

# Proposed Guidelines for an Osteopathic Neuromusculoskeletal Medicine (ONMM) Residency Curriculum: Osteopathic Manipulative Techniques to Address Patient Care



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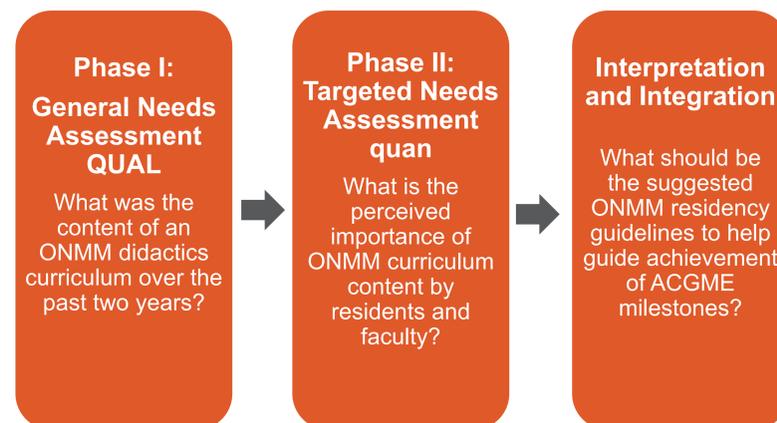
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## Background

- Since 2014, the Accreditation Council for Graduate Medical Education (ACGME), the American Osteopathic Association (AOA), and the American Association of Colleges of Osteopathic Medicine (AACOM) have moved towards a unified accreditation system for Graduate Medical Education.<sup>1,2</sup>
- Merging of programs completed in July 2020, including the transition of Osteopathic Neuromusculoskeletal Medicine (ONMM) Residency programs.
- ACGME milestones specific to ONMM residencies have been developed and implemented to help review resident performance through the course of residency, including those for Osteopathic Manipulative Treatment (OMT).<sup>3</sup>
- The purpose of this research was to develop guidelines to help guide the achievement of these milestones.

## Methods

- Kern's six-step approach to curriculum development for medical education was used as the theoretical foundation<sup>4</sup>
- Mixed methods exploratory sequential approach<sup>5</sup>
  - Qualitative analysis of the topics covered during ONMM didactics from July 2018 to September 2020 in one ACGME accredited ONMM residency program
  - Open and closed-question survey of perceived resident and faculty needs for an ONMM residency curriculum was developed based on qualitative analysis.
  - Results of qualitative analysis and the open and closed question survey were used to develop objectives for an ONMM residency curriculum grouped according to ACGME milestones and include educational methods and evaluation strategies.
- The purpose of this presentation is to present ONMM curriculum guidelines developed specifically for the ACGME milestone of Patient Care 1: Osteopathic Manipulative Techniques (Direct and Indirect)



## Results

### ONMM Competency Based Objectives, Educational Methods, and Learner Evaluation for Patient Care Using Osteopathic Manipulative Techniques (OMT)

#### ONMM Competency Based Objective

**Objective 1: (psychomotor) By the end of residency, learners will be able to independently apply and teach others how to use direct OMT techniques.<sup>6,7</sup>**

- Muscle Energy
- High-Velocity/Low Amplitude
- Articular technique and springing

**Objective 2: (psychomotor) By the end of residency, learners will be able to independently apply and teach others how to use indirect OMT techniques.**

- Counterstrain Techniques
- Facilitated Positional Release
- Exaggeration technique
- Functional method

**Objective 3: (psychomotor) By the end of residency, learners will be able to independently apply and teach others how to utilize a variety of other OMT techniques, including but not limited to:**

- Still's Technique
- Myofascial Release
- Balanced Ligamentous Tension and Ligamentous Articular Strain
- Lymphatic technique
- Soft tissue techniques
- Osteopathic Cranial Manipulation
- Visceral manipulation
- Chapman reflex treatment
- Fascial unwinding
- Percussion vibrator method

**Objective 4: (psychomotor and cognitive) By the end of residency, learners will successfully complete a 40-hour basic course in Osteopathic Cranial Manipulative Medicine.**

**Objective 5: (psychomotor) By the end of residency, learners will be able to employ appropriate biomechanics in the application of OMT to ensure their own physical safety and prevent injury.**

#### Educational Method(s)

- Hands-on laboratory didactics
- Application of knowledge in OMM continuity clinic and on rotation
- Completion of a 40-hour basic course in Osteopathic Cranial Manipulative Medicine

#### Evaluation of Learner

- Direct observation and feedback by faculty and co-residents in OMM didactics
- Direct observation and feedback by faculty in OMM clinic and on rotation
- End-of-rotation evaluation
- ONMM Residency Milestone evaluation every 6 months
- ONMM In-Training Exam
- Certificate of completion of a 40-hour basic course in Osteopathic Cranial Manipulative Medicine

## Discussion

- **Curriculum objectives:** Five objectives developed for Patient Care 1: Osteopathic Manipulative Techniques (OMT) (Direct and Indirect).<sup>3</sup>
  - Intended to be met by the end of residency.
  - Labeled as cognitive, affective, or psychomotor.<sup>5</sup>
  - Objectives similarly developed for each ACGME milestone.<sup>3</sup>
- **Curriculum Implementation:**
  - **Curriculum committee:** program director, assistant program director, designated faculty, chief resident(s), and/or program coordinator
  - **Academic calendar:** to coordinate sign-ups and track activities
  - **Time:** weekly didactics (4 hours), curriculum committee meetings, faculty curriculum development, assigned chief or resident duties.
  - **Funding:** Completion of a 40-hour basic cranial course is required for AOBNNM board certification (K. Sedrick, email communication, April 2021).
  - **Facilities:** support hands-on activities with appropriate PPE, OMM tables, and spacing to allow social distancing. AV equipment.
- **Support**
  - **Internal:** Curriculum committee, faculty, and resident participation
  - **External:** ACGME, AAO, AACOM, and AOA
- **Evaluation and Feedback**
  - Please see results for formative and summative evaluation
  - Resident/faculty satisfaction survey pre- and post- implementation
- **Curriculum Maintenance**
  - Pre- and post-test survey, in-service exam scores, and regular curriculum committee meetings
  - Revision may be needed as ACGME milestones are revised<sup>6</sup>
  - Consider pathway residents enter ONMM post-graduate education<sup>7</sup>
  - Adopt curriculum from existing evidence-based medical and post-graduate educational programs.<sup>8</sup>

## Conclusion

ACGME milestones provide an opportunity to develop more specific guidelines to meet residency graduation requirements such as proficiency in OMT. Proposed guidelines have been submitted to the American Academy of Osteopathy Post-Graduate Training Committee for consideration and as a guide for implementation in ACGME accredited ONMM residency programs.

## References

References are available upon request.

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