

Poisson regression models were used to determine factors associated with recovery.

**Results** Overall, 5,887 LE injuries were reported. Expected TL after LE injury differed across gender ( $p < 0.0001$ ), division ( $p < 0.0001$ ), season ( $p = 0.001$ ), and injury site ( $p < 0.0001$ ), conditional on the random effect (i.e. latent severity). Expected TL after LE injury in women's basketball was 50% higher than men's basketball for injuries of similar severity. Expected TL in Division I athletes was 56% lower than Division III athletes. Expected TL for hip/groin, lower leg/Achilles, and thigh injuries was lower than ankle injuries; knee injuries had 95% higher TL than ankle injuries. No TL differential was observed between injuries of different mechanisms or surfaces.

**Conclusions** There were several factors that had an impact on the recovery process following LE injury. Female athletes had a longer recovery time on average compared to their male counterparts. Recovery was shorter for DI athletes compared to DIII. Knee injuries had the longest expected recovery time of LE injuries.

**Significance and contributions to injury and violence prevention and science** Modeling TL as a count of days lost is a novel and clinically meaningful method of examining injury recovery. This approach can lead to context-specific injury recovery and rehabilitation strategies to aid in safely returning athletes to participation.

## Social determinants of health and injury

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### ASSOCIATION OF INSURANCE STATUS WITH THE TREATMENT AND OUTCOMES OF ADULT PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY: A PROPENSITY MATCHED ANALYSIS

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**Statement of Purpose** To determine if there is a disparity in treatment and outcomes among adult patients with a severe traumatic brain injury (TBI) based on health insurance status.

**Methods** Adult patients (18+ years old) with a severe isolated TBI were identified in the National Trauma Data Bank (2007–2014). Isolated TBI was defined as a head Abbreviated Injury Scale (AIS) score of 3+, excluding patients with another regional AIS of 3+. Procedure codes were used to identify two classifications of treatment: cranial procedures (craniotomy or craniectomy) and monitoring (external ventricular draining or intracranial pressure monitoring). Patient outcomes were determined using discharge disposition. Patients were propensity score matched using demographics and condition on admission to determine treatment and outcome disparities between patients with private insurance and patients without insurance (self-pay).

**Results** There were 45,928 patients identified. Among those, 25.1% ( $n = 11,556$ ) were self-pay. Patients without insurance had shorter hospital and ICU lengths of stay compared to patients with insurance. Among patients who survived their

injuries, patients with insurance were more likely to be discharged to a rehabilitation facility compared to those without insurance (40.7% vs 21.5%). After matching, patients lack of insurance was associated with 19% and 27% lower odds of receiving a cranial procedure and monitoring, respectively, compared to having private insurance ( $p < 0.001$ ). Uninsured status was associated with a 51% higher odds of in-hospital mortality ( $p < 0.001$ ).

**Conclusions** Uninsured patients with a significant TBI received fewer interventional procedures and were had greater odds of in-hospital mortality.

**Significance and Contributions to Injury and Violence Prevention Science** Even after creating a relatively homogeneous population by analyzing those with severe isolated brain injuries and using propensity score matching techniques, the disparity in treatment and outcomes persisted among those with and without insurance. These findings require a greater exploration regarding why these disparities exist and the potential role of health policy for ensuring equitable treatment.

## School violence

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### THE IMPACT OF ANTI-BULLYING POLICIES AT THE SCHOOL LEVEL: A MIXED-METHOD ANALYSIS OF IMPLEMENTATION PRACTICES

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**Statement of Purpose** All 50 states have adopted anti-bullying legislation in an effort to reduce bullying in schools. However, little research has been conducted to understand how schools implement their anti-bullying policies. This study illustrates how Maine schools implemented their district's anti-bullying policies and presents facilitators and challenges to implementing these policies.

**Methods/Approach** Semi-structured interviews and surveys were administered to twenty-two school personnel involved in the implementing anti-bullying policies (administrators, counselors, teachers, and support staff) across six schools in the state of Maine. Respondents were asked to recount how bullying allegations are reported, their experience investigating bullying allegations, how safety measures and responses plans are implemented, and discuss the content of the anti-bullying training provided.

**Results** Respondents identified many challenges to implementing the policy that included limited time and resources to investigate bullying allegations. Contextual challenges to reporting bullying allegations also emerged (e.g., fear of retaliation). One major challenge that emerged across all interviews was related to investigating cyberbullying allegations. Rural schools overall indicated it was easier to implement the anti-bullying policy when compared to urban schools.

**Conclusions** Interview findings have shown that implementation of anti-bullying policies is a complex process that involves substantial effort and time for schools to carry out Maine's required policy guidelines. School staff acknowledged