TRANSFORMING, STRENGTHENING AND RENEWING COMMUNITIES

Vital Trauma Care

ADULT LEVEL I TRAUMA CENTER ANNUAL REPORT 2021-2022



Providing unmatched trauma care to adult residents of eastern Wisconsin and beyond Published 2023



The Highest Level of Trauma Care

WE NEVER SETTLE FOR GOOD ENOUGH

ood enough" is never enough at the Froedtert & the Medical College of Wisconsin adult Level I Trauma Center at Froedtert Hospital. Every year, we build on our research efforts to improve treatment and outcomes for the most severely injured patients. At the only adult Level I Trauma Center in eastern Wisconsin, a devoted team cares for patients with traumatic injuries caused by a range of external forces, such as falls, motor vehicle crashes and gun violence. Every patient who comes through the doors has access to highly trained doctors and advanced traumatic injury protocols.

"If a pedestrian is hit by a car because of aggressive driving, we have 24/7 resources to treat a brain injury, chest injury, pelvic injury and more with our team of "always on" neurosurgeons, trauma surgeons, orthopaedic surgeons and a host of other specialists," said Marc de Moya, MD, trauma surgeon, Medical College of Wisconsin faculty member and chief of the Division of Trauma and Acute Care Surgery. "People who don't have a trauma center within reach could experience care delays. They may not receive cutting-edge treatment, including access to advanced support systems like extracorporeal membrane oxygenation (ECMO) and heart-lung machines."

Dr. de Moya compares the Trauma Center staff to a racing pit crew. The trauma "crew" works like a well-oiled machine to quickly and accurately assess injuries and immediately provide evidence-based care. The team also invests in

performance reviews, where any patient complication or death is carefully studied to identify opportunities for improvement.

"We had another successful year in research, with more than \$2 million of grant funding and more than 60 publications in our division," Dr. de Moya said. "We will now participate in three national clinical trials exploring how to improve the care of patients with traumatic brain injuries, and how to use whole blood and improve outcomes for patients with hemorrhagic shock. Whole blood use is based on data derived from the last decade of military experience."



Marc de Moya, MD

An important goal is to prevent traumatic injuries through continued advocacy and education. Trauma Center staff are committed to community and government engagement. They support policies and legislation to minimize factors like gun violence and aggressive driving.

Follow-up is key to successful recovery from traumatic injuries, but patient compliance can be a challenge. The Trauma Quality of Life Clinic connects patients and their families with treatment and resources to recover from the aftermath of their injuries. Care is coordinated among physicians, surgeons, clinicians, social workers, physical therapists and trauma psychologists.

"This clinic reduced the patient no-show rate from 45% the year before its inception to 12% after it opened," Dr. de Moya said. "More patients are getting the care that they need."

Care at the Trauma Center extends to staff involved in direct patient care, as well as those working behind the scenes to provide support. In this fast-paced, demanding environment, all of them can be under an inordinate amount of stress each day. Care must start at home, especially when home is a Level I trauma center.

"Teamwork is such an important part of what we do," Dr. de Moya said. "It's a very positive work environment. People support each other. We work through problems together. We're there for each other through crises. We have peer support. This kind of work environment is vital for decreasing burnout and serving our patients with the highest level of care."

Acute Care Surgery Team

ALWAYS ON DUTY FOR EMERGENCY SURGERIES

edical emergencies are worrisome and disruptive, especially when they occur off hours. If surgery is needed urgently, how quickly can a hospital respond?

A group of surgeons from the Froedtert & the Medical College of Wisconsin adult Level I Trauma Center at Froedtert Hospital campus, the only one in eastern Wisconsin, is ready around-the-clock. They apply their expertise not only to trauma care but also to acute care surgery (emergency general surgery).

"Acute care surgery is a progressive national trend," said Marshall Beckman, MD, trauma surgeon, medical director for acute care surgery and MCW faculty member. "Emergency and trauma-related surgery is all we do, and we do it well because it is our specialty."

Froedtert Hospital was among the first in the country to adopt the acute care surgery model. Of the 18 trauma surgeons at Froedtert Hospital, two are in-house 24/7. They also operate at Froedtert Menomonee Falls Hospital. The group provided consults for more than 3,000 emergency surgery patients in 2022. Patients arriving at any Froedtert & MCW emergency department can be transferred to one of these hospitals for immediate surgery if their condition allows transport.

"In the past, all general surgeons handled emergency surgeries. But as general surgery has grown more specialized, a dedicated system and dedicated surgeons are needed to care for patients with acute conditions," said Patrick Murphy, MD, MPH, trauma surgeon, associate medical director for acute care surgery and MCW faculty member. "We manage resources so patients get the right care at the right time. When emergent patients arrive, an acute care surgeon is ready if needed."

Acute care surgeons serve patients with many conditions, the most common being gallstone disease, diverticulitis, perforations of the stomach, colon or small bowel, colon obstructions and wound care.

Acute care surgeons — and the advanced practice providers who work alongside them — play an important role for patients with limited access to health care. Factors such as poverty, joblessness and health care system changes mean many people lack a primary care doctor. As a result, acute care surgeons do much more than operate. For example, a woman may arrive with a severe skin infection requiring surgery. During evaluation, the surgeon and his team might discover undiagnosed diabetes. They would get her diabetes under control in the hospital and arrange a diabetes follow-up appointment at discharge.

The vast resources of the Froedtert & MCW health network also allow surgeons to consult a deep range of specialists.

"If the condition is not life-threatening," Dr. Beckman said, "we arrange for other experts to operate, for instance, on the pancreas, the esophagus or to resolve a serious rectal injury. We stabilize patients and get other minds and hands involved in treatment."

Froedtert Hospital is pursuing the American College of Surgeons' Center of Excellence designation for its Acute Care Surgery Program.

"We'll meet rigorous criteria for staffing, equipment and operating rooms to optimize patient outcomes," Dr. Beckman said.

Froedtert Hospital will complete the process in about a year, but Dr. Murphy believes it meets standards already. Accreditation will provide national validation emphasizing the excellent care patients can expect.

"It will confirm we're providing patients with the highest level of emergency surgical care. It reflects our investment in meeting needs and expanding surgery care availability in the communities we serve."

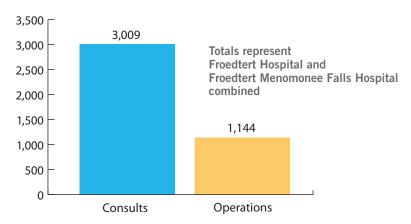


Marshall Beckman, MD



Patrick Murphy. MD, MPH

ACUTE CARE SURGERY CONSULTATIONS AND OPERATIONS 2022



Clinic Helps Gun Violence Survivors Heal



SURVIVORS NAVIGATE RECOVERY CHALLENGES

n 2022, there were 877 non-fatal shootings in Milwaukee, nearly double the number from 2019. More than 600 of those injured in 2022 were treated at the adult Level I Trauma Center at Froedtert Hospital campus, part of the Froedtert & the Medical College of Wisconsin health network.

But for many of these patients, serious, untreated socio-environmental and psychological issues complicated by their injuries linger long after physical healing.

That's where the Trauma Center's Trauma Quality of Life Clinic (TQoL) team steps in to tend to the complex mental health and social service needs of gun violence survivors. Created in 2020, the clinic – the only one in the nation with centralized, comprehensive resources – uses a holistic, multidisciplinary team approach. More than 300 patients treated for gunshot wounds at the Trauma Center took advantage of resources at the TQoL.

"We are addressing what has historically been poor long-term quality of life outcomes for gun violence survivors," said Colleen Trevino, NP, PhD, director of the TQoL Clinic and Medical College of Wisconsin faculty member.

The Trauma Center works in tandem with 414LIFE, the City of Milwaukee's team of "violence interrupters," taking a public health approach to de-escalating violence by treating it as a disease that can spread and impact lives if left unchecked. A key element to the success of the 414LIFE program is engaging community members as violence interrupters in Milwaukee County neighborhoods — and in the hospital setting. In 2019, the Trauma Center developed Milwaukee's first hospital-based violence interruption program as medical support for 414LIFE. The Hospital-Based Violence Interruption Program focuses on 15- to 35-year-olds with gunshot injuries. Patients are connected with a Froedtert & MCW violence interrupter, as well as resources from the community and Froedtert Hospital to help with recovery and deflect future violence. The TQoL is part of this effort designed to bring patients through the aftermath of their injuries.

"We know patients with firearm injuries are at higher risk than patients with any other type of traumatic injury for developing chronic pain, post-traumatic stress disorder (PTSD), depression, anxiety and chronic physical disabilities," Trevino said. "Social issues such as retaliation violence and a lack of safe places to go after discharge from the hospital also contribute to poorer outcomes."

In fact, TQoL screenings show that 78% of patients were risk-positive for PTSD, 48% were at risk for depression, and 78% were likely to suffer from chronic pain that moderately interferes with daily living.

Others struggle to find transportation to get to follow-up appointments, to take care of their families, pay rent or even buy food due to the impact of their injuries.

"It's safe to say that there's much more to healing than the gunshot wound itself," Trevino said.

INTENSIVE TEAM EFFORT

TQoL staffing reflects the clinic's multidisciplinary approach. It includes a trauma nurse practitioner, nurse navigator, clinical psychologist, physical therapist, social worker and a violence interventionist, all available during the same appointment. Becca Laszkiewicz, MSN, RN, the clinic's nurse navigator, meets patients when they're admitted to the hospital, then acts as their personal liaison for post-discharge care.

"I'm a familiar face throughout every phase of their care," she said. "This helps keep patients engaged – they know they always have someone to talk to."

Laszkiewicz also educates patients about what to expect after discharge. She calls to see if any unexpected issues pop up. This periodic check-in helps prevent unnecessary trips to emergency

rooms for issues like pain management or infections that can be addressed through the TQoL. Laszkiewicz also reminds patients about upcoming appointments and ensures they have transportation.

Laszkiewicz is a critical link because most patients she sees do not have a primary care physician. Furthermore, consistent personal contact helps build trust with patients who otherwise might be wary about obtaining medical care. The multidisciplinary approach is another key component.

"We have so many people supporting our patients," Laszkiewicz said. "That team aspect is vital."

SUCCESS BY THE NUMBERS

How well is the program working? A key indicator is the 12% no-show rate for follow-up appointments, down from 45% the year before the TQoL clinic opened. It indicates most patients are engaged in their recovery.

"Working with patients in the TQoL is one of the most satisfying interactions I've had in my entire career," Trevino said. "All of us here get back way more than we give."

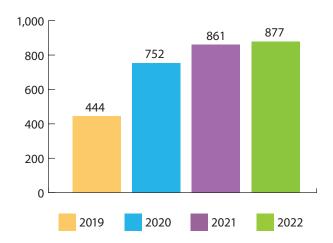


Colleen Trevino. NP, PhD



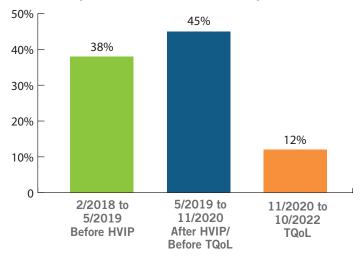
Becca Laszkiewicz, MSN. RN

MILWAUKEE NON-FATAL SHOOTINGS PER YEAR



Source: City of Milwaukee crime statistics

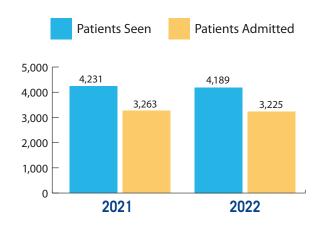
FOLLOW-UP VISIT NO-SHOW RATES (For Gun Violence Survivors)



HVIP: Hospital-Based Violence Interruption Program TQoL: Trauma Quality of Life Clinic

Trauma Center SNAPSHOT

TRAUMA VOLUMES 2021-2022 (Number of Patients Seen and Admitted)



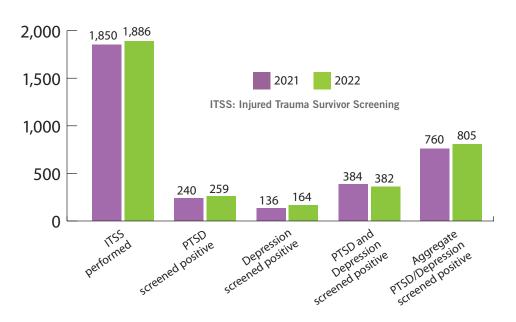
RACE AND SEX SUMMARY 2021 (Number of Patients Admitted)

Race	Female	Male	Total
Native American	1	6	7
Asian	16	28	44
Black	302	784	1,086
Hispanic	60	198	258
Native Hawaiian	0	1	1
Other	11	39	50
Unknown	13	32	45
White	816	956	1,772
Total	1,219	2,044	3,263

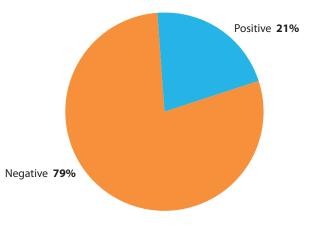
RACE AND SEX SUMMARY 2022 (Number of Patients Admitted)

Race	Female	Male	Total
Native American	4	7	11
Asian	22	22	44
Black	307	732	1,039
Hispanic	75	201	276
Native Hawaiian	0	1	1
Other	10	35	45
Unknown	7	23	30
White	796	983	1,779
Total	1,221	2,004	3,225

PTSD-DEPRESSION SCREENING 2021-2022



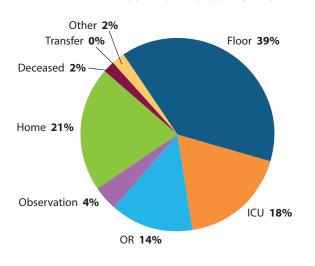
ALCOHOL SCREENING 2022

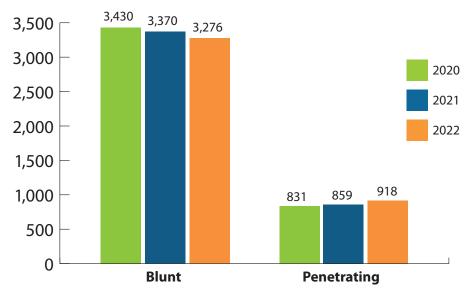


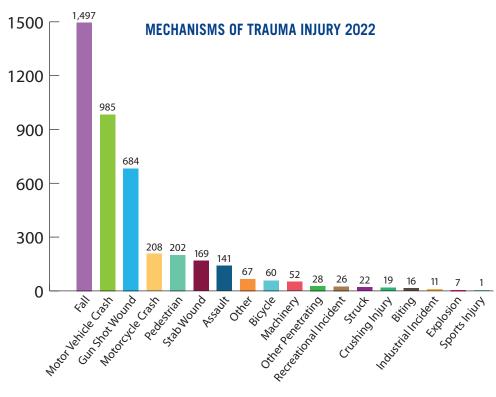
Total alcohol screenings: 2,050

PATIENT DISCHARGE DISPOSITION 2022

TRAUMA TYPE









Froedtert Memorial Lutheran Hospital 9200 W. Wisconsin Ave. Milwaukee, WI 53226-3596



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