COMMENTARIES

Use of Practice-Based Research Networks in Massage Therapy Research

Samantha Zabel, MA, PhD(c), 1* Niki Munk, LMT, PhD1,2,3,4

¹Department of Health Sciences, Indiana University School of Health and Human Sciences, Indianapolis, IN, USA, ²Australian Research Centre in Complementary and Integrative Medicine (ARCCIM), and ³Massage & Myotherapy, University of Technology Sydney, Sydney, ⁴National Centre for Naturopathic Medicine, Southern Cross University, Lismore, Australia

https://doi.org/10.3822/ijtmb.v17i1.883

Massage therapy is a profession, not simply an intervention, and pathways are needed to connect all key massage therapy profession components—clinicians, patient/clients, and the work—to the scholarship and research that describes, investigates, and shapes practice. While the volume of massage-related research has grown over the past few decades, much of the growing massage evidence base is not reflective of real-world massage therapy, nor is research typically conducted through the clinical lens of the massage therapy discipline. This situation reflects the unfortunate disconnect between massage therapy research and massage therapy practice, while magnifying a key research infrastructure deficiency within the massage therapy discipline: the who and where research is conducted is disconnected from the who and where massage therapy is practiced. Practice-based research networks (PBRNs) are a staple of primary care and other health professions research reflecting real life, disciplinefocused practice that seeks to address the needs of the discipline's practitioners and patients. The PBRN model fits well with the directional need of massage therapy research. This paper presents a commentary on the use of PBRNs in massage therapy research, and the current state of PBRN research within the field of massage therapy, namely the recently launched MassageNet PBRN.

KEYWORDS: PBRN; MassageNet; PRACI; real-world care; Massage Therapy Foundation

INTRODUCTION

Research is a key component and indicator of an applied discipline's progress,

status, and value to related stakeholders. Medicine and other health-related professions such as dentistry, nursing, and physical therapy are examples of applied disciplines rich in research that has guided and advanced their evidence-based practices and that are acceptable, valued, and accessible to end users through private pay or various third-party payers. Complementary and integrative health (CIH) fields, such as massage therapy, are also health-related applied disciplines despite their comparatively less robust research base, acceptance, and access within health-care contexts, and infrastructure to conduct research: and relatedly, are primarily accessed and available to end users through private, out-of-pocket payers. Ultimately, accessibility to and utilization of massage therapy and other CIH treatments will only improve if such care is covered by third-party payers, and thirdparty payers will only cover treatments with robust research bases.

The volume of massage intervention-focused research has substantially increased over the last couple of decades which has subsequently led to increases in the evidence base for massage therapy.⁽¹⁾ However, parallel improvements to massage therapy accessibility barriers have not occurred due to continued private pay models in most massage therapy delivery situations and environments which challenges the development, expansion, and perceptions of the massage therapy profession within health-care models. In addition, much of the growing massage therapy evidence base is not reflective of real-world massage therapy, nor is research typically conducted through the clinical lens of the massage therapy discipline. A majority of massage research focuses on massage as a subset of treatments in other fields such as physical therapy or oncology, or considering massage as a component of the wider group of CIH treatments. (2) This situation reflects the unfortunate disconnect between massage therapy research and massage therapy practice, magnifying a key research infrastructure deficiency within the massage therapy profession: the who and where research is conducted is disconnected from the who and where massage therapy is performed and practiced.

Research in other health-related disciplines tends to occur in university or academic-linked health-care environments—environments in which it is rare for the massage therapy discipline to reside. To increase the base of evidence reflective of the massage therapy discipline, bridges are needed to connect researchers and research infrastructure to massage practice, massage clinicians, and those who receive massage therapy. These connections are essential if the massage therapy field is to expand the production of high-quality, disciplinereflective research studies supporting what massage therapists and clients have known for centuries: massage is an effective treatment for all kinds of ailments and an important part of an individual's wellness plan.

Building the research evidence base supportive of massage therapy usage is necessary to move the field forward and improve cost-related accessibility barriers. The practice-based research network (PBRN) model can be a key bridge connecting researchers, massage practitioners, and massage therapy recipients, and facilitate the growth of evidence-based, discipline-reflective, and accessible massage therapy practice. This commentary seeks to provide a) an overview of PBRNs generally, b) the history of PBRNs and their prior massage therapy discipline-related efforts and products, and c) introduce and describe MassageNet which is a current PBRN effort focused exclusively on the massage therapy discipline as practiced in the United States and Canada.

Overview and Definition of PBRNs

Practice-based research networks (PBRNs) have become a staple of health-care research since their inception during the 1970s.⁽³⁾ A PBRN is a group of health-care practices and/or providers working toward a common mission in research

and health-care quality improvement, while emphasizing engagement and input from its members. (4) A PBRN is comprised of a variety of people associated with its target discipline, including individual practitioners, practices, or other people associated with practice or research. As PBRNs have become more ubiquitous in health-care research, a variety of resources have emerged to support the development and operation of these networks. The majority of PBRNs focus on primary care, but PBRNs connect many aspects of health care, (3) including integrative health collectives. (5) The essential link among all the organizations within PBRNs and their support is the common understanding of the importance of linking research resources and clinical care resources to improve client outcomes, access to quality care, and interdisciplinary education.(3)

PBRN research is performed in the context of practice, which allows greater generalization to real-world conditions. The practice environment is unlike the highly controlled setting of a research laboratory.⁽⁵⁾ The real-world practice environment is messy and difficult to control, and research results from a controlled laboratory may not reflect how things work in practice. (5) The difference between an intervention's efficacy (how it works under ideal conditions) and its effectiveness (how it works in a real-world setting) must be understood in order to determine best patient care options and best practices. (6) To better understand how an intervention works in real life, the effectiveness of the treatment must be tested in, and applied to, real life conditions, often called a pragmatic approach to research or pragmatic research. (17) Pragmatic research looks beyond the question of "Does an intervention work under ideal" conditions?" and addresses the broader question of "Does an intervention work in a typical clinical setting?"(8) Comorbidities, treatment noncompliance, and other competing effects arise in pragmatic, real-world research that may not be able to be accounted for under everyday practice conditions, potentially having considerable effect on results that would not be allowed to occur in a tightly-controlled laboratory research study. A PBRN is an excellent setting to perform such pragmatic and real world-reflective research on a large scale.⁽⁹⁾

Importance and Impact of PBRNs in Research

Many PBRNs have contributed to the development of best practices and care improvement in their respective disciplines. (10) Establishing a connection between research and practice ensures that the needs of practitioners and patients are met, care gaps are addressed, and barriers are reduced. (11) Research questions that are important to practice may not be considered by research entities that often work in environments separated from patients and practitioners. Involving practitioners in the research generation process helps develop research that is meaningful to those working in the field. (12) One PBRN reported using a networkwide stakeholders' facilitated workshop to determine research priorities and goals, as well as small group sessions to delve into specific strategies. (13) The connection may also make evidence more accessible to practitioners to implement in their practices, improving quality of care for patients.(4)

PBRNs have an opportunity to change the way research is involved in practice. Different practitioners may have preexisting access to different populations, allowing for work to be done with groups of people that may not have been easily accessible to researchers in the traditional institutional research setting, such as rural or minority communities. (14) By extension, these populations benefit through the improved understanding of their needs that is generated from practitioner participation in PBRNs and the research conducted within and through the network. The move toward justice in health care has become a priority in recent years, with the disparate effects of the COVID-19 pandemic forcing health-care practitioners and researchers to place a renewed focus on reassessing how health care is accessed by different populations. (15) The PBRN model holds particular value in the era of social justice for its potential role in increasing access to health care for all sectors of society. (15) The field of massage therapy can certainly benefit in this respect, considering the majority of massage users are upper middle-class.⁽¹⁶⁾ Building the discipline-reflective evidence base for massage therapy may motivate insurance companies to increase coverage for massage therapy treatments, allowing

a new sector of the population to gain access to this potentially valuable treatment resource.

History of PBRNs in Massage Therapy

Massage therapy is a relatively infrequent inclusion in research conducted by PBRNs, although it is gradually becoming more common. A scoping review published in 2020 examined the massage-related publications associated with PBRNs, finding an increasing number of PBRNs with an interest in massage therapy in recent years. (2) Most of these PBRNs, however, focus on CIH as a whole rather than specifically massage therapy. Massage therapy is virtually ignored in PBRNs outside of CIH, with only a few papers published by two PBRNs in primary care and palliative care. Out of nine PBRNs producing massage-related works, two specifically focused on massage therapy. MassageNet, based in Illinois, and MNO-PBRN, based in Ohio, produced a few works each, but both slowed down due to various reasons after a few years. Encouragement, however, comes from the creation and growth of new CIH- and massage therapy-related PBRNs, such as the Practitioner Research and Collaboration Initiative (PRACI) in Australia, (4) and the current efforts to revamp and restart MassageNet.(17)

MassageNet

MassageNet was first founded in 2009 through a grant from the Massage Therapy Foundation (MTF) by Dr. Jerrilyn Cambron's team at the National University of Health Sciences. MassageNet was created as an entity in which massage practitioners, students, educators, and researchers could connect and contribute to massage research together. The PBRN produced studies about client health history collection, (18) client experiences with massage, (19) and clinician volunteerism. (20) These were presented as posters at annual meetings of the American Massage Therapy Association. Although interest in the PBRN remained and gradual membership growth continued. MassageNet activities went dormant after about 2015. In early 2021, the decision was made to shift ownership of MassageNet from its previous home to the MTF, through which the PBRN's activities would be restored and revitalized. A new member enrollment survey was developed, as well as handbooks, procedures, and administrative documents to support PBRN activities. The existing membership list was contacted in November 2021 to gather interest in continuing membership as MassageNet was renewed, and those who confirmed that they would continue membership were given the new member enrollment survey beginning in April 2022. The first call for new membership occurred at the International Massage Therapy Research Conference (IMTRC) meeting in May 2022,⁽²¹⁾ with 271 members joining by the end of 2022.

Current Efforts of MassageNet

MassageNet is currently in the early stages of member recruitment. Data are being collected about members. including their practices, educational backgrounds, and interests and needs regarding the PBRN. Three research projects to date (February 2024) are being or have been conducted through the PBRN as first efforts to engage members and their practices in PBRN research. First to launch was a doctoral dissertation study seeking to examine how massage therapists' knowledge, perceptions, and experiences regarding mental health impact patient treatment. The second MassageNet launch was a master's thesis project seeking to investigate terminology and definitions surrounding deep tissue and myofascial techniques. The third and current effort is a collaborative project between the MTF and Briotix Health which seeks to investigate factors that contribute to work-related fatigue among massage clinicians. (22) Lastly, a paper describing the makeup of MassageNet members, both historically and currently, is in development by MassageNet administration.

A primary goal of MassageNet is to ensure member engagement in meaningful, field reflective, and aligned to research endeavors. In addition, MassageNet members have engagement opportunities to inform and be involved in the decision-making process regarding pursued research projects. The enrollment survey includes questions about member research interests such as populations, conditions, and interventions. Efforts will be made to focus on the development of research projects that pertain to these interests, both in

internal research project development and when inviting external researchers to utilize the MassageNet network. MassageNet's long-term plans include the potential for members to be involved in the development of research projects at every stage of research, including grant writing, research question generation, protocol development, data collection, data analysis and interpretation, and dissemination. Ensuring member input in the interpretation of results is particularly important because the massage therapist members are the experts in their field, with unparalleled understanding of what is significant to their patients in the context of practice. Without their critical stakeholder input and insight, massage research results have less potential for impact, relevance, meaning, and research.

Anticipated Challenges and Obstacles with PBRN Research

PBRNs frequently run into a variety of challenges, and MassageNet is sure to be no exception. McMillen et al. describe six common challenges experienced by PBRNs⁽²³⁾

- Relationships must be managed and nurtured with realistic expectations for all involved;
- Adequate funding must be available to support both PBRN infrastructure and research study activities;
- Productivity should be expected to grow over time;
- Ethical and oversight arrangements must be managed across institutional, state, and international lines;
- Practitioner and patient recruitment must be representative of routine practice; and
- Due to the nature of practice, errors in data collection are inevitable.

In addition, Wolf et al. identify three challenges specific to ethics oversight and institutional review boards (IRBs):(24)

- Practitioners may not be familiar with regulations and how to access requirements that may differ from institution to institution;
- Research in the practice environment presents difficulties with subject identification, confidentiality, and consent; and

 Electronic databases that may be used in PBRNs can be difficult to maintain confidentiality or how participant data is used.

From a practitioner perspective, Munk et al.⁽⁹⁾ identify challenges in recruitment of community massage practitioners to participate in a PBRN study:

- Difficulty contacting practitioners;
- Inability to participate;
- Unwillingness to participate; and
- Logistical timing issues.

Challenges such as these are guaranteed to arise as the massage therapy discipline moves toward the PBRN research model. The current efforts to build MassageNet, the PBRN under the purview of the MTF, take these lessons into account to keep its growth on track. For example, MassageNet research collaborators are required to provide IRB oversight from their home institutions prior to starting projects, which includes providing adequate training regarding participant recruitment, informed consent, and intervention delivery as required by project protocol. Additionally, MassageNet seeks to build a well-informed community though quarterly newsletters, networking events, and educational opportunities in order to narrow the gap between research and clinician experience and improve accessibility to research resources. Feedback from PBRN members will be collected periodically to better understand their needs and inform the wider PBRN community of the effectiveness of the organization at the practitioner level.

Future of MassageNet and PBRNs in Massage Therapy

A variety of member engagement activities are in development for MassageNet. (13) Webinars and educational modules will be provided about research-related topics such as ethics, research methods, scientific writing, and project development to be added to the MTF educational repertoire. Newsletters and other periodic communications will be sent to members, and a monthly journal club is in the works to encourage members to engage in reading scientific literature. Activities and resources will be added as MassageNet continues to develop and will be guided by member interests, which is a core tenet of PBRNs.

MassageNet members will have ongoing opportunities to participate in research projects run by outside researchers, such as the projects described earlier in this paper. (17) The involvement of external researchers brings opportunities for funding and resources that are less accessible to MassageNet alone, as well as the contribution of new ideas and strategies for knowledge discovery. MassageNet's growth, and the proliferation of projects and resources, is ultimately dependent on the uptake and engagement by clinicians and members in addition to utilization by potential and established researchers. MassageNet seeks to have its members provide input in the creation of new research projects that interest them. To that end, the MTF and MassageNet are planning an inaugural, working members' meeting to take place at the next International Massage Therapy Research Conference (date, location, and format is currently under consideration within the MTF). Members will have the opportunity to participate in brainstorming and research question-generating activities to guide the next steps of the PBRN, facilitated by MTF and MassageNet administration and research affiliates. Anyone interested in engaging with MassageNet are invited to visit www.massagenet. org and learn more. MassageNet invites membership to practicing massage clinicians, massage therapy students, massage therapy educators, massage-focused researchers, and others involved in the massage field. Opportunities are also available for schools and clinics to be involved in MassageNet.

CONCLUSION

The MassageNet relaunch is just a first step in what could evolve into a new evolutionary path for massage therapy research. The successes, failures, and lessons learned from MassageNet can be used to enhance established and new PBRN efforts that include massage therapy research, increasing the discipline reflective footprint in the growing evidence-based literature. Growing the evidence base supporting disciplinereflective massage therapy has the potential to expand access to massage treatment for those likely to benefit most and, currently, least able to access it due to the out-of-pocket costs. While only a single

path across waters in need of multiple bridges, the MassageNet PBRN hopes to increase discipline reflective research by connecting massage-focused or interested researchers to massage clinicians and practice. Such clinician-engaged and research-collaborative efforts support the assertion that massage therapy is not simply an intervention applied in care or as part of research; rather, massage therapy is a profession with its own discipline-focused and reflective literature base.

ACKNOWLEDGMENTS

The Indiana University Graduate School Block Grant awarded to the Health Sciences Department supported Samantha Zabel's dedicated work with MassageNet and the development of this manuscript during her doctoral training. The authors also wish to recognize the contributions of the Massage Therapy Foundation's Research Committee in the development of MassageNet.

CONFLICT OF INTEREST NOTIFICATION

The authors are members of the Massage Therapy Foundation's Research Committee and have been integral in the development of MassageNet. Author Munk has been a Trustee for the Massage Therapy Foundation since 2018. The authors have no financial or other conflicts of interest to declare.

COPYRIGHT

Published under the <u>CreativeCommons</u> <u>Attribution-NonCommercial-NoDerivs 3.0</u> <u>License</u>.

REFERENCES

- Sefton JM, Dexheimer J, Munk N, Miccio R, Kennedy AB, Cambron J, et al. A research agenda for the massage therapy profession: a report from the Massage Therapy Foundation. *Int J Therapeut Massage Bodywk*. 2020 Dec 1;13(4):42–46. doi:10.3822/IJTMB.V1314.595
- 2. Zabel S, Munk N. Practice-Based Research Networks and Massage Therapy: A scoping review. *Int J Therapeut Massage Bodywk*. 2020;13(4):25–34. https://doi.org/10.3822/ijtmb.v13i4.535

- 3. Hickner J, Green LA. Practice-based research networks (PBRNs) in the United States: growing and still going after all these years. *J Am Board Fam Med.* 2015;28(5):541–545. doi: 10.3122/jabfm.2015.05.150227.
- 4. Goldstein KM, Vogt D, Hamilton A, Frayne SM, Gierisch J, Blakeney J, et al. Practice-based research networks add value to evidence-based quality improvement. *Healthcare*. 2018 Jun 1;6(2):128–134. https://doi.org/10.1016/j.hjdsi.2017.06.008
- 5. Steel A, Adams J, Sibbritt D. Developing a multi-modality complementary medicine practice-based research network: The PRACI project. *Adv Integrat Med.* 2014 Dec 1;1(3):113–118. https://doi.org/10.1016/j.aimed.2014.11.003
- Singal AG, Higgins PD, Waljee AK. A primer on effectiveness and efficacy trials. Clin Transl Gastroenterol. 2014 Jan 2;5(1):e45. doi:10.1038/ctg.2013.13
- 7. Loudon K, Treweek S, Sullivan F, Donnan P, Thorpe KE, Zwarenstein M. The PRECIS-2 tool: designing trials that are fit for purpose. BMJ. 2015;350:h2147. doi:10.1136/bmi.h2147
- 8. Holtrop JS, Glasgow RE. Pragmatic research: an introduction for clinical practitioners. *Fam Pract*. 2020;37(3):424–428. doi:10.1093/fampra/cmz092
- 9. Munk N, Stewart K, Love MM, Carter E, Elder WG. The intersection of massage practice and research: community massage therapists as research personnel on an NIH-funded effectiveness study. *Int J Therapeut Massage Bodywk*. 2014 Apr 23;7(2):10–19. doi:10.3822/iitmb.v7i2.236
- Peterson KA, Lipman PD, Lange CJ, Cohen RA, Durako S. Supporting better science in primary care: a description of Practice-based Research Networks (PBRNs) in 2011. J Am Board Fam Med. 2012;25(5):565–571. doi:10.3122/jabfm.2012.05.120100
- Mold JW, Peterson KA. Primary Care Practice-Based Research Networks: working at the interface between research and quality improvement. *Ann Fam Med*. 2005 May 1;3(suppl 1):S12. doi:10.1370/ afm.303
- Pace WD, Fagnan LJ, West DR. The Agency for Healthcare Research and Quality (AHRQ) Practice-Based Research Network (PBRN) relationship: delivering on an opportunity, challenges, and future directions. J Am Board Fam Med. 2011 Sep 1;24(5):489–492. doi:10.3122/jabfm.2011.05.110080
- Gaglioti AH, Walston D, Vasquez Guzman CE, Dera NT, Ortiz C, Wright LC, et al. A practical approach to establishing a practice-based research network stakeholder engagement infrastructure. *J Am Board Fam Med*. 2019 Sep 1;32(5):695–704. doi:10.3122/iabfm.2019.05.190046
- 14. Hall-Lipsy E, Barraza L, Robertson C. Practice-based research networks and the mandate for real-world evidence. *Am J Law Med*. 2018 May 1;44(2-3):219–236. doi:10.1177/0098858818789428
- 15. Tapp H. The changing face of primary care research and Practice-Based Research Networks

- (PBRNs) in light of the COVID-19 pandemic. *J Am Board Fam Med.* 2020;33(5):645–649. doi:10.3122/jabfm.2020.05.200400
- 16. AMTA. Massage Therapy Industry Fact Sheet. Available from: https://www.amtamassage.org/publications/massage-industry-fact-sheet/ Accessed 31 July, 2022.
- 17. MassageNet. https://www.massagenet.org
- 18. Cambron J, Dexheimer J, Madigan D, Brod N, Walton T. 2011—Massage therapists' collection of health history and client conditions encountered: a MassageNet survey. Posted 2017 Mar 31. Available from: http://massagetherapyfoundation.org/recipient/massage-therapists-collection-health-history-client-conditions-encountered-massagenet-survey/
- Cambron J, Dexheimer J, Madigan D, Brod N. 2011—Client perceptions of massage effects: a MassageNet study. Posted 2017 Mar 31. Available from: http://massagetherapyfoundation.org/recipient/client-perceptions-massage-effects-massagenet-study/
- 20. Madigan D, Cambron J, Kennedy AB, Burns K, Dexheimer J. Volunteerism of massage therapists: a MassageNet study. *Int J Therapeut Massage Bodywk*. 2016;9(4):14–21.

- 21. MTF. IMTRC 2022 Education Sessions Description. Available from: https://massagetherapyfoundation.org/imtrc-2022/imtrc-2022-education-sessions/Accessed 30 April, 2023.
- 22. MTF. Massage Therapy Foundation Ergonomics Project: Phase One Report. 2022. Available from: https://massagetherapyfoundation.org/wp-content/uploads/MTF-Ergonomics-Project-Phase-One-Report.pdf
- 23. McMillen CJ, Lenze SL, Hawley KM, Osborne VA. Revisiting practice-based research networks as a platform for mental health services research. *Adm Policy Ment Health*. 2009 Sep;36(5):308–321. doi:10.1007/s10488-009-0222-2
- 24. Wolf LE, Walden JF, Lo B. Human subjects issues and IRB review in Practice-Based Research. Ann Fam Med. 2005 May 1;3(suppl 1):S30–S37. doi:10.1370/afm.302

Corresponding author: Samantha Zabel, MA, PhD(c), Department of Health Sciences, Indiana University School of Health and Human Sciences, 901 W. New York Street PE 250, Indianapolis, IN, USA

E-mail: sazabel@iu.edu