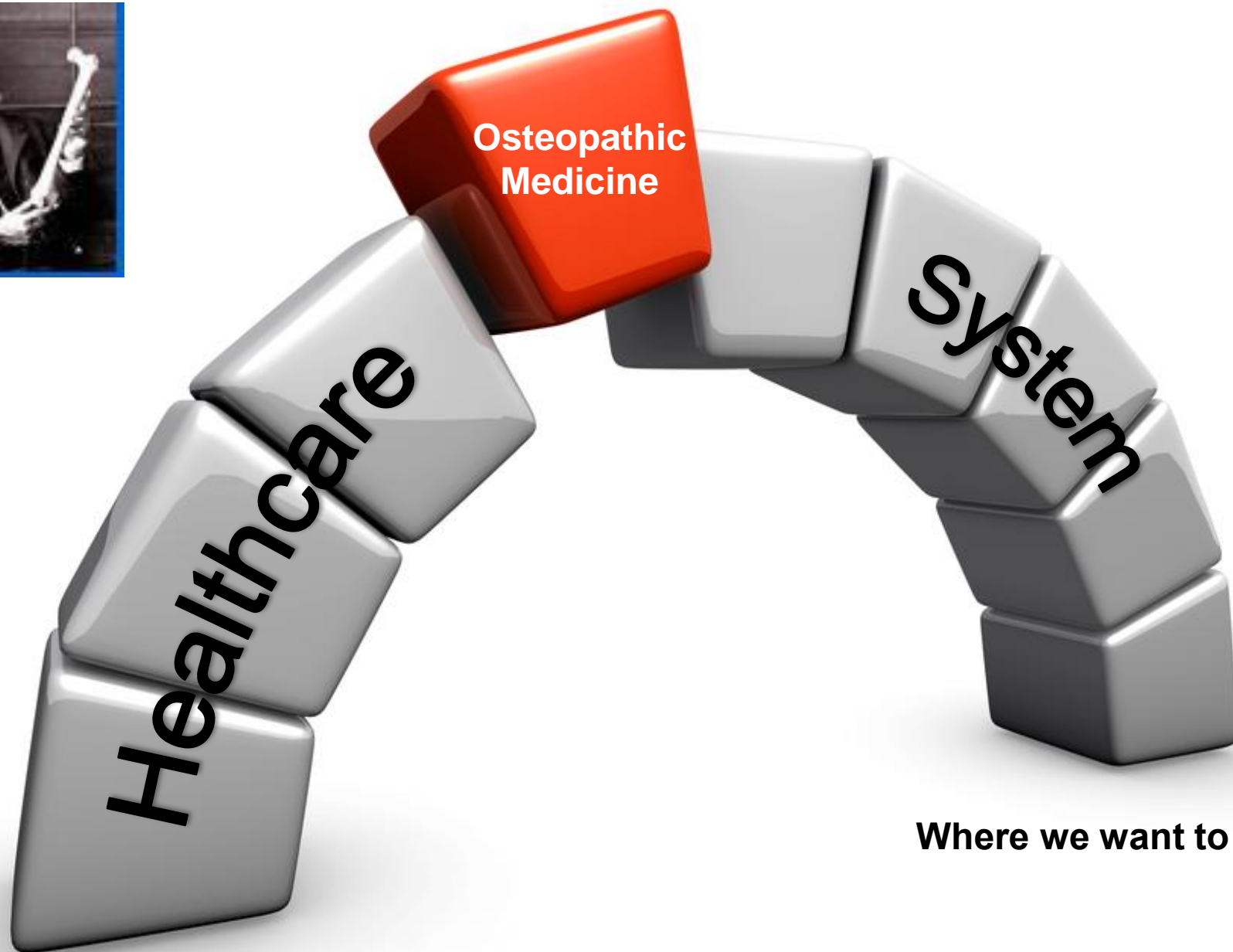
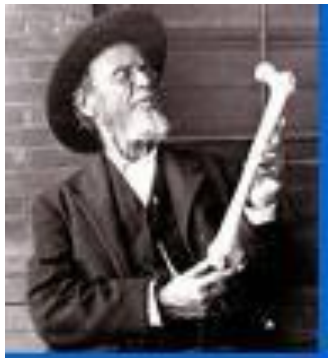


**Osteopathic medicine stands at the
crossroads of what was, is, and will be...**

Because of the osteopathic profession's common philosophy, principles, and practices, we have an opportunity to make a difference for the public we serve...

IATP

You can't find somatic dysfunction
if you don't look for it...



Where we are...

Where we want to be...

Bridging the Gap