

the second phase of revision, linearizations are being developed, with highest priority being given to the Joint Linearization for Mortality and Morbidity Statistics (JLMMS). A special linearization based on ICECI is envisaged.

Conclusions The form and content of the JLMMS are still in flux, but are expected to be in largely final draft by mid-2016. Injury researchers need to be aware of the forthcoming changes to the ICD, which will impact on injury statistics worldwide.

45 TRAUMA CARE EVALUATION

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Background While the global burden continues to rise, injury-related mortality rates have declined in many high-income countries. A key contributor to reduced mortality has been implementation of trauma systems with improved care of injured patients substantially enhancing the likelihood of surviving serious injury. The focus has now shifted to improving the quality of survival and reducing the burden of non-fatal injury. However, there is limited understanding of how well patients recover, how long this takes, and the proportion of the injured population who go on to experience lifelong disability.

Methods The state of Victoria, Australia, using the population-based Victorian State Trauma Registry as a data spine, is using coordinated data linkage, longitudinal qualitative studies, and routine long-term patient follow-up to evaluate trauma care through acute care, rehabilitation and community reintegration.

Results Key findings include: i) demonstrated reduced burden, measured in Disability Adjusted Life Years, of road traffic injury following implementation of an organised trauma system; ii) improved mortality and functional outcomes for patients following redesign of the state's retrieval system; iii) improvement in patient-reported outcomes to 2-years post-injury but variable recovery trajectories for key patient groups; and iv) profound issues with discharge planning, and post-discharge care coordination of trauma patients.

Conclusions Clinical data represents only a component of what we need to know to understand the impact of clinical practice and healthcare policy in trauma. Insight into patient experiences and pathways, healthcare and disability service needs, and factors that facilitate and impede recovery are needed to improve trauma system design and better meet the needs of injured patients.

46 THE NATIONAL EMERGENCY MEDICAL SERVICES INFORMATION SYSTEM (NEMSIS): PREHOSPITAL CARE DATA ON INJURY

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Background The National Emergency Medical Services Information System (NEMSIS) is the repository for data on emergency medical services (EMS) in the United States (US). Standard data elements are collected by local EMS providers, then aggregated at the state level and submitted to the national database. Data from NEMSIS are used to evaluate care delivery, compare regional differences, inform EMS provider training and generate research hypotheses.

Methods Data were accessed using the NEMSIS on-line data cube. Nearly 25.5 million patient care reports were submitted in 2014. The subset of injury events were selected using Type of service = 911 response and Possible injury = Yes.

Results More than 3.3 million records for possible injury events were reported in 2014, with 50% involving females and with 13% involving patients aged 0–19, 50% aged 20–59 and 36% aged 60+. Cause of injury was reported for 72%. Of events with a known cause, falls accounted for 46%, land transport 33%, struck by blunt object 11% and drug poisoning 4%. Age and sex distribution varied by cause of injury. Treatment was provided in 85% of events. Procedures were reported as being performed on 60% of patients. Common procedures included venous access (33%), spinal immobilisation (28%), cardiac monitoring (21%), pulse oximetry (20%), wound care (14%) and splinting (6%). Medications were reported as being given to 19% of patients. For those receiving medications, the most common medications were fentanyl (17%), morphine (10%), ondansetron (10%) and naloxone (2%). Nearly 90% of the treated patients were transported from the scene to a facility.

Conclusions Analysis of NEMSIS data provides insight into the provision of EMS care to injured patients in the US. This data system may serve as a model for other countries in how to capture standard information from prehospital providers. Continued efforts to improve completeness of reporting will enhance the utility of these data for injury research.

47 DISABILITY WEIGHTS FROM THE INJURY VIBES COLLABORATION

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Background Disability weights (DWs) are an integral part of deriving the years lived with disability (YLD) component of disability adjusted life years (DALYs). DWs can be derived through different methods including panels comprising of experts, the general population judging the impact of conditions on loss of health, or through follow-up data on the health-related quality of life of groups of injured patients. The Validating and Improving injury Burden Estimates Study (Injury-VIBES) sought to create new injury DWs by combining data from six of the largest injury outcome studies, that were conducted in Australia, New Zealand, United Kingdom, Netherlands and USA.

Methods Data were combined in an individual level meta-analysis from the Victorian State Trauma Registry, Victorian Orthopaedic Trauma Outcomes Registry, Dutch Injury Patient Survey, UK Burden of Injury Study, Prospective Outcomes of Injury Study, and the National Study on Costs and Outcomes of Trauma. DWs were calculated for individual and grouped ICD10 diagnosis codes and established nature of injury classifications. Twelve month annualised DWs (assumed to be indicative of permanent health loss) were calculated separately for cases discharged

following treatment in an emergency department or as a hospital admission.

Results There were 29,770 injury cases aged ≥ 18 years included in the analysis. Results will be provided by individual and grouped ICD10 codes and the GBD 2013 and EU Injury Data Base categorisations. For most injury groups DWs revealed greater health loss than previously published estimates and differ from those used in the GBD project. There were marked differences in DWs for cases hospitalised vs those not.

Conclusions Injury VIBES has produced sets of empirically derived DWs that will be useful to the injury research community in measuring the population burden of injury.

Early Morning Sessions Monday 19.9.2016

Research to Practice: The Global Road Safety Program

MON W AP 2

48 RESEARCH TO PRACTICE: THE GLOBAL ROAD SAFETY PROGRAM

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Background Road traffic injuries (RTIs) are a major public health threat that disproportionately affects low-and-middle income countries. As a response to this escalating public health problem, Bloomberg Philanthropies initiated the Global Road Safety Program to help ten low-and-middle-income cities implement evidence-based road safety interventions. This five-year project (2015–2019) is carried out by a consortium of partners with an overall goal of reducing the burden of road traffic injuries and fatalities in the targeted cities.

Description This panel will focus on the key lessons learned from the first year of the Global Road Safety Program. Emphasis will be placed on how research can be used to inform practice.

Session chair Dr. Adnan A Hyder, Johns Hopkins International Injury Research Unit, USA

- **Talk 1: Monitoring and Evaluation** - Dr. Abdulgafoor M Bachani, Johns Hopkins International Injury Research Unit, USA
 - **Abstract:** This talk will discuss the process and activities involved in the development of road safety risk factor data collection infrastructure in low-and-middle-income cities. It will also draw attention to the need for continuous assessment of program rollout to order to ensure effective implementation.
- **Talk 2: Enhancing Enforcement** - Gayle Dipietro, Global Road Safety Partnership, Switzerland.
 - **Abstract:** This talk will focus on lessons learned from engaging with and training of traffic police on road safety laws. This presentation will also shed light on the importance of data led enforcement.
- **Talk 3: Strengthening Road Safety Legislation** - Dr. Margie Peden, World Health Organization, Switzerland.
 - **Abstract:** This talk will present the challenges and opportunities associated with strengthening and changing of road safety legislations in low-and-middle-income settings. It will also highlight the role research can play in this process.

- **Discussion and Q&A** The session will end with a discussion on the implications of these lessons to the implementation of other road safety projects in low-and-middle-income settings.

49 IMPROVING SAFETY AND SECURITY IN TESOMA NEIGHBOURHOOD

Tanja Koivumäki, Nina Mustikkamäki. *City of Tampere, Finland*

10.1136/injuryprev-2016-042156.49

Background Tesoma is a typical Finnish suburb in western part of Tampere, built in the 1960s and 1970s. The total sphere of influence reaches almost 20 000 residents. Income and education levels in the area are lower than the city average. Residents of the area face several social challenges: unemployment, interruptions in education and even social exclusion. Also the housing prices are among the lowest in Tampere.

The city of Tampere is running a development project called “Own Tesoma”. The project is divided into subprojects and the aim is to achieve well-being and attractiveness in the whole Tesoma area. Residents have been involved in the project straight from the start and have taken concrete part in the planning and the developing of their neighbourhood.

Description of the problem Safety issues attribute heavily to Tesoma’s poor imago. This creates several challenges when strengthening attractiveness and vitality of the area and investing in urban infill.

Effects In 2015 the Own Tesoma -project mapped security and safety issues in Tesoma based on criminal statistics and residents’ experiences. During spring 2015 six guided walking tours were arranged and residents could in groups find out the challenging parts and places of the area. After mapping the most problematic places, city officials together with residents considered possible solutions for a safer living environment.

According to statistics and residents Tesoma is a safe place to live. Security challenges are typical and common to other similar suburbs. Clear challenges from residents’ point of view are growing traffic, poor traffic behaviour and accessibility as well as the uncleanliness and vandalism, which create an experience of the unsafe surroundings.

Safety issues will be developed in the future through cooperation between residents, businesses and other actors in the area. In 2016 there will be several different experiments aiming to increase safety through new partnership models. The main target is to increase traffic security and strengthen the sense of community and belonging.

Conclusions By the conference we will have more information available of the process and security in the neighbourhood of Tesoma.

50 IMPROVING THE FIRE SAFETY OF ELDERLY PEOPLE AND REDUCING FIRE DEATHS

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10.1136/injuryprev-2016-042156.50

Background In Finland (population 5.4 million), an average of 73 fatal building fires take place each year. A third of the casualties are elderly people (over 65 years old). They make up 18% of the population at the moment, but the share will increase to 26%