

COLLABORATIVE HEALTHCARE



INTERPROFESSIONAL PRACTICE, EDUCATION, AND EVALUATION

Spring 2018 | Vol. 9 No. 1

FROM THE EDITORS

Thank you reading the spring issue of Collaborative Healthcare! Spring is always an exciting time of year for us at JCIPE as we wrap up many of our IPE and collaborative practice (CP) programs on campus. This year, we graduated our tenth cohort of Jefferson Health Mentors Program students and celebrated the accomplishments of our first expanded cohort of interprofessional student hotspotters, consisting of 20 teams of students from 15 professions who worked with patients with complex health and social needs. Our Team SAFE (Safety and Fearlessness Education) program trained a record number of students and now includes both introductory and advanced simulation workshops. Additionally, our virtual IPE platform, Enhancing Services to Homeless Populations (ESHP), has been filled to capacity throughout the academic year and continues to improve the knowledge, skills and self-efficacy of interprofessional student participants. We are now more confident than ever that virtual platforms are an important way to build on core IPE programming at Jefferson and have already developed a new virtual program that will enable students to work with a patient with Alzheimer’s Disease and her caregiver. Assessment of collaborative practice behaviors remains a priority on campus, and we have now integrated our Jefferson Teamwork Observation Guide™ (JTOG) into

nearly every IPE and CP program on campus, with over 15,000 JTOGs completed to date. Once disseminated to other institutions, we believe the app, which incorporates the voice of the patient and family member (or support person) as well as students and providers as part of teamwork assessment will enable national benchmarking of collaborative practice behaviors. A number of JTOG studies are currently at press, and we look forward to sharing some of this exciting data with you soon.

This year, our Center continues to expand to meet the needs of our rapid programmatic expansion and new research initiatives. We now have a total of nine faculty and staff from various professions leading our new IPE and CP initiatives on campus as well as two new PhD researchers, Dr. Angela Gerolamo and Dr. Richard Hass, assisting us with assessment and research in the Center. Our JCIPE family has grown in other ways, too, as our Administrative Director, Shoshana Sicks, celebrated the arrival of a healthy new baby boy!

In addition to all of the updates at JCIPE, we could not be more thrilled with this edition of Collaborative Healthcare. We have another exciting collection of articles. One study describes the impact of a new IPE elective at

the University of Alabama designed to increase awareness about healthy work environments. In addition, three powerful student and alumni reflection pieces are featured. Finally, a thought provoking paper by Dr. Mark Goldszmidt challenges us to adopt a sociomaterial perspective to strengthen current assessment of CP. We are excited to announce that Dr. Goldszmidt will also be joining us at our upcoming JCIPE conference, where he will further elaborate on this fascinating assessment approach. We hope you enjoy the enclosed articles, and, if you have not already marked your calendar, please save the date for the upcoming 6th biannual JCIPE conference, Interprofessional Care for the 21st Century, on October 26th – 27th. We anticipate a record turnout of attendees, an opening Keynote by Dr. George Thibault, President of The Josiah Macy Jr. Foundation, an outstanding panel of plenary speakers including Dr. Mark Goldszmidt, Centre for Education Research & Innovation, Schulich School of Medicine & Dentistry, University of Western Ontario; Dr. Patty Coker-Bolt, Division of Occupational Therapy, Medical University of South Carolina; and Dr. Peter H. Vlasses, Accreditation Council for Pharmacy Education as well as a host of phenomenal pre-conference workshops led by IPE leaders from around the country. Looking forward to seeing you then!

IN THIS ISSUE

From the Editors.....1	Student Hotspotting: Reflections of a Program Graduate.....4	Health Mentors Program Key Student Take Aways.....6
An Ounce of Prevention: Interprofessional Education, Burnout Syndrome, and Healthy Work Environments: A Pilot Study.....2	Meet an IPE Student Champion from Thomas Jefferson University Gerald Gibbons.....5	Health Mentors Program Reflection Essays.....7
JCIPE by the Numbers.....3	Meet an IPE Faculty Champion from Thomas Jefferson University Angela Gerolamo.....5	Recognizing the Importance of Materials: Embracing a Sociomaterial Perspective on Interprofessional Collaboration.....8

An Ounce of Prevention: Interprofessional Education, Burnout Syndrome, and Healthy Work Environments: A Pilot Study

Background

Burnout syndrome (BOS), characterized by exhaustion, depersonalization, and reduced satisfaction in performance¹, has been associated with increased job turnover, reduced patient satisfaction, and decreased quality of care. It affects physicians and nurses alike, particularly in high acuity areas². In response to alarming rates of BOS, the Critical Care Societies Collaborative (CCSC), comprised of four U.S. professional and scientific societies, issued a call to action, advocating for healthy work environments (HWE), where mutual respect between team members occurs². HWE, supported by six evidenced-based, relationship focused standards of care, empower nurses and their colleagues to practice to their full potential³. The purpose of this paper is to report pilot study findings related to the effectiveness of a critical care interprofessional education (IPE) intervention on pre-licensure medical and nursing students to develop knowledge regarding the American Association of Critical Care Nurses (AACN) standards of HWE³ and to develop confidence regarding practice in interprofessional teams.

Methods

The IPE elective was delivered weekly during spring semester 2016 at a large, state-supported university. Nursing and medical school faculty trained 21 nursing and eight medical students utilizing lecture, skill demonstration, group discussion, and role play. HWE standards, skilled communication and true collaboration, which prepare nurses to demonstrate they are: (1) as proficient in communication skills as they are in clinical skills and (2) persistent in pursuing and fostering rich, equal collaboration, were highlighted weekly (AACN, 2005). Course procedures included central line insertion, intubation, trauma management, and interprofessional conflict resolution.

Data Collection

University IRB approval was obtained prior to data collection. Students in the experimental group self-elected to enroll in the elective. The control/comparison group was 50 5th semester nursing and 29 3rd and 4th year medical students from the same cohort. Using a post-test with nonequivalent groups design, surveys were sent electronically via Qualtrics (Qualtrics, Provo, Utah).

Assessment

The Interprofessional Socialization and Valuing Scale (ISVS; Cronbach's $\alpha = .95$), a 34-item, 7-point response scale was used. The tool has

three subscales: (1) ability to work with others ($\alpha = .90$), (2) value in working with others ($\alpha = .92$), and (3) comfort in working with others ($\alpha = .82$)⁴. The 12-item, researcher designed AACN HWE Survey was used to evaluate student knowledge regarding standards of HWE ($\alpha = .92$). Sample items included: (a) I am familiar with the link between work environment and patient safety, (b) I am familiar with the percentage of wrong site surgeries and delays in treatment related to communication issues, and (c) I am familiar with strategies to address unhealthy communication practices to prevent disruptive behaviors.

Data Analysis

Data was analyzed using SPSS Version 23 (IBM Corporation, 2015). Participant scores were compared on the measures of interest, including differences between males and females, older and younger participants, or nursing and medical students.

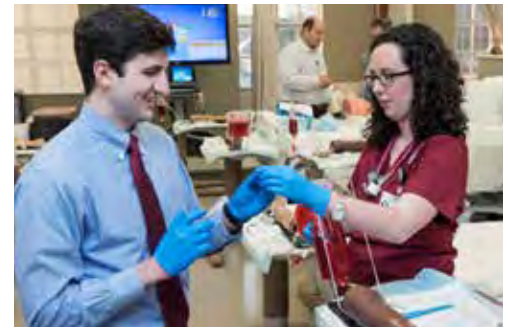
Results

The majority of participants were nursing students ($N=62$, 78.5%), female ($N=71$, 88.9%), and Caucasian ($N= 73$, 92.4%). The ISVS ability to work with others subscale was significantly correlated with both value in working with others ($r = 0.85$) and comfort in working with others ($r = 0.63$). The value in working with others and comfort in working with others were also significantly correlated ($r = 0.48$).

Males ($M = 5.81$, $SD = 0.60$) reported greater comfort in working with others than females ($M = 4.83$, $SD = 0.92$), $t(77) = 2.95$, $p = .004$. There was a marginally significant difference on value of working with others, with nursing students ($M = 5.85$, $SD = 0.78$) placing greater value than medical students ($M = 5.25$, $SD = 1.15$) $t(75) = 1.93$, $p = .07$. Nursing students ($M = 4.98$, $SD = 0.97$) also reported greater overall familiarity with HWE standards than medical students ($M = 4.26$, $SD = 1.24$), $t(75) = 2.44$, $p = .02$.

Discussion

A small, non-diverse sample, with data collection occurring at a single time point preclude generalization of findings. Whereas males were more comfortable working with others and nursing students placed more value on collaboration, ongoing interprofessional team work in medical and nursing curricula may be required. Although one would expect nursing students to be more aware of AACN HWE standards, the development and sustenance of these supportive environments will require cooperation between all



professionals. Future research should include longitudinal designs with diverse student groups to capture the effects of IPE on the development and sustenance of HWE.

Mary Louanne Friend, PhD, MN, RN

Assistant Professor
College of Community Health Science
Institute of Rural Health Research
The University of Alabama
P.O. Box 870326
Tuscaloosa, AL 35487
Phone 205-348-6753
Mobile 985-859-6024
Fax 205-348-6881
mlfriend@ua.edu

Richard D Friend, MD, FAAFP

Chair-Family, Internal and Rural Medicine
Residency Director
University of Alabama-Family Medicine
Residency-Tuscaloosa
The University of Alabama
850 5th Ave E
Box 870377
Tuscaloosa, AL 35401
Phone 205-348-1370
Fax 205-348-2695
rdfriend@ua.edu

REFERENCES

1. Maslach, C. & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*. 2: 99-113. doi:10.1002/job.4030020205
2. Moss, M., Good, V.S., Gozal, D., Kleinpell, R. & Sessler, C.N. (2016, July). An official critical care societies collaborative statement—burnout syndrome in critical care health-care professionals: a call for action. *CHEST*. 150(1):17-26.
3. American Association of Critical-Care Nurses. (2005, May). AACN standards for establishing and sustaining healthy work environments: a journey to excellence. *American Journal of Critical Care*. 14(3):187-97.
4. King, G., Shaw, L., Orchard, C.A. & Miller, S. (2010, Jan). The interprofessional socialization and valuing scale: A tool for evaluating the shift toward collaborative care approaches in health care settings. *Work*. 35(1):77-85.

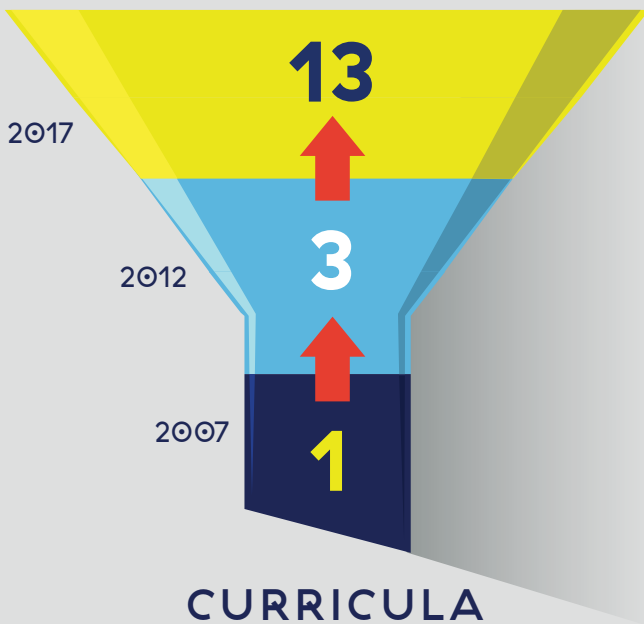
JCIPE by the Numbers

LOOKING BACK OVER 10 YEARS

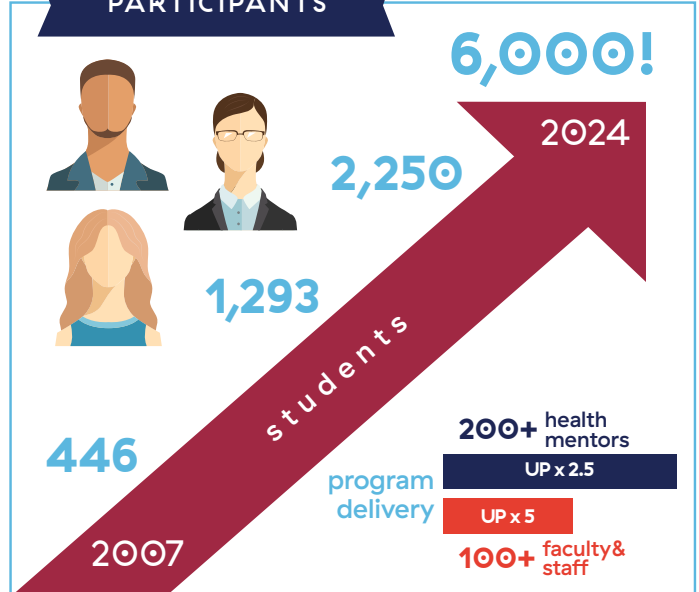
Availability to work with interprofessional healthcare teams

ranked **13 out of 28** most important reasons for choosing to attend Jefferson by incoming students in 2016.

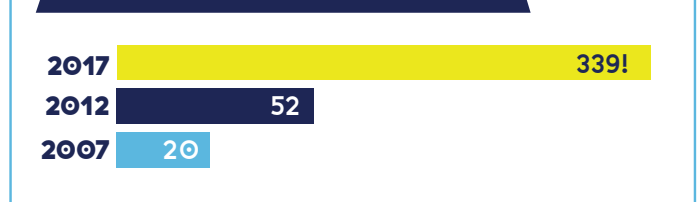
IPE OFFERINGS FOR NOVICE TO ADVANCED LEARNERS



PARTICIPANTS



FACULTY/STAFF/CLINICIAN INVOLVEMENT

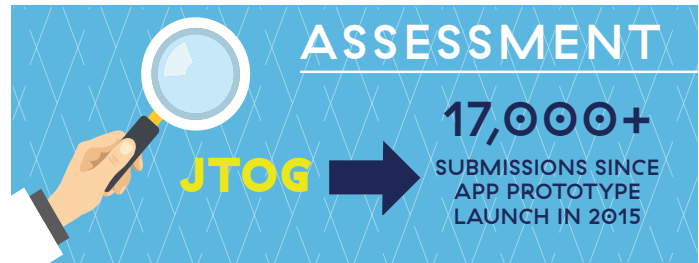


PUBLICATIONS

200+ MANUSCRIPTS
275+ PEER-REVIEWED PRESENTATIONS
100+ POSTERS
60+ INVITED PRESENTATIONS & CONSULTATIONS



ASSESSMENT



6 HOSTED CONFERENCES

12 GRANT AWARDS

2 BIENNIAL PEER-REVIEWED NEWSLETTERS CIRCULATED TO **500+**

Student Hotspotting: Reflections of a Program Graduate



Kyle Bardet, MD

the face of medicine for my family and my community. My family physician was our pediatrician, and she counseled us on medications (which we picked up from her office), gave us our immunizations, and suggested home exercises to rehab our injuries. It was only natural that as I became interested in a career in health that my ultimate goal was an MD and a family medicine residency. Soon after I matriculated at Sidney Kimmel Medical College, I was exposed to an array of occupations through interprofessional curriculum, such as the Health Mentors Program. I developed an appreciation for other professions during my first three years of medical school, but it was not until I became a “student hotspotter” that I came to understand the power of an interprofessional team.

In 2015, as a fourth year medical student, I had the opportunity to take part in the second cohort of student hotspotters through the Camden Coalition of Healthcare Providers (Camden Coalition), Association of American Medical Colleges (AAMC), and Primary Care Progress (PCP). I already had an interest in public health, geographic information systems, and the Camden Coalition. The Student Hotspotting program would teach me what I could do, as a future physician, to take care of populations of patients with excessive healthcare utilization but poor outcomes. I pictured myself as a forward-thinking leader who would change patients’ lives with my care, counseling, compassion, and prescriptions.

I was wrong.

Once we enrolled patients, it was quickly apparent that my patients did not need my care as a physician. They needed the expertise of the other members of my interprofessional team – our nursing student, physical therapy student, occupational therapy student, pharmacist, social work intern, and public health researcher. Embarrassingly, when we started our project, I could not explain what my colleagues did. I can recognize now that I did not understand the broad scope of their future professions. That changed as we worked together.

To this day, I value the students with whom I worked and the lessons they taught me. I continue to be humbled by the amazing group of professionals I worked alongside, and I still think about them when I provide care to my patients. Now when I see my patients struggling to afford their medications, forgetting to take them, or suffering from the side effects, I think of Julie, my pharmacy colleague. Because of the Student Hotspotting program, I now know where patients can get cheaper medication, how to navigate manufacturer coupons and rebates, which pharmacies will make blister packs, and how to assess medication adherence and understanding. When I hear that my patients are falling at home, I think of Jill, my occupational therapy colleague. Because of her, I know to ask about a patient’s house, stairs, hand rails, and mobility devices. I know how to write a meaningful referral to a physical therapist and when patients might need specialized wheelchairs, canes, and walkers. When my patients are struggling to make ends meet and take care of themselves at home, my brain goes to Anna and Carly, our team’s nurse and social worker. I can thank them for knowing how to identify



home nursing services and food pantries, and navigate complex insurance networks. I became a hotspotter because I wanted to be a compassionate provider; working in an interprofessional team turned me into a competent provider.

Nearly three years after my experience with hotspotting, I have the privilege of serving as a faculty advisor for a new group of student hotspotters. When my hotspotting students asked me for tips at the beginning of this year, I had only one: recognize the limitations of what you know and in doing so, learn what your colleagues are experts in.



Student Hotspotters, 2017-2018 Cohort



Meet an IPE Student Champion from Thomas Jefferson University

Gerald Gibbons - MD/MPH Student, Class of 2018

Briefly describe your work with/related to JCIPE:

As an MD/MPH student, I have taken part in the Health Mentors Program (HMP) and TeamSAFE training. HMP was a great introduction to teamwork early in medical school. TeamSAFE was a series of interprofessional simulation sessions in the Hamilton Simulation Center that provided a fantastic team communication experience prior to my start of residency.

Furthermore, over the past two years, I have worked extensively with JCIPE to develop the up-scaled Interprofessional Student Hotspotting Learning Collaborative (ISHLC) at Jefferson, which received status as a National Student Hotspotting Hub this past year. Part of my commitment included a role with the Jefferson ISHLC team in 2016 learning about the social determinants of health faced by a small group of “super-utilizers”, or patients who chronically overuse emergency services. The ISHLC team helped improve access to social resources for these patients, coordinated and attended physician visits, and

even spoke with family members. Additionally, the team built personal relationships with high-needs individuals who typically lacked social supports. Finally, another MD/MPH student, Charles Baron, and I, along with the JCIPE team developed curricula, timelines, application processes, evaluation plans, and multiple posters and presentations. This all occurred in coordination with five of the different Jefferson Colleges and the Jefferson Care Coordination team.

What excites you about this work?

Building an interprofessional curriculum through the use of previous experiences as a student and having the support to apply these experiences in developing changes and additions to the curriculum was an amazing opportunity. I have high hopes that by participating in the ISHLC program students and advisors will learn about serving a difficult patient population and see their efforts improve patients’ lives. In addition, I am a big supporter of “teamwork makes the dream work!” This program epitomizes that phrase as interprofessional teams must work together to provide hands-on interventions for super-utilizers, which typically requires a lot of planning and coordination.

What have you learned that was new?

The building of a new program has been an extremely valuable experience for my career. Learning all the aspects of coordination, communication, networking, and organization required to build a program has been incredible. Attempting to describe the effectiveness of JCIPE is quite difficult, so being able to witness its workings firsthand is truly invaluable.

Why is IPE/CP important to you?

I firmly believe that IPE & CP are the future of healthcare, especially given the focus on quality over fee-for-service. IPE allows students to gain teamwork exposure early in their careers, which can help facilitate positive interactions when caring for patients in practice. Even if the IPE doesn’t directly mimic clinical practice, it is still a great opportunity for individuals to work in teams formed with different perspectives and experiences. It is the opportunity to learn that alternative perspectives can lead to great success. Strong IPE programs allow graduated students to work more effectively in practice because they can grasp where their own role ends and where another health profession can better take the lead.



Meet an IPE Faculty Champion from Thomas Jefferson University

Angela Gerolamo, PhD, RN

Briefly describe your work with/related to JCIPE:

I serve as Chair of JCIPE’s Research and Evaluation Committee. In this role, I provide support in designing the evaluations of several of JCIPE’s interprofessional education programs, such as the Health Mentors Program (HMP) and Enhancing Services to Homeless Populations (ESHPP) training. In addition, I work on the qualitative evaluation of the Interprofessional Student Hotspotting Learning Collaborative (ISHLC), which will assess the experiences of student and faculty advisor participants. I also participate on the planning committee for JCIPE’s biannual conference. This all occurred in coordination with five of the different Jefferson Colleges and the Jefferson Care Coordination team.

What excites you about this work?

In my role as Chair of the Research and Evaluation Committee, I collaborate with extremely bright and capable health care professionals from diverse disciplines across the Jefferson Enterprise. It is exciting to work with colleagues who embrace interprofessional education with the same wholehearted enthusiasm as I do. It has been an amazing opportunity to contribute to the ongoing development and evaluation of these cutting-edge programs.

Why is IPE/CP important to you?

I believe effective and efficient health care cannot be achieved without bridging disciplines—this begins with the education of health care professionals. As a new registered nurse working in an acute inpatient psychiatric setting, I experienced first-hand the critical role that the interprofessional care team has in providing high-quality, comprehensive care to vulnerable patients. No one profession can do it alone. Teaching students the importance of collaborative practice through innovative interprofessional education programs has the potential to revolutionize health care. And, I want to be a part of it!

Health Mentors Program

Student Key Takeaways
2017-2018

“Each member of our team has his or her specialty, but one thing we have in common is ensuring quality patient care.”

Physical Therapy student

“Instead of just identifying the medical diagnoses, the experience led us to see the whole picture of our client including the physical and social environment...I think the [HMP] experience will definitely have an impact on my future profession in OT.... collaboration with other health care professionals is essential. In my future endeavors I will strive to ask for input from other health professionals...I will also take away the advocacy experience and use it to both help advocate for my future patients and empower them to advocate for themselves.”

Occupational Therapy student

“While my initial thought was on the mentor’s medications, the occupational and physical therapists were looking in the bathroom and layout of the apartment. The fact [that] we all had different ideas of what to look at seemed to complement each other and helped us get a better understanding of how our health mentor was living with their condition.”

Nursing student

“I believe that the most valuable thing that I was able to gain from [HMP] is the sense of the human behind the medical condition.”

Medical student

“I was proud to be a part of a team who took bettering the lives of another so seriously.”

Nursing student

Health Mentors Program Reflection Essays



Jen Starrs
Occupational Therapy

The Health Mentors Program has given me the opportunity to experience interprofessional teamwork and has provided me with an understanding of how a medical diagnosis can impact quality of life. Meeting with our health mentor

at his home as a team was an enriching experience; being able to speak with our mentor in a personal setting allowed for open communication about living life as a diabetic and the challenges that come with this condition. Working as a team was challenging at first, but after introductions and our visit at our health mentor's home, we were able to work collaboratively on group assignments. This collaboration culminated in our final project of advocacy. Meeting with our health mentor for a second time on Jefferson's campus gave us a better understanding of what issue was most significantly impacting our mentor's life. After identifying our health mentor's desire and the need for a better policy for the safe disposal of sharps, we were

able to gather information on the existing protocols and navigate a course of action for political change.

Working as an interprofessional team (occupational therapy, nursing, medical, and physician assistant) allowed for a greater appreciation of what each profession has to offer. It was interesting to hear the difference in what other professions were thinking about our health mentor's condition compared to what I had in mind with my occupational therapy lens. While nursing, medicine, and PA were concentrated on the medical side of a diabetes diagnosis, I was attuned to how this diagnosis impacts function. It was, however, a collaborative effort, given that nursing informed me on how often insulin needs to be administered and I was able to provide suggestions for medication management, coping strategies, and environmental adaptations. As a team, we were able to work together to understand our health mentor's diagnosis, how this impacts his life, and how we could better advocate for his needs. Overall, the process of meeting with our health mentor, working as a team, and advocating for political change was a rewarding experience. The experience provided me with a sense of accomplishment because I now know that I

have the ability to work and contribute as a team member in the medical field.

Although plans were not made for future encounters, the Health Mentors Program has provided me with a basis of how to work effectively on a medical team. I have gained insight from this experience that I will carry with me into my professional future. For example, I now understand the importance of storytelling with patients and clients; getting a better picture of how a diagnosis impacts daily living can help to improve how we address medical concerns. Additionally, I have learned the importance of clear, articulate communication and how this affects teamwork; specifically, how written directions are better than verbal directions and can help to eliminate confusion within the group. In future professional groups, I will work to ensure effective communication by being concise and explicit when giving directions and organizing meeting times.



Rachel Fogley
Medicine

As I tried to find my way to the conference room of the Sidney Kimmel Cancer Center, Tony appeared out of a doorway with a big smile and a warm "hello." I entered the small room and was immediately overcome by our

mentor's generosity: trays of hoagies, pizza, chips, and a variety of beverages, all for us. "It's from Celebre's. They've got the best pizza in Philly." As usual, our group spent the first portion of our meeting discussing food and family with our mentor. Tony grew up in South Philadelphia. As an Italian, he was raised on his mom's sauce. He married the girl across the street, Cheryl, and together they have four girls and two boys, many who live close to home. This Monday, in the conference room, we talk cannolis. I've brought a box from Termini Brothers, as per Tony's recommendation. Tony tells us his daughter is expecting a baby in February and describes Sunday football traditions with his

family now that it's Eagles season. We segue into our Module 3 prompt and, before we head out the door, Tony insists we all take doggie bags. He pulls out a box of Ziploc baggies: "I brought these so you could take some with you. Make sure you get some sweet peppers and some 'mozz.'"

I remain deeply moved by all of our team interactions with Tony, but especially this last one. In the short time we've known Tony, he has displayed such generosity of spirit. I feel grateful and honored to have him as our mentor and proud that our group was able to foster a meaningful relationship with him in such a short amount of time. We have gotten to know Tony as a person--not just as a patient or a disease--and have learned what is most important to him in life. I do not regret that we spent just as much time getting to know Tony as discussing our prompts because, to me, this was the most interesting and rewarding part of the Health Mentors Program.

My experience with Tony and the Health Mentors Program has been a reminder of the importance of developing relationships with patients and making an effort to understand what they value and who they are outside of their diseases. As a practicing clinician,

I aspire to express the same curiosity with patients that our group did with Tony, in order to better know them. In the end, patients benefit from a good relationship with physicians, as they receive medical care from someone who views them as an individual, not merely a disease, and who is ideally familiar with their wishes, values, and life circumstances. In return, as our group has already experienced with Tony, the physician is rewarded by establishing human connections with patients through the discussion of mutual interests and the wealth of experiences by which patients educate doctors. Tony has certainly educated and inspired us to approach life's challenges with a positive attitude.

Recognizing the Importance of Materials: Embracing a Sociomaterial Perspective on Interprofessional Collaboration

08.00h: The interprofessional team has just gathered for 'bullet rounds' – a brief 10 minute round designed for reviewing the list of patients who may be discharged each day. Around the table are the physiotherapist, occupational therapist, social worker, charge nurse, attending physician and senior medical resident. The conversation is led by the charge nurse and all members who contribute are listened to thoughtfully. For one of the patients, while the attending physician was intending to discharge them, based on the physiotherapist's voiced concerns, a decision is made to delay discharge and review them again at end of day.

Even in the best of circumstances, achieving effective interprofessional collaboration can be challenging. The above example, by most standards, would however appear to represent a model interaction; there was an effective team leader, meaningful and valued contribution by each participant and team members felt safe to disagree. The problem with it, as it likely is in many less ideal appearing interactions, is not the people. While there certainly can be people problems – such as issues with their attitudes, beliefs and abilities – a growing body of research suggests that the problem is far more complicated and less easily identified. Increasingly, both educators and researchers are turning to sociomaterial theories to trouble our assumptions around complex, real-world problems like interprofessional collaboration.^{1,2}

The term 'sociomaterial' has been taken up in numerous fields including organizational sciences, science and technology, philosophy, education and, most recently, in medicine.³⁻⁷ Rather than a single theory, sociomaterial is being used as an umbrella term to represent a diverse set of research practices which share a common focus on exploring the ways in which people and materials are "entangled" and together shape practice. Examples of sociomaterial theories used in studies of interprofessional collaboration include complexity theory,

actor network theory and cultural historical activity theory.¹

From a sociomaterial perspective, rather than "context" being considered as a backdrop in which collaboration takes place, it is considered to be an essential and inseparable – entangled – component of it. Moreover, the materials that get taken into consideration range from the very tangible (e.g., papers, pencils, rooms, chairs, pagers, cell phones) to the intangible (e.g., the electronic architecture of a medical record, scheduling rules, practice policies). What matters is the practice that takes shape – assembles – as a result of these multiple entanglements. From an interprofessional collaboration perspective, this way of thinking encourages us to think differently about what collaboration is, how it should be done, how it should be measured and the types of things we can do to improve it.

Returning to the example from above, from a sociomaterial perspective, we could ask questions like: What type of practice took shape (assembled)? What elements of the social and material contributed to this assemblage? What other practices – or outcomes – would we hope emerge that do not? In a recent study that asked those very same questions, we found some troubling answers. The practice that assembled was discharging patients. While the expertise for achieving other outcomes, like identifying ways to improve patient wellbeing existed, it was not the focus of any of the interprofessional interactions throughout the day. Some of the materials that contributed to this particular assemblage included over-crowded emergency rooms, hospital initiatives to address this problem – like bullet rounds, high volumes of patients on the wards and inadequate resources – like too few physiotherapists. Other practices that we would have liked to see emerge, like junior resident learning around interprofessional collaboration and bedside nursing contribution, did not. A deeper exploration of these also revealed contributing materials

like rooms too small to include the full team, overlapping scheduled teaching rounds, and nursing assignments such that each nurse looked after patients from multiple different physician teams – on average, a physician team with 28 patients would have to interact with 21 different nurses.

While this paper is necessarily short – another sociomaterial entanglement – it is my hope that it offers a novel perspective that can be taken up in at least three ways. First, I hope it encourages readers to read more about some of these ideas around sociomateriality. The references below include a deliberate mix of papers that are readily available online and books which, while less easily accessed, are highly recommended for those who develop a deeper interest in the topic. Second, I hope it can have an influence on those developing assessment tools for measuring the quality of interprofessional collaboration; using a sociomaterial perspective can strengthen current assessment practices by helping to broaden what is assessed beyond social interactions (e.g., also assess the materials and how they might be contributing to current practices). Third, I hope it can influence those working on quality improvement initiatives to consider materials more broadly, to make small changes with some of the identified materials (i.e., try changing the physical space or schedule) and then observe how they impact practice.

Mark Goldszmidt, MD, PhD

*Assistant Professor of Medicine
Associate Director, Centre for Education
Research & Innovation
Schulich School of Medicine & Dentistry
University of Western Ontario*

Remember to Save The Date for JCIPE's Conference this Fall and learn more from one of our amazing keynotes, Dr. Mark Goldszmidt!

REFERENCES

1. McMurtry A, Rohse S, Kilgour KN. Socio-material perspectives on interprofessional team and collaborative learning. *Medical Education*. 2016;50(2):169-180.
2. Lindh Falk A, Hopwood N, Abrandt Dahlgren M. Unfolding practices: A sociomaterial view of interprofessional collaboration in health care. *Professions & Professionalism*. 2017;7(2):1-14.
3. Coole D, Frost S, Bennett J, Cheah P, Orlie MA, Grosz E. *New materialisms: Ontology, Agency, and Politics*. Duke University Press; 2010.
4. Sørensen E. The time of materiality. Paper presented at: Forum Qualitative Sozialforschung/Forum: Qualitative Social Research; 2007.
5. Fenwick T, Edwards R, Sawchuk P. *Emerging approaches to educational research: Tracing the sociomaterial*. London: Routledge; 2011.
6. Orlikowski WJ. Sociomaterial Practices: Exploring Technology at Work. *Organization Studies*. 2007;28(9):1435-1448.
7. Fenwick T. Sociomateriality in medical practice and learning: Attuning to what matters. *Medical Education*. 2014;48(1):44-52.

SAVE THE DATE

Jefferson Center for Interprofessional Practice and Education
cordially invites you to our 6th biannual conference

Interprofessional Care for the 21st Century October 26 & 27, 2018

Philadelphia, PA • Jefferson.edu/JCIPE/2018Conference

EDITORIAL BOARD

EDITORS:

LAUREN COLLINS, MD

Co-Director, Jefferson Center for Interprofessional Practice & Education
Associate Professor, Family & Community Medicine
Sidney Kimmel Medical College
Thomas Jefferson University

ELENA UMLAND, PHARM D

Co-Director, Jefferson Center for Interprofessional Practice & Education
Associate Dean, Academic Affairs
Professor, Jefferson College of Pharmacy
Thomas Jefferson University

SHOSHANA SICKS, EdM

Administrative Director, Jefferson Center for Interprofessional Practice & Education
Thomas Jefferson University

EDITORIAL ASSISTANTS:

CATHERINE MILLS

Administrative Assistant
Jefferson Center for Interprofessional Practice & Education
Thomas Jefferson University

COURTNEY NEWSOME, BA

Advanced Programs Coordinator
Jefferson Center for Interprofessional Practice & Education
Thomas Jefferson University

EDITORIAL BOARD:

CAROL BECK, PHD

Assistant Dean, Jefferson College of Biomedical Sciences
Assistant Professor, Pharmacology & Experimental Therapeutics
Sidney Kimmel Medical College
Thomas Jefferson University

RAEYLYNN COOTER, PHD

Associate Provost for Academic Infrastructure
Thomas Jefferson University

REBECCA FINLEY, PHARM D, MS

Dean, Jefferson College of Pharmacy
Thomas Jefferson University

CAROLYN GIORDANO, PHD

Editorial Consultant

GERALD ISENBERG, MD

Director, Undergraduate Education
Professor of Surgery
Thomas Jefferson University Hospital

REBECCA C. JAFFE, MD

Clinical Assistant Professor, Hospital Medicine
Assistant Patient Safety Officer,
Thomas Jefferson University Hospital

RACHEL SOROKIN, MD

Chief Patient Safety and Quality Officer
Thomas Jefferson University Hospital

BETH ANN SWAN, PhD, CRNP, FAAN

Professor, Jefferson College of Nursing
Thomas Jefferson University

JON VELOSKI, MS

Director, Medical Education Research,
Center for Research in Medical Education and Health Care
Sidney Kimmel Medical College
Thomas Jefferson University

DEBRA ZELNICK, OTD, OTR/L

Interim Dean, Jefferson College of Health Professions
Thomas Jefferson University

STUDENT BOARD:

MATTHEW CARR

Sidney Kimmel Medical College
Thomas Jefferson University

DENA LEHMANN

Jefferson College of Pharmacy
Thomas Jefferson University

ALICIA MURATORE

Sidney Kimmel Medical College
Thomas Jefferson University

Collaborative Healthcare: Interprofessional Practice, Education, and Evaluation is a peer reviewed bi-annual publication that aims to disseminate current information and innovative projects advancing interprofessional education, evaluation, research and practice.

Jefferson Center for Interprofessional Practice and Education

130 S. 9th Street, Suite 1056, Philadelphia, PA 19107 • Tel: 215-955-0639 • Fax: 215-503-6284 • Jefferson.edu/JCIPE