The History of the DIT

By Jeremy French-Lawyer, MPH, CAS, CHES

Inception of the DIT

Margaret A. Turk, MD, has worked throughout her career to incorporate disability content into medical education in order to improve care for people with disability, and address health disparities and differences. In 2016, Dr. Turk hired Michael loerger, PhD, MPH, CSCS, ACE-FNS as a student fellow to work on several research projects while he was completing his MPH and PhD. Dr. loerger also contributed to the development of a series of modules in partnership with New York State Department of Health Disability and Health Program and the Independent Living Center of the Hudson Valley, to provide continuing medical education for healthcare providers about appropriate healthcare for people with disability.

Dr. Turk noted the increasing requirements within medical school curricula, but the relatively small amount of time for or interest in medical education about disability. A brief review of the literature noted the majority of publications about disability medical education focused on attitudes, not on knowledge or skills. A systematic search and review of medical education about disability reinforced this concept and further identified a mismatch among learning objectives, described learning experiences, and choice of measurement tools. Typically, disability education was provided in isolation from clinical application or experiences. Thus began consideration of integration strategies for more effective disability education and approaches to disseminate successful learning experiences. Dr. loerger's PhD thesis related to Self-other Overlap² further supported the view that attitude change was not the appropriate focus, but rather consideration of empathy to support more positive behaviors toward people with disability. Integrating disability into medical education would involve incorporating disability content throughout the curriculum in small ways that support the current requirements for students, rather than following the traditional pattern of teaching about disability as a discrete, isolated topic. With this idea at its center, the Disability Integration Toolkit (DIT) was created.

Dr. loerger was hired full time to continue this work in January of 2017. Jeremy French-Lawyer MPH, CAS, CHES and Katherine Goss, MPH were hired as student fellows in January 2017 and December 2016, respectively. Thus, the Disability and Health Research Team (DHR) at SUNY Upstate Medical University was formed.

Initiation of the DIT

Work on the DIT was initiated at the beginning of 2017, with Dr. loerger taking significant roles in the theoretical framing of the toolkit, as well as authoring a significant amount of content. Ms. French-Lawyer also contributed significantly to content development, as well as contributing perspectives related to adult education. Ms. Goss contributed to authoring of Small Group Activities and Journal Club Recommendations. Dr. Turk led the development and provided her considerable expertise in both disability content and medical education and curriculum. This team provided a variety of perspectives that has led to the theoretical context of the DIT, and the development of a diverse set of educational tools that feature disability content.

A webpage was created and hosted on the SUNY Upstate Medical University website in September, 2017. This page includes information about the DHR team, additional resources, information for collaborators, and, of course, the educational activities that make up the DIT. This content is published under a Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license which allows for open access non-commercial use of the content, with or without changes, with credit to the authors.

Two small group activities were initially completed, *Respectful Communication* in October 2017 and *Spinal Cord Injury (SCI) and Pregnancy Discussion* in September 2018. Several Journal Club Activities were also completed in October of 2017, *Accessibility of Medical Equipment*, *Defining Disability*, *Disability in Primary Care*, and *Rural Residents with Disability*.

In 2017, early in the formation of the DIT, a need for a peer review process was recognized. The DIT Peer Review process was developed by Dr. loerger and Ms. French-Lawyer to provide independent feedback from clinical and education experts on the content, instructional design, and integration of the DIT activities. This process also helps to ensure that content is accurate and up to date. For more information, please visit Our Team and Process (Link) or review the Disability Integration Toolkit Technical Guide on the Resources for Collaborators page (Link).



Partnerships and Participants

The DHR began a partnership with the Association of Academic Physiatrists (AAP) in 2018 to support the implementation of the DIT on a national scale. The Medical Student Education Council had an interest in the concept and began working on the DIT. The AAP sent out the first call for participants to its members in 2018 and received several responses from individuals interested in creating tools for the DIT. The first activity from an author from this call for participants, *Defining Disability TED Talk*, was published in January 2019, after going through the triage process, revisions, and peer review process.

In 2019 a Subcommittee of the Education Committee of the AAP was established to specifically focus on the Disability Integration Toolkit. This committee continues to recruit participants, disseminate information about the DIT and support DIT development.

As of January 2020, there were DIT authors from four institutions, reviewers from ten institutions, and two major partnering

organizations. These numbers are anticipated to continue growing as the DIT is disseminated and implemented nationally.

Dissemination and Evaluation

Rigorous evaluation is an important aspect of the DIT.¹ The *DIT Evaluation Matrix* was written by Dr. loerger in 2019 after an initial pilot evaluation in 2018, in order to provide a comprehensive and systematic evaluation of the DIT. This evaluation matrix emphasizes knowledge and self-efficacy, and is based on a pretest, posttest, and longitudinal follow-up structure. For more information, please review the information about evaluation on the Our Team and Process page (Link).

The DIT has been implemented at SUNY Upstate on a small scale with the PMR Interest Group and with the AAP's Medical Student Summer Clinical Externship for over two years. Pilot evaluations have also been completed as a part of this implementation. Results from the 2019 MSSCE pilot evaluation, as well as a poster describing the DIT development process, are being presented by Ms. French-Lawyer at ISPRM 2020.

The first evaluation of the DIT at another university led by an Evaluation Coordinator began in 2019 and is anticipated to end in spring of 2020. This evaluation was implemented at University of Alabama with Alexandra Fry, MD working as Evaluation Coordinator, and Jeremy French-Lawyer providing technical support. This initial evaluation provides a model for implementation of evaluation at other institutions in future.



Ongoing Work of the DIT

The Clinical Rotation Companion Module: Pediatrics was completed in November 2017, and was revised in October 2018. The Pediatrics Module was created through a series of strong collaborations with experts from different fields. The *Pre-participation Participation Exam Module* is almost complete as of February 2020, and is undergoing the peer review process. Articulate software, which allows for the creation of high-quality, interactive modules that can be posted to the internet, was purchased in September 2018 to support the creation of these interactive modules.

Several other projects have continued to grow the DIT. Instructions for Journal Club Activities were added to the toolkit in in March 2019, and the *Community Resource Activity* was posted in January 2020. In addition to the *Pre-participation Participation Exam Module* an additional module focusing on physical activity is also in progress. There is also an ethics case that is nearing completion, and is under revision in the peer review process. In total, eleven tools have been published to the DIT to date, not including these in progress educational activities. A sustainability plan is being developed that includes a

collaborative effort to maintain the work of the DIT, and to continue to grow the content and expand the access to and impact of the DIT in medical education.

References

- 1. loerger, M., Flanders, R. M., French-Lawyer, J. R., & Turk, M. A. (2019). Interventions to Teach Medical Students About Disability: A Systematic Search and Review. *American journal of physical medicine & rehabilitation*, *98*(7), 577-599.
- 2. loerger, M., Machia, L. V., & Turk, M. A. (2019). Self-other overlap: A unique predictor of willingness to work with people with disability as part of one's career. PloS one, 14(8).