Indiana Department of Health

INDIANA STATE TRAUMA CARE COMMITTEE

January 21, 2022

Email questions to: indianatrauma@isdh.in.gov

OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.

Housekeeping

- This meeting was public noticed – anyone can attend.
- Submit questions in the chat box or you can unmute your computer.
- **Please** make sure you are on mute if you are not speaking.

Introduction and approval of meeting minutes

Lindsay Weaver, M.D., FACEP

Chief Medical Officer

Indiana Department of Health

ISTCC Member List

Role/Representing	Member	Representing
Chair	Kristina Box, MD	IDOH
Vice Chair	Stephen Cox	IDHS
Level III Trauma Center Physician	Luis Benavente, MD	Elkhart General Hospital
Level I Trauma Center Physician	Erik Streib, MD	Eskenazi Health
Level I Trauma Center Physician	Peter M. Hammer, MD	IU Health – Methodist Hospital
Level I Trauma Center Physician	Matthew Landman, MD	IU Health - Riley Hospital for Children
Level I Trauma Center Physician	Lewis E. Jacobson, MD	Ascension St. Vincent Indianapolis Hospital
Level II Trauma Center Physician	Jay Woodland, MD	Deaconess Hospital
Level II Trauma Center Physician	Keith Clancy, MD	Lutheran Hospital
Level II Trauma Center Physician	Scott Thomas, MD	Memorial Hospital of South Bend
Level II Trauma Center Physician	Raymond Cava, MD	Parkview Regional Medical Center
Level II Trauma Center Physician	Kevin McConnell, MD	Ascension St. Vincent Evansville Hospital
Level III Trauma Center Physician	Rong Yang, MD	Good Samaritan Hospital
Level III Trauma Center Physician	Ruban Nirmalan, MD	IU Health Arnett
Level III Trauma Center Physician	Mark Saleem, MD	IU Health Ball Memorial
Level III Trauma Center Physician	Joseph Baer, MD	Ascension St. Vincent Anderson Regional Hospital
Emergency Medicine Physician	Chris Hartman, MD	Franciscan Health - Indianapolis
Emergency Medical Services for Children	Elizabeth Weinstein, MD	Indiana Emergency Medical Services for Children
Emergency Medical Services Provider	Ryan E. Williams, RN, BSN, EMT-P	Reid Health
Fire Rescue Services Representative	Douglas Randell, Division Chief of EMS	Plainfield Fire Territory
Nurse	Kelly Blanton, RN	Ascension St. Vincent Indianapolis Hospital
Nurse	Lisa Hollister, RN	Parkview Regional Medical Center
Physician – Rural	David J. Welsh, MD	General Surgeon
Physician – Gary	Michael A. McGee, MD	Methodist Hospital Northlake (Gary)
IHA Representative	Andrew VanZee	Indiana Hospital Association
Ex-Officio	Tony Murray	Professional Fire Fighters' Union of Indiana

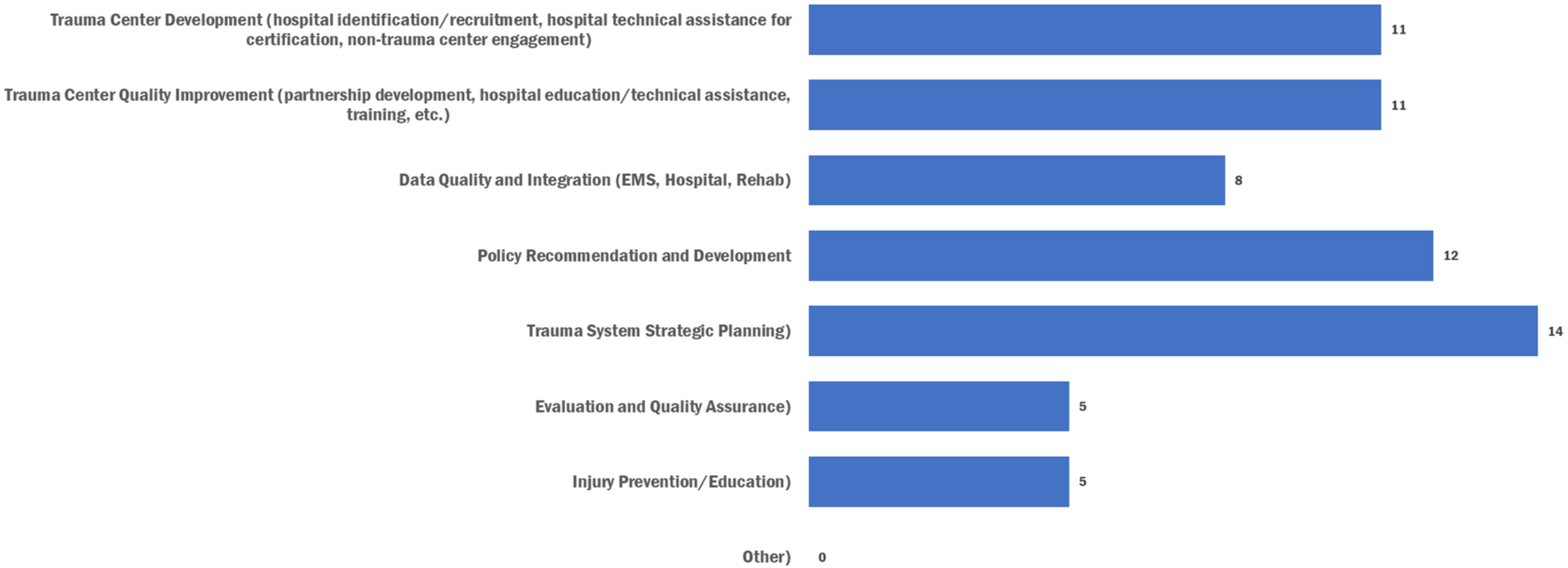
ISTCC Survey Overview

This meeting has been public noticed

Brian Busching, MPH

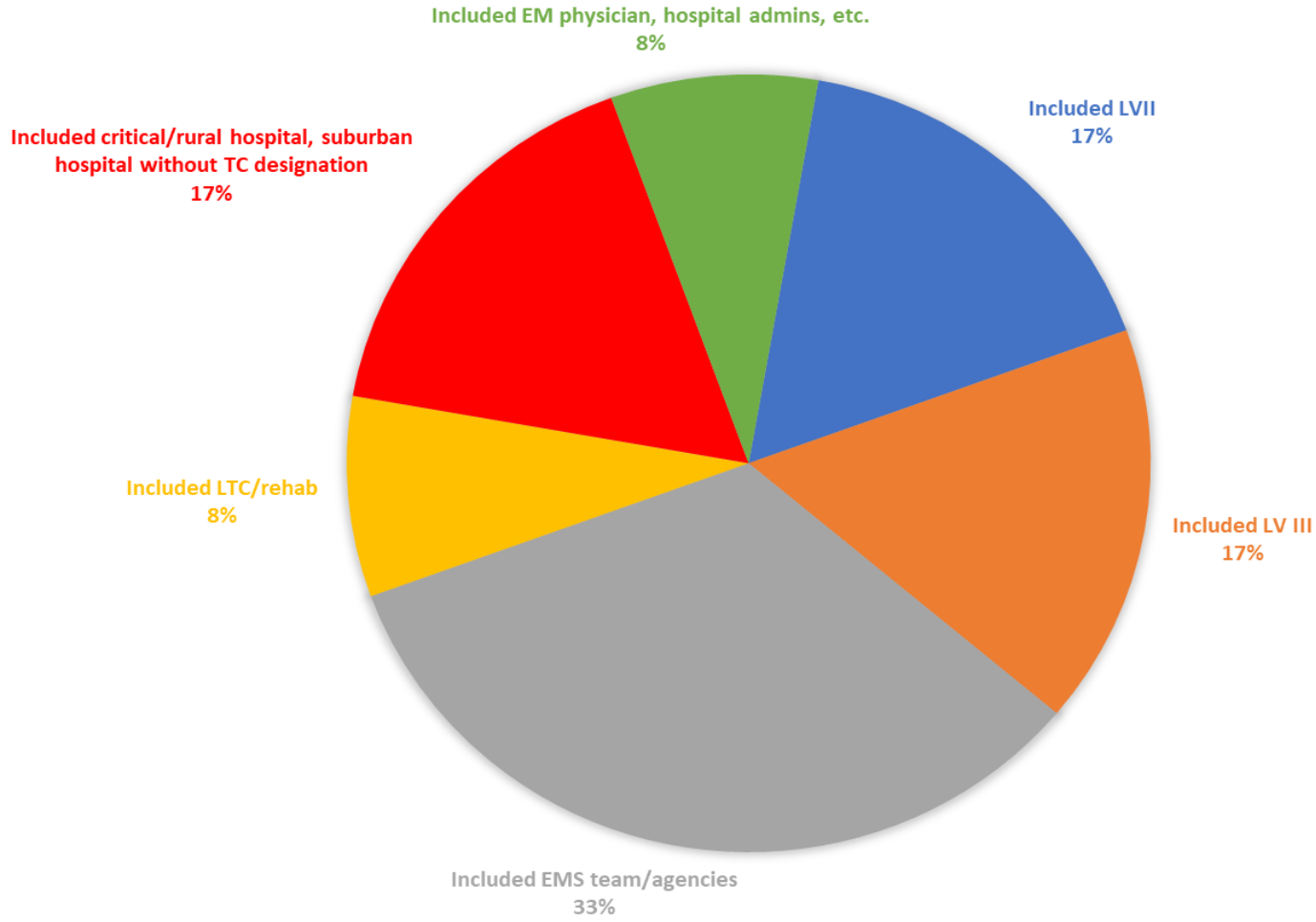
Director, Trauma and Injury Prevention

What should be the primary goals of the TCC?

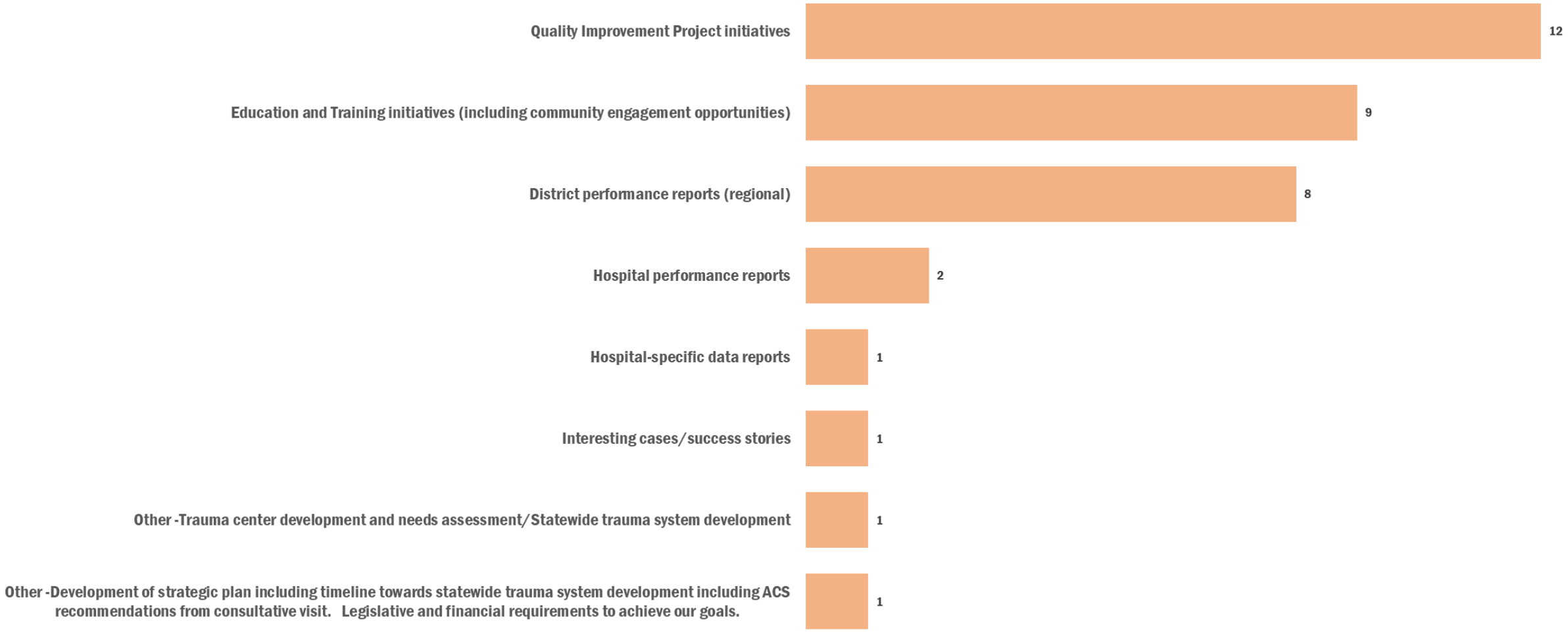


Indiana Department of Health

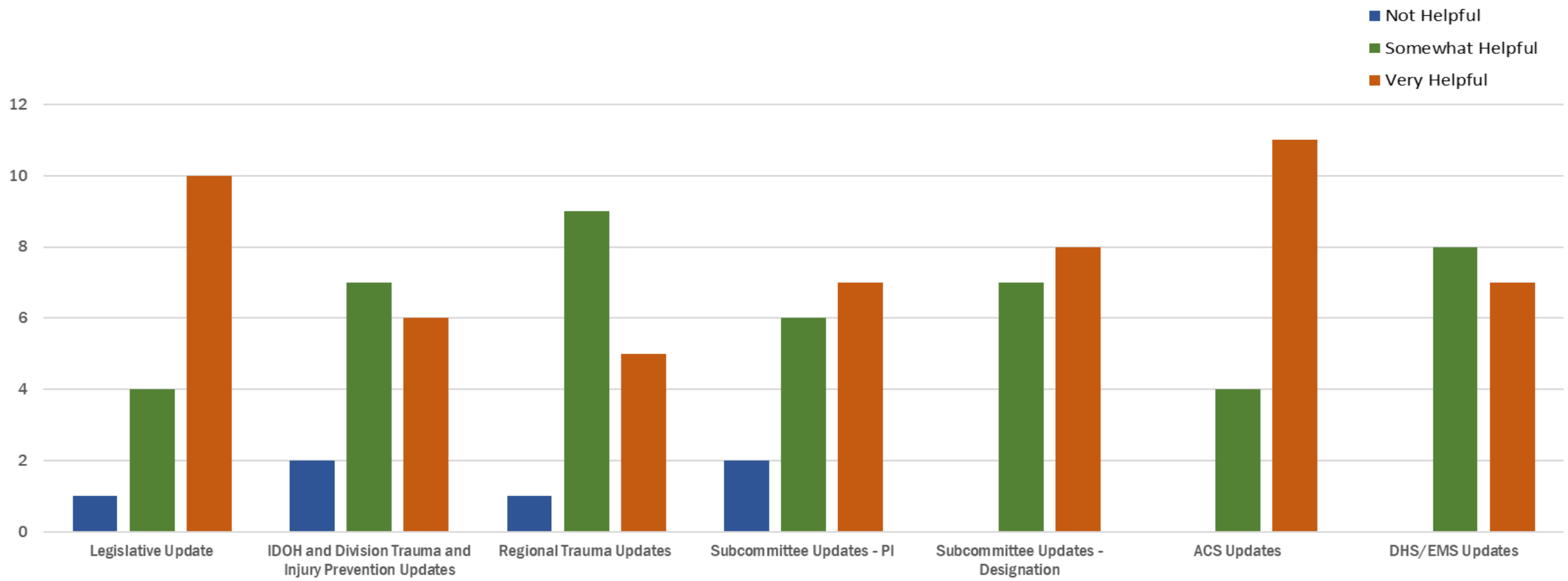
ARE THERE OTHER STAKEHOLDERS IN TRAUMA CARE (E.G., PROVIDERS AT HOSPITALS OTHER THAN LEVEL I TRAUMA CENTERS) WHO SHOULD BE ENCOURAGED TO ATTEND TCC MEETINGS OR SUBCOMMITTEES?



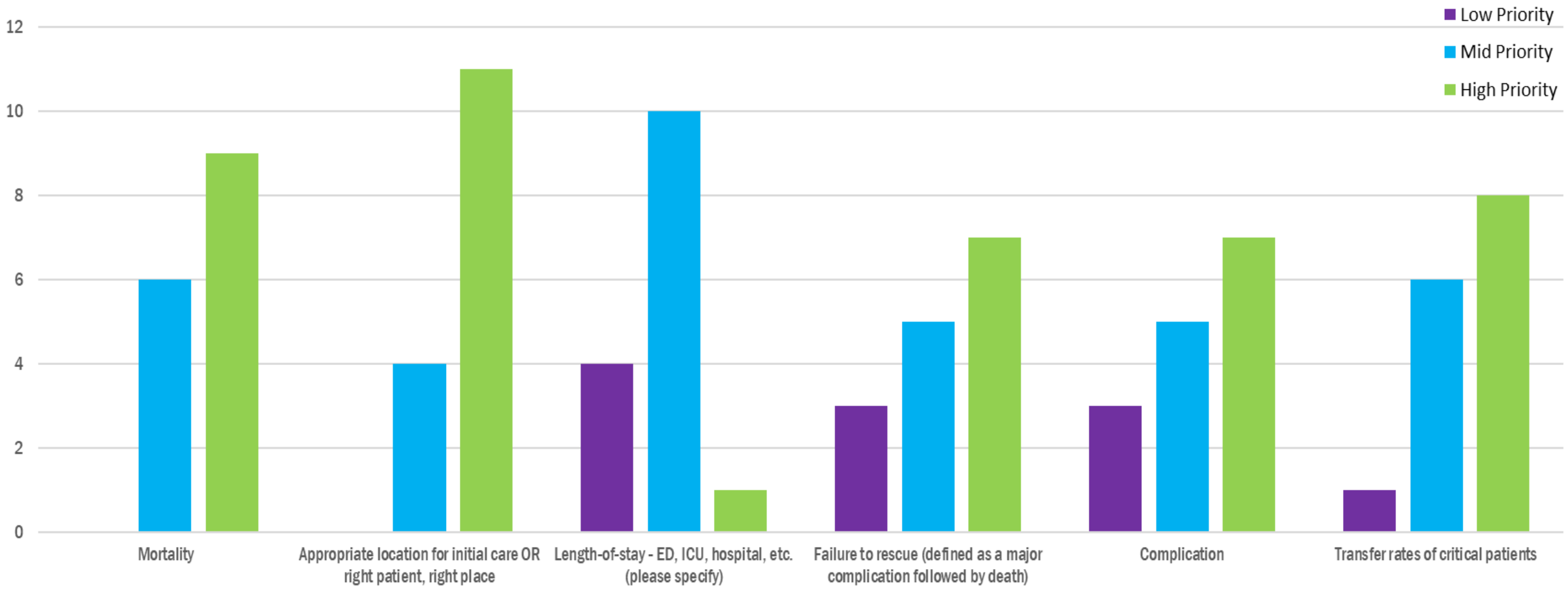
What topics should the TCC meetings routinely include that they do not currently?



Rank existing TCC standing agenda items?



What outcomes should TCC target for quality improvement, and how would you rank them as a priority?



ISTCC Survey Overview

Discussion

ORIGINAL ARTICLE

Extending Trauma Quality Improvement Beyond Trauma Centers

Hospital Variation in Outcomes Among Nontrauma Hospitals

Peter C. Jenkins, MD, MSc,✉ Lava Timsina, PhD,* Patrick Murphy, MD, MPH,† Christopher Tignanelli, MD,‡ Daniel N. Holena, MD, MSCE,§ Mark R. Hemmila, MD,¶ and Craig Newgard, MD, MPH||*

Objective: The American College of Surgeons (ACS) conducts a robust quality improvement program for ACS-verified trauma centers, yet many injured patients receive care at non-accredited facilities. This study tested for variation in outcomes across non-trauma hospitals and characterized hospitals associated with increased mortality.

Summary Background Data: The study included state trauma registry data of 37,670 patients treated between January 1, 2013, and December 31, 2015. Clinical data were supplemented with data from the American Hospital Association and US Department of Agriculture, allowing comparisons among 100 nontrauma hospitals.

Methods: Using Bayesian techniques, risk-adjusted and reliability-adjusted rates of mortality and interfacility transfer, as well as Emergency Departments length-of-stay (ED-LOS) among patients transferred from EDs were calculated for each hospital. Subgroup analyses were performed for patients ages >55 years and those with decreased Glasgow coma scores (GCS). Multiple imputation was used to address missing data.

Results: Mortality varied 3-fold (0.9%–3.1%); interfacility transfer rates varied 46-fold (2.1%–95.6%); and mean ED-LOS varied 3-fold (81–231 minutes). Hospitals that were high and low statistical outliers were identified for each outcome, and subgroup analyses demonstrated comparable hospital variation. Metropolitan hospitals were associated increased mortality [odds ratio (OR) 1.7, $P = 0.004$], decreased likelihood of interfacility transfer (OR 0.7, $P \leq 0.001$), and increased ED-LOS (coef. 0.1, $P \leq 0.001$) when compared with nonmetropolitan hospitals and risk-adjusted.

Conclusions: Wide variation in trauma outcomes exists across nontrauma hospitals. Efforts to improve trauma quality should include engagement of nontrauma hospitals to reduce variation in outcomes of injured patients treated at those facilities.

Keywords: hospital variation, mortality, outcomes, quality, system, trauma

(*Ann Surg* 2022;275:406–413)

Traumatic injuries are a leading cause of death and disability.[1–3] To improve the quality of care and outcomes of injured patients, the American College of Surgeons Committee on Trauma (ACS-COT) developed the American College of Surgeons Trauma Quality Improvement Program (ACS TQIP).[4,5] ACS TQIP collects data from all ACS-COT verified level I and level II trauma centers and provides risk-adjusted outcome reports, benchmarked against national averages.[6] The reports have been a fundamental component of the program, as ACS TQIP hospitals have used them to identify at-risk populations and guide their hospital-specific quality improvement initiatives.[7] These measures, particularly when implemented as part of a regional collaborative quality initiative infrastructure, have been associated with significant improvements in trauma patient outcomes compared with national benchmarks, yet the ACS TQIP includes only a fraction of US hospitals that treat injured patients.[8]

Trauma center status has benefitted those patients treated at hospitals that have been verified as trauma centers by the ACS-COT.[9] However, a substantial number of trauma patients (including many who are severely injured) receive their care at hospitals that lack trauma center verification and/or designation, so-called "non-trauma hospitals."[10–12] States with organized trauma systems and trauma designation programs have generally either adopted triage and transfer guidelines recommended by the Centers for Disease Control and Prevention (CDC) or developed their own.[13–16] These guidelines direct providers at nontrauma hospitals to identify patients with potentially life-threatening injuries and transfer them to trauma

https://journals.lww.com/annalsofsurgery/Fulltext/2022/02000/Extending_Trauma_Quality_Improvement_Beyond_Trauma.27.aspx

IDOH Updates

Lindsay Weaver, M.D., FACEP

Chief Medical Officer

Legislative Update

Micha Burkert,
Director, Legislative & External Affairs

Blaire Viehweg,
Deputy Director, Legislative & External Affairs

Other Business

Next ISTCC Meeting:

March 18, 2022

10:00am to 11:00am (Eastern Time)