

**Supplementary material 11:
Characteristics of triage / assessment only based approaches**

Approach Authors Country	Population served	Details	Team members Team training	Onward Referral
Presenting to an emergency department				
HEADS-ED Tool Cappelli et al. 2012 ¹ Cappelli et al. 2020 ² Roman et al. 2018 ³ Canada	CYP aged 10 to 18 years presenting at the PED in crisis with any MH presentation including suicidality, risk of harm to self or others	MH assessment screening tool for PED clinicians The HEADS-ED captures key information and identifies areas of need across seven variables: home, education, activities and peers, drugs and alcohol, suicidality, emotions and behaviours, and discharge resources	PED physicians Team training: No	Referred to the psychiatrist within the ED for consultation
Mental Health Triage Assessment Tool Ayliffe et al. 2005 ⁴ Canada	CYP presenting at the PED in crisis with any MH including suicidality	MH assessment screening tool for PED clinicians Based upon the Canadian Pediatric Triage and Acuity Scale, Multi-score Depression Inventory for Children, ² and Suicide Potential Scale	PED physicians Team training: Yes	Triageed as needing ongoing medical care and/or CIWs within the ED
HEARTSMAP Lee et al. 2019 ⁵ Gill et al. 2018 ⁶ Koopmans et al. 2019 ⁷ Virk et al. 2018 ⁸ Canada	Youth aged <17 years who were identified by the triage nurse as presenting to the PED for a MH-related complaint and placed in the mental health assessment room (including suicidality, self-harm and	Emergency Psychosocial Assessment and Management guiding tool with built in referral algorithm The HEARTSMAP captures key information & identifies 10 areas of need home, education & activities, alcohol & drugs,	PED physicians Team training: Yes	The assessment tool makes recommendations relating to service referral (social, adolescent medicine and psychiatry Levels of resources offered for psychiatry included ED psychiatry consultation, outpatient crisis response team referral; and less acute community MH team referrals

	psychiatric disorders)	relationships & bullying, thoughts & anxiety, safety, sexual health, mood & behaviour, abuse & professionals & resources		
Pediatric Crisis Clinic Lee and Korczak, 2010 ⁹ Lee and Korczak, 2014 ¹⁰ Canada	CYP aged 5 to 15 years presenting to PED in psychiatric crisis including suicidality	Outpatient urgent care clinic consultation Referred by PEM physicians to Pediatric Crisis Clinic and seen within 72 hours	Child psychiatrist Team training: NR	Psychiatric hospitalisation Recommendations for outpatient's care Referred back to their primary care physicians or to non-psychiatric community agencies
Rapid Response Model Parker et al. 2003 ¹¹ Canada	CYP presenting to the ED in psychiatric crisis including suicidality	Urgent adolescent psychiatric consultation Three components: emergency consultation (within the ED or over the phone), urgent consultation in outpatient psychiatry (within 48 hours of being in ED) and education of those who might use the service	Emergency consultation Child psychiatrist or Child psychiatry resident Team training: Yes	Discharge with no further referrals or referral to outpatient services or a community ambulatory mental health clinic, or admission to the inpatient unit
Mobile Urgent Follow-up Leon et al. 2013 ¹² Canada	CYP presenting to the ED in psychiatric crisis	Mobile urgent care clinic consultation Mobile team either come in to see the patient in the ED at the time of presentation (during evenings or weekends when no other ED mental health coverage) or will follow up with the patient as an outpatient within 48 hrs	Team members: NR Team training: NR	Response team' offers follow-up post-discharge within 24 h (M–F 08:00 to 16:00). Set up community resources or psychiatry referral if urgent issues evident
Clinic-based Urgent Follow-up Leon et al. 2013 ¹² Canada	CYP presenting to the ED in psychiatric crisis	Outpatient urgent care clinic consultation Clinic offers assessment within 48 h for non-emergent visits to ED appointments are booked	Psychiatrist Psychiatry resident Team training: NR	Acute assessment and referral back to the family physician with recommendations on management

		by the ED physicians directly without assessment from the crisis team		
Crisis Intervention Programme Dion et al. 2010 ¹³ Canada	Children & adolescents with MH health issues presenting to the ED (including suicidal & homicidal risk)	CIWs in the ED Provides consultation and education to ED staff	CIW ED staff Team training: Yes	Of patients seen by the CIWs, 17.9% were admitted to the inpatient psychiatric unit while the remainder were discharged from the ED
Child Guidance Model Mahajan et al. 2007 ¹⁴ USA	CYP (age not specified) presenting to the ED with mental disorders including suicidal or homicidal ideation or psychotic behaviour	Additional of an on-site psychiatric social worker who evaluates all children with MH needs	Social worker working under the supervision of a child psychiatrist Team training: Yes	NR
Videoconference- based Psychiatric Emergency Consultation Programme Thomas et al. 2018 ¹⁵ USA	CYP under 19 years of age presenting with a behavioural health complaint that was not immediately life threatening (excluding suicide attempts that required medical attention) to a network ED site that required transfer to the Children's Hospital for in-person PES evaluation	Telepsychiatry assessment Aimed to reduce unnecessary patient transfers to Children's Hospital though linking patients at network EDs in real time with the centralised psychiatric ES staff instead of transporting them to the Children's Hospital for in-person consultation	Psychiatric ES provider (typically a clinical SW) ED attending physician or advanced practice provider Team training: Yes	Admission to Children's Hospital Admission to other facility Discharged home
Telepsychiatry Reliford and Adebajo 2019 ¹⁶ USA	CYP aged 3-18 years presenting to PED in need of psychiatric care	Telepsychiatry evaluation Aimed to reduce length of stay and decrease the amount of time evaluating clinicians need to evaluate and travel to evaluation site	Child psychiatry fellow Team training: NR	NR
Kids Assessment Liaison for Mental Health Pathway	CYP aged 5 – 17 years	Allocated to ED medical officer for KALM pathway	ED Medical Officer On call psychiatrist	Referral to MH clinician within the ED if needed Discharge to GP for ongoing care for discharge

Nagarsekar et al. 2020 Australia	presenting to PED with MH concerns	Pathway implemented in the ED which builds in extra capacity for an ED medical officer to complete the assessment and to link with an on-call psychiatrist regarding assessment and management plan		with referral to CAMHs
Enhanced Care Coordination Roman et al. 2018 USA	CYP aged 0-18 years presenting to PED with MH complaints	Care coordination and community linkage Coordination involves a comprehensive needs assessment, a review of current services/resource utilization, PED discharge recommendations support in accessing & securing critical medical & behavioural health follow up care, as well as supporting families in addressing any educational needs or modifications & social support services	Master in social work Clinical care coordinators	Within 48 hours after discharge, clinical care coordinators contacted families for services
Presenting in crisis within an educational setting				
Prevention of Escalating Adolescent Crisis Events (PEACE) protocol Capps et al. 2019 ¹⁷ Michael et al. 2015 ¹⁸ Sale et al. 2014 ¹⁹ USA	High school students (aged not specified) experiencing crisis events including suicidal, homicidal & self-injury risk	School based comprehensive risk assessment To guide decision-making to develop and execute a response plan based upon level of risk severity Referral by teachers, classmates, administrators, counsellors, family members of self-referral	ML licensed PA GL intern GL practicum students All under the weekly supervision of one licensed doctoral clinical psychologist Team training: Yes	Referral to community mental health agencies for assessment of higher levels of risk and possible initiation of hospitalisation

Urgent Evaluation Service Alvarado et al. 2020 ²⁰ USA	Students with suicidal or homicidal ideation	Ambulatory psychiatric evaluation Same-day assessment, coordination of care with referring school staff Based in a paediatric psychiatry clinic Operating Monday – Friday 9am to 3pm	Psychiatrist	Linkage to outpatient treatment If a child presenting to the UES required a higher level of care, he or she could be escorted directly to the paediatric ED, located on the hospital campus.
Telephone triage				
Crisis phone line Epstein et al. 2009 ²¹ USA	CYP aged 3 to 21 years experiencing any MH crisis including suicidality, risk of harm to self or others, homicidal ideation, psychotic symptoms	Crisis phone line Available 24/7 Available for the adult with responsibility for child's wellbeing and as well as self-referrals	Crisis phone line operators CWs who are ML clinicians Team training: NR for phone line operators	The crisis phone operators direct appropriate calls to local agencies that send a crisis worker who then conduct MH screening Crisis workers then make a referral for inpatient psychiatric hospitalisation package or for intensive community-based treatment
Kids' Link Hotline Roman et al. 2018 ³ USA	Children (age not specified) experiencing any MH crisis	Triage line Available for schools, families, paediatricians & other providers	PyES clinicians Team training: Yes	Callers directed to most appropriate site for care as opposed to the ED Follow-up contact with at-risk students at 2 weeks 3 months, & 1 year after their crisis (intended to screen for any barriers to treatment engagement & to provide alternatives if treatment has not yet started)
Out of hours psychiatric emergency service				
Out of hours mobile crisis team Dil and Vuijk 2012 ²² The Netherlands	CYP < 18 years in emergency situations including self-harm, psychotic signs, suicidal behaviour	Mobile after-hours crisis service Self-referral If the child is first involved with the police outside office hours, an emergency team of social services evaluates the patient and decides on further consolation with the MCT	Team of psychologists that operate under the supervision of senior psychologists Child psychiatrist Training: NR	Following consultation, the assessing psychologist could place children either in a SCU or with extended family & friends or some children return home with their caretaker Referred to the care provider that is already engaged in their care and referral channels consist of, GPs, SWs, police, childcare/custody services or MH providers

Key: CIW: crisis intervention workers; CW: crisis workers; CYP: children and young people; ED: emergency department; ES: emergency services; GL: graduate level; GP: general practitioners; MH: mental health; ML: master's level; PA: psychological associate; PED: paediatric emergency department; PEM: paediatric emergency medicine; PyES: psychiatric emergency services, SCU: special care unit; SW: social worker

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