

# Successful Implementation of Osteopathic Principles in Practice (OPP) in an Anesthesiology Program

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## INTRODUCTION

- In the Single Accreditation System (SAS), residency programs can highlight their training in Osteopathic Principles and Practice (OPP) by achieving Osteopathic Recognition (OR) from the Accreditation Council for Graduate Medical Education (ACGME).<sup>1</sup>
- Having OR status means that programs emphasize holistic patient care and teach residents in the tenets of Osteopathic practice.<sup>2</sup>
- Since the inception of the SAS, the number of surgical or specialty-based programs achieving OR has been low (Figure 1).<sup>3</sup>

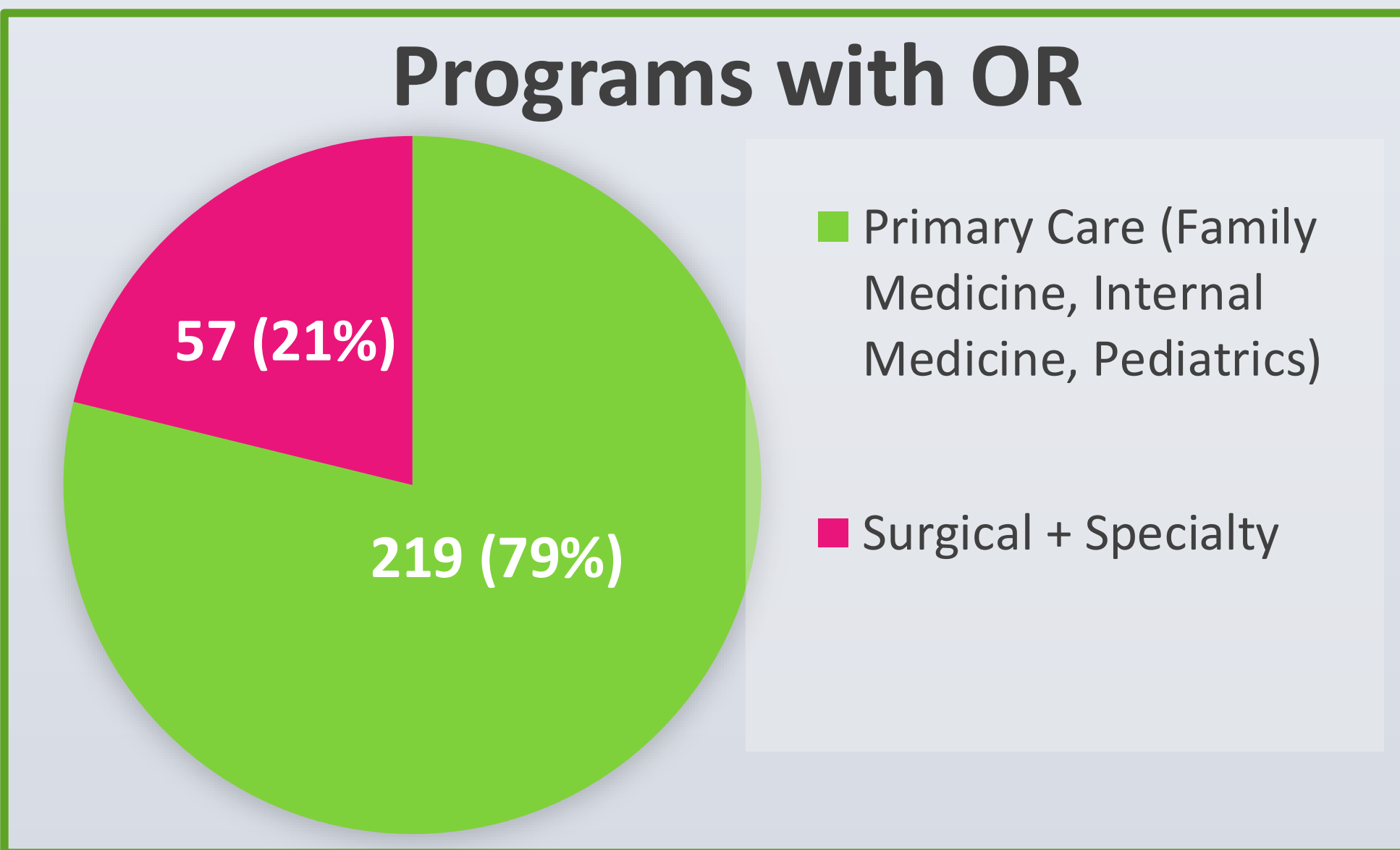


Figure 1: Percentage of Primary Care Programs vs Non-Primary Care Programs that have achieved Osteopathic Recognition or applied for Osteopathic Recognition from the American Council for Graduate Medical Education, as of date: March 7, 2025

- There is currently a lack of literature addressing the effectiveness of implementing OPP in specialty residencies.

## OBJECTIVES

- Our goal was to demonstrate the efficacy of the Anesthesia program achieving OR through assessments of feedback from resident and faculty surveys and ACGME OR Review Committee citations.

Hypothesis:

- The Anesthesia program would be able to exhibit success in Osteopathic Recognition through analysis of its programing, with few citations, and be looked at positively by residents/faculty.

## METHODS

This study explored the efficacy of an Anesthesiology program at a community based, mid-sized hospital in the midwest implementing an OPP curriculum (Table 1) and achieving OR status utilizing the following methods:

1. A comparison of the resident responses on the annual ACGME OR program survey before and after the program achieved OR Continued- Accreditation status in September of 2022. Statistical differences were determined using chi-square tests, with p-value set at 0.05 (Table 2).
2. A descriptive report of ACGME OR review committee citation letters issued throughout the process of this program receiving Continued OR status.
3. Results from a program-administered Likert-based anonymous survey (Table 3) on the OPP programing utilizing a validated "Return on Learning"<sup>4</sup> survey among faculty, residents and administrative staff of the program. For analysis, the responses "strongly disagree", "disagree", and "neutral" were combined and "agree" and "strongly agree" were combined.

## METHODS CONTINUED

Osteopathic Principles in Practice (OPP) Implementation in the Anesthesia Curriculum	
ACGME OR Competencies	Curriculum Implementation
i. OPP-Patient Care	<ul style="list-style-type: none"><li>• OMM Labs with real-world focus with topics including: structural evaluation and mobility, pre assessment testing/airway structure and mechanics, perioperative/postoperative care and complications</li><li>• Associate OMM clinic</li></ul>
ii. OPP-Medical Knowledge	<ul style="list-style-type: none"><li>• Clinical Osteopathic Recognition Training Exam (CORTEX)</li><li>• OMM assessments</li></ul>
iii. OPP-Systems Based Practice	<ul style="list-style-type: none"><li>• Pre-Admission Testing and Peri-Anesthesia Unit OPP performance</li></ul>
iv. OPP-Practice Based-Learning	<ul style="list-style-type: none"><li>• Osteopathic Journal Club</li><li>• OPP Grand Rounds</li></ul>
v. OPP-Professionalism	<ul style="list-style-type: none"><li>• Required OMM logs</li><li>• Clinical Instructor opportunities</li><li>• OPP didactics performance</li></ul>
vi. OPP-Communication	<ul style="list-style-type: none"><li>• OPP on Clinical Rotations</li></ul>

Table 1: Osteopathic Curriculum implemented in an anesthesia program based on ACGME competencies, OMM= Osteopathic Manipulative Medicine

## RESULTS

### 1. ACGME OR Program Survey

CHI-SQUARED TESTS FOR PRE VS. POST OR RECOGNITION		
QUESTION	CHI-SQUARED VALUE	P-VALUE
Do you receive an adequate education in OPP in the Hospital/ Inpatient Setting?	3.31	0.069
Do you receive an adequate education in OPP in Clinic/Outpatient Setting?	0.138	0.71
Do you receive an adequate education in OPP in Didactic Setting?	1.032	0.31
Do you receive an adequate education in OMM, as applicable to your specialty/subspecialty in Hospital/Inpatient Setting?	3.31	0.069
Do you receive an adequate education in OMM, as applicable to your specialty/subspecialty in Clinic/Outpatient setting?	0.138	0.71
Do you receive an adequate education in OMM, as applicable to your specialty/subspecialty in Didactic Setting?	1.032	0.31
To what extent do you feel your non-osteopathic faculty members and staff are supportive of osteopathic residency/fellowship education?	1.246	0.264
To what extent do you feel your osteopathic faculty members role model the integration of OPP?	3.028	0.082
To what extent do you feel you are supervised by osteopathic faculty members? *	4.506	0.034
To what extent do you feel you are evaluated on OPP? *	4.367	0.037
To what extent do you feel your program supports you to explore scholarly activity that integrates OPP?	0.666	0.414

Table 2: Accreditation Council for Graduate Medical Education annual survey questions Pre and Post Osteopathic Recognition chi-squared test results, \* indicates statistical significance

- In the most recent ACGME survey from 2023-2024, 100% residents reported that they "probably would select" or "definitely would select" an OR residency again.
- After program received Continued OR status respondents felt:
  - There was more supervision by osteopathic faculty members, ( $\chi^2 = 4.506$ , p-value 0.034)
  - There was more evaluation in OPP, ( $\chi^2 = 4.367$ , p-value 0.037)

### 2. ACGME OR Review Committee Citation Letters

- This program received minimal administrative citations regarding clerical errors, resources, appointment policies, and evaluations.
- No citations regarding the structure or curriculum were received.

## RESULTS CONTINUED

### 3. Return on Learning Likert Survey

	Strongly Disagree + Disagree + Neutral	Agree + Strongly Agree
Being in an Osteopathic Recognized program is relevant to my work?	9, (69.2%)	4, (30.8%)
The OR curriculum provides me with new information (or clarifies previous Osteopathic information)?	7, (53.8%)	6, (46.2%)
I intend to use what I learn from the OR curriculum?	8, (61.5%)	5, (38.5%)
I am knowledgeable about OPP in relation to the field of anesthesia?	6, (46.2%)	7, (53.8%)
I am knowledgeable about OMM in relation to the field of anesthesia?	7, (53.8%)	6, (46.2%)
The faculty is knowledgeable about OPP?	5, (38.5%)	8, (61.5%)
The faculty is helping me learn more information regarding OPP/OMM?	5, (38.5%)	8, (61.5%)
The Osteopathic Learning environment is conducive to learning?	5, (38.5%)	8, (61.5%)

Table 3: Faculty, Residents and Administrative Staff Responses to the Program-administered Likert-based Anonymous Survey on the Osteopathic Principles in Practice Programing

- 4 of 13 (30.8%) agreed or strongly agreed (3,1) that "Being in an Osteopathic Recognized program is relevant to my work."
- 7 of 13 (53.8%) agreed or strongly agreed (6,1) that "they are knowledgeable about OPP in relation to the field of anesthesia."
- 8 of 13 (61.5%) agreed or strongly agreed (4,4) that "The Osteopathic Learning environment is conducive to learning."

## DISCUSSION

- The minimal citations received and absence of citations regarding the OR curriculum from the OR-review committee demonstrates the success of this program in achieving OR status from ACGME.
- The responses from the Likert survey indicate that OR status has been successful in increasing residents' knowledge of OPP and OMM in hospital/ outpatient settings in specialty practice.
- The program successfully showed continual improvement in supervision and evaluation of residents in OPP as seen in the ACGME OR Program Survey results.
- There was discrepancy between the resident's likelihood of choosing an OR program again (at 100% in the ACGME survey) and believing OR had "relevancy to work" (at 31% in the Likert survey). To explain this discrepancy, there may be intangible, difficult to measure factors in OR, such as camaraderie, that contribute to this, and residents may associate OR with OMM over OPP.

## CONCLUSIONS

- Osteopathic Recognition was shown to be a tangible and attainable way for ACGME residency programs to differentiate themselves by offering valuable Osteopathic training and a learning environment that enhances residents' OPP/OMM skills, even in specialized fields like Anesthesia.
- Expanding these programs in specialty areas is crucial for the continued growth and success of the Osteopathic Profession.

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