



The Evolution of the HEADS-ED

A journey from conception
through development, evaluation
and implementation

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Overview

- Background
- HEADS-ED: The Tool
- www.heads-ed.com: The Site
- Evidence
- Scalability

Background

- There is no standard of practice or tool used to guide the assessment and disposition of mental health concerns within the ED
- Only 9% of ED physicians indicated using evidence-based screening methods to assess mental health concerns¹
- 62% identified lack of an available tool as a significant barrier¹
- The AAP called for action supporting improved screening of mental health issues in the ED
- Recommendations were made for the use of specific and validated pediatric screening measures part of the assessment and disposition planning for ED patients with mental health emergencies.

Background

An ED Mental Health Tool must be:

- Very Brief
- Very Easy to complete
- Very Easy to score
- Clinically intuitive
- Help guide clinical decisions in the assessment and for treatment recommendations

HEADS-ED: The Tool

- Enables ED physicians to take a psychosocial history which aids in decisions regarding patient disposition
- Rated on a 3 point scale based on need for action
- Only 7 variables are incorporated into the HEADS-ED tool:

Home

Education

Activities and peers

Drugs and alcohol

Suicidality

Emotions and behaviours

Discharge resources

HEADS-ED: The Video

Evidence: 3 Studies to Date

- Initial Validation & Reliability Study
- Theoretical Domains Framework Study for Implementation
- Local ED Implementation Study

Evidence: Reliability and Validity

The HEADS-ED: A rapid mental health screening tool for pediatric patients in the Emergency Department. *Pediatrics*, 130 (2) 130:e321-e327 (2012)

- 313 children and youth presenting to the ED between March 1 to May 30 and seen by a Crisis Worker
- Crisis Workers completed the HEADS-ED, CANS-MH 3.0
- Youth completed the Children's Depression Inventory (CDI)

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The HEADS-ED: A Rapid Mental Health Screening Tool for Pediatric Patients in the Emergency Department

Mario Cappelli, Clare Gray, Roger Zemek, Paula Cloutier, Allison Kennedy,
Elizabeth Glennie, Guy Doucet and John S. Lyons

Pediatrics; originally published online July 23, 2012;

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Evidence: Reliability and Validity

- HEADS-ED correlated with all subscales of the CDI and the CANS-MH 3.0 ($r = 0.17$ to $r = 0.89$)
- Predicted request for consultation & hospital admissions
 - *Sensitivity* = 82%
 - *Specificity* = 87%
- Demonstrated inter-rater reliability (ICC=.78)

Evidence: Theoretical Domains Framework ED Focus Groups

- Conducted 6 focus groups (1.5 hours) consisting of 6 to 8 ED physicians to evaluate facilitators and barriers to HEADS-ED use in pediatric, general and rural hospitals
 - 3 in Ontario (pediatric centre, general hospital, rural hospital)
 - 3 in Nova Scotia (pediatric centre, general hospital, rural hospital)
-
- *“I think I can speak for most Emerg docs when I say we’re not really all that aware of what’s out there in the community”*
 - *“I think the biggest part of the tool is...the disposition and all of the resources linking that to this piece, like just this in and of itself is useful”*

Evidence: Implementation Study

- 374 Youths (M = 14.98 years; 72.6% female) presenting to CHEO ED between May 7, 2013 to December 16, 2013 and seen by a physician
- 38.5% of patients received a psychiatric or crisis consultation during their stay
- 14.9% of patients were admitted (Ψ in-patient)

Evidence: Implementation

Sensitivity = 79.5%

Specificity = 66.7%

	Crisis and/or Psych Consult	No Consult
Patients with a HEADS-ED Score > 7 and Suicidality = 2 (N = 44)	35 (79.5%)	9 (20.5%)
Patient with a HEADS-ED Score ≤ 7 or HEADS-ED Score >7 without Suicidality (N = 330)	110 (33.3%)	220 (66.7%)

Evidence: Implementation

Patients with a HEADS-ED Score > 7 and Suicidality = 2 that did not receive a consult (N = 9)

- 2 patients were admitted to CHEO Inpatient Psychology
- 2 patient had an urgent f/u recommendation (next day appt.)
- 3 patients were well-connected with discharge resources
- 2 patients were scored incorrectly on Suicidality (NSSI)

Evidence: Implementation

- Ninety-two patients were seen by both an EDP and a CIW
- EDP and CIW independently completed HEADS-ED for their patient

	ICC
Home (<i>n</i> =89)	.569**
Education (<i>n</i> =82)	.815**
Activities & Peers (<i>n</i> =83)	.392*
Drugs & Alcohol (<i>n</i> =83)	.838**
Suicidality (<i>n</i> =90)	.699**
Emotions & Behaviours (<i>n</i> =86)	.263
Discharge Resources (<i>n</i> =83)	.518**

* $p < .05$; ** $p < .001$

Looking beyond our back yard:

- Currently planning multi-site electronic HEADS-ED evaluation and implementation study: Janeway Hospital (NL), IWK Health Sciences Centre (NS), CHU Sainte-Justine (PQ), Children's Hospital of Eastern Ontario (ON), The Hospital for Sick Children (ON), Children's Hospital of Winnipeg (MB), Royal University Hospital (SK), Stollery Children's Hospital (AB), and British Columbia Children's Hospital (BC)
- Provincial Council for Maternal and Child Health support implementation of the HEADS-ED in the Emergency Department Clinical Pathway for Children and Youth with Mental Health Conditions
- Develop apps suitable for hand held devices
- Partner with community regarding HEADS-ED use in primary care &
- Develop apps suitable for hand held devices

THANK YOU

Questions ? Feedback?

