Community Massage Therapists as Research Personnel on an NIH Funded Effectiveness Study

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Background & Significance

- Few NIH funded studies give community licensed massage therapists (LMTs) the opportunity to become study personnel.
- A move toward effectiveness research and examining massage therapy as practiced in the "real world" motivated researchers with the Department of Family of Community Medicine at the University of Kentucky to develop a novel study design that utilized community LMTs as study personnel.

Objectives

- <u>Primary Study Objective</u> Determine whether health related outcomes for chronic low back pain (CLBP) improve when patients are referred from primary care to select CAM modalities.
- Massage Practice Driven & Poster Objectives
- Identify challenges and solutions to recruiting and retaining ample community LMTs.
- Develop a real world, practice informed clinical massage therapy (CMT) protocol.
- Identify challenges and solutions for utilizing LMT intake and treatment notes as data.
- Determine the extent to which community LMTs comply to rigorous research methodology in their clinical practice as study personnel.

LMT Recruitment & Retention

Eligible LMTs living in rural and urban areas were identified utilizing public records from the Kentucky Board of Massage Licensure and AMTA (Figure 1). Eligible LMTs were invited to participate through mail and phone efforts.

- Eligible LMTs = those with 5+ years experience.
- Urban counties = Metro (i.e., Lexington/Fayette) or directly adjacent counties.
- Rural counties = Non-Metro

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LMT Recruitment & Retention (con't)

Figure 1. LMT Recruitment Flow Chart

1951 Kentucky LMTs in 2009 458 LMTs in study area 97 Rural 361 Urban County LMTs County LMTs 166 Urban County LMTs with <5 years Counties Counties experience experience 174 Unreached 21 Urban 7 Rural 58 Unreached or Declining County LMTs County LMTs or Declining LMTs in Urban Trained as Trained as LMTs in Rural Counties Study Personne Study Personnel Counties 18 Urban 7 Rural LMTs LMTs Assigned Assigned

Recruitment and retention challenges (<u>Table 1</u>) were magnified in rural counties due to a smaller pool of therapists in the area.

25 Total LMT

Study Personne

Assigned

Participants

Participants

Participants

Table 1. LMT Recruitment & Retention Challenges and Solutions

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<u>Challenges</u>	<u>Solutions</u>
Initial contact/approach to LMTs with opportunity details.	 Utilizing previous connections with eligible LMTs. Involving prominent LMT community members. Personal invitations from known study personnel when possible.
Inability to participate due to: - Lack of experience - Busyness of practice - Location of practice	 No accommodation could solve lack of experience and busy practices challenges. LMTs had the option to see participants in alternate locations if needed due to employer constraints.
Unwillingness to participate due to: - Lack of interest - Compensation - Resistance to documentation procedures	 Mass mailings and presentations sought to increase interest in LMT involvement. LMTs compensated \$25/treatment. Study training earned 6 CE hours (3 for ethics) for licensure renewal. Allow supplementary documentation to study forms and ongoing support from LMT liaison.
Logistical timing issues that caused long periods of time to pass from initial LMT recruitment to actual participation.	 Refresher information sessions. Status and trajectory updates. LMT recruitment efforts in coordination with other study activity locations.

- 102 participants were assigned to study LMTs for up to 10 treatments each over a 12-week period.
- LMTs were assigned an average of 4 patients each (range 1-8) and completed an average of 68% of their total potential treatments (range 0-100%).

Real World Protocol Development

Unlike **efficacy research** which explores whether treatments work in a controlled setting, **effectiveness research** seeks to determine whether treatments work in practice or real world settings. Contrasts between MT efficacy and effectiveness study approaches used in the current study are highlighted in <u>Table 2</u>.

Table 2. Developed and Utilized Effectiveness Research Strategies

Efficacy Approaches	Effectiveness Approaches Utilized In the Current Study	How Effectiveness Approach Mirrors CMT Practice
Strict inclusion/exclusion criteria for study participants.	Few exclusion criteria for study participants allowed for CLBP patients with complex medical histories and comorbidities to participate. In addition, study participants participated in the study in conjunction with MD directed treatment plan with could include controlled medications.	Massage professionals often face clients experiencing complicated health conditions and rarely treat CLBP as an isolated condition or free of pharmacological intervention.
Treatments administered in controlled, consistent, research settings/environments.	Participants were assigned to conveniently located study LMTs and treatments occurred within study LMTs' clinical practices. Appointments and treatment schedules were collaboratively designed and managed by each LMT and participant pairing.	CMT is practiced in a variety of settings, all of which strive to promote calm and therapeutic environments (e.g., through music, soft lighting and cozy decor and temperatures). Real world CMT clients tend to seek therapy from therapists that are in a relatively convenient location to them and are responsible for scheduling and attending treatments as agreed upon within the therapeutic relationship established between themselves and the massage professional.
Strict treatment schedules allot treatment: - Number - Length (often short – e.g. 5-20 minutes) - Frequency - Duration	 Flexible treatment schedule allotted for: Up to 10 CMT sessions An initial session of 75 minutes to accommodate sufficient intake Session lengths of 50-60 minutes unless intolerable (i.e., 30 minutes) Frequency determined through LMT clinical judgment and individualized treatment plans 12 week treatment windows could be extended up to two weeks in order to accommodate life events. 	Complex conditions such as CLBP most often require multiple CMT sessions. Ideal CMT treatment schedules allow for practitioner clinical judgment to determine frequency and treatment length dependant on individual client needs as informed by condition and availability. Furthermore, effective scheduling often allows for more frequent treatments at the onset which taper off as work begins to "hold".
Utilization of specific or exclusive therapeutic modality or technique(s).	A CMT protocol was developed which allowed LMTs to treat participants supine or side lying for the initial 5 treatments, unless therapeutic judgment deemed prone or seated treatments more appropriate. In addition to basic Swedish massage techniques, study LMTs were free to utilize specialty modality options in which they were trained, including trigger point therapy, active isolated stretching, craniosacral therapy, neuromuscular therapy, Zero Balancing®, and a variety of others. Technique ordering and body progression was not stipulated in CMT protocol.	Massage practitioners utilized their whole skill set of modalities when treating clients. While signature techniques or patterns may exist for individual massage practitioners, unique session progressions occur for each applied treatment as practitioners respond to body and condition needs/responses throughout a treatment within an over arching treatment plan.
Administration of intervention performed by generally non-descript therapists of various experience levels. Descriptions have included non-professionals, single, or few therapist situations.	Kentucky LMTs with 5+ years experience were eligible to become study personnel and matched with study participants. During study personnel training, LMTs provided practice and training descriptors that may later be used in analysis and/or to provide pertinent information when study results are disseminated.	While CMT falls under the scope of many health and therapeutic professionals (e.g., nurses, PTs, beauticians), few approach such treatments as customarily done by massage professionals.

Utilizing Treatment Notes as Data

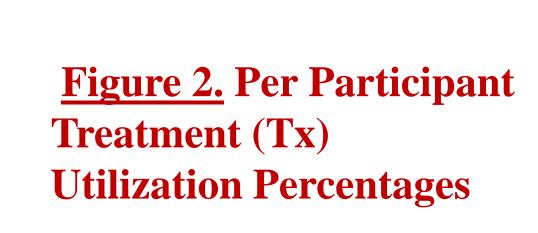
The design of CMT data collection forms utilized in the study were adapted from materials employed in similar massage therapy / low back pain research.¹

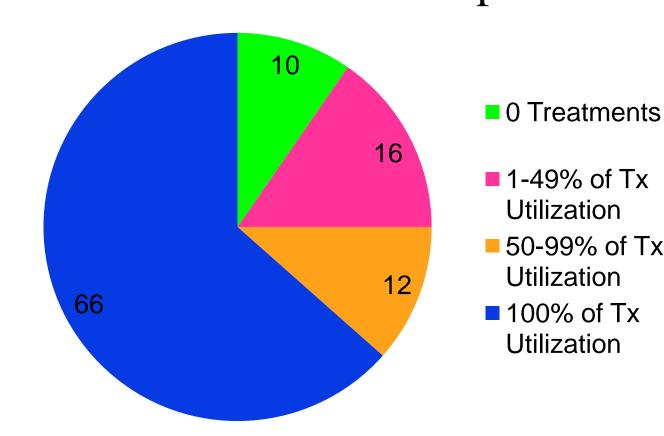
- Qualitative style of CMT treatment notes pose challenging data issues.
- Variables developed from CMT data collection forms and SOAP notes include:
- Pain progression (e.g., constant, alternating, progressive)
- Sleep position (e.g., flat back, side, stomach, alternating)
- Activities that increase and activities that decrease pain.
- Medical history (e.g., obesity, scoliosis, MVA, depression)
- Qualitative research methodology utilized for coding, analyzing, and reporting data collected on CLBP study participants by LMTs.

¹ Group Health Research Institute – Dr. Dan Cherkin

LMT Compliance and Conclusion

Of the possible 1040 CMT treatments (tx), 73% were utilized by participants (Figure 2). Study data collection forms were retrieved from LMT study personnel for 97% of the 759 completed tx.





Conclusion: When challenges in recruitment, retention, and protocol are met, community LMTs are valuable study personnel for practice based, effectiveness, CMT research. Presented methodology and design strategies should serve as models for future research reflecting real world CMT.