Clinical Quality Improvement Initiative (CQII): Clinical Record Quality – Licensed Massage Therapists

Importance: Documentation of the clinical encounter using best practice guidelines is essential to support high quality patient care. When Lawrence Weed, MD created the problem-oriented medical record (POMR) in the 1960's he identified the importance of a complete medical record for, "reliable continuity of medical care, even with the same physician.".[1] This has progressed to more formal training in documentation by accredited health care institutions, licensing board requirements, and ultimately has been identified as a necessity for quality of care.[2] Since its inception nearly 30 years ago, The CHP Group (CHP) has engaged network providers in developing "Best Practices" in clinical record keeping. This has been supported by CHP's Clinical Record Quality Improvement Program (CRQIP) with ongoing provider clinical record reviews using evidence-based scoring tools, continuing education programs, and a *Quality Improvement Guide to Clinical Record Keeping* for each clinical discipline in the CHP network. Providers who score below established quality thresholds are enrolled in the CRQIP where best practice resources and mentoring are made available to help providers improve clinical record quality. This program has been well established for naturopathic and chiropractic physicians as well as licensed acupuncturists. The inclusion of licensed massage therapists in this clinical record quality program is essential as the profession continues to become further integrated into the healthcare system and the evidence of effectiveness for many health conditions continues to grow.

Objective: To implement a clinical record keeping quality program specific to massage therapy for the following purposes:

1. Measure current performance in clinical record keeping in the CHP massage therapy network and identify opportunities for quality improvement.
2. Establish baseline massage therapy clinical record keeping threshold scores using best practice scoring tools.
3. Measure the effectiveness of CHP's *Quality Improvement Guide to Clinical Record Keeping Massage Therapy* best practice document to improve recording keeping quality for those below the established threshold.
4. Establish an evidence-based best practice clinical record keeping quality program for massage therapy providers to support consistent high-quality clinical care.

Design, Setting, and Participants: A complete set of clinical records from a new patient (including all initial intake forms-informed consent, patient self-reports, etc., the first visit note and two consecutive follow-up visits for a total of three visits) was collected from 530 CHP massage therapy provider's over a three-year period (2015-2017). An evidence-based scoring tool, the CHP *Initial Scoring Tool Massage Therapy*, was developed using regulatory requirements, clinical guidelines-best practice, multi-disciplinary clinician experience, and other discipline CHP clinical record scoring tools. This scoring tool includes basic administrative requirements for documenting items such as legibility, patient name, date of birth, informed

consent, provider identification and signature as well as clinical information including patient complaints, clinical findings, treatment plan, and follow up. All 530 providers scoring tools were returned to them with a score as well as feedback to include both positive statements and recommendations for improvement. A threshold score of 65% or below was established for enrollment in the intervention group and was based on several factors, e.g. other discipline established thresholds, resource requirements to implement the intervention, consensus among CHP's multidisciplinary Combined Medical Directors Committee. The intervention group consisted of 46 massage therapy providers; 13% (46/530) of the total baseline group.

Interventions: The intervention group was mailed the *Quality Improvement Guide to Clinical Record Keeping Massage Therapy*. This is an evidence-based manual comprised of, "Best Practices in Clinical Record Keeping" sections including the basics, identification, informed consent, SOAP notes, documenting procedures, and de-identifying clinical records for quality improvement. This guide was created using regulatory guidelines, evidence-based practice clinical guidelines, multidisciplinary clinician experience, and other discipline *Quality Improvement Guide to Clinical Record Keeping*. After reading the guide, providers were instructed make changes in their record keeping procedures and then to submit another complete set of clinical records for scoring and analysis to determine the effectiveness of the quality improvement program. Throughout the course of this CQII there were additional opportunities for massage therapy providers to participate in clinical record keeping improvement activities most notably, CHP Associate and Regional Medical Directors presented multiple 2 hour live clinical record keeping continuing education events specifically for massage therapists. Attendees were not tracked with the CQII program intervention group to determine potential effect.

Main Outcomes and Measures: The primary outcome measures were the number of providers in the intervention group whose score improved, the degree of improvement, and the number meeting or exceeding the threshold score. Additionally, the individual questions on the scoring tool were aggregated at baseline and post-intervention to provide feedback for further consideration in the content of the *Quality Improvement Guide to Clinical Record Keeping Massage Therapy* or other approaches to improving clinical record keeping quality.

Results:

Baseline performance:
The mean baseline score of the intervention group was 56%. The median baseline score was 59%. The baseline range was 38 with a low of 27% and a high of 65%.

Intervention group performance:
The mean post intervention group performance score was 73%. The median post intervention score was 73%. The mean score increased by 17% and the aggregate mean score improvement was 32%. The average median score increase was 15% and the aggregate score improvement was 32%. The post intervention range was 57 with a low of 43% and a high of 100%.

Individual items on the scoring tool were tracked for the intervention group both pre-intervention and post-intervention. The following chart demonstrates the descriptions and total points available in the header

with average percentage of total points scored both pre-intervention and post-intervention for comparison purposes:

	Patient Name 1	Patient DOB 1	Provider Name 1	Provider Address 1	Provider Phone 1	Every page 3	Dates of Treatment 2	Signature 3	Informed Consent 5	Complaint/ Comments 3	Interval changes 3	Findings 3	Treatment Procedures 3	F/U info/Plan 3	Legibility 3	Sufficient Space 1
Pre-Intervention	98%	79%	47%	51%	42%	48%	96%	56%	26%	63%	40%	60%	70%	47%	75%	71%
Post-Intervention	100%	98%	83%	85%	85%	57%	98%	72%	51%	78%	57%	81%	77%	75%	77%	78%

Analysis of the individual scoring tool items demonstrates improvement in all categories and provides additional performance information that helps to inform our education efforts and improve the overall quality of our clinical record quality program for massage therapists.

Conclusions and Relevance: Overall there was an aggregate mean score improvement of 32% for the intervention group. Of the 46 providers in this group, 85% (39) scored higher, 7% (3) scored the same, and 9% (4) scored lower. Additionally, 70% of the intervention group met or exceeded the initial threshold score of 65%.

This evidence demonstrates that intervention in the form of a clinical record keeping quality program specific to massage therapy providers including a specific evidence-based *Initial Scoring Tool Massage Therapy* and *Quality Improvement Guide to Clinical Record Keeping Massage Therapy* provided significant improvements in clinical record keeping for the majority of providers who were enrolled in the program. The relevance of this outcome demonstrates the capacity of massage therapy providers to improve their clinical record keeping quality and consequently the quality of care provided to patients through participation in a clinical record keeping quality program.

[1] Weed LL. Medical records that guide and teach. *New Eng. J. Med.* 278(12):652-657, 1968

[2] Taylor DN. A literature review of electronic health records in chiropractic practice: common challenges and solutions. *J Chiropr Humanit* 2017;24:31-40