

BACKGROUND

Family Medicine (FM) residents receive varying degrees of osteopathic manipulative treatment (OMT) training which affects their competency, confidence, and efficiency. This directly translates to whether or not they continue to use OMT in their future practice as evidenced by a survey of osteopathic physicians in Ohio¹.

To improve the quality of our osteopathic training, our Samaritan Health Systems (SHS) FM residency program implemented a new longitudinal Osteopathic curriculum in August of 2020 as we prepared to apply for Osteopathic Recognition (OR). DO residents self-selected into an OMT tier, dictating their relative involvement in OMT curricula: Integrated (IT), or Osteopathic (OT). IT requires 1-2 half days of OMT clinic per quarter. In addition to the IT clinic requirement, the OT requires that 3 of 6 electives are used for OMT-focused rotations, participation in monthly OMT didactics, and completion of an OMT-related scholarly activity.

OBJECTIVES

- Measure the impact of the new OMT curriculum on:
1. Resident OMT utilization (# of OMT visits)
 2. Resident perception of competency, confidence, and efficiency in OMT treatment
 3. Faculty perception of resident competency, confidence, and efficiency in OMT treatment

METHODS

Data collected for IT and OT residents from two different time periods: Pre-implementation (Aug 2019 – Jan 2020) and post-implementation (Aug 2020 – Jan 2021).

1. A retrospective chart review (identified by procedure billing codes 98925-98929) was used to determine the number of osteopathic visits per resident.
2. Survey of residents and two DO faculty assessing markers of OMT competency, confidence, and efficiency on a 3-point scale “not confident”, “somewhat confident”, or “very confident”. McNemar’s Chi-squared test used for paired data from residents pre/post surveys and Pearson’s Chi-squared tests for unpaired data from faculty surveys.

RESULTS

- IT residents had a decrease in avg number of OMT visits from 16 to 8 visits (7% to 3% of total visits); OT residents had an increase from 8 to 20 visits (7% to 11% of total visits) in the OT group (Table 1).
- Self-assessment surveys: no significant change in resident perception of OMT competence/confidence/efficiency (Figure 1).
- Faculty surveys: improvement in all categories with statistical significance in “confident patient communication/education” (p=0.02), “confidence and efficiency of osteopathic charting and billing” (p=0.03 and p=0.05, Figure 2).

Table 1. Number of OMT office visits

Implementation of OMT Curriculum	Pre Aug '19 – Jan '20 (6 months)	Post Aug '20 – Jan '21 (6 months)
ALL RESIDENTS		
# of residents	15 residents	20 residents
Avg # of OMT visits / resident	15 visits	11 visits
% OMT visits / resident	7%	4%
% of residents who completed at least one OMT visit	93%	95%
OSTEOPATHIC TRACK (OT)		
# of residents	2 residents	4 residents
Avg # of OMT visits / resident	8 visits	20 visits
% OMT visits / resident	7%	11%
% of residents who completed at least one OMT visit	100%	100%
INTEGRATED TRACK (IT)		
# of residents	13 residents	16 residents
Avg # of OMT visits / resident	16 visits	8 visits
% OMT visits / resident	7%	3%
% of residents who completed at least one OMT visit	92%	94%

CONCLUSIONS / LIMITS / IMPLICATIONS

- OT residents completed more OMT encounters after curriculum implementation, indicating that commitment to the most rigorous track gave more opportunity to apply OMT skills.
- Faculty noted resident improvement in several areas, but residents did not perceive the same improvement. This discrepancy could be related to a resident being more critical of their own performance.

Limitations and Issues:

- Increase/decrease in osteopathic visits likely multifactorial (resident interest, OT residents scheduled for more OMT visits, etc.).
- 3-point scale used is not validated; consider use of Likert scale or similar for future studies.
- COVID-19 pandemic decreased number of OMT visits.
- Small sample size between groups limits trends and generalizability and prevents direct comparison between OT and IT groups in the survey.

Future Implications:

- Increase sample size by tracking longitudinally.
- Survey alumni to determine OMT utilization in future practice.
- Use data to drive changes in the osteopathic curriculum for both DOs and MDs².

Figure 1. Per residents, percent of total residents who feel somewhat or very consistent, confident, and efficient (N=10)

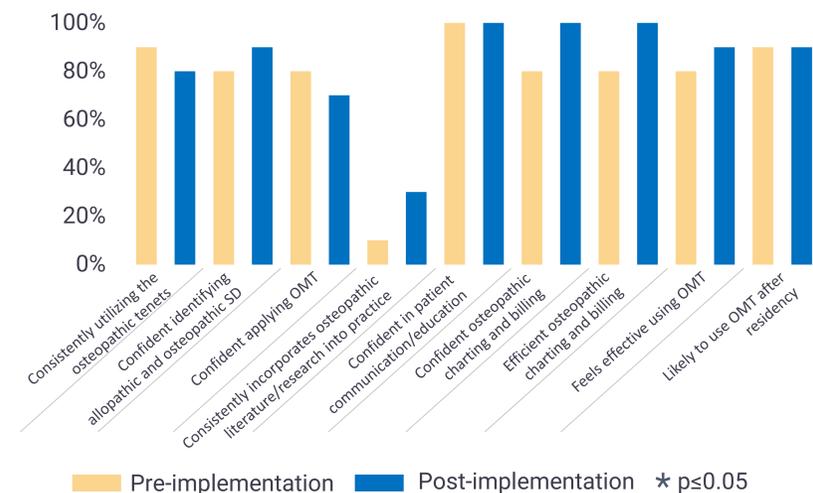
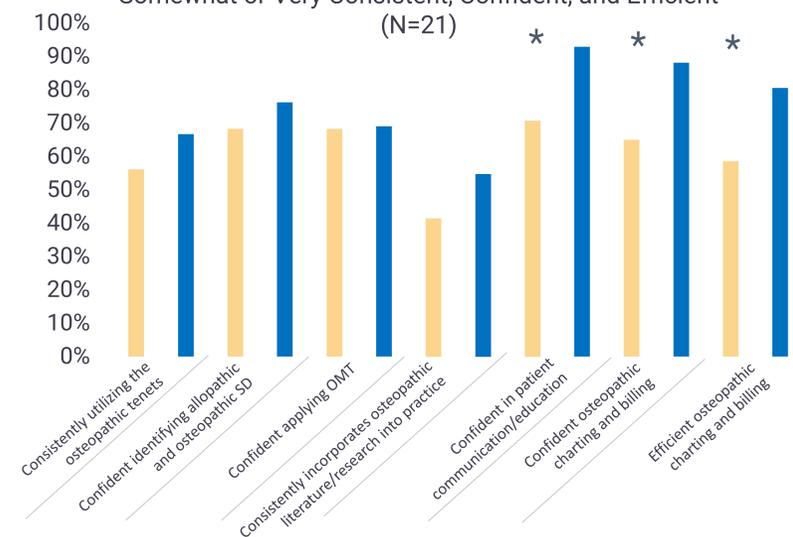


Figure 2. Per Faculty, the Percent of Residents who are Somewhat or Very Consistent, Confident, and Efficient (N=21)



REFERENCES

1. Spaeth DG, Pheley AM. Evaluation of osteopathic manipulative treatment training by practicing physicians in Ohio. J Am Osteopath Assoc. 2002;102(3):145-150.
2. Hempstead LK, Harper DM. Incorporating Osteopathic Curriculum Into a Family Medicine Residency. Fam Med. 2015;47(10):794-798.