

TRAUMATIC INJURY

FACTS AND FIGURES

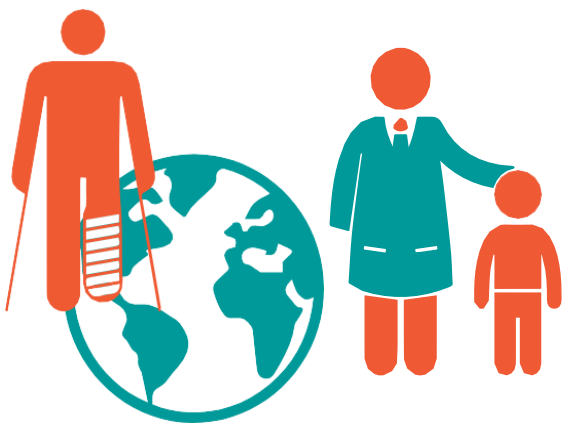
SYMPTOMS INCLUDE¹

- PAIN
- SWELLING
- BRUISING
- BLEEDING OR HEMORRHAGE
- DEFORMITY
- REDUCED MOBILITY



RISK FACTORS²

- Falls
- Road traffic collision
- Violent crime
- Child abuse

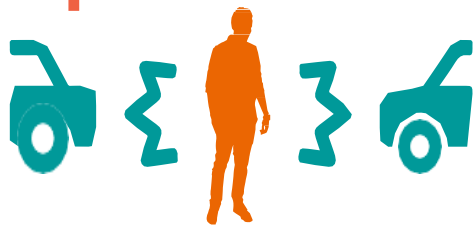


\$4.2 Trillion

Economic cost of fatal and nonfatal injuries in the US in 2019³

Injuries and violence are responsible for an estimated **10%** of all years lived with disability⁴

Globally, 1.3 million people are killed



by traffic crash every year⁵

Traumatic injuries account for over **41 million** emergency visits in the US each year⁶

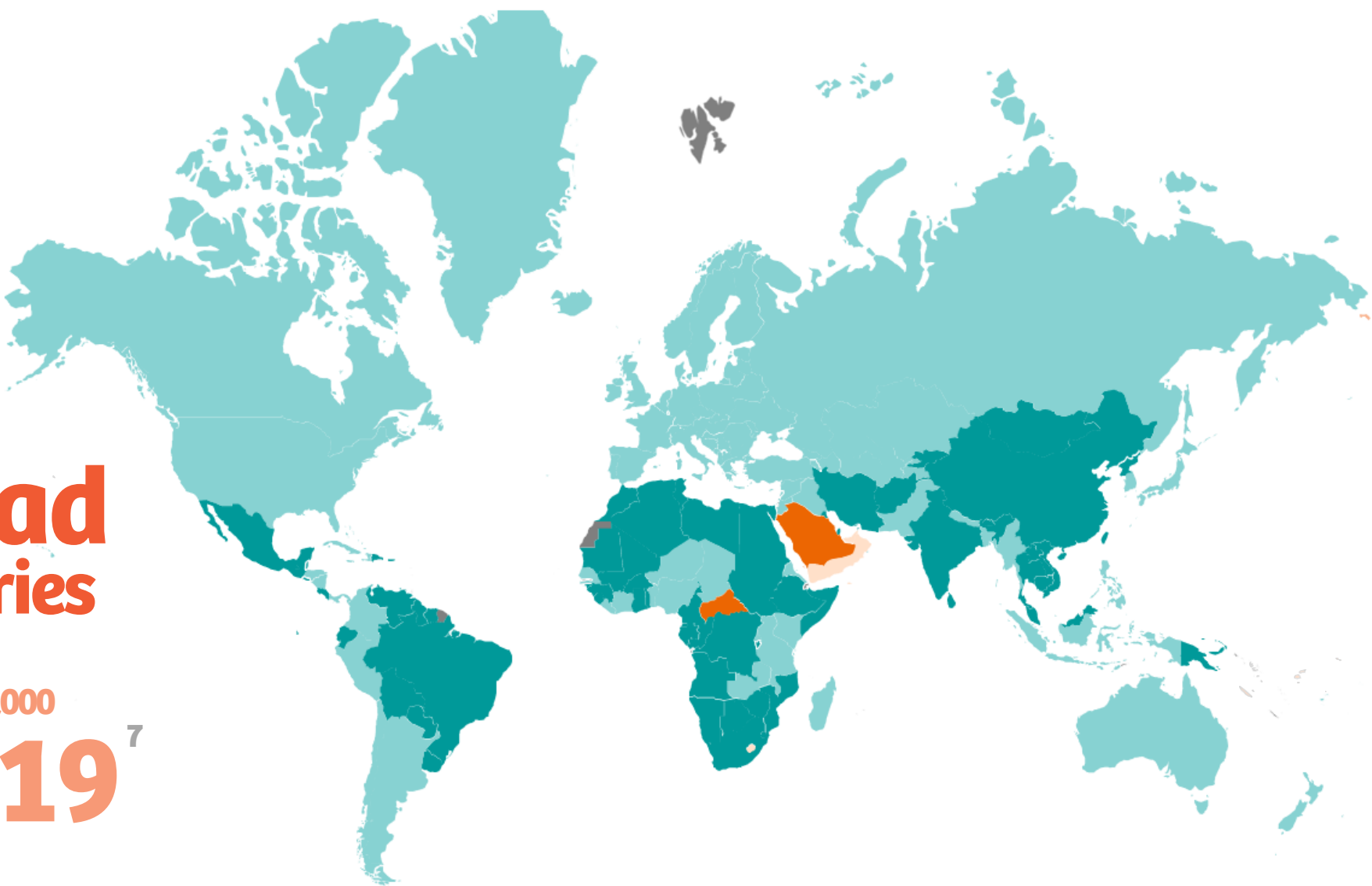
Road traffic injury death rates⁵

- Highest** in the African region
- Lowest** in the European region

Road injuries

Deaths per 100,000

2019⁷



3 to 15

36 to 55

No data available

16 to 35

> 55

Disclaimer:

This publication on the traumatic injury pathway framework was updated on 29.09.2022. It cannot be taken as a recommendation for the readers, especially not as a guideline for treatment, and it is not a medical document. There is no guarantee for completeness or global correctness, the various pain points, solutions, and statistical data are examples only. Sources are multiple, such as public statistics, expert opinions, open innovation workshops, research, own data and many more (see references).

The products and features mentioned may not be available in all countries and their future availability cannot be guaranteed. Some products mentioned are planned and under development.

1. Health Grades. (2020). Injury. Retrieved September 26, 2022, from <https://www.healthgrades.com/right-care/injuries-and-wounds/injury>
2. Traumatic injury risk factors | PLOS ONE. Journals.plos.org. (2020). Retrieved September 26, 2022, from https://journals.plos.org/plosone/browse/traumatic_injury_risk_factors
3. Peterson C, Miller GF, Barnett SB, Florence C. Economic Cost of Injury — United States, 2019. MMWR Morb Mortal Wkly Rep 2021;70:1655–1659. DOI: <http://dx.doi.org/10.15585/mmwr.mm7048a1externalicon>
4. World Health Organization. (2021). Injuries and violence. Retrieved September 26, 2022, from <https://www.who.int/news-room/fact-sheets/detail/injuries-and-violence>
5. World Health Organization. (2022) Road Traffic Injuries. Retrieved September 26, 2022, from <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>
6. The Conversation. (2019). How traumatic injury has become a health care crisis. Retrieved September 26, 2022, from <https://theconversation.com/how-traumatic-injury-has-become-a-health-care-crisis-116250>
7. Institute for Health Metrics and Evaluation. (2019). Road traffic Mortality per 100,000 people in 2019, both sexes, all ages. Retrieved September 26, 2022, from <https://vizhub.healthdata.org/gbd-compare/>

An extensive research-based analysis from 40+ scientific articles and journals in combination with hospital workflow experience allowed the identification of painpoints and solutions.

These solutions were proposed based on AI, IoMT, AR/VR, biosensors, nanorobotics and smart wearable technologies.

**THROUGH THIS CAREPLAN WE
HIGHLIGHT DATA FROM
A COLLECTION OF**

35
painpoints

40 solutions

connected to
different stakeholders

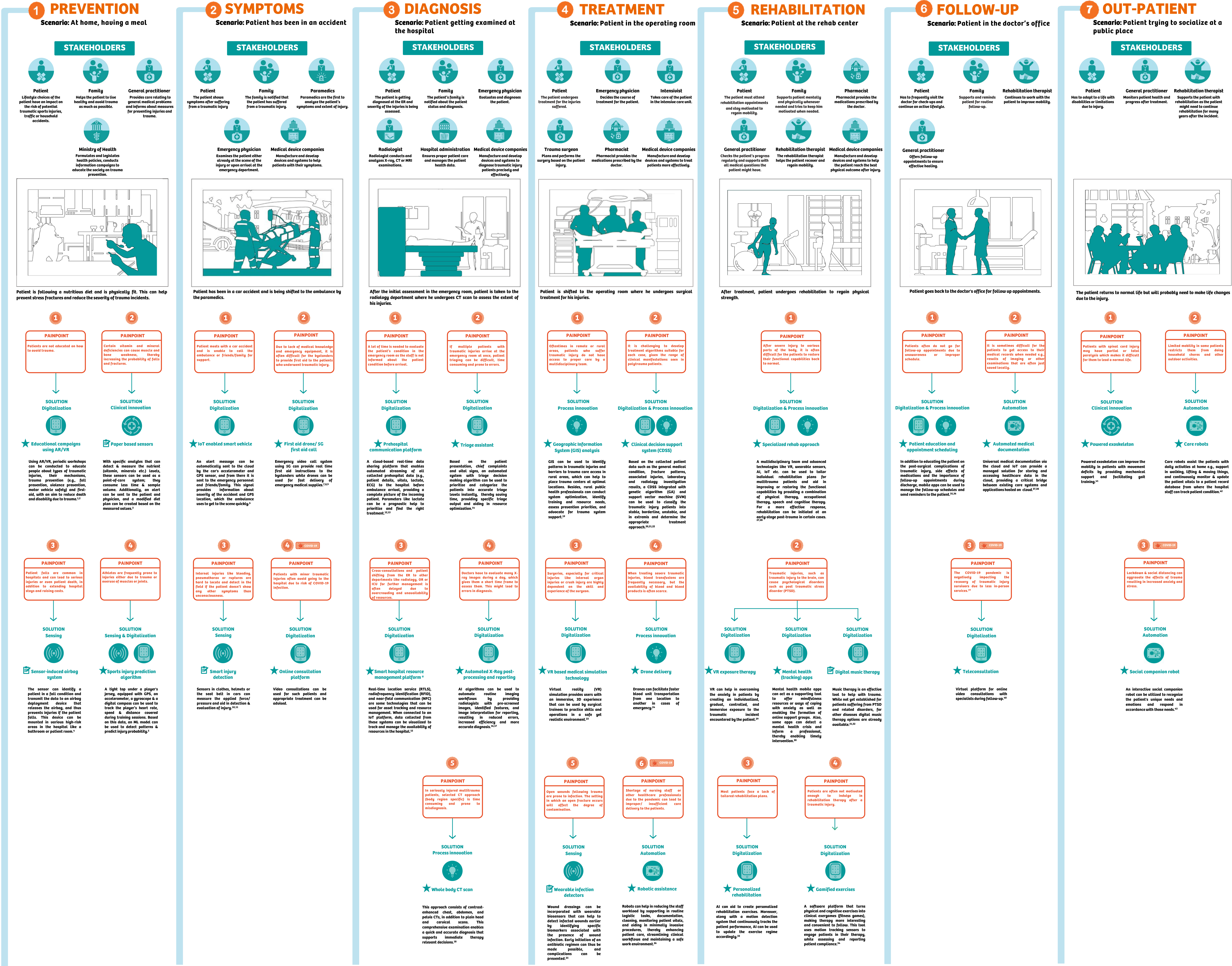
Solution categories

- Existing in healthcare sector
 - Ongoing research in healthcare
 - Futuristic solution (may or may not be implemented)

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PORTLS to locate patients and staff (SHS): This service is under development and not commercially available. Its future availability cannot be ensured.

Website:
<https://www.siemens-healthineers.com/careers/innovation-think-tank>

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