# The power of images: using infographics to promote patient and family understanding of sex and gender effects in traumatic brain injury



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### Introduction: sex and gender effects in traumatic brain injury

- A traumatic brain injury (TBI) is an alteration of brain structure and/or function caused by an external physical force
- Common causes include impacts by or against objects, falls, motor vehicle collisions, and physical assault
- TBI often disrupts a person's ability to perform familial and social roles, making it crucial for patients and families to understand the effects of biological sex and sociocultural gender in recovery

### Objective: infographics as knowledge translation tools

The goal was to create infographics about sex and gender effects in TBI, to be used by the knowledge users: people with TBI and their family



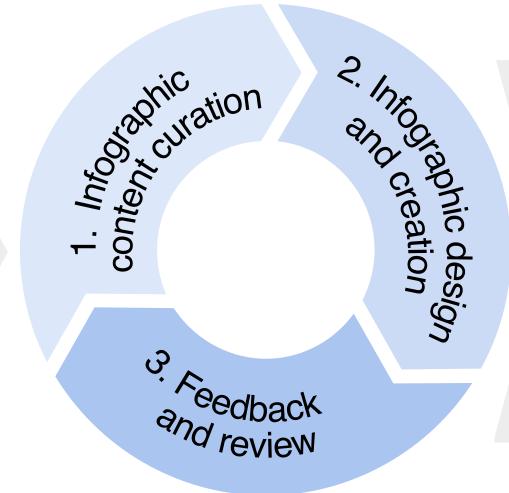
#### **Objectives:**

- 1. Foster interest in the topic
- 2. Educate end users about TBI and sex & gender effects
- 3. Motivate viewers to practice gender-adaptive behaviours early after injury to enhance recovery and quality of care

# Methods: evidence synthesis and iterative design process

# **Evidence synthesis** consulting research:

- Sex and gender effects in TBI
- Educational needs of knowledge users
- Best practices for infographic design



# Next steps:

- Feedback from UHN Offices and end users
- Distribution to knowledge users

## Results: enhancing recovery and quality of care

- We created five infographics on topics intersecting TBI, sex, and gender
- All infographics can be accessed by scanning the QR code at the bottom of the poster

Figure 1. Visual illustrating sex and gender effects on TBI acquisition: cause of injury differs between men and women

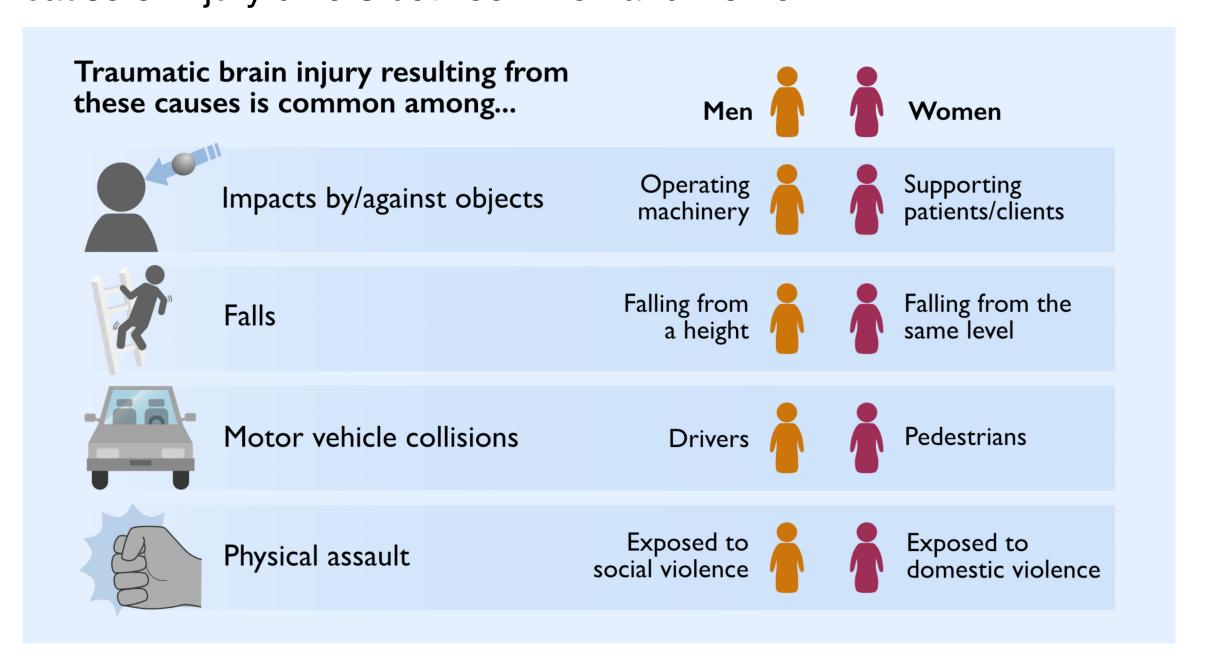


Figure 2. Content communicating short- and long-term effects of TBI on patients and their families

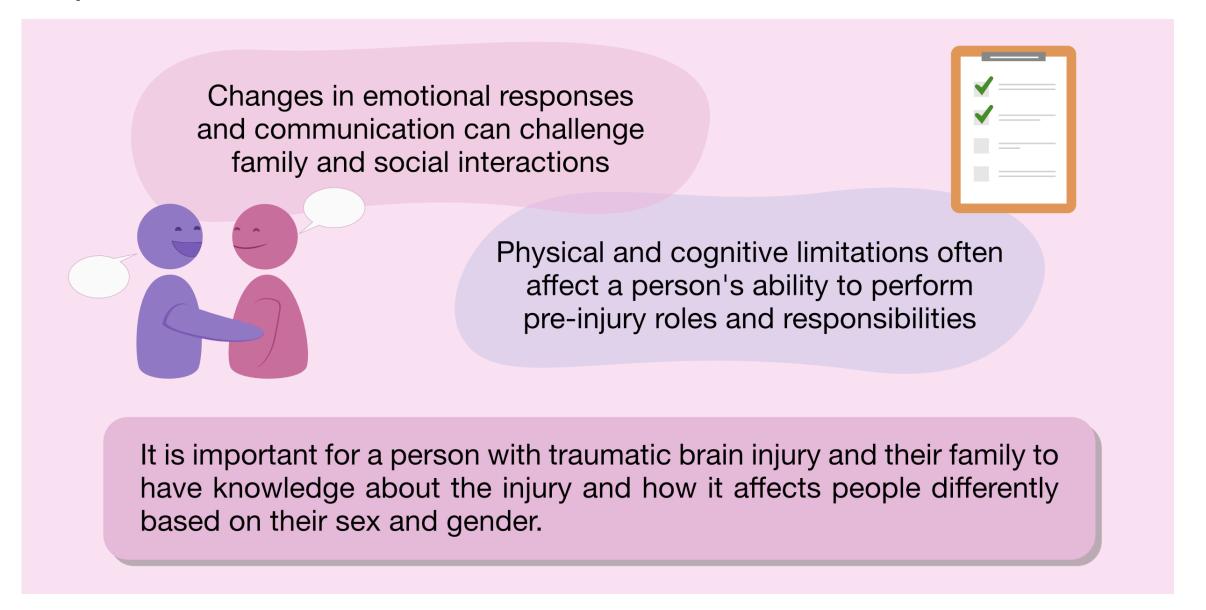
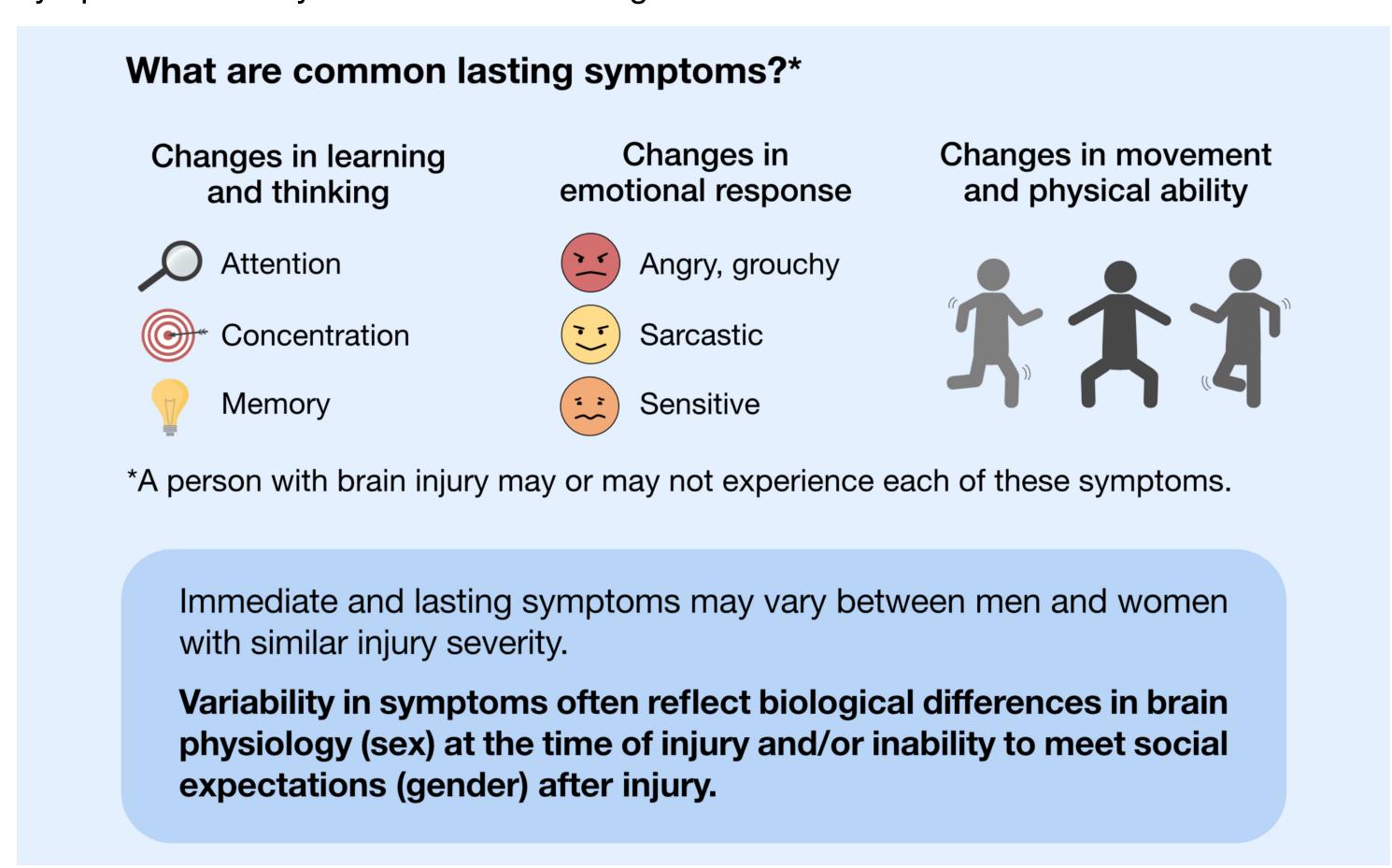


Figure 3. Content illustrating common lasting symptoms of TBI and explaining how symptom variability is linked to sex and gender differences



#### Discussion and future direction

- Iterative design: Our content was iteratively designed for inclusivity, accessibility, and representation
- Powerful visuals: Visuals with minimal text ease communication and recognition of complex concepts
- Engaging content: Our infographics provided informative and engaging text and visuals created using research and lived experiences of people with TBI
- Future direction: Incorporating feedback from knowledge users will improve effectiveness of infographics as strategies for mutual understanding and easing the emotional toll and gender role distribution after TBI

Scan the QR code to view all infographics and access the sources referenced **Funding:** Cass Family Grants / "Gender Matters": Create Patient and Family Understanding around Sex and Gender in Traumatic Brain Injury