Osteopathic Manipulative Treatment (OMT) has demonstrated improved outcomes or decreased length of stay in hospitalized patients with diverse conditions including but not limited to postoperative ileus, pneumonia, postoperative coronary artery bypass graft patients and newborn feeding difficulty in addition to improving overall patient satisfaction.

In the past, osteopathic hospitals included OMT as part of “routine provision of services”1 however changing insurance requirements and integration with allopathic hospitals has contributed to an overall decline in the use of OMT in all clinical settings. This decrease in standardized use of inpatient OMT has been identified as a factor in our trainees’ decreased likelihood of developing important OMT skills.2

As of 2020, there are 27 known hospitals offering inpatient OMT consultation services (as identified by OMM/NMM residencies in the US)3 and while it is unknown how many other hospitals offer OMT consultation, given the profession’s identified need for more inpatient OMT advocates4 it is thought to be inadequate.

One of the top perceived barriers identified by osteopathic physicians incorporating OMT into their practice is poor reimbursement5.

By demonstrating that insurance does consistently reimburse for the provision of inpatient OMT, we hope to disprove this misconception regarding poor reimbursement and thereby promote expanding the provision of inpatient OMT in more hospitals.

How does Samaritan Health Services (SHS) charge for inpatient OMT?

Does SHS receive reimbursement for inpatient OMT, and if so how much?

Does overall likelihood or amount of reimbursement differ based on insurance?

Are there other factors which influence the likelihood or rate of reimbursement?

This retrospective pilot study examined how one hospital system (SHS) charges for and is reimbursed for the provision of inpatient OMT.

The study involved all patients who were seen by the inpatient OMT consult service at Good Samaritan Regional Medical Center in Corvallis, OR during the 2019 calendar year and had their insurance billed for provision of services.

Insurance providers were classified by primary payer. Only patients with commercial, Medicare, or Medicaid insurance were included.

The study was deemed to be non-human subjects research, therefore IRB approval was not required.

T-tests were used to compare charges across visit vs procedure codes and across inpatient vs observation encounters. A Kruskal-Wallis rank sum test was used to determine whether charges differed by insurance type and Chi-squared tests were used to determine whether reimbursement differed by insurance type.

A total of 1505 CPT codes from 447 unique hospital accounts were included in this study. Individual insurance codes were billed a CPT visit code range (99203 to 99219) for initial observation care, 99221 to 99233 for initial hospital care, 99224-99226 for subsequent observation care, and 99231-99233 for subsequent hospital care) in addition to an OMT-specific CPT procedure code (range from 98925 to 98929, based on number of regions treated) for each episode of care.

The charge per code submitted for inpatient OMT did not differ between Commercial insurances ($207.26) or Medicaid ($200.74), but Medicare is charged less ($170.15) on average, as demonstrated in Fig 2.

Average charges increase based on increasing number of regions treated and increasing complexity of patient problem and comprehensiveness of history and exam. Across insurances, visit codes are charged more on average than procedure codes (p<0.001)

Average charge did not change based on inpatient versus observation status (p=0.1)

All types of insurance charged for inpatient OMT provided some form of reimbursement most of the time, however the likelihood and amount of reimbursement was different based on insurance type, as demonstrated in Fig 3.

Medicare insurance was most likely to provide some amount of reimbursement (98% with some reimbursement), Medicare less likely (92%) and Commercial (85%) was least likely (p<0.001). Commercial insurance reimbursed at a higher rate however (52% of average charge), while Medicare (34%) and Medicaid (31%) reimbursed less (p<0.001).