

Can referrals to a pediatric osteopathic manipulative medicine clinic be increased through provider education?



An Evolving Quality Improvement Project

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BACKGROUND

- Osteopathic manipulative medicine (OMM) is non-invasive, non-pharmaceutical method for treating common pediatric conditions, including: neonatal feeding difficulties; non-synostotic plagiocephaly; otitis media; asthma; obstructive apnea in infants; dysfunctional voiding; and ADHD.
- MDs (and other non-osteopathically trained providers) often do not have awareness of the indications or evidence-base for OMM. In some cases, this has shifted as OMM clinics have been implemented successfully within traditionally allopathic residencies - DO residents have effectively increased OMM knowledge amongst their non-DO counterparts. However, this has traditionally occurred within family medicine residencies. There is little information about effective ways to improve awareness of OMM principles and applications amongst non-DO providers in pediatric residencies.
- With increased inclusion of osteopathically-trained physicians into ACGME residencies, there is a need for greater awareness of osteopathic medicine's evidence-based applications. The transition period for the single accreditation system for graduate medical education under the Accreditation Council for Graduate Medical Education (ACGME) will end June 30, 2020.

LOCAL CONTEXT

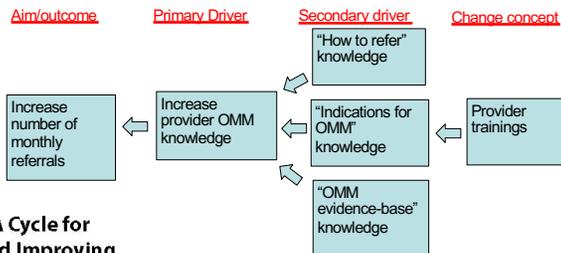
- The University of New Mexico (UNM) pediatric residency program (2019-2020) is comprised of a significant number of DOs (33%) who work closely with other pediatric providers with referral capabilities.
- However, UNM Hospital's pediatric OMM consult service does not see many patients per month, due to low referral rates and limited clinic hours/staffing. For the past 7 years, it has been held twice a month with one attending (an osteopathically-trained pediatrician).

GOAL

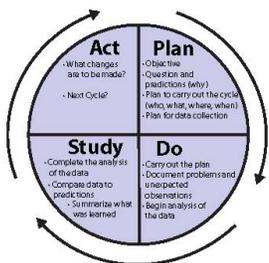
- To increase the average number of referrals to UNM Hospital's pediatric OMM clinic by 25% by May 2020.

STRATEGY

This quality improvement (QI) project (IRB number HRRC# 19-529) was designed based on the Model for Improvement. A key driver diagram was developed to consider some factors contributing to low referral rates. The primary measure of interest was monthly referral rate to the pediatric OMM clinic. This will be tracked by pulling data on referrals from UNM Hospitals electronic medical record on a monthly basis.



The PDSA Cycle for Learning and Improving



Our first PDSA cycle involved conducting three separate one hour professional development/continuing education trainings on the use of OMM in pediatrics from November to December 2019.

Providers trained included nurses, physicians (primarily pediatric residents), developmental specialists, and physical and occupational therapists.

After the sessions, feedback (PDSA data) were collected from participants via an anonymous, online survey. This survey assess provider knowledge of the indications and evidence-based for use of OMM in pediatric patients and their interest in referring to the OMM service.

Survey data were descriptively analyzed in Stata 15. Non-parametric tests were used to assess differences in responses by some participant characteristics.

RESULTS TO DATE

Data from the first PDSA cycle

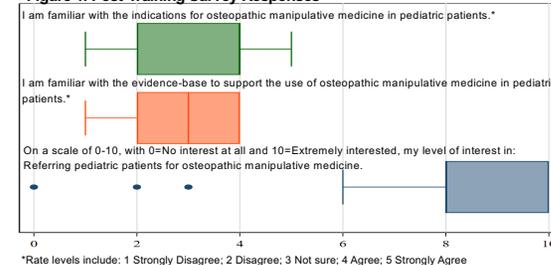
- Overall, respondents indicated that they were familiar with indications for osteopathic medicine (median: 4 [agree]; IQR = 2-4), but were more unsure about the evidence-base (median: 3 [not sure]; IQR = 2-4) to support the use of osteopathic medicine (Figure 1).
- Those who had previously referred patients to the clinic were no more likely to report familiarity with the indications (p=0.30) and evidence-base (p=0.31) for the use of OMM than those who had never referred to the clinic.
- On average, on a scale of 0 to 10, with 0 being no interest at all and 10 being extremely interested, respondents had a high level of interest in referring pediatric patients to the OMM service (median: 8; IQR = 8-10). Interest was higher in those who had previously referred to the clinic (Med: 10; IQR = 9-10) compared to those who had never referred to the clinic (Med: 8; IQR = 7-10) (p=0.03; Figure 1).
- Two MDs indicated that they would like additional training in OMM techniques.
- Two respondents indicated that the clinic needed more hours/capacity due to a long wait time (>1 month).

Table 1. Survey Participant Characteristics

Variable	% (N=31)
Credentials¹	
DO	39
MD	52
RN	10
IBCLC	10
MS	6
Years in Practice	
0-5 Years	87
16-20 Years	3
21+ Years	10
Ever referred a patient to Pediatric Manual Medicine consult service²	
Yes	23
No	77

¹Participants could select more than one.
²Full Question: Have you ever referred a patient to the Pediatric Manual Medicine consult service at UNMH, or worked with a care team colleague to refer a patient to the Pediatric Manual Medicine consult service at UNMH?

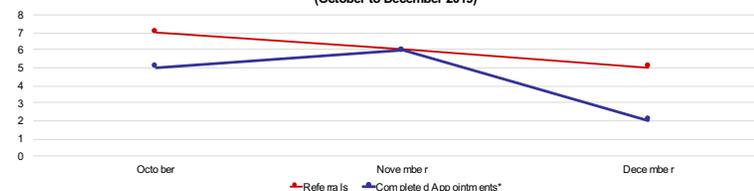
Figure 1. Post-Training Survey Responses



Measure data

- Referrals to the UNMH OMM Consult Service declined slightly from October to December 2019 (Figure 2).

Figure 2. Referrals and Completed Appointments for UNMH OMM Consult Service (October to December 2019)



DISCUSSION

The results of this first PDSA cycle indicate:

- Explanations of OMM indications and evidence-base for pediatric patients should be further clarified for future presentations. We will conduct additional PDSAs to refine the training.
- There is a significant interest in referring to the pediatric OMM clinic among training attendees. However, the number of referrals dropped slightly from October to December, as the training was implemented. A few attendees reported a long wait time for the clinic, and this may have been exacerbated during the holiday season. We need to identify additional barriers to referral and address them through future PDSA cycles. Clinic capacity will need to expand if demand increases. In addition, patient attendance at OMM appointments is sometimes poor and may need to be addressed in future PDSAs.

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