Concussion Consensus Process

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Scientific and Organizing Committee

**Organizing Committee**
- Mark Aubry (IIHF)
- Jiri Dvorak (FIFA)
- Lars Engebretsen (IOC)
- Paul McCrory
- Willem Meeuwisse
- Martin Raftery (World Rugby)
- Allen Sills (FEI)

**Scientific Committee**
- Willem Meeuwisse
- Paul McCrory
- Jiri Dvorak
- Ruben Echemendia
- Lars Engebretsen
- Nina Feddermann
- Michael Makdissi
- Mike McCrea
- Jon Patricios
- Kathryn Schneider
- Allen Sills
History: “the 5th”

- 2001 Vienna, 2004 Prague
- Aim: “to provide recommendations for the improvement of safety and health of athletes who suffer concussive injuries in ice hockey, rugby, football (soccer) as well as other sports”
- Summary & Agreement Statements
2008 Zurich

- First formal Consensus Meeting
- Framework:
  - National Institutes of Health (NIH)
  - Consensus Development Conference Format

https://prevention.nih.gov/programs-events
1. Specific questions are prepared and posed in advance to define the scope and guide the direction of the conference.

2. A systematic literature review was prepared and circulated in advance for use by the panel in addressing the conference questions.

3. Experts presented data in a public session, followed by inquiry and discussion.

4. Expert Panel meets in a closed session to prepare the consensus statement.

5. The principle task of the panel is to elucidate responses to the questions.

6. The consensus statement is intended to serve as the scientific record of the conference.

7. Widely disseminated to achieve maximum impact on both current health care practice and future medical research.
Concussion in Sport Consensus

Goals

• Highest Scientific Standard
• Structured Format
• Transparency
• Clinically Applicable Outcome
Timeframe

Planning

Scientific Committee

Jan 2015

Apr 2015
Development of the Consensus Questions

NEW: Modified Delphi Method

• Initial drafting, feedback and revisions of questions were conducted:

  – 5 rounds with Scientific Committee (10 members) and Expert Panel (35 members total)
Development of the Consensus Questions
Modified Delphi Method

**Round 1** - Scientific Committee - Open Ended
- 45 questions suggested

**Round 2**
- Rating (Essential, Desirable, Not a priority)
- Wording changes and other / additional questions.
- Distilled to 14 questions + subquestions

**Round 3** – Expert Panel Ranking
- Additional questions?

**Round 4** – Scientific Committee
- Review of additions
- Reorganized and reduced to 12 questions

**Round 5** – Final review
- Final 12 questions (with sub-questions)
Timeframe

Jan 2015
Apr 2015
Aug 2015
Nov 2015
Expert Panel

- Selected for scientific, clinical and academic understanding of the topic / field
- Expertise and experience
- Not representing organizations per se
- Broadened to include more related disciplines, organizations and experts
Systematic Reviews

• Ensure literature searched systematically
• Methodological rigour
• Standardized guideline based on:
  – BJSM Author Instructions
  – PRISMA guidelines
• Focus on sport-related concussion
• Discussion to bring in other relevant literature
Systematic Reviews

• Included:
  – Search strategy developed by content experts (authors)
  – Search strategy reviewed by librarians knowledgeable on systematic reviews (CADTH Peer Review Checklist for Search Strategies was used)
    • Dr. Alix Hayden
    • Dr. Kathryn Schneider
  – Risk of bias tools
• Titles shared with all lead authors and encouraged to discuss overlap
• 7 meetings held during final five months leading up to meeting
  – Lead Authors + Scientific Committee
Scientific Abstracts

• New structured online review process
• Engaged larger group of Expert Panel
• 202 Accepted (56 in 2012)
• 178 Poster and 24 oral presentations
• Objective: Add to systematic reviews by providing latest evidence
Timeframe

Planning
Scientific Committee
Question Development
Expert Panel
Systematic Reviews
Abstract Deadline
Consensus Meeting

Jan 2015
Apr 2015
Aug 2015
Nov 2015
Mar 2016
Jun 2016
Oct 2016
Disclosure

• All conflicts of interest declared
  – Relevant relationships, funding
  – Direct, Indirect, Perceived

• International Journal of Medical Editors
  – Form submitted
  – Posted online
  – Printed in Consensus Statement
2016 Format

• Day 1 & 2 - Public
  – Plenary lectures to address focused questions

• Day 3 - Closed
  – Expert Panel meeting

• Day 4
  – SCAT, Child SCAT and CRT
Plenary Session – Day 1 & 2

• Not a “continuing medical education” conference

• Speakers will:
  1. Present the evidence
  2. On a focused topic / question
  3. Give recommendations, where possible
  4. Stay on time!
Plenary Session – Day 1&2

• Discussion
  – Panel discussion
  – Audience participation
Expert Panel Day 3

• To debate pre-defined questions
• Synthesize:
  1. Published evidence
  2. New research (abstracts)
  3. Plenary session summary
  4. Audience input
• Interpret the evidence and draft a consensus statement
The Task

• Achieve consensus on 12 Key questions
• Consensus does not need to be unanimous
  – Option for dissenting opinion / minority opinion
  – Withdrawal
Day 4

**SCAT3™**
Sport Concussion Assessment Tool – 3rd Edition

**Child-SCAT3™**
Sport Concussion Assessment Tool for children ages 5 to 12 years

**Pocket CONCUSSION RECOGNITION TOOL™**
To help identify concussion in children, youth and adults
The end goal

• A simple, clear message and tools that will equip the practitioner to diagnose and manage concussion in sport
Timeframe

- Planning: Jan 2015
- Scientific Committee: Apr 2015
- Question Development: Aug 2015
- Expert Panel: Nov 2015
- Systematic Reviews: Mar 2016
- Abstract Deadline: Jun 2016
- Consensus Meeting: Oct 2016
- Writing: Nov-Dec 2016
Timeframe

Planning: Jan 2015
Scientific Committee: Apr 2015
Question Development: Aug 2015
Expert Panel: Nov 2015
Systematic Reviews: Mar 2016
Abstract Deadline: Jun 2016
Consensus Meeting: Oct 2016
Writing: Nov-Dec 2016
Publish Online: Feb 2017
Meeting Details

• 1 hour plenary session for each of the 12 questions/themes:
  – Oral abstract(s) ~ 10 min.
  – Presentation of systematic review summary ~ 25 min.
  – Panel discussion with audience ~ 20 min.

• Preceded by abstract poster session “breaks”
  – Grouped by themes
A Point in Time

- The Consensus Conference itself is only one point in time
  - 18 months preparation
  - Information exchange, discussion, feedback
  - Followed by drafting/writing of consensus document
  - To be completed and released in early 2017
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