CLINICAL SCHOLARS

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Toolkit for Health Equity Using a Trauma-Informed Lens in the Emergency Department

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TABLE OF CONTENTS

ABOUT THE PROGRAM

Clinical Scholars is a national leadership program of the Robert Wood Johnson Foundation led by the University of North Carolina at Chapel Hill. Learn more about RWJF's Leadership for Better Health programs by visiting: rwjf.org/leadershipforbetterhealth

ABOUT THE TOOLKIT

This toolkit can be used by organizations to understand the impact of trauma and bias on patients and staff in an emergency department, and to plan interventions to develop a trauma-informed approach.

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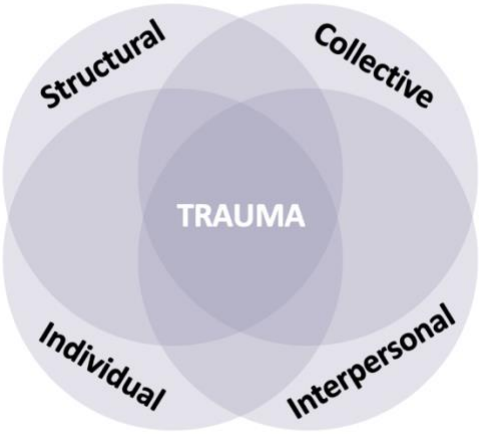
Toolkit for Health Equity Using a Trauma-Informed Lens in the Emergency Department



Trauma takes many forms, ranging from individual, interpersonal to societal and can have a profound effect on health. Traumatic experiences also influence the ways in which people engage with health care. Receiving health care services can be retraumatizing and is layered within a broader history of medical institution racism and abuse of vulnerable populations. Without an understanding of these effects, patients can be retraumatized and clinicians and non-clinical staff can suffer secondary traumatization. Trauma-informed care (TIC) offers an approach to recognize the impact of trauma on health and wellness as well as reduce retraumatization and promote healing. TIC requires a paradigm shift that advances health equity and social justice with mindful attention to traumas that are rooted in structural racism, oppression, bias, and stigma. 2020 has brought to wider consciousness both the ways in which trauma affects everyone, through the effects of COVID-19, as well an awareness of how trauma disproportionately affects communities of color.

Advancing trauma-informed approaches in the ED

Our TIC project's focus is the emergency department (ED), recognizing that trauma is ever present in this setting. Moreover, trauma-informed care would foster an expansion of thinking for emergency clinicians as trauma tends to be thought of in terms of physical traumas such as stabbings and gunshot wounds, or other events related to individual or interpersonal encounters, whereas social and structural traumas may be overlooked. This toolkit serves as a roadmap to understanding the layered, intersectional types of trauma, ranging from individual, interpersonal and collective/structural that are encountered by a broad array of emergency department staff. We address exploring the acceptability of several strategies to address the visible and 'invisible' forms of trauma occurring in EDs for both patients and staff. We promote applying the six TIC principles outlined by SAMHSA with a triple aim: policies and procedures; staff-patient; and staff-staff.

Trauma-informed approaches are crucial in ED's because the patient population typically includes a high concentration of people with traumatic experiences including individual and systemic adversity. In addition, ED staff members experience secondary (vicarious) trauma, within this fast-paced, high-stress exposure environment. TIC offers a theoretical framework and strategies that may mitigate the adverse effects of trauma on health and on people's ability to engage in healthcare, and to strengthen staff well-being. We include a focus on patients and staff, in order to contribute to a culture of health equity in the ED in ways that foster staff well-being while addressing stigma, bias and systemic racism present in both the provision of patient care and occurring within the milieu of the ED.

IN THIS TOOLKIT

We describe a process to engage stakeholders in identifying the challenges that a broad range of traumatic experiences cause to both ED staff and patients. Then, we suggest potential TI interventions that align with the six guiding-principles in order to:

- Strengthen the resilience of staff
- Decrease retraumatization
- Improve the ability of patients to engage in care with the goal of promoting healing and improving health outcomes

This toolkit will help users explore ways to understand how to garner stakeholder support to promote a TIC focused project that assesses ED staff acceptability and feasibility of TIC interventions before implementation.

Planning

REVIEW OF LITERATURE

A general population survey conducted in 24 countries (sample size 68,894 adults) found that over 70% of respondents reported a traumatic event with 30.5% reporting 4 or more events (Beneit et all, 2016). Patients presenting to an ED with acute trauma often are survivors of previous traumatic experiences. A survey of survivors of community violence participating in a hospital-based violence intervention program found that 100% of participants reported at least one adverse childhood experience (ACEs). These previous traumatic experiences are not equally distributed. Those self-identified as female, American Indian/Alaskan Native, and Black are more likely to experience several types of ACEs than those self-identified as male or white. ED providers experience trauma in their own lives as well. Unfortunately, this often occurs in the workplace. Providers commonly receive or witness verbal abuse, threats, or personal assault while delivering clinical care. Such vicarious trauma or can manifest as posttraumatic stress symptoms in a caregiver. A study of ED nurses demonstrated high levels of secondary traumatic stress symptoms, particularly arousal symptoms such as irritability and hypervigilance.

We conducted a systematic literature review to understand existing literature on TIC interventions in emergency medicine. Our review found only 10 studies demonstrating ED interventions explicitly operationalizing a TIC framework. Five studies represent primarily educational interventions and 5 describe protocols or programs that operationalized a TIC framework. Themes emerging from the qualitative analysis of unique interventions included: education, collaboration, and safety. Of the ED programs and protocols in place, there has been the most robust development in the fields of community violence intervention, pediatrics, and human trafficking. The majority of interventions focused on preliminary provider education and care protocols for historically vulnerable populations (e.g., persons impacted by structural racism and oppression). Numerous guidelines and best practices for TIC in the ED setting have been published as we described in our limitations section. However, operationalization of these best practices and outcomes data remains limited. It may be that the studies are ongoing. For example, the educational interventions included in this review were published between 2014-2020. Most papers included only level 1 and level 2 Kirkpatrick assessments (i.e., attitude changes and knowledge gains) and only two included level 3 and level 4 outcomes (i.e., clinical practice change and patient outcomes). The timing of our review may have been insufficient for most groups to collect patient-centered outcomes. Future studies are needed to establish provider and patient outcomes related to educational TIC interventions in EM. Across all interventions both education and protocol-driven, there was little to no adoption of TIC as a universal precaution for all patients. All interventions captured in our review rely on a population-specific approach. While this approach may increase providers' awareness of trauma in specific populations, it does not address needs of patients who do not present with "red flags" or who do not present with trauma-related complaints.

Future educational and programmatic interventions should emphasize TIC as a universal precaution for all-comers. Additionally, education should emphasize that TIC offers the opportunity to avoid trauma related to medical care and interventions itself. This review also uncovered a lack of process analysis and environmental analysis of the ED itself. Only two interventions evaluated how the physical space of the ED could be evaluated and improved using a TIC framework. None of the interventions examined cost effectiveness or return on investment when TIC models are used, representing another gap in the research.

RECOMMENDED LITERATURE

- Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. Achieving Health Equity: A Guide for Health Care Organizations. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016.
- Fostering Resilience and Recovery: A Change Package, National Council for Behavioral Health
- SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach (TIP Sheet 57)
- Trauma-Informed Healthcare Approaches: A Guide for Primary Care Editors: Gerber, Megan R. (Ed.)
- Fischer KR, Bakes KM, Corbin TJ, Fein JA, Harris EJ, James TL, Melzer-Lange MD. Trauma-Informed Care for Violently Injured Patients in the Emergency Department. Ann Emerg Med. 2019 Feb;73(2):193-202. doi: 10.1016/j.annemergmed.2018.10.018. Epub 2018 Nov 2
- Lewis-O'Connor A, Warren A, Lee J, Levy-Carrick N, Grossman SJ, Chadwick M, Stoklosa H, & Rittenberg E. (2019). The state of the science on trauma-inquiry. Women's Health

SKILLS NEEDED

- **Team-building skills:** It is important to develop an interdisciplinary steering team with a range of complementary skills. EDs include a wide range of roles and viewpoints, and an interdisciplinary team supported by administrative staff facilitates the ability to engage the entire ED community. Establishing regular meetings with agenda and minutes is vital to the progress of the project. Utilize options available to you to understand the unique strengths of each team member, as well as the synergies that can be built off the interplay of team members. For example, we utilized assessments such as the FourSight Model, Myers-Briggs Type Indicator, Change Style Indicator, and workshops in understanding how to have critical conversations.
- **Community-building skills:** In order to successfully implement a TIC project in the ED it is important to be able to build on current strengths of the community in the ED. This includes current efforts by staff and committees already existing in the ED. Make use of contacts and connections within the institution as you develop and promote your project.
- **Communications skills:** Include team members with the ability to develop coherent description of the project. These skills can help promote the project efficiently, given the fast-paced environment of the ED.
- **Diversity, equity, and inclusion (DEI) skills:** These skills are necessary in order to address the historical oppressions caused by many health care institutions as well as ongoing health inequities that can manifest in patient care and in interactions between staff. In each stage of the process, ensure incorporation of diverse voices from the ED community.
- **Analytic and research skills:** Early discussions should explore whether using a QA/QI (process) or a research (outcomes), as this will inform the overall project plan. Must consider budget, resources and timeline. This skillset may be either internal within your team, or external through community partnerships such as outside universities or research institutions.

KEY STEPS

- **Gain leadership buy-in:** It's essential to get buy-in from leadership early in the process as they can help you access available resources to support the project, including quality and safety efforts, diversity and inclusivity efforts and/or marketing initiatives. Equally important is identifying and including staff (and patient advisory groups if available) to inform and contribute throughout the process. The goal is to integrate TIC into current ED structures and initiatives and community building will help ensure the project does not feel like additional work , rather is baked into the culture.
- **Identify TIC champions:** Draw on existing relationships and structures to engage the key members of the ED in this work. These can be identified leaders by role, or by influence. Key is also including patient advisors (or community advisory groups) including Patient and Family Relations.
- **Gain knowledge of existing TIC materials:** Review materials, literature, and subject matter experts. Foster an ability to connect and partner with experts in the field both locally and nationally.
- **Develop a communication strategy:** Set up regular (bi-weekly minimum) meetings, an action plan, keep a running (status of project- SOP), and a shared folder including articles that all must read.

OUR TEAM

In alphabetical order:

- Samara Grossman*: Psychiatry – Outpatient (LICSW)
- Jeannie Lee: Research Assistant (BA)
- Nomi Levy-Carrick*: Psychiatry – Inpatient/Consults (MD, MPhil)
- Annie Lewis-O'Connor*: CARE Clinic (NP, PhD) and Team Lead
- Eve Rittenberg*: Primary Care (MD)
- Hanni Stoklosa*: Emergency Department (MD)

*Clinical Scholars Fellows

BUDGET CONSIDERATION

Developing and implementing projects requires time, resources, financial support, and teamwork.

- Any salient project will be best operationalized with 2-3 months of planning and a project plan with timeline
- Personnel that may need budgeted for: providers time, research assistant/project coordinator, project lead
- Research support such as analytics, someone with project management or grant management experience.
- Supplies, printing, and software

Project work

TIC is a conceptual framework that promotes health equity. In our project we sought to create a culture of safety and equity. We use Health Equity as the overarching framework and trauma-informed care as out theoretical or conceptual framework.

GOALS

- Understand the need for and acceptability of TIC in an ED
- Determine the feasibility of TIC in an ED
- Understand the impact and relationship of TIC on health equity

Our exploratory aims included: addressing bias and stigma, improving staff well-being, and exploring the application of TIC approaches, including: inquiry, health care delivery, responses to disclosure, communication, and documentation.

METHODS

Informing the quantitative survey questions and qualitative interview protocol utilizing the Theoretical Domains Framework allowed us to explore opportunity, motivation, and capability. Questions regarding health equity and acceptability and feasibility of potential interventions were also included, specifically on coordinated warm handovers, trauma-informed care plans, and broad trauma tiered inquiry.

IMPLEMENTATION

As we developed our project, we aligned our work with the SAMHS's guiding principles of trauma-informed care, with attention to both the content of our interviews and the process of collaboration and partnership with stakeholders and amongst our team.

- **Safety:** Incorporation of questions about both physical and psychological safety in the ED; flexibility in adapting to the demands of the Covid-19 pandemic to conduct video interviews; plan for future collaboration with ED projects exploring de-escalation strategies.
- **Trustworthiness and transparency:** Outreach to stakeholders in ED, building on existing relationships; sharing interim progress with ED leadership during the course of this project; plan to share results at transitional phases of the project.
- **Empowerment, Voice and Choice:** We included a broad as possible range of ED staff interviews as possible (rather than focusing only on providers or clinical staff). Our interviewees included: nurses, doctors, social workers, emergency services assistants, physician assistants, ultrasound technicians, security, violence recovery advocate, community health worker. Including the voices of many promotes collegiality and a healthy environment.
- **Collaboration and mutuality:** At our hospital one of the pillars of our community is: "We are stronger together." To this end, when planning to interview staff we sought to ensure representation of a diverse group across disciplines and across clinical practice . We developed ties with ED leadership, existing committees including ED patient advisory board, and ED health equity committee.
- **Peer Support:** Peer support has played an important role in our hospital, particularly over the past year during the Covid-19 pandemic. Several members

RESEARCH QUESTION

What is the feasibility and acceptability of introducing trauma informed-care into a level one trauma-center emergency department?

Atkins, L., Francis, J., Islam, R. et al. A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. Implementation Sci 12, 77 (2017). https://doi.org/10.1186/s13012-017-0605-9

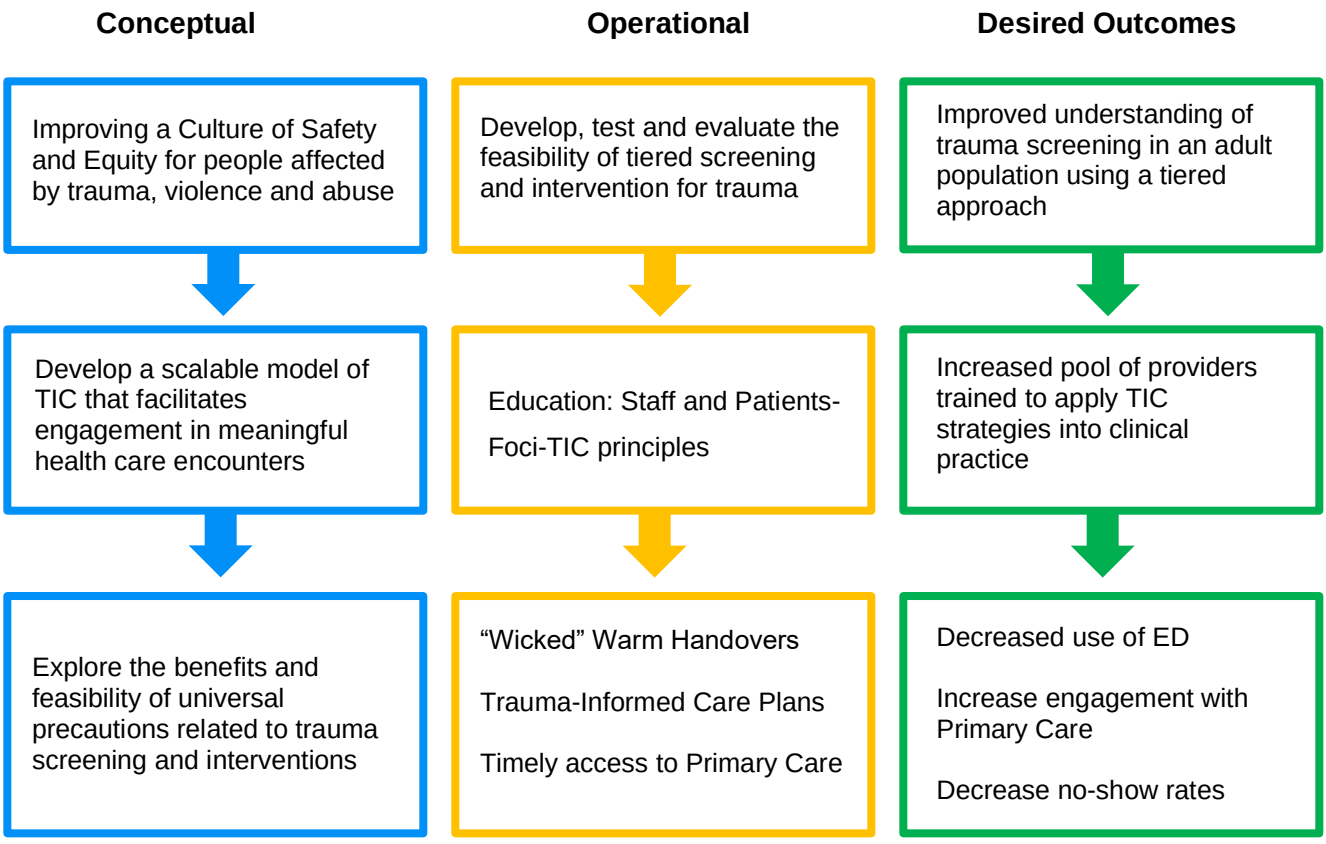
of our team are engaged in these hospital-wide peer support efforts. We see our work as aligning closely with Wellness, DEI, United Against Racism and Peer Support efforts.

- **Cultural, historical and gender acknowledgement:** To attend to the intersectionality of trauma and health equity we included interview questions about stigma, bias and racism, understanding that we cannot address that which is not brought into awareness.

Key points to highlight from our process are:

- Data from these semi-structured interviews, guide your next steps
- This data should be presented to ED leadership to assure they are informed and to learn about overlapping efforts
- Gather quantitative data about emergency department usage
- Develop materials for use in TIC training and education in the emergency department

TRAUMA-INFORMED EMERGENCY DEPARTMENT WORKFLOW



Evaluation and dissemination

The following are outcomes you may consider as you implement your project:

- Understanding of the feasibility and acceptability of TIC in the ED
- Increased pool of clinicians and non-clinical staff trained to apply TIC strategies
- Increased use of Trauma-Informed acute care plans
- Increased warm handovers
- Decreased staff burnout
- Patient outcomes such as Decreased AMA/security/restraints

QUALITATIVE STUDY: INTERVIEW GUIDE

In terms of the first outcome, understanding of the feasibility and acceptability of TIC in the ED, we implemented a qualitative study. A sample of our interview guide categorized by the Theoretical Domains Framework domains is below.

KEY MESSAGES

Throughout our project we disseminated information about TIC and our project findings/needs to stakeholders. In addition to utilizing pre-existing trainings created as part of a broader health system-wide endeavor on TIC, we synthesized our research findings and shared these findings with ED leadership in order to co-create/co-integrate our intervention into existing ED efforts on DEI/micro/macro aggression, upstander trainings/ restraint use/ acute care plans for complex medical "at-risk" patients.

COM-B: Capability

TDF DOMAIN	CONSTRUCTS	INTERVIEW QUESTIONS
Knowledge: *An awareness of the existence of something*	Knowledge of condition/scientific rationale, Procedural knowledge, Knowledge of task environment	What does trauma informed care mean to you?
Skills: *An ability or proficiency acquired through practice*	Skills, Skills development, Competence, Ability, Interpersonal skills, Practice, Skill assessment	Likert: I have received trauma-informed care training (including safety, trustworthiness, peer support, collaboration/mutuality, gender/race historical trauma, empowerment, voice, and choice) for patient care.
Beliefs about capabilities: *Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use*	Self-confidence, Perceived competence, Self-efficacy, Perceived behavioral control, Beliefs, Self-esteem, Empowerment, Professional confidence	Likert: How often do you feel confident that you are capable of positively affecting the experience in the ED for a patient who has experienced trauma?

COM-B: Motivation

TDF DOMAIN	CONSTRUCTS	INTERVIEW QUESTIONS
Optimism: *The confidence that things will happen for the best or that desired goals will be attained*	Optimism, Pessimism, Unrealistic optimism, Identity	Likert: I am optimistic about the quality of care received in the BWH ED by patients who have experienced trauma.
Beliefs about Consequences: *Acceptance of the truth, reality, or validity about outcomes of a behavior in a given situation*	Beliefs, Outcome expectancies, Characteristics of outcome expectancies, Anticipated regret, Consequents	How does working in the ED **positively** affect your mental/physical health? ▪ How does working in the ED **negatively** affect your mental/physical health?
Reinforcement: *Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus*	Rewards (proximal/distal, valued/not valued, probable/improbable), Incentives, Punishment, Consequents, Reinforcement, Contingencies, Sanctions	What would encourage you to learn more about exposures to lifetime trauma and their related health consequences?
Intentions: *A conscious decision to perform a behavior or a resolve to act in a certain way*	Stability of intentions, Stages of change model, Transtheoretical model and stages of change	Likert: How often do you think you address emotional or behavioral distress that patients may be experiencing well? ▪ What about other ED staff?

COM-B: Opportunity

TDF DOMAIN	CONSTRUCTS	INTERVIEW QUESTIONS
Memory, attention and decision processes: *The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives*	Memory, Attention, Attention control, Decision making, Cognitive overload/tiredness	When it's busy in the ED, what aspects of patient care are easy to forget or forgo, especially for patients who have experienced trauma?
Environmental context and resources: A*ny circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behavior*	Environmental stressors, Resources/material resources, Organizational culture/climate, Salient events/critical incidents, Person x environment interaction, Barriers and facilitators	What **opportunities** exist in the ED to improve taking care of the needs of patients who have experienced trauma? ▪ What **barriers** exist? What do you think the emergency department does well to keep employees physically safe? ▪ Emotionally and psychologically safe?
Social influences: T*hose interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviors*	Social pressure, Social norms, Group conformity, Social comparisons, Group norms, Social support, Power, Intergroup conflict, Alienation, Group identity, Modeling	Likert: I feel supported by colleagues and staff in the ED.
Emotion: A *complex reaction pattern, involving experiential, behavioral, and physiological elements, by which the individual attempts to deal with a personal significant matter or event*	Fear, Anxiety, Affect, Stress, Depression, Positive/negative affect, Burn-out	What is rewarding for you when treating/caring for patients in the ED who have experienced trauma? ▪ What is challenging for you? Likert: How often do you feel like you want to avoid patients who have experienced trauma? ▪ Likert: How often have you found yourself enjoying your work in the ED in the past two weeks?

Table 1. TIC Protocol Likert Scale Results

LIKERT RESPONSES	BROAD TRAUMA TIERED INQUIRY	ACUTE CARE PLAN	WARM HANDOVER
Very Easy	4 (19.0%)	7 (33.3%)	4 (19.0%)
Easy	7 (33.3%)	11 (52.4%)	6 (28.6%)
Neutral	3 (14.3%)	1 (4.8%)	6 (28.6%)
Difficult	6 (28.6%)	1 (4.8%)	4 (19.0%)
Very Difficult	1 (4.8%)	0 (0.0%)	1 (4.8%)

Challenges, successes, and lessons learned

SYSTEMIC ISSUES

- **Capacity/bandwidth:** Working in an academic medical center means understanding that the ED environment is well positioned to promote a culture of health equity using trauma-informed principles. As clinicians devoted to patient care, we suggest identifying and building on existing structures (i.e. established meetings).
- **COVID:** An important aspect of TIC is understanding that trauma happens not just to individuals but also to communities, systems and society. In our work, the understanding of this level of trauma became 'visible.' TIC approaches became paramount as we responded to the needs of patients and staff.

PERSONAL AND INTERPERSONAL CHALLENGES

- **Clarifying the intent of WPIP in addressing racism as a trauma and bias in our TIC oriented project:** Iterative discussions, with urgency of this increased in context of BLM -racism impact awareness increased over summer of 2020
- **Learning how groups of leaders can work together:** Using resources provided by Clinical Scholars and seeking clarity as needed. Utilize PI /Director/facilitator of team (this could also be a Co-PI model).

SUCCESSES

- **Flexibility:** Team familiarity and dynamics led to an ability to be flexible even with unforeseen events (COVID-19) and IRB process.
- **Hiring a research assistant**: Having an RA allowed the team to stay on track. These processes included establishing a standing meeting time, recording meeting minutes, other documentation, AND streamlining activities. In addition, the RA was devoted to supporting research design, subject recruitment, and collection of data.
- **Larger, multidisciplinary team:** Working as a larger, multidisciplinary team-facilitates sharing of tasks. When some team members are more overwhelmed than others, other team members can step forward and 'divide and conquer' on complex tasks as needed. Each team member also adhered to the commitment to meeting biweekly throughout the Clinical Scholars grant years. We feel that being familiar with each other before forming as a team contributes greatly to our project, lending a sense of collaboration and experience with implementation from other projects.
- **Clinical Scholars:** Using resources offered within or outside institutions is also key. For example, this team used the resources offered by Clinical Scholars to understand each team members styles of leadership (Meyers Briggs, Change Index, etc.) as they relate to our WPIP.
- **Stakeholder awareness:** It is important to identify who your stakeholders are early in the process. In our case, we sought and gained ED leadership before moving to data collection and implementation. We feel it is important to gain stakeholder buy-in, to increase stakeholder responsiveness.
- **Knowing our resources:** Having access to a large community of clinicians, researchers, champions, researchers interested in TIC has been of great assistance. Working in a large academic medical institution, as part of a consortium of institutions (MGB) has meant that we can identify across our

LESSONS LEARNED: STYLE OF PROJECT

If choosing a research-based intervention, be aware of unforeseen challenges. It is important to hone goals and be aware that research style (IRB, interviews, transcription, analysis, literature review, etc.) takes time. It is important to plan for and allow time for delays.

- Be prepared to decide early whether you/your team would like to utilize research or QI/QA approach
- Process is usually slower than planned for
- Not all TIC implementation needs to be research based, it is important to think as a team before you implement project as to pros and cons of research versus QA/QI, etc.

academic medical community TIC champions. For example, we have worked with residents to compile TIC literature review on TIC in ED, offered numerous trainings on TIC and use TIC approaches in practice modeling best practice.

- **Building on existing or emerging culture that supports our work:** During the course of our project, social and political changes influenced the culture and choices of our hospital and umbrella organizations. Both have responded to racism/BLM protests with new initiatives, funds, and requirements to address racism. We feel this dovetailing with our TIC ED project will help us further influence leadership and the culture of the ED. There will be further understanding that TIC training and interventions will help us become safer for all patients and more able to address patient trauma of all types, including racial traumas.

Photo by Hanni Stoklosa

Trauma-informed Care is not about doing additional work, it is about **reframing** how we do our work.

Recommendations

- DO use this toolkit to help design, implement, and evaluate trauma-informed approaches in an emergency department.
- DO prioritize support for a research assistant to keep the project on track and make possible an academic research component.
- DO use this toolkit as a reference to structure project design, implementation and evaluation to correlate with program phases that include an academic/research component and research assistant.
- DO incorporate stakeholder's feedback into program design and development, as well as evaluation.
- DO prioritize communication and collaboration with existing efforts and committees, to find areas of synergy and mutual support. (I am not sure if this is worded exactly right, but I think we should include something about collaboration here)
- DO review the literature and related resources to identify existing best practices that can inform the development of programs that are responsive to needs identified by stakeholders
- DON'T get impatient and skip the stakeholder input component, even if that takes much longer than anticipated.
- DON'T forget to schedule regular meetings with all team members for the full year in advance so everyone can prioritize that meeting whenever possible. Even if you don't know what the specific agenda might be, having a general agenda and opportunity to identify potential issues proactively is invaluable for both team and project cohesion.

For more information contact: Annie Lewis-O'Connor aoconnor@bwh.harvard.edu