NEW JERSEY HUMAN SERVICES

NEW JERSEY ADVISORY COUNCIL ON TRAUMATIC BRAIN INJURY

New Jersey Advisory Council on Traumatic Brain Injury

July 15, 2025

Welcome, Review of Minutes, Division Updates

Jacqueline Moskowitz, Interim Executive Director
Division of Disability Services

10:00 – 10:05

Agenda

Welcome, Introductions, Review of Minutes, Division Updates: *Jacqueline Moskowitz, Interim Executive Director, DDS*	**10:00am-10:05am**
Brain Injury Alliance of NJ: *Barbara Chabner, Director of Education & Outreach*	**10:05am-10:10am**
TBI Fund Updates: *Margaret Lumia, PhD, MPD*	**10:15am-10:20am**
TBI Fund Updates: *Margaret Lumia, PhD, MPD*	**10:15am-10:20am**
NJ TBI Data Dashboard: *Sophie Wilkinson, MPH*	**10:20am-10:35am**
Survivor Board Future Directions Presentation **Acute Assessment of TBI** *Tara Buggie*	**10:35am-10:55am**
Break	**10:50am-11:05am**
State Action Plan Development and Discussion: *Kelly Miller, Senior Manager for Technical Assistance, NASHIA*	**11:05am-11:45am**
Open Discussion:	**11:45am-12:00pm**

NEW JERSEY ADVISORY COUNCIL ON TRAUMATIC BRAIN INJURY

Please put your name in the chat and we'll note that in our attendance!

NEW JERSEY HUMAN SERVICES

Brian Injury Alliance of New Jersey
Update

Barbara Chabner
Director of Education and Outreach

10:05 - 10:10

Workshops

- In-person and virtual workshops
- 69 workshops, 4,500 attendees
- Wide range of topics and settings
- FY: 309 workshops, 11,440 attendees

Exhibiting and Coalition Meetings

Community Fairs/Wellness Events

- 30 attended
- FY: 97 (includes 10 professional conferences)

Coalition and Networking Meetings

- 81 attended
- Coalition meetings
- Individual networking meetings
- FY: 319 attended

BIANJ Annual Professional Seminar

Enhancing Understanding Across the Brain Injury Spectrum

Keynote address: **Kristy Arbogast**, Scientific Director of Center for Injury Research and Prevention, CHOP

9 workshops; 11 student posters; 33 exhibitors

CEUs for multiple disciplines;

237 attended; multidisciplinary

Webinars and Facebook Live

Hosted 3 webinars

- 217 attended
- FY: 11 webinars, 890 attendees

Facebook Live Discussions

- At BIANJ Annual Gala during survivor panel discussion
- FY: 4 FB Live sessions

Workshops, Networking, Exhibiting

- At least one event in each of 6 ACL counties
- Bilingual events:18; FY: 72

Virtual Family Wellness Event

- 34 attended
- Sessions included:
  - BIANJ Programs and Services Overview
  - Organizational Tips
  - Chair Yoga

TBI Fund

- TBI Fund promoted at presentations/events
- 26 referrals
- State Fiscal Year: 239 referrals

BIANJ Website

- Increase access
- Small focus group of brain injury survivors
- Added accessibility icon

Additional BIANJ Resources and Programs

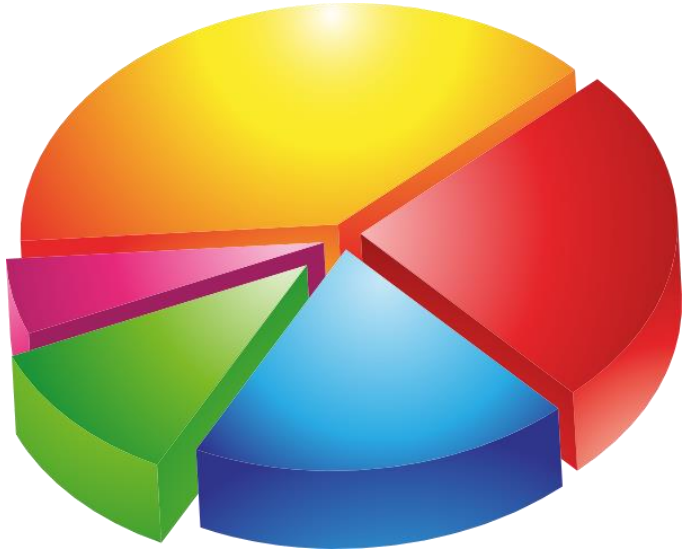
- BIANJ Resource App
- Brain Injury Journey: Exploring Resilience Through Art

TBI Fund Updates

Margaret Lumia, PhD, MPH
Administrator, Disability Health & Wellness/TBI Fund

10:15 - 10:20

TBI Fund Applicants



2025 Quarter 1

New Applicants (14)
- ✓ 4 Female, 10 Male

Top County
- ✓ Monmouth (n=3)

Race/Ethnicity
- ✓ White (n=12)
- ✓ Black (n=1)
- ✓ Prefer not to say (n=1)

Top Causes
- ✓ MVC (n=3)
- ✓ Struck-by (n=1)
- ✓ Falls (n=8)
- ✓ Gun shot (n=1)

2025 Quarter 2

New Applicants (20)
- ✓ 8 Female, 12 Male

Top County
- ✓ Gloucester (n=3)

Race/Ethnicity
- ✓ White (n=13)
- ✓ Black (n=3)
- ✓ Hispanic (n=3)
- ✓ Asian (n=1)

Top Causes
- ✓ Falls (n=5)
- ✓ MVC (n=12)
- ✓ Assault (n=2)
- ✓ Gun shot (n=1)

TBI Fund Updates

- To date, for State Fiscal Year 2025, the TBI Fund has **collected $7,651,256** from the $.50 MVC Vehicle Registration Surcharge.
- To date for State Fiscal Year 2025, TBI Fund has **paid $5,947,122** for direct and case management services
- The Top Three Service Providers include:
  - Olive Branch ($348,031)
  - A Plus ($163,105)
  - Advancing Opportunities ($247,650)
- **Panoramic**, online management system, is continuing the review and onboarding process.
- A revised **TBI Fund website** will be launched in the coming weeks.

NJ TBI Data Dashboard:

Sophie Wilkinson, MPH

10:20 - 10:35

CBI-M: First Update to TBI Assessment in 50 years:

Tara Buggie

10:35 - 10:55

Multi Trauma s/p MVA

DISCH. DATE

REFERRED BY: Screening REFERRAL DATE: 3/26/97 SERVICE REQUESTED: D/C PLAN

SOCIAL EVALUATION, TREATMENT AND PLAN:

3/26/97 - Pt is 21 yr old white, single female college student, who was admitted to ICU for treatment of multitrauma s/p MVA. Discussed with J. Walling, RN - Trauma Coord. who reports pt has made very little neurological improvement if any. Currently GCS 6T with bilateral infiltrates. Met with J. Kirsch, RN Bereavement who reports she's been involved with pt since admission. Will meet with family to offer support and coordinate discharge plan.

Mary F. Brennan LCSW

Page # 899-3583

Voice Mail # 987-4656

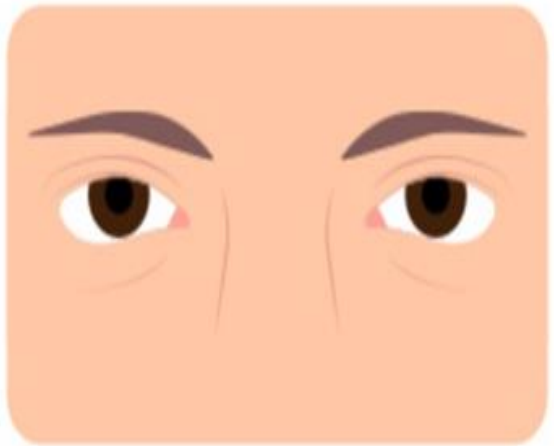
HUMAN SERVICES

Traumatic Brain Injury Categories Should Be Updated and Pe to Better Guide Patient Care, Says New Report

News Release | February 1, 2022

GLASGOW COMA SCALE

EYE OPENING RESPONSE



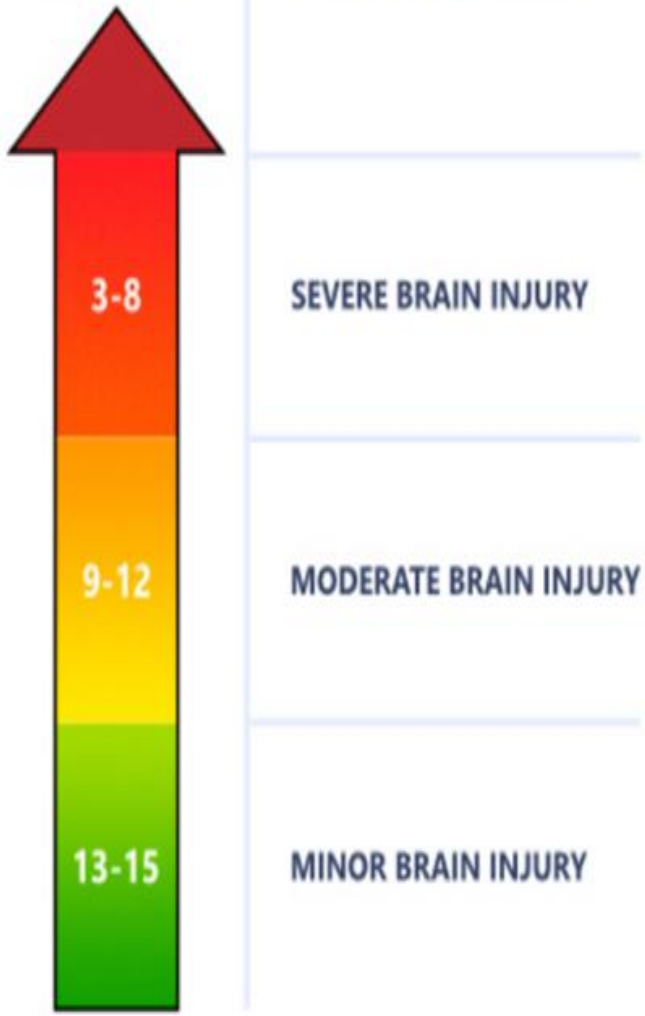
SCALE	SCORE
EYES OPEN SPONTANEOUSLY	4
EYES OPEN TO VERBAL COMMAND OR SPEECH	3
EYES OPEN TO PAIN	2
NO EYE OPENING	1

VERBAL RESPONSE

SCALE	SCORE
ORIENTATED	5
CONFUSED CONVERSATION BUT ABLE TO ANSWER QUESTIONS	4
INAPPROPRIATE RESPONSES	3
INCOMPREHENSIBLE SOUND OR SPEECH	2
NO VERBAL RESPONSE	1

MOTOR RESPONSE

SCALE	SCORE
OBEYS COMMANDS FOR MOVEMENT	6
PURPOSEFUL MOVEMENT TO PAINFUL STIMULUS	5
WITHDRAWS FROM PAIN	4
ABNORMAL FLEXION OR DECORTICATE POSTURE	3
EXTENSOR RESPONSE OR DECEREBRATE POSTURE	2
NO MOTOR RESPONSE	1



GLASGOW COMA SCALE SCORE

Cureus. 2025 Feb 12;17(2):e78900. doi: 10.7759/cureus.78900

Limitations of the Glasgow Coma Scale: Challenges and Considerations

Christopher Andraos [1,✉], Amman Siddiqi [2], James Brazdzionis [3], Javed Siddiqi [4,3,5,6]

Editors: Alexander Muacevic, John R Adler

Challenges in the acute identification of mild traumatic brain injuries: results from an emergency department surveillance study

Ilaria Pozzato [1], Susanne Meares [2], Annette Kifley [1], Ashley Craig [1], Mark Gillett [3], Kim Van Vu [1], Anthony Liang [1], Ian Cameron [1], Bamini Gopinath [4]

← All Media

Prompt Diagnosis and Treatment of Traumatic Brain Injuries Starts in the Emergency Room

CATEGORIES: Legal Issues

by Steven Gursten
Michigan Auto Law

The key to prompt diagnosis and treatment of a car accident victim's brain injury starts with the doctors and medical staff in the hospital emergency room (ER). Knowing that car crashes are one of the leading causes of traumatic brain injury (TBI), they need to look for the symptoms of TBI and ask the right questions.

Unfortunately, that is not happening as effectively as it should. Research has shown that as many as 56% of TBIs are not detected in the ER. Other respected studies show that hospital ERs miss TBI diagnoses 80% of the time.

diagnosing TBI. Bazarian et al.[31] found that trained research assistants administering a structured clinical interview based on the American Congress of Rehabilitation Medicine's (ACRM) definition of TBI[32] to patients or available witnesses identified over twice as many TBIs as were diagnosed with TBI at ED discharge. Yuh et al. reported that 27% of mild traumatic brain injury (mTBI) patients with normal head CTs had trauma-related abnormalities on MRI.[16] Thus, it is likely that a significant fraction of patients evaluated in the ED for TBI but not ultimately diagnosed did in fact sustain traumatic brain injury. Although imperfect (can miss patients evaluated for TBI without a head CT), our approach of using a combination of TBI ICD-9 codes and head CT imaging in patients presenting with injury-related complaints represents a more robust approach to identifying and quantifying

Emergency Department Evaluation of Traumatic Brain Injury in the United States, 2009-201,
J. Head Trauma Rehail 2016 Nov/Dec ; 31n(6) 379-387.

GCS-P

* Important changes highlighted in red

	Motor response	Verbal response	Eye opening
1.	None	None	None
2.	Extension	Sounds	To Pressure
3.	Abnormal flexion	Words	To speech
4.	Withdrawal	Confused	Spontaneous
5.	Localizing	Orientated	
6.	Obeying commands		

Pupil Reactivity Score: Subtracted from the calculated GCS

Pupil Reactivity Score

Pupil(s) unreactive to light	Score
Both pupils	2
One Pupil	1
Neither pupil	0

For total GCS, subtract pupil reactivity score from calculated GCS

Canadian CT Head Rule

CT head is only required for minor head injury patients with any one of these findings:

High Risk (for Neurological Intervention)

1. GCS score < 15 at 2 hrs after injury
2. Suspected open or depressed skull fracture
3. Any sign of basal skull fracture*
4. Vomiting ≥ 2 episodes
5. Age ≥ 65 years

Medium Risk (for Brain Injury on CT)

6. Amnesia before impact ≥ 30 min
7. Dangerous mechanism ** *(pedestrian, occupant ejected, fall from elevation)*

*Signs of Basal Skull Fracture
- hemotympanum, 'racoon' eyes, CSF otorrhea/ rhinorrhea, Battle's sign

** Dangerous Mechanism
- pedestrian struck by vehicle
- occupant ejected from motor vehicle
- fall from elevation ≥ 3 feet or 5 stairs

Rule Not Applicable If:
- Non-trauma cases
- GCS < 13
- Age < 16 years
- Coumadin or bleeding disorder
- Obvious open skull fracture

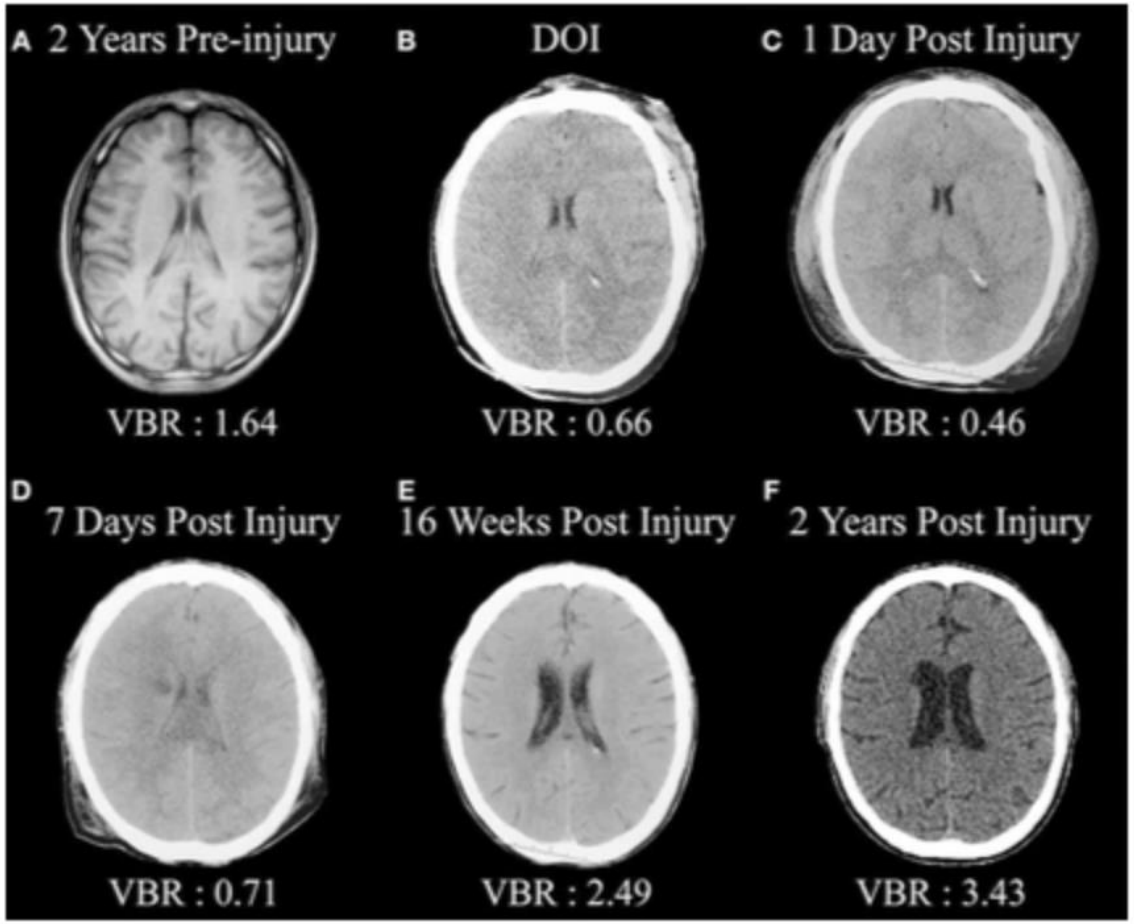


Fig. 3 – Ventricular enlargement in TBI over time with serial CT scans

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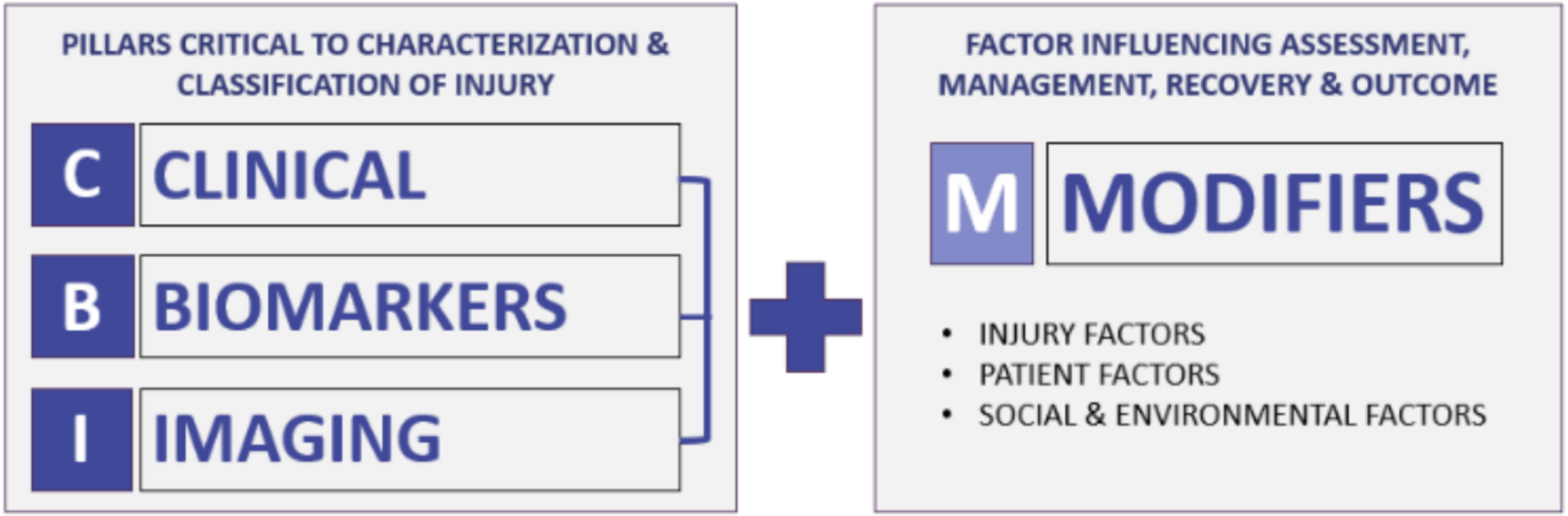
Getty Images/iStock/Cecilie Arcurs

THE CBI-M MODEL



https://www.mountsinai.org/about/newsroom/2025/new-framework-for-characterizing-traumatic-brain-injury-to-reveal-more-detail-about-patients-condition-and-potential-for-recovery

MOST IMPORTANT COMPONENTS OF CBI-M PILLARS

Clinical	Blood-Based Biomarkers	Imaging	Modifiers
Ensure Glasgow Coma Scale (GCS) assessment records eye, motor, and verbal components; pupillary reactivity; and post-traumatic amnesia	Establish insurance support for routine biomarker analysis	Standardize TBI imaging terminology and reporting	Record psychosocial and environmental modifiers (PEFs) affecting assessment of TBI severity and outcome
Assess and record social, medical, and injury-related factors influencing GCS/TBI outcomes	Include biomarkers in TBI practice guidelines	Use simple language to explain TBI imaging to patients and families	Research of PEFs contribute to TBI healthcare seeking, presentation, and outcome
Repeat symptom severity assessment for up to 14 days	Include TBI biomarker tests in acute TBI evaluation and management	Identify a core set of TBI imaging features for use in research	Develop and validate tools for measuring PEFs

Retrospective Classification: What information can we gather today to identify and classify past exposure to TBI?

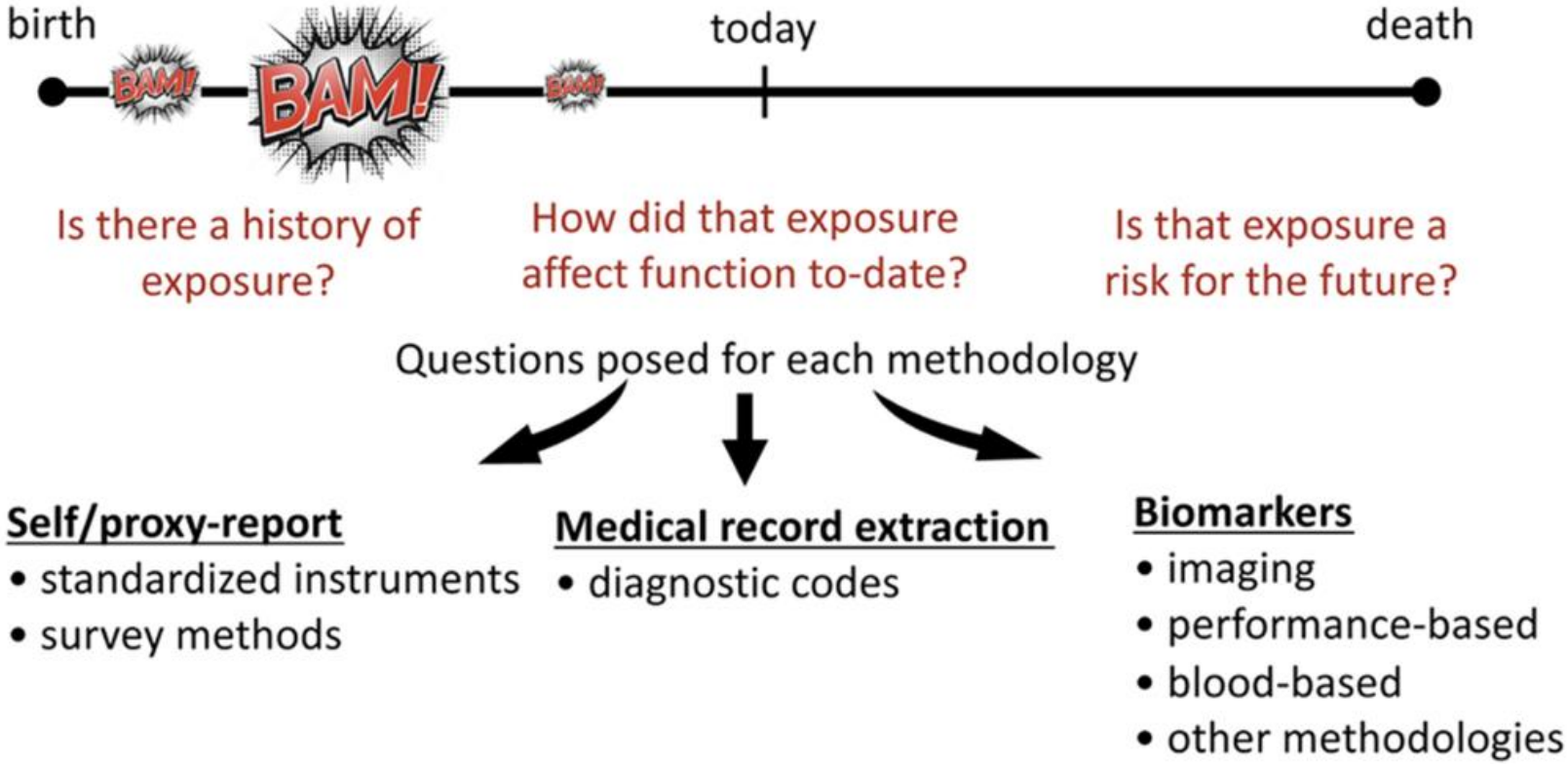


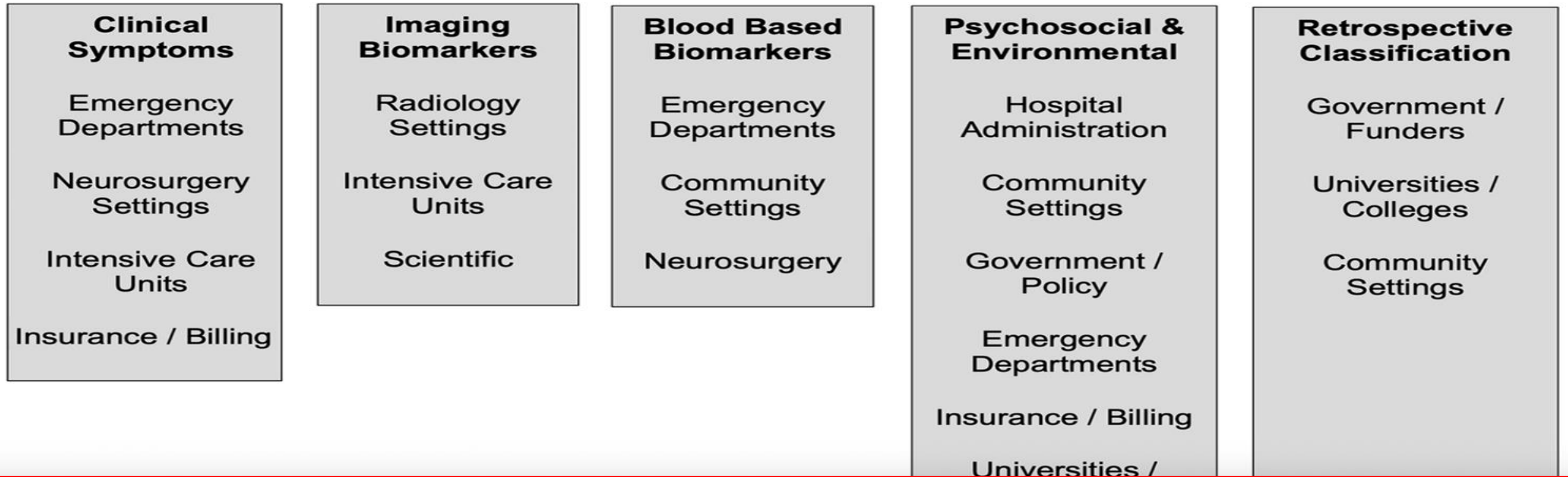
FIG. 1. Retrospective classification: What information can we gather today to identify and classify past exposure to TBI? This figure depicts the three questions (in red font) that were posed for each methodology examined. The timing in a person's life course that is pertinent to each question is shown above the questions and the methodologies examined are shown below. The arrows depict that the three questions were asked for each methodology. TBI, traumatic brain injury.

Research Article | FREE ACCESS | Published Online: 7 May 2025

Starting with the End in Mind: Recommendations to Optimize Implementation of a Novel TBI Classification from the 2024 NINDS TBI Classification and Nomenclature Workshop's Knowledge to Practice Working Group

Target settings

The working groups also identified various settings most likely to be initially affected by their proposed recommendations. A tota of 18 different settings were identified, with frequently identified settings including community health, emergency and intensive care, and university settings (Fig. 4).



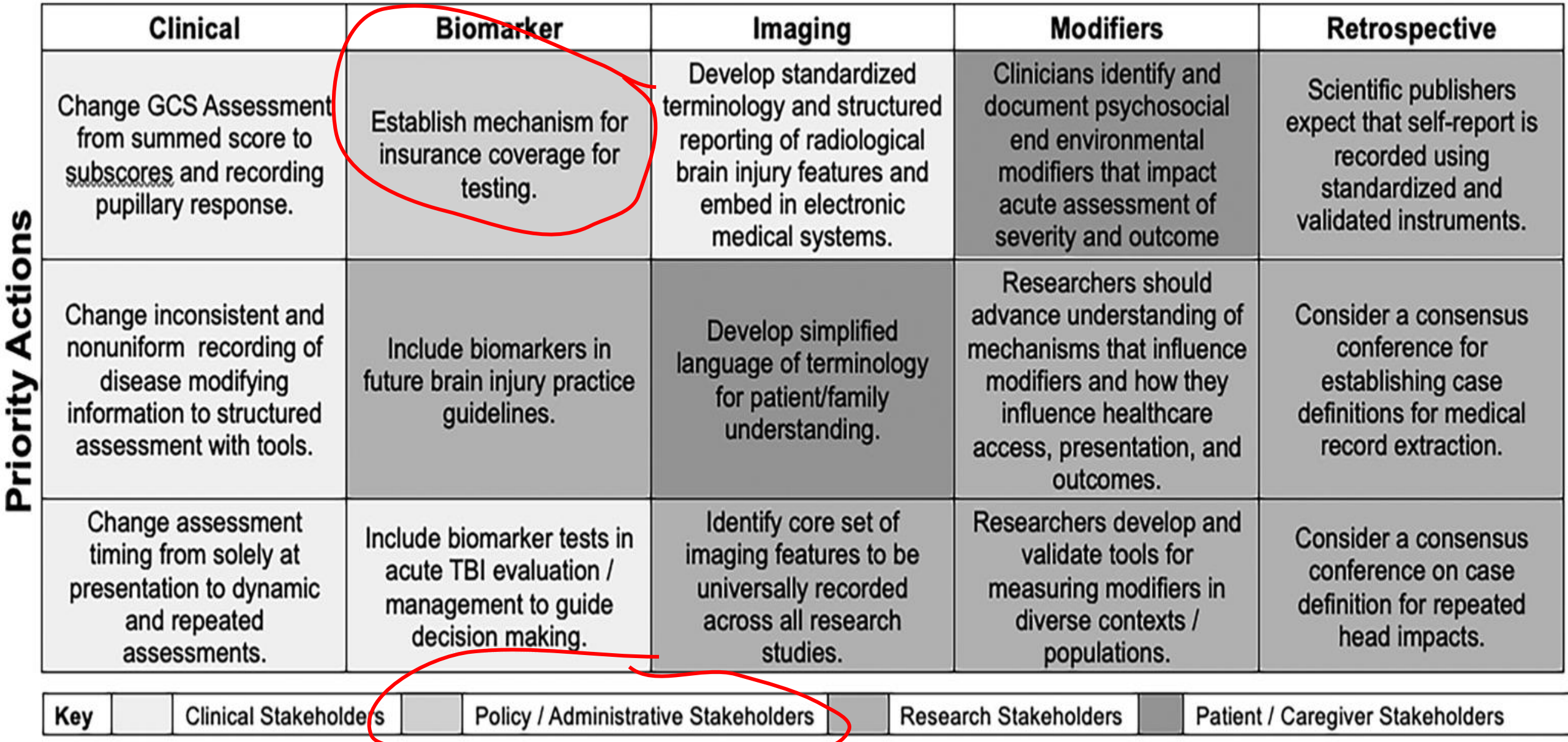


FIG. 5. Initial priority actions to support translation of recommendations into practice.

A Broad TBI Coalition

References

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*https://pmc.ncbi.nlm.nih.gov/articles/PMC11908630/pdf/cureus-0017-00000078900.pdf

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https://nap.nationalacademies.org/read/25394/chapter/7#84

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Break

10:50-11:00

State Action Plan Development & Discussion

Kelly Miller, Senior Manager for Technical Assistance
NASHIA

11:05 – 11:45

Open Discussion

11:45 – 12:00

Upcoming Meeting Schedule:

- **October 15, 2025 – TBI State Action Plan Conference (in-person)**
  - **Date: Wednesday, October 15 2025**
  - **Time: 10 a.m. – 2 p.m. (Registration Start at 9 a.m.)**
  - **Location: Mercer County Community College Conference Center**

What to Expect at the Conference:

- **Review the draft action plan**
- **Share your ideas and feedback**
- **Help shape collaboration strategies that reflect real community needs**