Promoting Osteopathic Thought in Clinical Education

Every Patient, Every Day...

A Presentation to the AOCOO-HNS Residency Program Directors

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Osteopathic Thought

Where we are... Where we want to be...
Osteopathic medical education stands at the crossroads of what was, is, and will be...

Source of original drawing unknown.
Because of the osteopathic profession’s integrated organizational structure and our common philosophy, we have an opportunity to make a difference for the public we serve...
Agenda

• Background
  – The way we see the problem is the problem (Covey)
    • OPP/OMT Program Director Survey results

• Promoting Osteopathic Thought in Clinical Education

• Teaching and Assessing Osteopathic Thought
  – Integrating OPP/OMT into the other AOA competency domains
It’s About Perspective…
The Impact of Personality Type on Learning and Practice Behavior

The Parable of the Six Blind Men and the Elephant

Source of original drawings unknown.
The intended outcome of the AOA Osteopathic Principles and Practice competency requirement is

The expectations for what I must do as a program director to implement the AOA requirement to teach and assess Osteopathic Principles and Practice is

The expectations for what I must do as a program director to implement the AOA requirement to improve upon my existing efforts to teach and assess Osteopathic Principles and Practice is
I believe OPP should be emphasized as a key component of our resident training program.

ENT Program Directors: Only OMT has only a minimal role in my specialty

Ophthalmology Program Directors: Only OMT has only a minimal role in my specialty
Which of the following are reasonable expectations of trainees with regard to meeting the OPP competency?

- The resident should embrace a practice philosophy that emphasizes the...
- The resident should maintain an ongoing review of osteopathic literature...
- The resident should demonstrate application of osteopathic principles...
- The resident should demonstrate application of osteopathic philosophy...
- The resident should review at least one item (journal article, textbook...)
- The resident should include at least one item representing the osteop...
My personal comfort level as a program director with teaching osteopathic principles and OMT is

- Very Comfortable
- Somewhat Comfortable
- Somewhat Uncomfortable
- Very Uncomfortable

My personal interest level as a program director to teach osteopathic principles and OMT is

- Very Interested
- Somewhat Interested
- Somewhat Disinterested
- Very Disinterested
ED nurse to ED patient:

“Why did I pull this curtain?”

Story adapted from Liz Jazwiec, RN, author of *Eat THAT Cookie*
“The Zipper Effect”

- **Unzipping the zipper…**
  - Arising from several challenges, the osteopathic profession began to separate into two groups and to redefine itself in the 1960s
    - A smaller group retained OMT as a key component of practice with a focus upon the ‘host’
    - A larger group moved toward greater specialization with a focus upon the ‘disease’ and typically viewed OMT as techniques to be applied under certain conditions (and often by someone else)
    - Both groups laid claim to ‘thinking’ in a manner different than an allopathic physician (holism)
  - This ‘unzipping’ was essentially complete by the 1990s

- **Zipping the zipper…**
  - We need to create a cradle of learning to support the development of a culture that encourages the re-integration of OPP/OMT across all specialties
    - Such an effort would
      - Employ principles of innovation
      - Employ a consistent behavior over time (making it evident why we pull the curtain—every patient, every time, every day)
      - Promote research advancing osteopathic thought at all levels of the profession (the volume of available information must be increased and only we can do that)

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• **Promoting Osteopathic Thought in Clinical Education**

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Ideal Patient Care

What is it and how does it relate to osteopathic thought?
Elements Impacting Clinical Decision Making

- **Positive system effect**
  - When not to do something
  - Good Pt. outcome
  - When to do something
  - Bad Pt. outcome

- **Negative system effect**

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Elements Impacting Clinical Decision Making

IDEAL PATIENT CARE

Positive system effect

Good Pt. outcome

Bad Pt. outcome

When not to do something

Negative system effect

When to do something

Ideal Patient Care represents the work of John Kenagy, MD.
http://www.kenagyassociates.com/team.john.php

Dr. Kenagy is the founder of Kenagy & Associates, a firm committed to getting patients exactly what they need at continually lower cost (Ideal Patient Care).
Bridging the Gap

What can help us move closer to the destination of Ideal Patient Care?

Source of original photograph unknown.
Creating a Best Practice

Best practice as represented by a level stool with four equal legs
Creating a Best Practice

Best practice as represented by a level stool with four equal legs

- Best Evidence
- Clinical Experience
- Clinical Circumstance
- Patient Interest
An Evidence Pyramid
An Evidence Pyramid

Systematic Review
Meta-analysis
Randomized-controlled
Case Series, Cohort Study
Case Study
Personal Observation
Best Evidence
Thinking about the Information Pyramid

Source of original diagram unknown.
Developing a Patient-centered, Systems Approach to Health and Illness

Health Potential

Patent

"The Black Box"

Initiators

Responses

Disease State (presentation)
Natural History of Disease
(a similar curve can be constructed for acute, chronic and non-specific problems)

A. asymptomatic
B. begin symptoms
C. compensated symptoms
D. decompensated symptoms
E. end-stage disease
F. fatality

Natural History of Disease
(a similar problem can be constructed for acute, chronic, and non-specific problems)

Developing a Patient-centered, Systems Approach to Health and Illness

Health Potential → PATIENT

Environmental Cradle

Initiators → Responses

Disease State

2nd order problem solving is typically directed at the ‘initiators’

1st order problem solving is typically directed at the ‘effects’ arising from initiators

3rd order problem solving is typically directed at the ‘environmental cradle’

This is often overlooked in our current system of care for a number of reasons, including high patient volumes, poor reimbursement, and lower physician comfort levels with testing and treatment decisions.

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Developing a Patient-centered, Systems Approach to Health and Illness

Health Potential

PATIENT

Initiators

Responses

Environmental Cradle

Disease State (presentation)

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

“The Black Box”

Where is the least amount of training offered in most medical schools and residencies?
A focus on the environmental cradle and promoting or maintaining the health of a patient…”healthcare”

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The Osteopathic Paradigm

• This is a model intended to help us define our professional distinctiveness—‘the DO difference’
  – A paradigm is commonly defined as the ‘way we see the world’

• Our profession is different from our counterparts because it has a paradigm within which and from which we should practice—it is a strength
  – Applying this practice paradigm to every patient, every day sets us apart

• To make our distinctiveness clear, we must be certain everyone understands why we ‘pull the curtain’
Defining the Osteopathic Paradigm

PHILOSOPHY/EDUCATION

Holistic & Patient-centered

Respect for the Human Body’s Environmental Cradle

Focus/Emphasis

Services/Training

Manipulative treatment/Primary care core and unlimited scope of practice
Developing a Patient-centered, Systems Approach to Health and Illness

Disease Limited Model
Returning a patient to health and eliminating illness is focused upon treatment of the disease, the responses to initiators, and the initiators

Health Potential

Environmental Cradle

Disease State

Initiators

Responses

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Based upon the work of Edward Stiles, DO
Developing a Patient-centered, Systems Approach to Health and Illness

Health Potential

PATIENT

Environmental Cradle

Initiators

Responses

Disease State

Host Limited Model
Maintaining a patient's health or returning a patient to health and eliminating illness is focused upon treatment of the environmental cradle

2010 Proactive Health Management, LLC.
Based upon the work of Edward Stiles, DO
Developing a Patient-centered, Systems Approach to Health and Illness
“Osteopathic Thought”

Host + Disease Model = Patient-centered, Systems Approach
Returning a patient to health and eliminating illness is focused upon treatment of both the host and the disease

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Based upon the work of Edward Stiles, DO
Is it possible that osteopathic distinctiveness, including the effective use of osteopathic thought, offers the ‘final connection’ necessary for achieving Ideal Patient Care?

If we fail to apply osteopathic thought and to promote osteopathic distinctiveness, are we effectively limiting our patient’s ability to achieve their best outcome possible? Is there an impact upon the healthcare system?
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The AOCCOO-HNS ‘Struggle’
With OPP/OMT Integration
What about Structure-Function Relationships?

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

  - **DISEASE + host = Illness**
    - 1\(^{st}\) and 2\(^{nd}\) order problem solving (medical/surgical care) is most likely to be successful with a limited role for OMT

  - **HOST + disease = Illness**
    - 3\(^{rd}\) order problem solving (including OMT) is more likely to be successful with a lesser role for medical/surgical care

  - **HOST + DISEASE = Illness**
    - 1\(^{st}\) and 2\(^{nd}\) order problem solving (medical/surgical care) is typically helpful but doesn’t completely allow us to achieve the outcome of Ideal Patient Care
    - The addition of 3\(^{rd}\) order problem solving (including OMT) better enables the patient to realize their full “health potential”

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

• The presence of dysfunction amenable to OMT

• We should not use OMT simply because we can

• We should not apply generic techniques to a diagnosis (anymore than we would use the same antibiotic to treat every pneumonia)

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

• The presence of dysfunction amenable to OMT
  – Somatic dysfunction
  – Visceral dysfunction

Which we must actually look for if we are to offer a patient-centered, systems approach to health and illness (osteopathic healthcare)…

Based upon the work of Edward Stiles, DO
Pikeville College-School of Osteopathic Medicine
Classification of Somatic/Visceral Dysfunction and Potential Roles for OMT

- Pure somatic/visceral dysfunction
- Surgical/post-op somatic/visceral dysfunction
- Disease-associated somatic/visceral dysfunction
- Primary OMT
- Adjunctive OMT
- Preventive OMT

Based upon the work of Edward Stiles, DO
Pikeville College-School of Osteopathic Medicine
The Clogged Drain and Osteopathic Thought

What does this clogged drain have in common with our approach to teaching and using OMT?
The Clogged Drain and Osteopathic Thought
Building Evidence: Adult Respiratory Distress Syndrome (ARDS)

- 1980’s
  - Sheep studies reveal that ventilator use induces damage to the lung at the alveolar-capillary membrane level
    - Higher pressure and volumes are associated with greater damage
Building Evidence: Adult Respiratory Distress Syndrome (ARDS)

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• 1990’s
  – Grandview Medical Center pulmonologists use this data to change management strategy for patients on the ventilator
Building Evidence: Adult Respiratory Distress Syndrome (ARDS)

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    - Higher pressure and volumes are associated with greater damage

- **1990’s**
  - Grandview Medical Center pulmonologists use this data to change management strategy for patients on the ventilator

- **Late 1990’s**
  - Human research reveals that ventilator use induces damage at the alveolar-capillary membrane level
    - Higher pressures and volumes are associated with greater damage

- **2000’s**
  - Guidelines published to recommend change in management strategy for patients on the ventilator
    - Reduction in mortality
    - Reduction in barotrauma/volutrauma
Examples

• Chronic Cough
  – 6 weeks, non-smoker
  – No GERD s/s, (-) pH study
  – No PND, chronic sinus disease or allergy s/s
  – No recent infections

• *3rd* order problem solving—things to consider
  – What percentage of patients with chronic cough have no identifiable cause?
  – Is current management intuitive or precise?
  – What is the potential impact of rib dysfunction on development of chronic cough?
  – What is the potential impact of an OA dysfunction on development of chronic cough?
  – What is the potential impact of cervical dysfunction on development of chronic cough?
  – How might allostatic load contribute to this complaint?

• Dry Eyes
  – 6 weeks, no autoimmune disease
  – No recent infections, no contact use
  – 35 years old

• *3rd* order problem solving—things to consider
  – What percentage of patients with dry eyes have no identifiable cause?
    • What is the source of inflammation contributing to dry eyes?
  – Is current management intuitive or precise?
  – What is the potential impact of a cervical lesion on tear formation?
  – What is the potential impact of an upper thoracic lesion on tear formation?
  – What is the potential impact of a cranial lesion on tear formation?
  – How might allostatic load contribute to this complaint?
Examples

• Recurrent otitis media
  – 10 year old patient
  – 3 episodes of otitis media over 18 months
  – Using the environmental cradle model, identify potential 3rd order causes for recurrent otitis media
  – Propose research to develop a treatment plan addressing at least one of the 3rd order causes
    • Focus on structure-function changes if possible

• Recurrent conjunctivitis
  – 10 year old patient
  – 3 episodes of conjunctivitis over 18 months
  – Using the environmental cradle model, identify potential 3rd order causes for recurrent otitis media
  – Propose research to develop a treatment plan addressing at least one of the 3rd order causes
    • Focus on structure-function changes if possible
Elements Impacting Clinical Decision Making

**IDEAL PATIENT CARE**

- **Positive system effect**
  - When not to do something
  - Good Pt. outcome
- **Negative system effect**
  - When to do something
  - Bad Pt. outcome

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Elements Impacting Clinical Decision Making

When not to do something
When to do something
Good Pt. outcome
Bad Pt. outcome
Positive system effect
Negative system effect

TARGET
# Program Core Competency Plan

**Osteopathic Principles and Practice Matrix**

**Learning Environments**

<table>
<thead>
<tr>
<th>Environment Type</th>
<th>Learning Environments</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care</td>
<td>Hospital inpatient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outpatient</td>
<td></td>
</tr>
</tbody>
</table>

**Integrated Competency Domains**

<table>
<thead>
<tr>
<th>Medical Knowledge</th>
<th>Practice-Based Learning</th>
<th>Patient Care</th>
<th>Interprofessional Practice</th>
<th>Professionalism</th>
<th>Communication &amp; Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insightful Learning</td>
<td>Associated with Elements 1 &amp; 2</td>
<td>Associated with Elements 1 &amp; 2</td>
<td>Associated with Elements 1 &amp; 2</td>
<td>Associated with Elements 1 &amp; 2</td>
<td>Associated with Elements 1 &amp; 2</td>
</tr>
<tr>
<td>Patient Care</td>
<td>Recognize the role of osteopathic medicine in patient care</td>
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<td></td>
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<tr>
<td></td>
<td>Integrate complementary concepts and OMT into patient care</td>
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<tr>
<td></td>
<td>Demonstrate understanding of the role of osteopathic medicine in patient care</td>
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<tr>
<td></td>
<td>Caring for patients, families, and communities</td>
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</tbody>
</table>

**Appropriate for level of training as defined by SPHL or Program Director**

- Integrative Learning/Inheritance
- Patient Care
- Interprofessional/Team-Based Learning
- Other (describe below)

**Evaluation Methods**

Each scheme requires two methods of evaluation. Two different categories are assessed:

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Rotation Evaluation</td>
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<tr>
<td>Objective/Subjective</td>
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<tr>
<td>360 Evaluation</td>
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<tr>
<td>Survey</td>
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<tr>
<td>Written Examination</td>
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<tr>
<td>Oral Examination</td>
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<tr>
<td>OSCE</td>
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<tr>
<td>CE or Mini-CEX</td>
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<tr>
<td>Checklists</td>
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<tr>
<td>Simulation or Task Trainer</td>
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<tr>
<td>Interviews</td>
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<tr>
<td>Chart Review</td>
<td></td>
</tr>
<tr>
<td>Procedure or Case Logs</td>
<td></td>
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<tr>
<td>Records Service</td>
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<tr>
<td>Other (describe below)</td>
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Element 1: Demonstrates competency in understanding and application of OMT (knows what to do)
Element 2: Integrates osteopathic concepts and OMT into patient care (knows when and how to do it)
Element 3: Applies osteopathic principles and practice in professional activities (knows why to do it)
THE OSTEOPATHIC OATH

I do hereby affirm my loyalty to the profession I am about to enter.

I will be mindful always of my great responsibility to preserve the health and the life of my patients, to retain their confidence and respect both as a physician and a friend who will guard their secrets with scrupulous honor and fidelity, to perform faithfully my professional duties, to employ only those recognized methods of treatment consistent with good judgment and with my skill and ability, keeping in mind always nature's laws and the body's inherent capacity for recovery.

I will be ever vigilant in aiding in the general welfare of the community, sustaining its laws and institutions, not engaging in those practices which will in any way bring shame or discredit upon myself or my profession. I will give no deadly drugs to any, though it may be asked of me.

I will endeavor to work in accord with my colleagues in a spirit of progressive cooperation and never by word or by act cast imputations upon them or their rightful practices.

I will look with respect and esteem upon all those who have taught me my art. To my college I will be loyal and strive always for its best interests and for the interests of the students who will come after me. I will ever be alert to adhere to and develop the principles of osteopathy as taught by Andrew Taylor Still.
Examples

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Using a Scholarly Question to Promote Osteopathic Thought

- In a population of patients with recurrent otitis media, what is the role of:
  - Secretory IgA?
  - OMT to stimulate slgA production?

- In a population of patients with recurrent conjunctivitis, what is the role of:
  - Secretory IgA?
  - OMT to stimulate slgA production?

- Medical Knowledge
  - Understand role of slgA in prevention of mucosal infections
  - Understand effect of OMT on the production of slgA

- Practice-based Learning
  - Search literature to understand the role of slgA in immunity and recurrent mucosal infection
  - Search literature to identify a relationship between OMT and slgA production

- Systems-based Practice
  - Determine how this information might impact outcomes and cost of care if applied (or if not applied)

- Patient Care
  - Determine how to apply this knowledge to promote Ideal Patient Care

- Communications
  - Determine how to convey this information meaningfully to the patient

- Professionalism
  - Relate the decision making to the key phrases of the osteopathic oath (how can we further advance our understanding?)
Summary

- OPP/OMT is a challenge for the profession’s non-primary care physician educators
  - Personality type likely plays a role in this challenge
- Advancing osteopathic thought will require an intentional effort by the profession, not just modeling
- Evidence comes in many forms—we must look for it without confirmation bias
- Osteopathic thought may contribute to higher quality patient care in an outcome based system of compensation
- OMT is not about a complaint defining a technique
- Simple approaches can be used to teach and assess osteopathic thought