Communities of Practice Annotated Bibliography

Barnett, S., et al. (2014). "Implementing a Virtual Community of Practice for Family Physician Training: A Mixed-Methods Case Study." Journal of Medical Internet Research **16**(3): e83. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3967123/

>BACKGROUND: GP training in Australia can be professionally isolating, with trainees spread across large geographic areas, leading to problems with rural workforce retention. Virtual communities of practice (VCoPs) may provide a way of improving knowledge sharing and thus reducing professional isolation. OBJECTIVE: The goal of our study was to review the usefulness of a 7-step framework for implementing a VCoP for general practitioner (GP) training and then evaluated the usefulness of the resulting VCoP in facilitating knowledge sharing and reducing professional isolation. METHODS: The case was set in an Australian general practice training region involving 55 first-term trainees (GPT1s), from January to July 2012. ConnectGPR was a secure, online community site that included standard community options such as discussion forums, blogs, newsletter broadcasts, webchats, and photo sharing. A mixed-methods case study methodology was used. Results are presented and interpreted for each step of the VCoP 7-step framework and then in terms of the outcomes of knowledge sharing and overcoming isolation. RESULTS: Step 1, Facilitation: Regular, personal facilitation by a group of GP trainers with a co-ordinating facilitator was an important factor in the success of ConnectGPR. Step 2, Champion and Support: Leadership and stakeholder engagement were vital. Further benefits are possible if the site is recognized as contributing to training time. Step 3, Clear Goals: Clear goals of facilitating knowledge sharing and improving connectedness helped to keep the site discussions focused. Step 4, A Broad Church: The ConnectGPR community was too narrow, focusing only on first-term trainees (GPT1s). Ideally there should be more involvement of senior trainees, trainers, and specialists. Step 5, A Supportive Environment: Facilitators maintained community standards and encouraged participation. Step 6, Measurement Benchmarking and Feedback: Site activity was primarily driven by centrally generated newsletter feedback. Viewing comments by other participants helped users benchmark their own knowledge, particularly around applying guidelines. Step 7, Technology and Community: All the community tools were useful, but chat was limited and users suggested webinars in future. A larger user base and more training may also be helpful. Time is a common barrier. Trust can be built online, which may have benefit for trainees that cannot attend face-to-face workshops. Knowledge sharing and isolation outcomes: 28/34 (82%) of the eligible GPT1s enrolled on ConnectGPR. Trainees shared knowledge through online chat, forums, and shared photos. In terms of knowledge needs, GPT1s rated their need for cardiovascular knowledge more highly than supervisors. Isolation was a common theme among interview respondents, and ConnectGPR users felt more supported in their general practice (13/14, 92.9%). CONCLUSIONS: The 7-step framework for implementation of an online community was useful. Overcoming isolation and improving connectedness through an online knowledge sharing community shows promise in GP training. Time and technology are barriers that may be overcome by training, technology, and valuable content. In a VCoP, trust can be built online. This has implications for course delivery, particularly in regional areas. VCoPs may also have a specific role assisting overseas trained doctors to interpret their medical knowledge in a new context.

Cambridge D, K., S & Suter, V. (2005) Community of Practice Design GuideStep-by-Step Guide for Designing and Cultivating Communities of Practice https://net.educause.edu/ir/library/pdf/nli0531.pdf

Kimble, C., Hildreth, PM, & Bourdon, I (2008). Communities of practice: Creating learning environments for educators. Charlotte, NC, Omfpr,atopm Age {ib.

Krug EG, D., LL, Mercy, JA, Zwi, AB, Lozano, R (2002). World report on violence and health. W. H. Organization. Geneva.

Nasca, T. J. and I. Philibert (2009). "Communities of Practice and Learning: Disseminating Their Work." Journal of Graduate Medical Education **1**(1): 164-165.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2931189/

PG, H. C. K. (2005). "Using technology to transform communities of practice into knowledge-building communities." SIGGROUP Bulletin **25**(1): 31-40.

Richardson, J. E., et al. (2015). "A needs assessment of health information technology for improving care coordination in three leading patient-centered medical homes." Journal of the American Medical Informatics Association **22**(4): 815-820.
> Objective We investigated ways that patient-centered medical homes (PCMHs) are currently using health information technology (IT) for care coordination and what types of health IT are needed to improve care coordination.Materials and Methods A multi-disciplinary team of researchers conducted semi-structured telephone interviews with 28 participants from 3 PCMHs in the United States. Participants included administrators and clinicians from PCMHs, electronic health record (EHR) and health information exchange (HIE) representatives, and policy makers.Results Participants identified multiple barriers to care coordination using current health IT tools. We identified five areas in which health IT can improve care coordination in PCMHs: 1) monitoring patient populations, 2) notifying clinicians and other staff when specific patients move across care settings, 3) collaborating around patients, 4) reporting activities, and 5) interoperability. To accomplish these tasks, many participants described using homegrown care coordination systems separate from EHRs.Discussion The participants in this study have resources, experience, and expertise with using health IT for care coordination, yet they still identified multiple areas for improvement. We hypothesize that focusing health IT development in the five areas we identified can enable more effective care coordination. Key findings from this work are that homegrown systems apart from EHRs are currently used to support care coordination and, also, that reporting tools are key components of care coordination.Conclusions New health IT that enables monitoring, notifying, collaborating, reporting, and interoperability would enhance care coordination within PCMHs beyond what current health IT enables. https://academic.oup.com/jamia/article-lookup/doi/10.1093/jamia/ocu039

Roland, D., et al. (2017). "Preliminary Evidence for the Emergence of a Health Care Online Community of Practice: Using a Netnographic Framework for Twitter Hashtag Analytics." J Med Internet Res **19**(7): e252.
> Background: Online communities of practice (oCoPs) may emerge from interactions on social media. These communities offer an open digital space and flat role hierarchy for information sharing and provide a strong group identity, rapid flow of information, content curation, and knowledge translation. To date, there is only a small body of evidence in medicine or health care to verify the existence of an oCoP. Objective: We aimed to examine the emergence of an oCoP through the study of social media interactions of the free open access medical education (FOAM) movement. Methods: We examined social media activity in Twitter by analyzing the

network centrality metrics of tweets with the #FOAMed hashtag and compared them with previously validated criteria of a community of practice (CoP). Results: The centrality analytics of the FOAM community showed concordance with aspects of a general CoP (in terms of community, domain, and practice), as well as some specific traits of a health care community, including social control, common purpose, flat hierarchy, and network-based and concrete achievement. Conclusions: This study demonstrated preliminary evidence of an oCoP focused on education and based on social media interactions. Further examination of the topology of the network is needed to definitely prove the existence of an oCoP. Given that these communities result in significant knowledge translation and practice change, further research in this area appears warranted. http://www.jmir.org/2017/7/e252/

Saint-Onge, H., & Wallace, D (2003). Leveraging communities of practice for strategic advantage. Boston, MA, Butterworth-Heinemann.

Soubhi, H., et al. (2010). "Learning and Caring in Communities of Practice: Using Relationships and Collective Learning to Improve Primary Care for Patients with Multimorbidity." Annals of Family Medicine **8**(2): 170-177.

We introduce a primary care practice model for caring for patients with multimorbidity. Primary care for these patients requires flexibility and ongoing coordination, and it often must be tailored to individual circumstances. Such complex and flexible care could be accomplished within communities of practice, whose participants are willing to learn from their shared practice, further each other's goals, share their stories of success and failure, and promote the continued evolution of collective learning. Primary care in these communities would be conceived as a complex adaptive process in which the participants use an iterative approach to care improvement that integrates what they learn and do collectively over time. Clinicians in these communities would define common goals, cocreate care plans, and engage in reflective case-based learning. As community members manage their knowledge, gain insights, and develop new care strategies, they can improve care for patients with multiple conditions. Using a mix of methods, future research should explore the conditions that are necessary for collective learning within communities of clinicians who care for patients with multimorbidity and who develop new knowledge in practice. By understanding these conditions, we can foster the development of collective learning and improve primary care for these patients. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2834724/

Walsh, K. and S. Barnett (2014). "Virtual Communities of Practice: Overcoming Barriers of Time and Technology." J Med Internet Res **16**(7): e185. http://www.jmir.org/2014/7/e185/

Welsh, S., Sherriff A, Flodgren G (2015) The champion for improved delivery of care to older people in long-term care settings: effects on professional practice, quality of care and resident outcomes. Cochrane Database of Systematic Reviews **11**, http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011956/epdf

Wenger, E., McDermott, RA, & Snyder, W (2002). Cultivating communities of practice: A guide to managing knowlege. Boston, Harvard Business School Press.