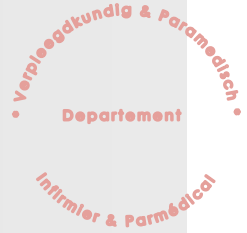
CHU | UVC
BRUGMANN

Echelles de TRI
Tour d'horizon

Yves MAULE
Infirmier en Chef
Urgences & SMUR
CHU Brugmann

Service
Date



Objectifs du Triage

- Répond à des besoins organisationnels
  - **Standardisation des pratiques**
  - **Dépistage des patients « aigus »**
  - **Répartition au sein service selon gravité**
- Répond a des besoins en terme de qualité :
  - **↗ de la gestion de la douleur**
  - **↗ de la satisfaction du patient**
  - **↗ de la satisfaction du patient**

Le TRIAGE cadre légal

- Point de vue normatif - organisation du service: pas de cadre légal = organisation en réponse aux besoins locaux
- Point de vue individuel :
  - **Non siamu : pas de spécificités**
  - **SIAMU : annexe 4 ⇨B1 = rôle autonome**
    - **TRI et Orientation de Patient (dans le cadre de situation d'exception mais aussi aux Urgences)**
    - **En combinaison avec interprétation de paramètres hémodynamiques / respiratoires / neurologiques**

Le TRIAGE : les raisons

- Over-crowding des SUS généralisé en Belgique mais aussi en Europe
  - **SUS dernière ligne ou première ligne de soins**
  - **Evolution sociologique : société du FAST**
  - **Faiblesse des choix politiques**
- Développement des compétences des Infirmier(e)s
- Prise de conscience du management
- Glissement des responsabilités

NDLR

- Rassurant de voire que le besoin d'organiser le chaos est une priorité commune à tout les pays
- Effrayant de voir le manque d'implication politique en Belgique
- TRI = souvent adaptation locale
- TRI peu être un outil de gestion
- !!!! EVB ???? !!!!

Echelles vs Systèmes

- Différences d'objectifs
- Différences de performance
- Impact des protocoles
- Adaptations locales (CMGU, Consult)
- Implémentation dans un cadre défini, défini aussi la performance.

Nous envisagerons

Echelle ou système ayant une distribution large

- ETG
- ESI
- ATS / NTS
- MTS

Manchester Triage System

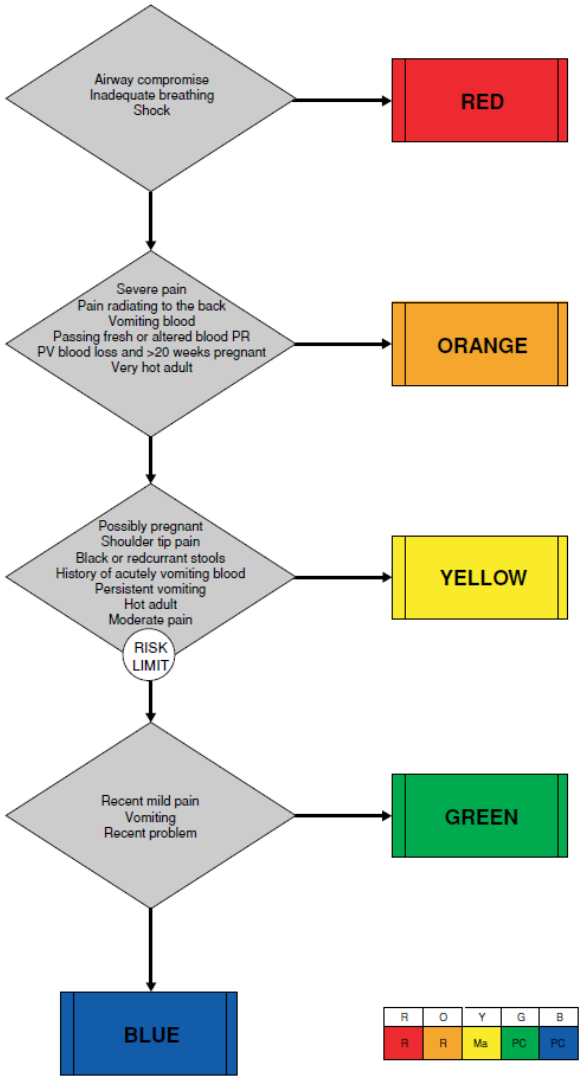
MTS ?

- 1° version en 1996 à l'initiative du Manchester Triage Group
- 2° version en 2006
- Au départ local (Manchester), généralisé à tout l'UK
- Présence d'un Groupe International car utilisé dans tout les pays anglo saxon

Caractéristiques MTS

- Evidence Based (publications multiples)
- Développé essentiellement par des infirmier(e)s spécialisé(e)s
- Se base sur 50 plaintes initiales évaluation de 5 niveau de gravité.
- Adapté au triage téléphonique
- Discrimination sur base de la gravité mais aussi de la douleur
- Intégration Enfant / Adulte
- Système ouvert s'incluant dans une politique de changement

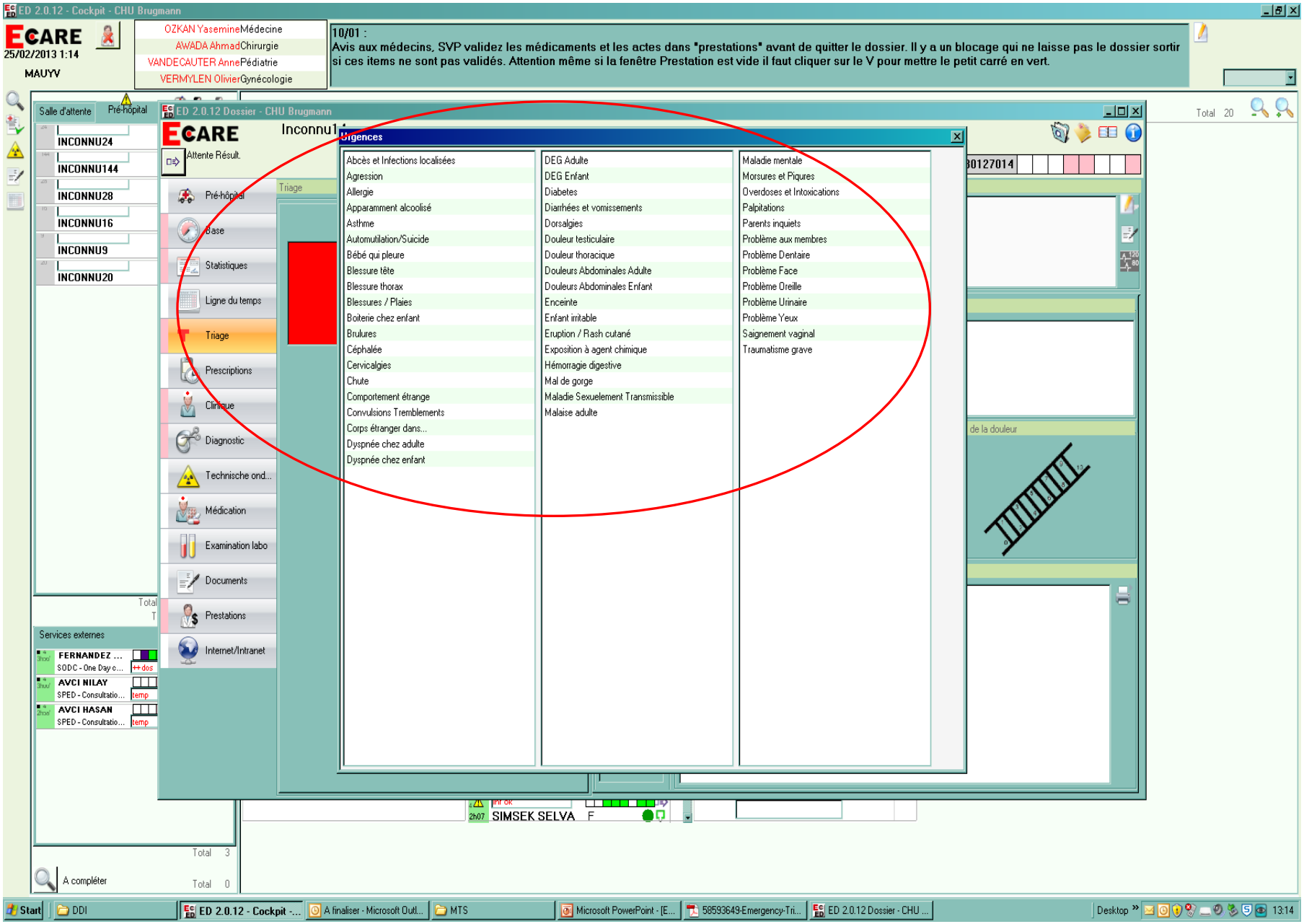
Abdominal Pain in Adults



Notes Accompanying Abdominal Pain in Adults

See also	Chart notes
GI bleeding, diarrhoea and vomiting, pregnancy	This is a presentation defined flow diagram. Abdominal pain is a common cause of presentation of surgical emergencies. A number of general discriminators are used including *Life Threat and Pain*. Specific discriminators are included in the ORANGE and YELLOW categories to ensure that the more severe pathologies are appropriately triaged. In particular discriminators are included to ensure that patients with moderate and severe GI bleeding and those with signs of retroperitoneal or diaphragmatic irritation are given sufficiently high categorisation

Specific discriminators	Explanation
Pain radiating to the back	Pain that is also felt in the back either intermittently of constantly
Vomiting blood	Vomited blood may be fresh (bright or dark red) or coffee ground in appearance
Passing fresh or altered blood PR	In active massive GI bleeding dark red blood will be passed PR. As GI transit time increases this becomes darker, eventually becoming melaena
PV blood loss and >20 weeks pregnant	Any loss of blood per vaginum in a woman known to be beyond the 20th week of pregnancy
Possibly pregnant	Any woman whose normal menstruation has failed to occur is possibly pregnant. Furthermore any woman of childbearing age who is having unprotected sex should be considered to be potentially pregnant
Shoulder tip pain	Pain felt in the tip of the shoulder. This often indicates diaphragmatic irritation
Black stool	Any blackness fulfils this criterion
Redcurrant stool	A dark red stool classically seen in intersussception
History of acutely vomiting blood	Frank haematemesis, vomiting of altered blood (coffee ground) or of blood mixed in the vomit within the past 24 hours
Persistent vomiting	Vomiting that is continuous or that occurs without any respite between episodes
Vomiting	Any emesis fulfils this criterion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AWADA AhmadChirurgie
VANDECAUTER AnnePédiatrie
VERMYLEN OlivierGynécologie
10/01 :
Avis aux médecins, SVP validez les médicaments et les actes dans "prestations" avant de quitter le dossier. Il y a un blocage qui ne laisse pas le dossier sortir si ces items ne sont pas validés. Attention même si la fenêtre Prestation est vide il faut cliquer sur le V pour mettre le petit carré en vert.
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Automutilation/Suicide
Bébé qui pleure
Blessure tête
Blessure thorax
Blessures / Plaies
Boiterie chez enfant
Brulures
Céphalée
Cervicalgies
Chute
Comportement étrange
Convulsions Tremblements
Corps étranger dans...
Dyspnée chez adulte
Dyspnée chez enfant
DEG Adulte
DEG Enfant
Diabetes
Diarrhées et vomissements
Dorsalgies
Douleur testiculaire
Douleur thoracique
Douleurs Abdominales Adulte
Douleurs Abdominales Enfant
Enceinte
Enfant irritable
Eruption / Rash cutané
Exposition à agent chimique
Hémorragie digestive
Mal de gorge
Maladie Sexuelement Transmissible
Malaise adulte
Maladie mentale
Morsures et Piqures
Overdoses et Intoxications
Palpitations
Parents inquiets
Problème aux membres
Problème Dentaire
Problème Face
Problème Oreille
Problème Urinaire
Problème Yeux
Saignement vaginal
Traumatisme grave
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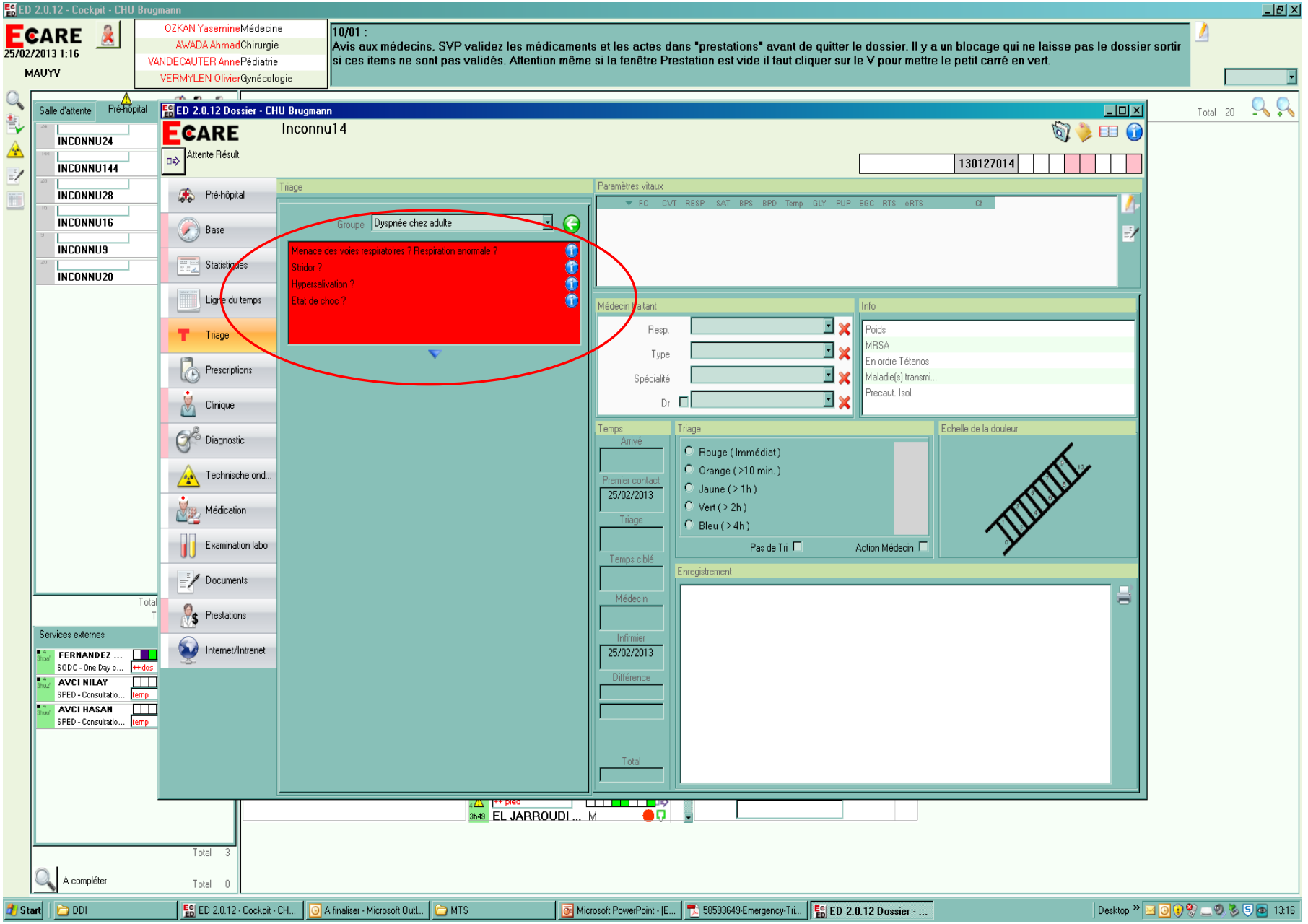
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Stridor ?
Hypersalivation ?
Etat de choc ?
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Infirmier
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Orange (>10 min.)
Jaune (> 1h)
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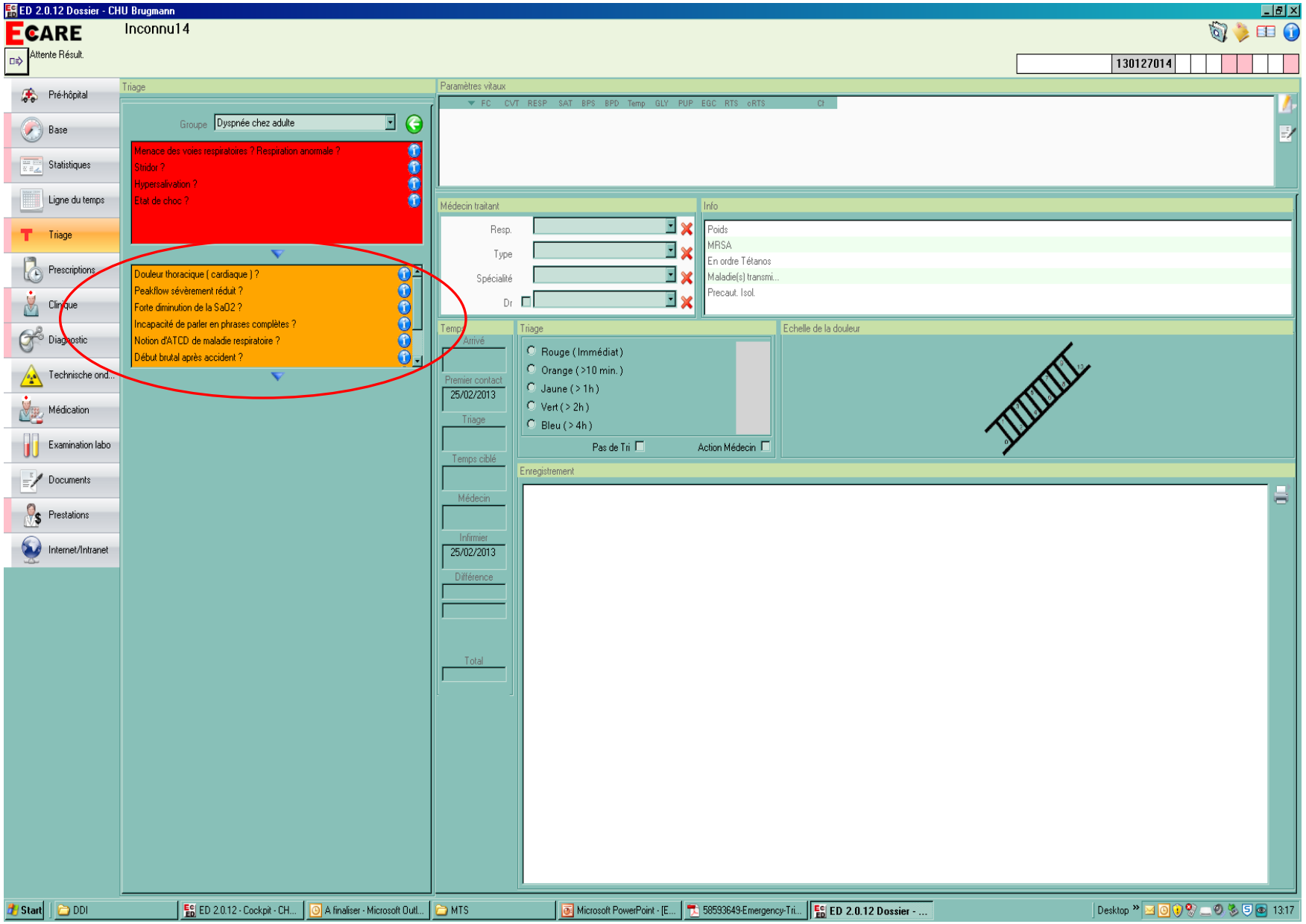
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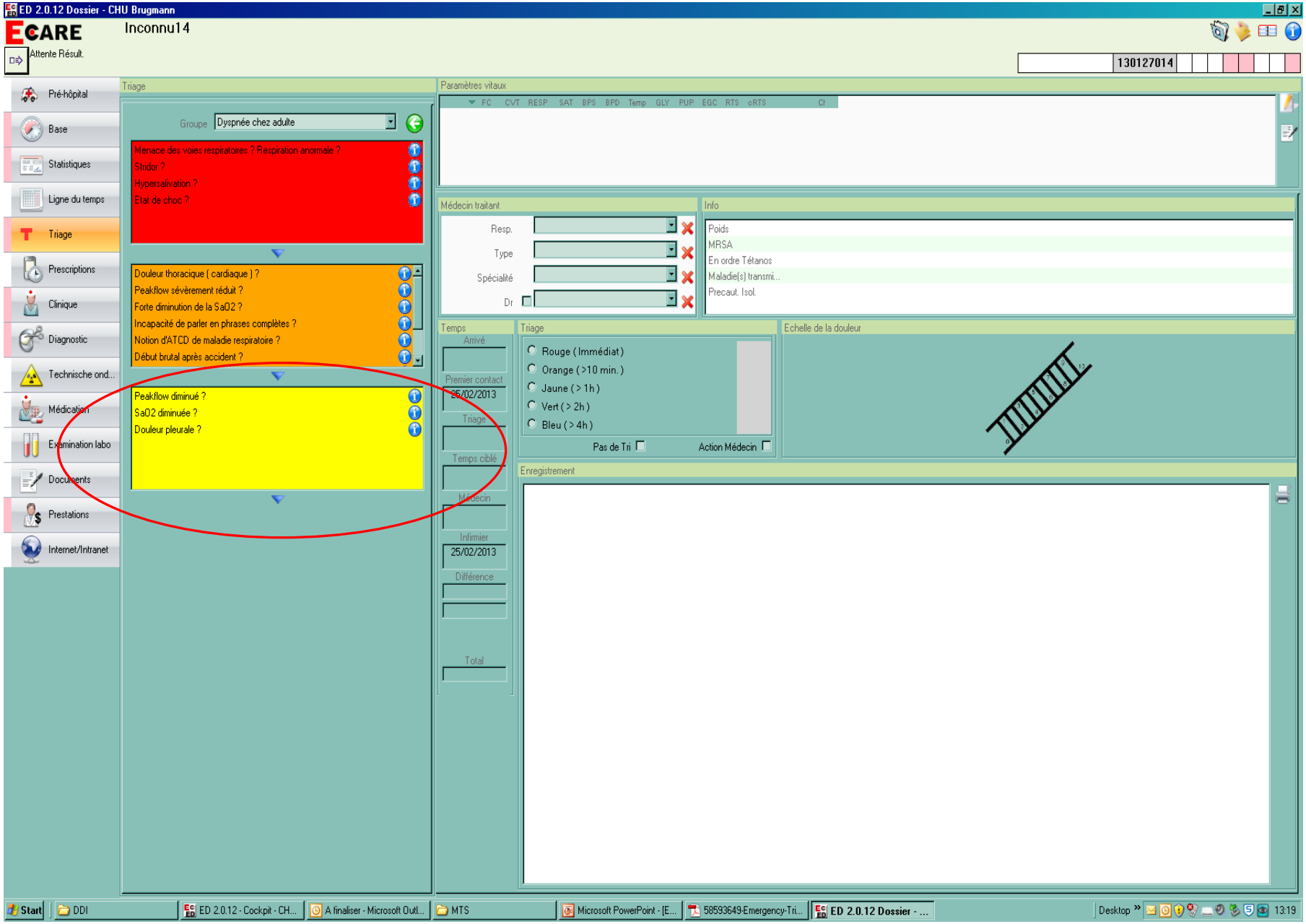
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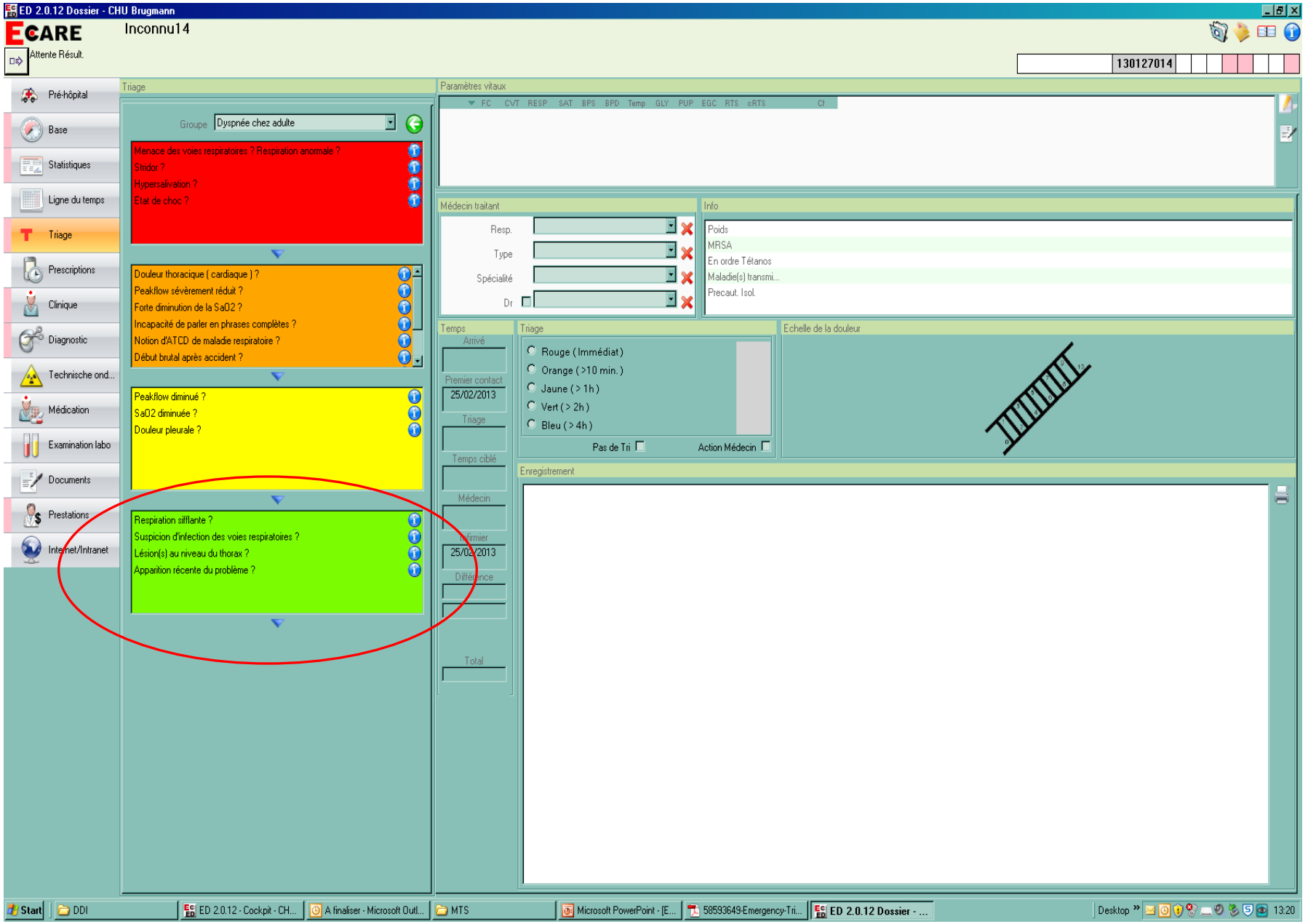
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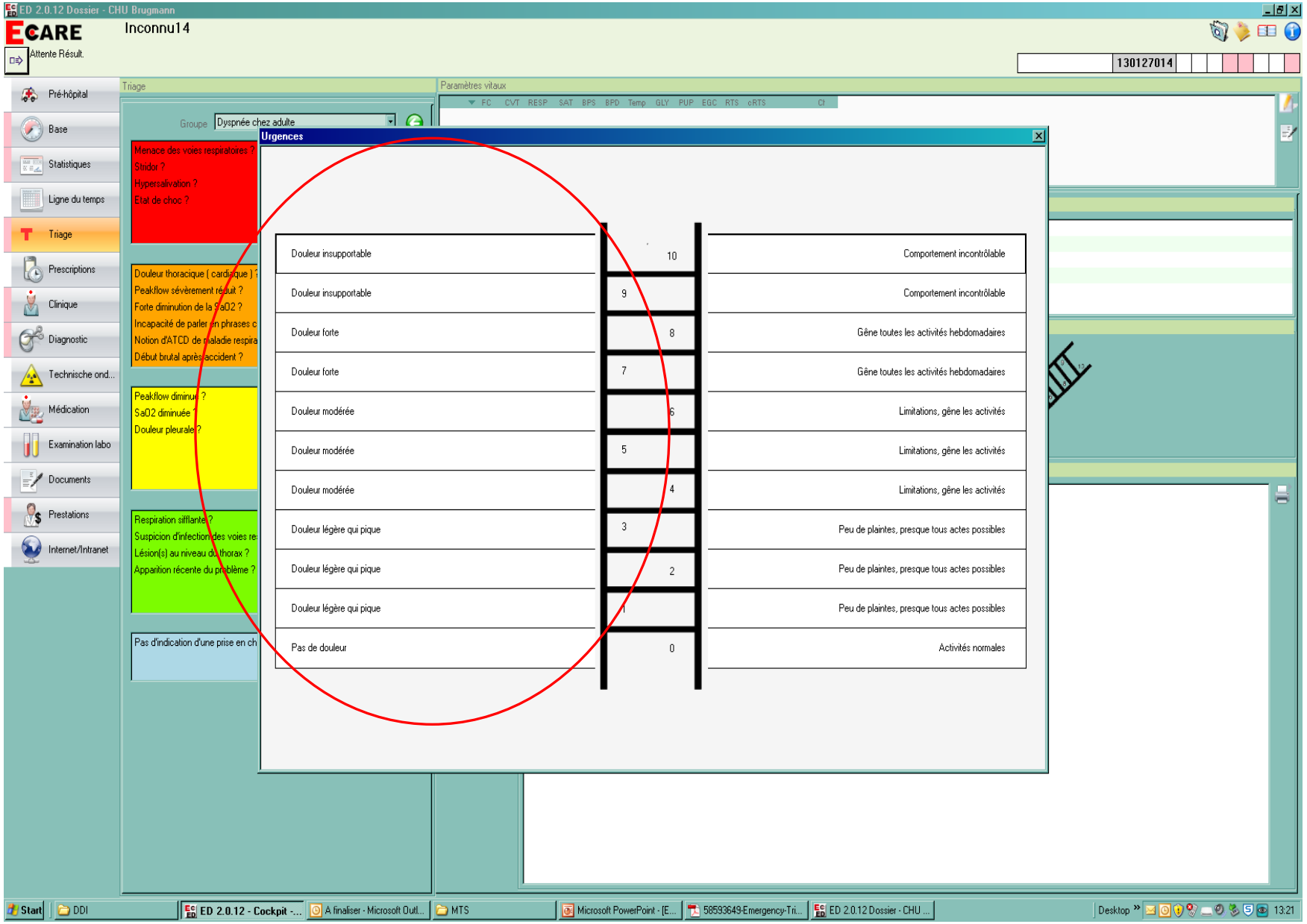
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Pas de douleur
10
9
8
7
6
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4
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1
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Comportement incontrôlable
Comportement incontrôlable
Gêne toutes les activités hebdomadaires
Gêne toutes les activités hebdomadaires
Limitations, gêne les activités
Limitations, gêne les activités
Limitations, gêne les activités
Peu de plaintes, presque tous actes possibles
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MTS

- Discrimination très fine
- Sensibilité et spécificité EVB
- Renvoi d'information à chaque items (bulle d'info)
- Outil Multi-dimentionnel(physique, psy,...)
- 10^7 passages / an
- Evaluation constante
- Standardisation de la prise en charge (Guide)

- Conçu par anglo-saxon donc attention à la traduction.
- Difficulté réévaluation du patient
- Difficulté pour faire correspondre les plaintes

Echelle canadienne de Triage et de Gravité
ou
Canadian Triage & Acuity Scale

ETG ?

- Créé en 1999 révision en 2005
- Consensus d'un panel d'expert
- Un outil qui s'inscrit dans des lignes directrices de triage
- Objectif = uniformisation des règles de triage
- Soutien Ordre Infirmier Québec

Caractéristiques ETG

- Pas EVB large, EVB locale
- L'implémentation s'accompagne d'un Guide de Bonnes Pratiques pour l'anamnèse
- 5 niveaux de Gravité
- Révision de 2004/2008 ⇨ Liste des raisons de consultations (démarche MTS)
- 2004/2008 apparition des « modificateurs 1° et 2° ordre ».

ETG

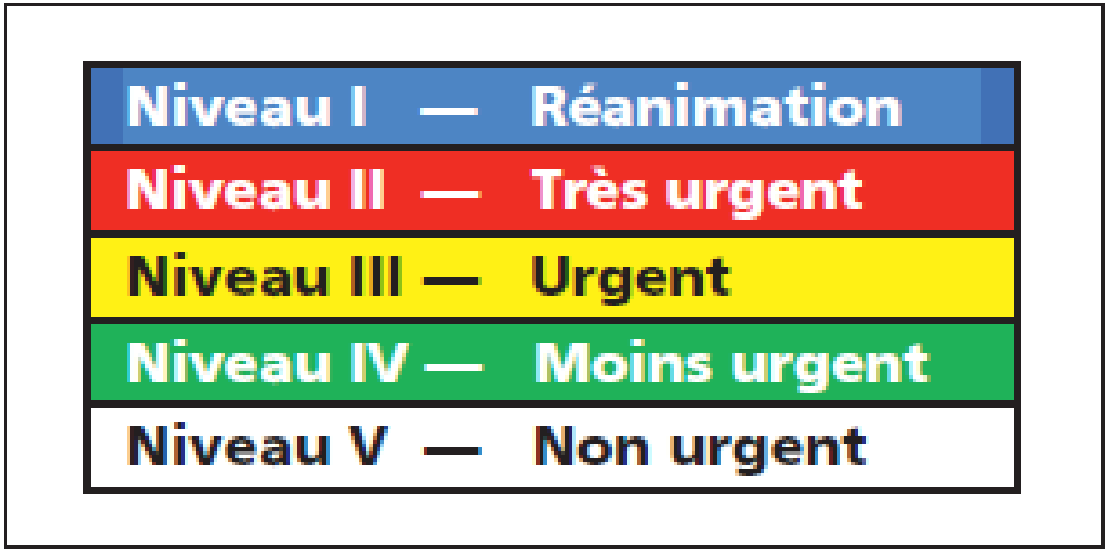


Fig. 1. Codes de couleurs de l'Échelle canadienne de triage et de gravité pour les départements d'urgence.

ETG

Tableau 1 Raisons de consultation d'adultes (nouvelles ou révisées)

Catégorie de raisons du SIGDU	Raison précédente	Raison (nouvelle ou révisée)
Cardiovasculaire	Membre chaud et rouge : symptômes de TVP	Membre chaud et rouge
Environnement	s/o	Quasi-noyade
Gastro-intestinal	s/o	Corps étranger oral / œsophagien
Génito-urinaire	Douleur – œdème scrotal	Douleur scrotale et/ou œdème scrotal
Santé mentale et problèmes psychosociaux	Dépression ou suicidaire; hallucinations comportement violent, homicidaire, comportement bizarre ou paranoïde, s/o	dépression/suicidaire/automutilation; hallucinations ou délire comportement violent ou homicidaire, comportement bizarre, Inquiétude face à la sécurité du patient
Neurologique	Étourdissement ou vertige	Vertige
Gynéco-Obstétrique	Douleur vaginale ou dyspareunie	Douleur vaginale ou prurit
Ophtalmologie	Écoulement oculaire; rougeur ou prurit oculaire; œdème périorbitaire et fièvre	Écoulement oculaire ou rougeur; œdème périorbitaire
Respiratoire	Toux	Toux ou congestion
Tégument (peau)	Ecchymose – antéc. probl. coagulation	Ecchymose spontanée

SIGDU = Système d'information de gestion des départements d'urgence au Canada; TVP = thrombose veineuse profonde; s/o = sans objet

ETG

Tableau 2. Modificateurs relatifs à la température (ÉTG pour adultes)

Température,* âge, condition	Niveau de triage de l'ÉTG
Adultes ≥ 16 ans (> 38,5 °C)	
Immunodéprimé†	II
Apparence septique ‡	II
Mauvaise apparence §	III
Bonne apparence¶	IV

ÉTG = Échelle canadienne de triage et de gravité pour les départements d'urgence
*Les modificateurs relatifs à la température peuvent être appliqués en fonction d'antécédents récents documentés de fièvre, même si le patient est afébrile au triage.
†Immunodéprimé : patient avec neutropénie (ou suspicion de neutropénie), en chimiothérapie ou qui prend des immunosuppresseurs, y compris des stéroïdes.
‡Apparence septique : patient présente des signes d'infection, répond à 3 critères du SIRS (syndrome de réponse inflammatoire systémique), ou signes d'état hémodynamique altéré, de détresse respiratoire modérée ou d'un état de conscience altéré.
§Mauvaise apparence : patient répond à moins de 3 critères du SIRS, a mauvaise mine (c.-à-d. rougeur au visage, léthargique, anxieux ou agité).
¶Bonne apparence : la fièvre est le seul critère de SIRS; patient semble bien et n'est pas en détresse.

ETG

Tableau 3. Modificateurs de premier et de deuxième ordre (nouveaux ou révisés)

Raison de consultation	Modificateur révisé	Niveau de l'ÉTG
Douleur thoracique, non cardiaque	Autre douleur thoracique importante (déchirante)*	II
Blessure au membre supérieur; blessure au membre inférieur	Déformation évidente†	III
Nausée et vomissement; diarrhée	Déshydratation sévère‡	I
Faiblesse générale	Déshydratation modérée§	II
	Déshydratation légère¶	III
	Potentiel de déshydratation**	IV
Problèmes de grossesse > 20 semaines††	Présence de parties fœtales, prolapsus du cordon ombilical	I
	Saignement vaginal, 3e trimestre	I
	Travail actif (contractions ≤ 2 min)	II
	Aucun mouvement fœtal ou aucune fréquence cardiaque fœtale	II
	Céphalée avec ou sans œdème, douleur abdominale ou hypertension	II
	Probl. post-partum	II
	Travail actif (contractions > 2 min)	III
	Écoulement possible du liquide amniotique	III

Boîte 1. Classification de la gravité des saignements et modification du niveau de gravité

Saignements importants pouvant entraîner la perte d'un membre ou de la vie

Niveau II – modificateur de premier ordre

- Tête (intracrâniens) et cou
- Thorax, abdomen, pelvis, colonne vertébrale
- Hémorragie vaginale massive
- Muscle psoas-iliaque et hanche
- Loges musculaires
- Fractures ou luxations
- Lacérations profondes
- Tout épisode de saignement non contrôlé

Saignements légers ou modérés

Niveau III – modificateur de premier ordre

- Nez (épistaxis)
- Bouche (y compris les gencives)
- Articulations (hémarthrose)
- Ménorragie
- Abrasions et lacérations superficielles

Tableau 4. Raisons de consultation et modificateurs de deuxième ordre relatifs aux troubles mentaux

Raison de consultation (SIGDU)	Description	Niveau de triage de l'ÉTG
Dépression, suicide ou automutilation délibérée	Tentative de suicide ou plan de suicide précis	II
	Pensées suicidaires actives	II
	Risque de fuite ou de sécurité	II
	Idées de suicide, aucun plan	III
	Dépression, pas d'idées de suicide	IV
Anxiété ou crise situationnelle	Anxiété ou agitation sévère	II
	Risque de fuite ou de sécurité	II
	Anxiété ou agitation modérée	III
	Anxiété ou agitation légère	IV
Hallucinations ou délire	Psychose aiguë	II
	Anxiété ou agitation sévère	II
	Risque de fuite ou de sécurité	II
	Anxiété ou agitation modérée, ou avec paranoïa	III
	Agitation légère, stable	IV
	Anxiété ou agitation légère, hallucinations chroniques	V
Insomnie	Aiguë	IV
	Chronique	V
Comportement violent ou homicidaire	Passage à l'acte imminent – pour lui-même ou autrui, ou plans précis	I
	Risque de fuite ou de sécurité	II
	Idées violentes ou homicidaires, aucun plan	III
Problème social	Abus physique, mental, stress émotionnel intense	III
	Incapable de faire face	IV
Comportement bizarre	État chronique, non urgent	V
	Non contrôlé	I
	Risque de fuite ou de sécurité	II
	Contrôlé	III
	Inoffensif	IV
	État chronique, non urgent	V

SIGDU = Système d'information de gestion des départements d'urgence;
ÉTG = Échelle canadienne de triage et de gravité pour les départements d'urgence.

CEDIS Presenting Complaint List

CEDIS and CTAS National Working Groups

Substance Misuse (Subst)
Substance misuse / Intoxication
Overdose ingestion
Substance withdrawal

Mental health & psychosocial
Depression / Suicidal / Deliberate se
Anxiety / Situational crisis
Hallucinations / Delusions
Insomnia
Violent / Homicidal behaviour
Social problem
Bizarre behaviour
Concern for patient's welfare
Paediatric Disruptive behaviour

Neurologic (Cns)
Altered level of consciousness
Confusion
Vertigo
Headache
Seizure
Gait disturbance / Ataxia
Head injury
Tremor
Extremity weakness/Symptoms of CVA
Sensory loss / Parasthesias
Floppy child

Ophthalmologie (Ophth)
Chemical exposure, eye
Foreign body, eye
Visual disturbance
Eye pain
Red Eye, discharge
Photophobia
Diplopia
Periorbital swelling
Eye trauma
Re-check eye

ENT - Nose
Epistaxis
Nasal congestion / Hay fever
Foreign body, nose
URTI complaints
Nasal trauma

ENT - Ears
Earache
Foreign body ear
Loss of hearing
Tinnitus
Discharge, ear
Ear injury

ENT - Mouth, Throat, Neck
Dental / Gum problems
Facial trauma
Sore throat
Neck swelling / pain
Neck trauma
Difficulty swallowing / Dysphagia
Facial pain (non-traumatic/non-dental)

Respiratory (Resp)
Shortness of breath
Respiratory arrest
Cough / Congestion
Hyperventilation
Hemoptysis
Respiratory foreign body
Allergic reaction
Stridor
Wheezing - no other complaints
Apneic spells in infants

Trauma complaints are written in "blue"

Cardiovascular
Cardiac arrest (non traumatic)
Cardiac arrest (traumatic)
Chest pain (cardiac features)
Chest pain (non cardiac features)
Palpitations / Irregular heart beat
Hypertension
General weakness
Syncope / Pre-syncope
Edema, generalized
Bilateral leg swelling / Edema
Cool pulseless limb
Unilateral reddened hot limb

Gastrointestinal (GI)
Abdominal pain
Anorexia
Constipation
Diarrhea
Foreign body in rectum
Groin pain / mass
Vomiting and/or nausea
Rectal / Perineal pain
Vomiting blood
Blood in stool / Melena
Jaundice
Hiccoughs
Abdominal mass / distention
Anal / Rectal trauma
Oral / Esophageal Foreign Body
Feeding difficulties in newborn
Neonatal jaundice

Ob - Gyn (Ob - Gyn)
Menstrual problems
Foreign body, vagina
Vaginal discharge
Sexual assault
Vaginal bleed
Labial swelling
Pregnancy issues < 20 wks
Pregnancy issues > 20 wks
Vaginal pain / itch

Genitourinary (Gu)
Flank pain
Hematuria
Genital discharge / lesion
Penile swelling
Scrotal pain and/or swelling
Urinary retention
UTI complaints
Oliguria
Polyuria
Genital trauma

Orthopedic (Ortho)
Back pain
Traumatic back / spine injury
Amputation
Upper extremity pain
Lower extremity pain
Upper extremity injury
Lower extremity injury
Joint(s) swelling
Paediatric gait disorder / painful walk
Cast check

Trauma (T)
Major trauma - penetrating
Major trauma - blunt
Isolated chest trauma - penetrating
Isolated chest trauma - blunt
Isolated abdominal trauma - penetrating
Isolated abdominal trauma - blunt

Environmental
Frostbite / Cold injury
Noxious inhalation
Electrical injury
Chemical exposure
Hypothermia
Near Drowning

Skin (Skin)
Bite
Sting
Abrasion
Laceration / Puncture
Burn
Blood and body fluid exposure
Pruritus
Rash
Localized swelling / redness
Wound check
Other skin conditions
Lumps, bumps, calluses
Redness / tenderness, breast
Rule out infestation
Cyanosis
Spontaneous bruising
Foreign body, skin
Removal staples / sutures

General & Minor (Gen)
Exposure to communicable disease
Fever
Hyperglycemia
Hypoglycemia
Direct referral for consultation
Dressing change
Imaging tests
Medical device problem
Prescription / Medication request
Ring removal
Abnormal lab values
Pallor / Anemia
Post-operative complications
Inconsolable crying in infants
Congenital problem in children
Minor complaints NOS

Reference: Graham E, Ballard MJ, Warren D, Unger B, the CEDIS National Working Group. Revision of the Canadian Emergency Department Information System (CEDIS) presenting complaint list version 1.1. CJEM 2008;10:151-61

Adult CTAS First Order Modifiers

CEDIS and CTAS National Working Groups.

First Step

Respiratory Distress

Level of Respiratory Distress	O_2 Sat	PEFR predicted	CTAS Level
Severe: Fatigue from excessive work of breathing, cyanosis, single-word speech, unable to speak, upper airway obstruction, lethargic or confused, intubated or requiring assisted breathing.	<90%	-	1
Moderate: Increased work of breathing, speaking phrases or clipped sentences, significant or worsening stridor but airway protected.	<92%	<40%	2
Mild: Dyspnea, tachypnea, shortness of breath on exertion, no obvious increased work of breathing, able to speak in sentences, stridor without any obvious airway obstruction.	92 - 94%	40 - 60%	3

Hemodynamic Stability

Circulatory Status	CTAS Level
Shock: evidence of **severe end-organ hypoperfusion**: marked pallor, cool skin, diaphoresis, weak or thready pulse, hypotension, postural syncope, significant tachycardia or bradycardia, ineffective ventilation or oxygenation, decreased level of consciousness. Could also appear as flushed, febrile, toxic, as in septic shock.	1
Hemodynamic compromise: evidence of **borderline perfusion**: pale, history of diaphoresis, unexplained tachycardia, postural hypotension (by history), feeling faint on sitting and standing, or suspected hypotension (lower than normal blood pressure or expected blood pressure for a given patient) (hemodynamic compromise).	2
Vital signs at the **upper and lower ends of** normal as they relate to the presenting complaint, especially if they differ from the usual values for the specific patient	3
Normal vital signs.	4 & 5

Level of Consciousness

Level of Consciousness	GCS	CTAS Level
Unconscious: unable to protect airway, response to pain or loud noise only and without purpose, continuous seizure or progressive deterioration in level of consciousness	3 – 9	1
Altered level of consciousness: response inappropriate to verbal stimuli; loss of orientation to person place or time; new impairment of recent memory; altered behaviour	10 – 13	2
Normal: Use other modifiers to define CTAS	14 – 15	3, 4 or 5

Reference: *Bullard MJ, Unger B, Spence J, Grafstein E, the CTAS National Working Group. Revisions to the Canadian Emergency Department Triage and Acuity Scale (CTAS) adult guidelines. CJEM 2008; 10: 136-42*

First order modifiers assist in assigning the most appropriate acuity level to each patient and are broadly applicable to a majority of the CEDIS complaints.

–First step assessment follows the "critical look" and is supported by vital signs when appropriate.

–Second step assessment items are then considered and applied as indicated.

Acuity Score	Descriptor (1st order modifier)
1st Step	
1	Severe respiratory distress
1	Shock
1	Unconscious (GCS 3-9)
2	Moderate respiratory distress
2	Hemodynamic compromise
2	Altered level of consciousness (GCS 10-13)
2	Fever, immunocompromised
2	Looks septic (3 SIRS criteria)
3	Mild respiratory distress
3	Pulse rate / pressure abnormal (hemodynamically stable)
3	Fever (looks unwell), + 3 SIRS criteria
4	Fever (appears well), fever only SIRS criteria
2nd Step	
2	Acute central severe pain (8-10)
2	Bleeding Disorder (life or limb threatening bleed)
2	High risk mechanism of injury
3	Acute central moderate pain (4-7)
3	Acute peripheral severe pain (8-10)
3	Chronic central severe pain (8-10)
3	Bleeding Disorder (moderate or minor bleed)
4	Acute central mild pain (<4)
4	Acute peripheral moderate pain (4-7)
4	Chronic central moderate pain (4-7)
4	Chronic peripheral severe pain (8-10)
5	Acute peripheral mild pain (<4)
5	Chronic central mild pain (<4)
5	Chronic peripheral pain (<8)

Temperature

Fever >38. 5C (age ≥16 years)	CTAS Level
Immunocompromised: neutropenia (or suspected), chemotherapy or on immunosuppressive drugs including steroids.	2
Looks septic: has 3 positive SIRS criteria or hemodynamic compromise, moderate respiratory distress or altered level of consciousness.	2
Looks unwell: has < 3 positive SIRS criteria but appears ill-looking (flushed, lethargic, anxious or agitated.	3
Looks well: has fever as the only positive SIRS criteria and appears comfortable and in no distress.	4

Fever Definitions

SIRS is the systemic inflammatory response to a variety of severe clinical insults. The response is manifested by 2 or more of the following criteria: temperature >38° C or <36° C; heart rate >90 beats/minute; respiratory rate >20 breaths/minute or $PaCO_2$ <32 torr (<4.3 kPa); WBC >12000 cells/mm³, <4000 cells/mm³ or >10% immature (band) forms.

Sepsis is defined as the systemic response to infection, manifested by 2 or more of the SIRS criteria as a result of infection.

Severe sepsis is defined as sepsis associated with organ dysfunction, hypoperfusion or hypotension; hypoperfusion and perfusion abnormalities may include, but are not limited to, lactic acidosis, oliguria or an acute alteration in mental status.

Second Step

Mechanism of Injury

MOI	CTAS Level 2
General Trauma	**MVC**: Ejection from vehicle, rollover, extrication time>20 minutes, significant intrusion into passenger's space, death in the same passenger compartment, impact >40 km/h (unrestrained) or impact>60 km/h (restrained) **MCC**: Where impact with a car>30 km/hr, especially if rider is separated from motorcycle **Pedestrian or bicyclist** Run over or struck by vehicle at >10 km/h **Fall:** of >15 ft (>5 m). **Penetrating injury:** To head, neck, torso or extremities proximal to elbow and knee
Head Trauma	**MVC**: ejection from vehicle, unrestrained passenger striking head on windshield **Pedestrians**: struck by vehicle **Fall:** from >3 ft (>1 m) or 5 stairs **Assault:** With blunt object other than fist or feet
Neck Trauma	**MVC**: ejection from vehicle, rollover, high speed (esp. if driver unrestrained) **MCC** **Fall:** from >3 ft (>1 m) or 5 stairs **Axial load to the head**

Bleeding Disorder

Life or Limb Threatening Bleed	Moderate/Minor Bleed
CTAS level 2	*CTAS level 3*
Head (intracranial) & neck	Nose (epistaxis)
Chest,abdomen,pelvis,spine	Mouth (including gums)
Massive vaginal hemorrhage	Joints (hemarthroses)
Iliopsoas muscle & hip	Menorrhagia
Extrem musc compartments	Abrasions
Fractures & dislocations	Superficial lacerations
Deep lacerations	
Any uncontrolled bleeding	

*Patients with bleeding disorders presenting with significant bleeds require rapid factor replacement or other relevant interventions. **Therapy usually takes precedence over investigations.**

Pain Severity

Severity & Score	Location	Acute/Chronic	CTAS Level
Severe 8 - 10	Central	Acute	2
		Chronic	3
	Peripheral	Acute	3
		Chronic	4
Moderate 4 - 7	Central	Acute	3
		Chronic	4
	Peripheral	Acute	4
		Chronic	5
Mild 0 - 3	Central	Acute	4
		Chronic	5
	Peripheral	Acute	5
		Chronic	5

Pain Definitions

Central pain originates within a body cavity or organ and may be associated with life- or limb-threatening conditions.

Peripheral pain originates in the skin, soft tissues, axial skeleton or superficial organs where dangerous diagnoses are less likely to be missed.

*Caveat: A patient presenting with apparent peripheral pain in whom the triage nurse suspects a life or limb threatening condition should score based on "central" pain.

Acute pain is a new-onset pain and is more likely to prove dangerous (prior to a diagnostic work-up) than chronic pain.

Chronic pain is a well-recognized continuing or recurring pain syndrome manifesting the same pattern.

CTAS Second Order Modifiers

CEDIS and CTAS National Working Groups.

2nd Order Modifiers are specific to a limited number of complaints and

Type 1. 2nd Order Modifiers supplement 1st Order Modifiers to ensure the patient is assigned an appropriate acuity score.

Examples:

Blood Glucose Level

CEDIS Presenting Complaint	Blood Glucose Level	Symptoms	CTAS Level
Altered level of consciousness; Confusion; Hyperglycaemia; Hypoglycaemia	<3mmol/L	Confusion, diaphoresis, behavioral change, seizure	2
		None	3
	>18mmol/L	Dyspnea, dehydration, weakness	2
		None	3

Dehydration Severity

CEDIS Presenting Complaint	Second Order Modifier	CTAS Level
Nausea & / or vomiting; Diarrhea; General Weakness	Severe dehydration: marked volume loss with classic signs of dehydration and signs and symptoms of shock	1
	Moderate dehydration: dry mucous membranes, tachycardia, plus or minus decreased skin turgor and decreased urine output	2
	Mild dehydration: stable vital signs with complaints of increasing thirst and concentrated urine & a history of decreased fluid intake or increased fluid loss or both.	3
	Potential dehydration: no symptoms of dehydration but presenting cause of fluid loss ongoing or difficulty tolerating oral fluids	4

Selected Adult 2nd Order Modifiers

Presenting Complaint	Revised Modifier	CTAS level
Chest pain, non cardiac features	other significant chest pain (ripping or tearing)	2
Extremity weakness / symptoms of CVA	time of onset of symptoms < 3 hours	2
	> 3 hours or resolved	3
Difficulty swallowing / dysphagia	drooling or stridor	2
	possible foreign body	3
Upper or Lower extremity injury	obvious deformity †	3

† to allay concerns that fracture patients with mild/mod pain waiting too long

Type 2. 2nd Order Modifiers apply to certain complaints where 1st Order Modifiers are either irrelevant or totally inadequate to assign an appropriate acuity score.

Examples:

Hypertension (Adult)

Blood Pressure	Symptoms	CTAS Level
SBP >220 or DBP >130	Any other symptoms	2
SBP >220 or DBP >130	No other symptoms	3
SBP 200 - 220 or DBP 110 - 130	Any other symptoms	3
SBP 200 - 220 or DBP 110 - 130	No other symptoms	4 & 5

*1st order modifiers not applicable in these patients, unless "symptomatic"

Obstetrics

CEDIS Presenting Complaint	Second Order Modifier	CTAS level
Pregnancy issues > 20 weeks	Presenting fetal parts, prolapsed cord	1
	Vaginal bleeding 3rd trimester	1
	Active labor (contractions ≤2 min)	2
	No fetal movement / no fetal heart tones	2
	Headache +/- edema+/- abdominal pain +/- hypertension	2
	Post delivery	2
	Active labor (contractions >2 min)	3
	Possible leaking amniotic fluid	3

Mental Health 2nd Order Modifier Definitions

Suicidal Term	Definition
Suicide attempt	Self injurious behavior with a non fatal outcome accompanied by evidence (explicit or implicit) that the person attempted to die
Suicide intent	Subjective expectation and desire for self-destructive act that would end in death.
Suicidal ideation	Thought of serving as an agent of one's own death, may vary in seriousness depending on specificity of plans and degree of suicidal intent.
Uncertain flight or safety risk	Patients threatening violence towards themselves or others; patients exhibiting uncontrolled anger, restlessness, paranoia, or hallucinatory behavior, or patients unable or unwilling to cooperate with suicide risk assessment and who pose a flight risk. Need close observation based on site resources. (If family member willing to observe & both parties agree 'hospital-assigned' close observation may not be required.)

Mental Health Complaints

CEDIS Presenting Complaint	Second Order Modifier	CTAS Level
Depression / Suicidal / Deliberate self harm	Attempted suicide or clear plan	2
	Active suicidal intent	2
	Uncertain flight or safety risk	2
	Suicidal ideation, no plan	3
	Depressed, no suicidal ideation	4
Anxiety / Situational crisis	Severe anxiety / agitation	2
	Uncertain flight or safety risk	2
	Moderate anxiety / agitation	3
	Mild anxiety / agitation	4
Hallucinations / Delusions	Acute psychosis	2
	Severe anxiety / agitation	2
	Uncertain flight or safety risk	2
	Moderate anxiety / agitation	3
	Mild anxiety / agitation	4
	Mild anxiety / agitation, chronic hallucinations	5
Insomnia	Acute	4
	Chronic	5
Violent / Homicidal behaviour	Imminent harm to self or others or specific plans	2
	Uncertain flight or safety risk	3
	Violent / homicidal ideation, no plan	4
Social problem	Abuse physical, mental, high emotional stress	3
	Unable to cope	4
	Chronic, non urgent condition	5
Bizarre behaviour	Uncontrolled	1
	Uncertain flight or safety risk	2
	Controlled	3
	Harmless behaviour	4
	Chronic, non urgent condition	5

Mental Health 2nd Order Modifier Definitions

Anxiety / Agitation	Definition
Severe anxiety / agitation	Extreme unease, apprehension or worry with signs of excessive circulating catecholamines, or dangerously agitated and uncooperative and does not calm down when asked
Moderate anxiety / agitation	Clear unease, apprehension, or worry, but no obvious tachycardia or tremulousness; or signs of agitation, and does not consistently obey commands (e.g. will sit or calm down when asked, but soon becomes restless and agitated again
Mild anxiety / agitation	Mild unease, apprehension or worry, but can be reassured; or restless but cooperative; obeys commands

Mental Health Complaints

Complaint	2nd order modifier	CTAS level
Concern for patient's welfare	Conflict or unstable situation	1
	Risk of flight or ongoing abuse	2
	Physical or sexual assault	3
	History/signs of abuse or maltreatment	4
Paediatric disruptive behavior	Uncertain flight or safety risk/family distress	2
	Acute difficulties with others/environment	3
	Persistent problematic behavior	4
	Chronic, unchanged behavior	5

Selected Paediatric 2nd Order Modifiers

Complaint	2nd order modifier	CTAS level
Floppy child	No tone, unable to support head	2
	Limited/less than expected muscle tone	3
Paediatric gait disorder/ painful walk	Gait or limp problems with fever	3
	Walking with difficulty	4
Congenital problem in children	Conditions and protocol letters identifying concerns for rapid deterioration or need for immediate therapy Vomiting/diarrhea in a child with inherited metabolic disease, type 1 diabetes or adrenal insufficiency	2
	Caregivers identifying need for care	3
	Stable child with congenital disease with potential for problems	4
Stridor	Airway compromise	1
	Marked stridor	2
	Audible stridor	3
Apneic spells in infants	Apneic episode on presentation	1
	Recent spell consistent with apnea or respiratory compromise	2
	History of spell consistent with apnea	3
Inconsolable crying in infants	Inconsolable infant - abnormal vital signs	2
	Inconsolable infant - vital signs stable	3
	Irritable but consolable	4

ETG

- Très fouillée
- Guide de Bonnes Pratiques
- Evaluation globale du patient
- S'intègre dans un philosophie de triage au sens large
- Francophone

- Mise en œuvre complexe
- Nécessite formation+++
- Multiples facteurs influençant le résultat du TRI
- EVB sur de larges séries ?
- Focalisé médecins
- Corrélation sur le terrain ? Les items ne sont pas présents dans tout les niveau de gravité

Emergency Severity Index

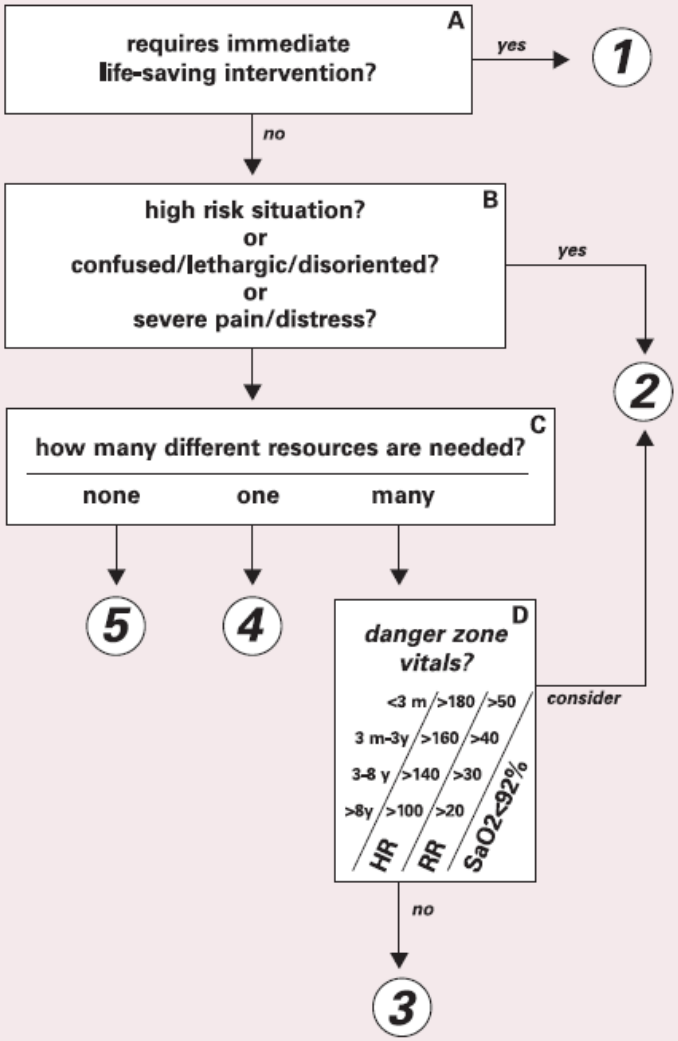
ESI ?

- Créé en 1999, 4° révision
- Développé par un institut de recherche américain émanation du gouvernement, focus sur recherche & qualité
- Panel de spécialiste infirmier et médecin
- Soutien de ENA (Emergency Nursing Association)

Caractéristiques ESI

- Triage à 5 niveaux
- Implémentation s'accompagne d'un Guide très complet.
- Massivement EVB
- Révision en 2012 + 6° chapitre plus spécifique à la pédiatrie

Figure 2-1a. ESI Triage Algorithm



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions (IV, supplemental O2, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO_2<90, acute mental status changes, or unresponsive.

Unresponsiveness is defined as a patient that is either:
(1) nonverbal and not following commands (acutely); or
(2) requires noxious stimulus (P or U on AVPU) scale.

B. High risk situation is a patient you would put in your last open bed.

Severe pain/distress is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	*Not Resources*
• Labs (blood, urine) • ECG, X-rays • CT-MRI-ultrasound-angiography	• History & physical (including pelvic) • Point-of-care testing
• IV fluids (hydration)	• Saline or heplock
• IV or IM or nebulized medications	• PO medications • Tetanus immunization • Prescription refills
• Specialty consultation	• Phone call to PCP
• Simple procedure =1 (lac repair, foley cath) • Complex procedure =2 (conscious sedation)	• Simple wound care (dressings, recheck) • Crutches, splints, slings

D. Danger Zone Vital Signs
Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

Pediatric Fever Considerations
1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)

1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)

3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever

Esi Level 1

Figure 2-2. Decision Point A: Is the Patient Dying?

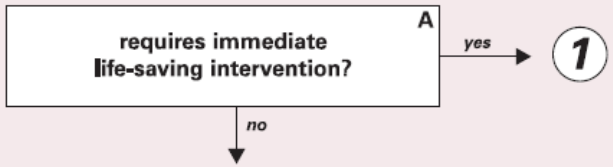
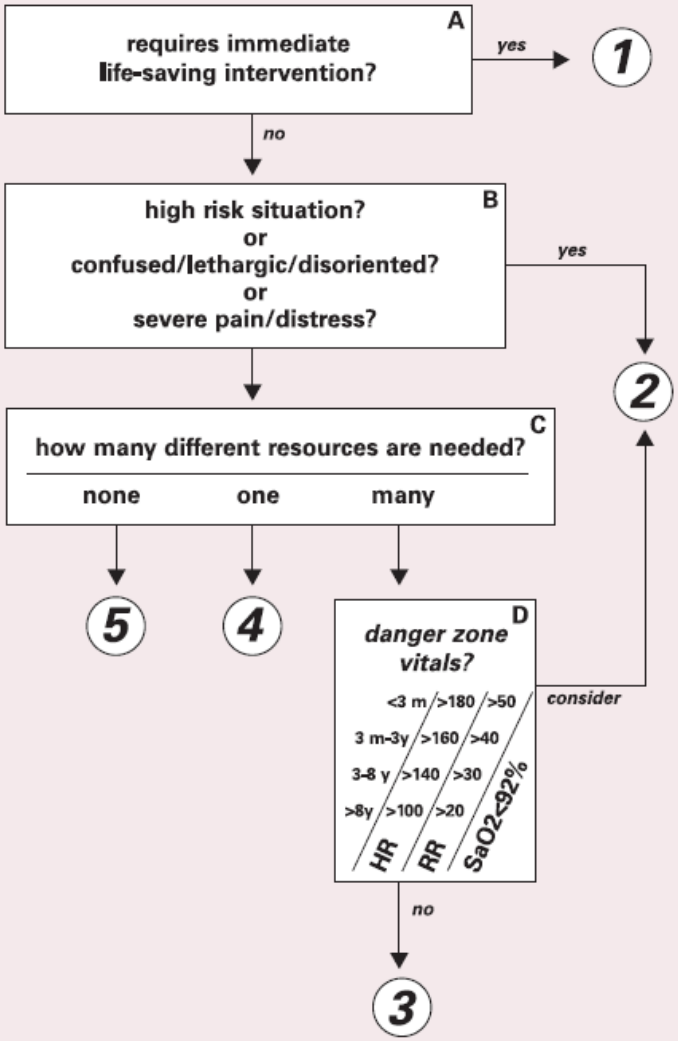


Table 2-1. Immediate Life-saving Interventions

	Life-saving	Not life-saving
Airway/breathing	• BVM ventilation • Intubation • Surgical airway • Emergent CPAP • Emergent BiPAP	Oxygen administration • nasal cannula • non-rebreather
Electrical Therapy	• Defibrillation • Emergent cardioversion • External pacing	Cardiac Monitor
Procedures	• Chest needle decompression • Pericardiocentesis • Open thoracotomy • Intraoseous access	Diagnostic Tests • ECG • Labs • Ultrasound • FAST (Focused abdominal scan for trauma)
Hemodynamics	• Significant IV fluid resuscitation • Blood administration • Control of major bleeding	• IV access • Saline lock for medications
Medications	• Naloxone • D50 • Dopamine • Atropine • Adenocard	• ASA • IV nitroglycerin • Antibiotics • Heparin • Pain medications • Respiratory treatments with beta agonists

Figure 2-1a. ESI Triage Algorithm



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions (IV, supplemental O2, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO_2<90, acute mental status changes, or unresponsive.

Unresponsiveness is defined as a patient that is either:
(1) nonverbal and not following commands (acutely); or
(2) requires noxious stimulus (P or U on AVPU) scale.

B. High risk situation is a patient you would put in your last open bed.

Severe pain/distress is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	*Not Resources*
• Labs (blood, urine) • ECG, X-rays • CT-MRI-ultrasound-angiography	• History & physical (including pelvic) • Point-of-care testing
• IV fluids (hydration)	• Saline or heplock
• IV or IM or nebulized medications	• PO medications • Tetanus immunization • Prescription refills
• Specialty consultation	• Phone call to PCP
• Simple procedure =1 (lac repair, foley cath) • Complex procedure =2 (conscious sedation)	• Simple wound care (dressings, recheck) • Crutches, splints, slings

D. Danger Zone Vital Signs
Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

Pediatric Fever Considerations
1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)

1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)

3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever

Esi Level 2 / 4-5

Figure 2-3. Decision Point B: Should the Patient Wait?

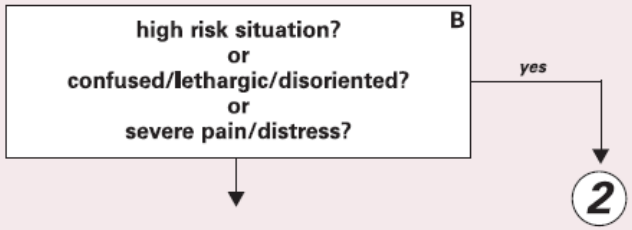


Figure 2-4. Resource Prediction

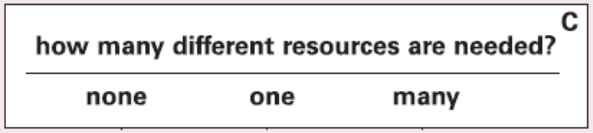
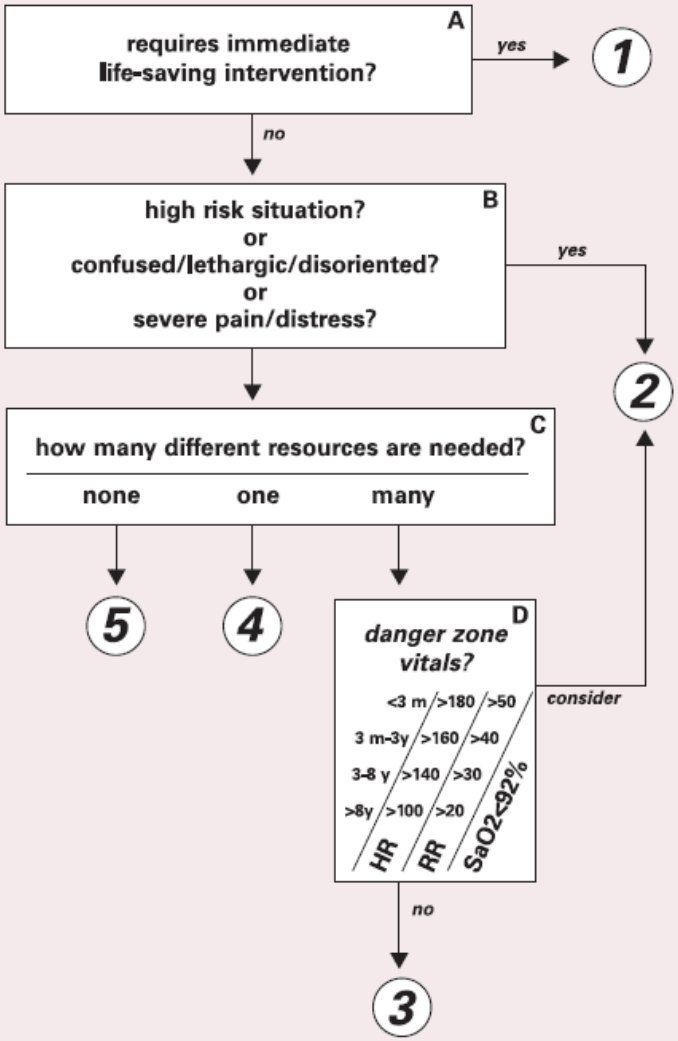


Table 2-3. ESI Resources

Resources	Not resources
Labs (blood, urine)	History & physical (including pelvic)
ECG, X-rays CT-MRI-ultrasound angiography	Point-of-care testing
IV fluids (hydration)	Saline or heplock
IV, IM or nebulized medications	PO medications Tetanus immunization Prescription refills
Specialty consultation	Phone call to PCP
Simple procedure = 1 (lac repair, Foley cath) Complex procedure = 2 (conscious sedation)	Simple wound care (dressings, recheck) Crutches, splints, slings

Figure 2-1a. ESI Triage Algorithm



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions (IV, supplemental O2, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO_2<90, acute mental status changes, or unresponsive.

Unresponsiveness is defined as a patient that is either:
(1) nonverbal and not following commands (acutely); or
(2) requires noxious stimulus (P or U on AVPU) scale.

B. High risk situation is a patient you would put in your last open bed.

Severe pain/distress is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	*Not Resources*
• Labs (blood, urine) • ECG, X-rays • CT-MRI-ultrasound-angiography	• History & physical (including pelvic) • Point-of-care testing
• IV fluids (hydration)	• Saline or heplock
• IV or IM or nebulized medications	• PO medications • Tetanus immunization • Prescription refills
• Specialty consultation	• Phone call to PCP
• Simple procedure =1 (lac repair, foley cath) • Complex procedure =2 (conscious sedation)	• Simple wound care (dressings, recheck) • Crutches, splints, slings

D. Danger Zone Vital Signs
Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

Pediatric Fever Considerations
1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)

1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)

3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever

Esi Level 3

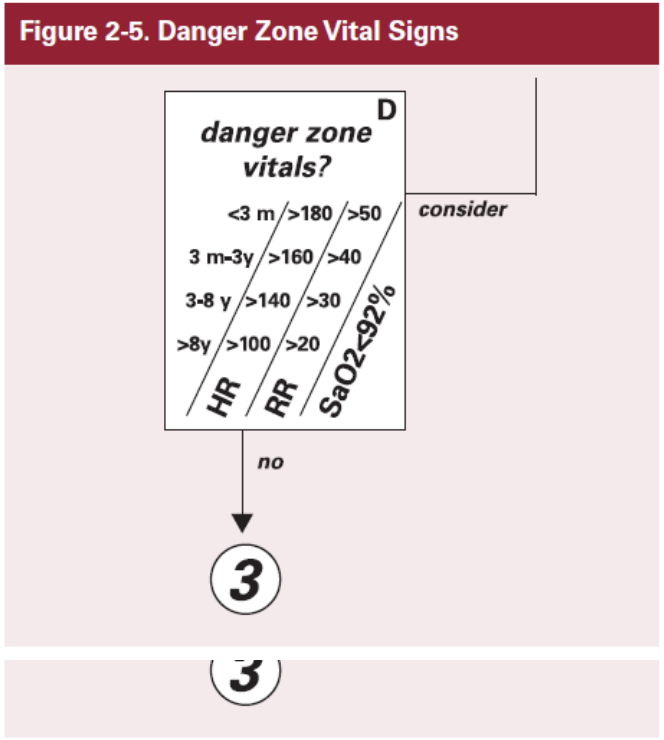
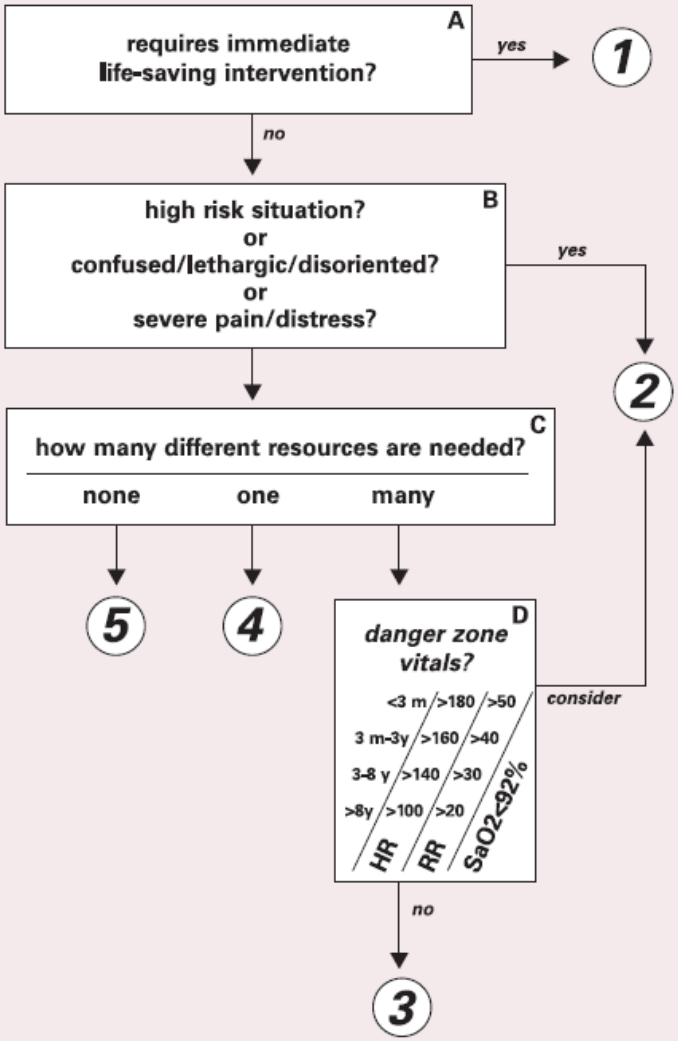


Figure 2-5. Danger Zone Vital Signs
D
danger zone vitals?
<3 m >180 >50
3 m-3y >160 >40
3-8 y >140 >30
>8y >100 >20
HR
RR
SaO2<92%
consider
no
3
3

Figure 2-1a. ESI Triage Algorithm



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions (IV, supplemental O2, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO_2<90, acute mental status changes, or unresponsive.

Unresponsiveness is defined as a patient that is either:
(1) nonverbal and not following commands (acutely); or
(2) requires noxious stimulus (P or U on AVPU) scale.

B. High risk situation is a patient you would put in your last open bed.

Severe pain/distress is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	*Not Resources*
• Labs (blood, urine) • ECG, X-rays • CT-MRI-ultrasound-angiography	• History & physical (including pelvic) • Point-of-care testing
• IV fluids (hydration)	• Saline or heplock
• IV or IM or nebulized medications	• PO medications • Tetanus immunization • Prescription refills
• Specialty consultation	• Phone call to PCP
• Simple procedure =1 (lac repair, foley cath) • Complex procedure =2 (conscious sedation)	• Simple wound care (dressings, recheck) • Crutches, splints, slings

D. Danger Zone Vital Signs
Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

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1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)

1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)

3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever

Esi Level 2 le plus difficile à évaluer

Table 3-1. Examples of Possible High-risk Situations

System	Demographics, Chief Complaint	ESI 2: Yes/No Rationale
Abdomen	88-year-old female with severe right lower quadrant abdominal pain, vital signs stable.	Yes. High risk for acute abdominal emergency which is associated with a high mortality in the elderly.
	22-year-old male with generalized abdominal pain, nausea, vomiting, and diarrhea for 3 days, vital signs stable.	No. Symptoms are more indicative of gastroenteritis than an acute surgical emergency. Patient is stable to wait.
	45-year-old female who has been vomiting blood and is tachycardic.	Yes. High risk for gastrointestinal bleeding and patient can deteriorate rapidly.
	22- year-old female noticed a spot of blood on toilet paper this a.m. after having a bowel movement. Has a history of hemorrhoids.	No. This patient most likely has a hemorrhoid and this is not a high-risk situation.
Cardiovascular	35-year-old female with a sudden onset of palpitations, anxious, heart rate of 160, blood pressure of 120/70.	Yes. High risk for possible supraventricular tachycardia.
	35-year-old female with sudden onset of palpitations, anxious, heart rate of 90, blood pressure of 120/70.	No. This patient may be having an anxiety attack.
	65-year-old female with sudden onset of shortness of breath and discomfort in chest for 3 hours.	Yes. High risk for possible myocardial ischemia.
	45-year-old male with generalized fatigue, chest pain when coughing, productive cough with green sputum, fever and chills for 4 days.	No. This patient has classic non-cardiac symptoms, despite having chest pain.
	52-year-old male with sudden onset of pain to left foot, a history of diabetes requiring insulin therapy; left foot is cold to touch, and the nurse is unable to palpate a pulse in the foot.	Yes. High risk for acute arterial occlusion.
Eye, ENT	65-year-old female with sudden onset of loss of vision.	Yes. All complaints with sudden loss of vision are high-risk.
	22-year-old male patient with trauma to eye in a bar fight, unable to open eye.	Yes. High risk for globe rupture or other trauma.
General medicine	40-year-old female diabetic with vomiting for 2 days.	Yes. At high risk for diabetic ketoacidosis which requires rapid evaluation and management.
	69-year-old male who is weak and dizzy, and undergoes regular kidney dialysis.	Yes. High risk for hyperkalemia and other electrolyte imbalances.
	29-year-old female with a recent history of headaches, blood pressure of 210/120, and no known history of HTN.	Yes. High risk for hypertensive emergency.
	55-year-old male with a laceration to the thumb. Blood pressure of 204/102, known history of HTN and admits to skipping a few doses of blood pressure medication, denies other complaints.	No. Patient will not require emergent treatment of his blood pressure, but will require re-evaluation of his anti-hypertensive dose and agents.

ESI

- Simple & concis
- Algorithme clair
- S'intègre dans une philosophie globale de triage
- EVB

- Pratique américaine très cadrée <> Europe plus « bohème »
- Formation +++ nécessaire
- Ressources difficilement accessible
- Catégorisation sur base de plaintes ???

Australian Triage Scale

ATS ?

- Développé en 2001 (Australie)
- Evolution du NTS (National Triage Scale) 1993
- Implémentée sur tout le continent
- Outil Agence Fédérale de Santé
- Soutien Associations infirmière / médecin

Caractéristiques ATS

- Echelle à 5 niveaux comparable CTAS
- Triage téléphonique possible
- Implémentation demande formation +++
- Inclus gestion de la douleur et triage maladie mentale
- Spécificité pédiatrique / Gynéco

Table 2.1: ATS categories for treatment acuity and performance thresholds[1]

ATS category	Treatment acuity (maximum waiting time)	Performance indicator (%)
1	Immediate	100
2	10 minutes	80
3	30 minutes	75
4	60 minutes	70
5	120 minutes	70

Algorithme

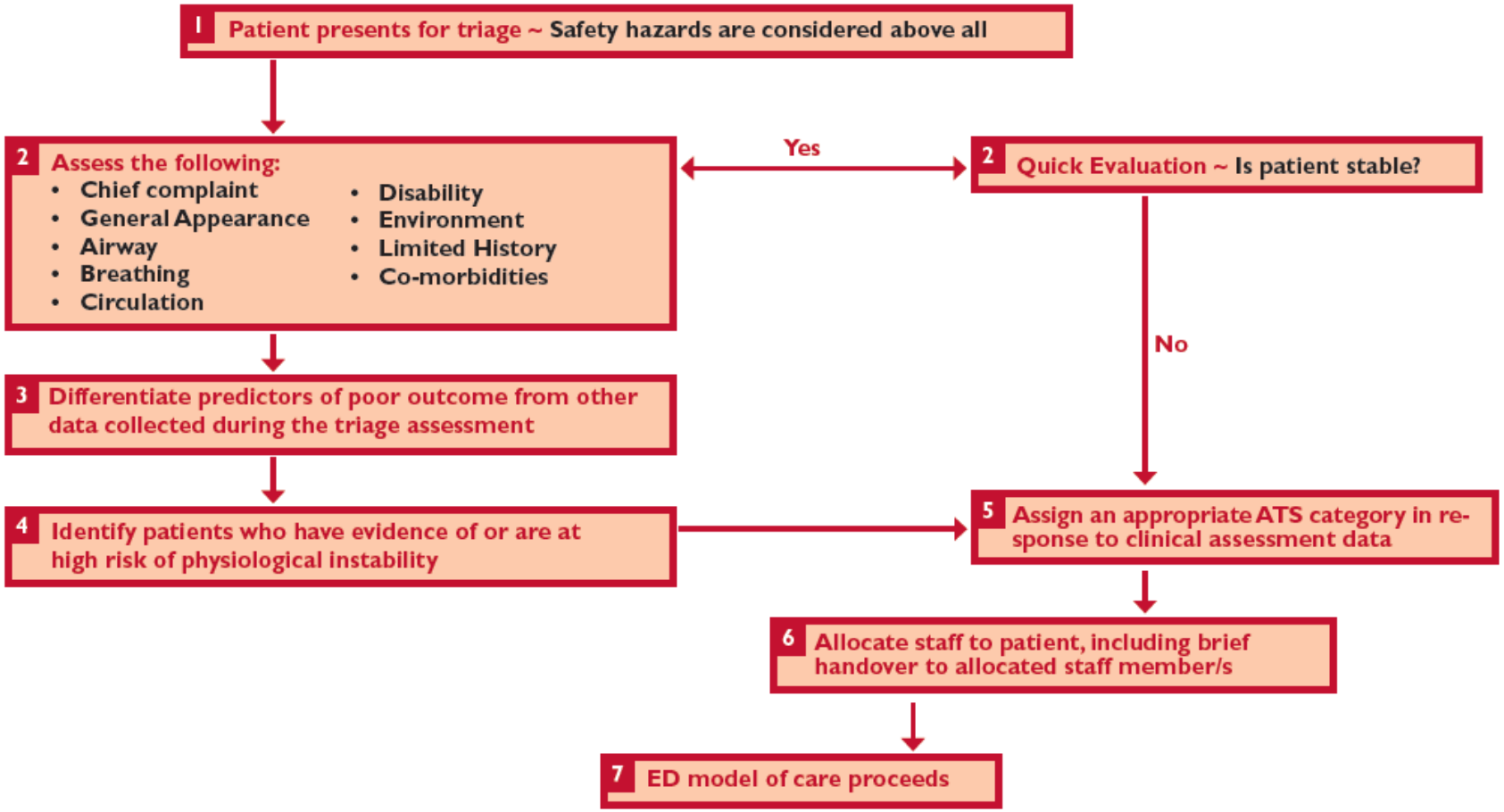
1 Patient presents for triage ~ Safety hazards are considered above all
2 Assess the following:
• Chief complaint
• General Appearance
• Airway
• Breathing
• Circulation
• Disability
• Environment
• Limited History
• Co-morbidities
Yes
2 Quick Evaluation ~ Is patient stable?
No
3 Differentiate predictors of poor outcome from other data collected during the triage assessment
4 Identify patients who have evidence of or are at high risk of physiological instability
5 Assign an appropriate ATS category in response to clinical assessment data
6 Allocate staff to patient, including brief handover to allocated staff member/s
7 ED model of care proceeds

Table 4.1: Summary of adult physiological predictors for the ATS

	Category 1 Immediate	Category 2 10 minutes	Category 3 30 minutes	Category 4 60 minutes	Category 5 120 minutes
Airway	Obstructed/ partially obstructed	Patent	Patent	Patent	Patent
Breathing	Severe respiratory distress/absent respiration/ hypoventilation	Moderate respiratory distress	Mild respiratory distress	No respiratory distress	No respiratory distress
Circulation	Severe haemodynamic compromise/ absent circulation Uncontrolled haemorrhage	Moderate haemodynamic compromise	Mild haemodynamic compromise	No haemodynamic compromise	No haemodynamic compromise
Disability	GCS <9	GCS 9–12	GCS >12	Normal GCS	Normal GCS

Risk factors for serious illness/injury – age, high risk history, high risk mechanism of injury, cardiac risk factors, effects of drugs or alcohol, rash and alterations in body temperature – should be considered in the light of history of events and physiological data. Multiple risk factors = increased risk of serious injury/illness. Presence of one or more risk factors may result in allocation to a triage category of higher acuity.

Table 4.2. Australasian Triage Scale categories

ATS Category	Description of Category	Response
1	Immediately life-threatening	Immediate
2	Imminently life-threatening or important time-critical treatment or very severe pain	Assessment and treatment within 10 minutes
3	Potentially life-threatening or situational urgency or human practice mandates the relief of severe discomfort or distress within 30 minutes	Assessment and treatment start within 30 minutes
4	Potentially life-serious or situational urgency or significant complexity or severity or human practice mandates the relief of severe discomfort or distress within 60 minutes	Assessment and treatment start within 60 minutes
5	Less urgent or clinico-administrative problems	Assessment and treatment start within 120 minutes

Table 4.2: Summary of ophthalmic emergency predictors for the ATS

Category 1 Immediate	Category 2 10 minutes	Category 3 30 minutes	Category 4 60 minutes	Category 5 120 minutes
	• Penetrating eye injury • Chemical injury • Sudden loss of vision with or without injury • Sudden onset severe eye pain	• Sudden abnormal vision with or without injury • Moderate eye pain, e.g. – blunt eye injury – flash burns – foreign body	• Normal vision • Mild eye pain, e.g. – blunt eye injury – flash burns – foreign body	• Normal vision • No eye pain

ATS

- S'intègre dans une philosophie globale de triage
- Consensus d'expert
- EVB

- Pratique australienne très cadrée <> Europe plus « bohème »
- Formation +++ nécessaire
- Algorithme multiple
- Catégorisation sur base de plaintes ???

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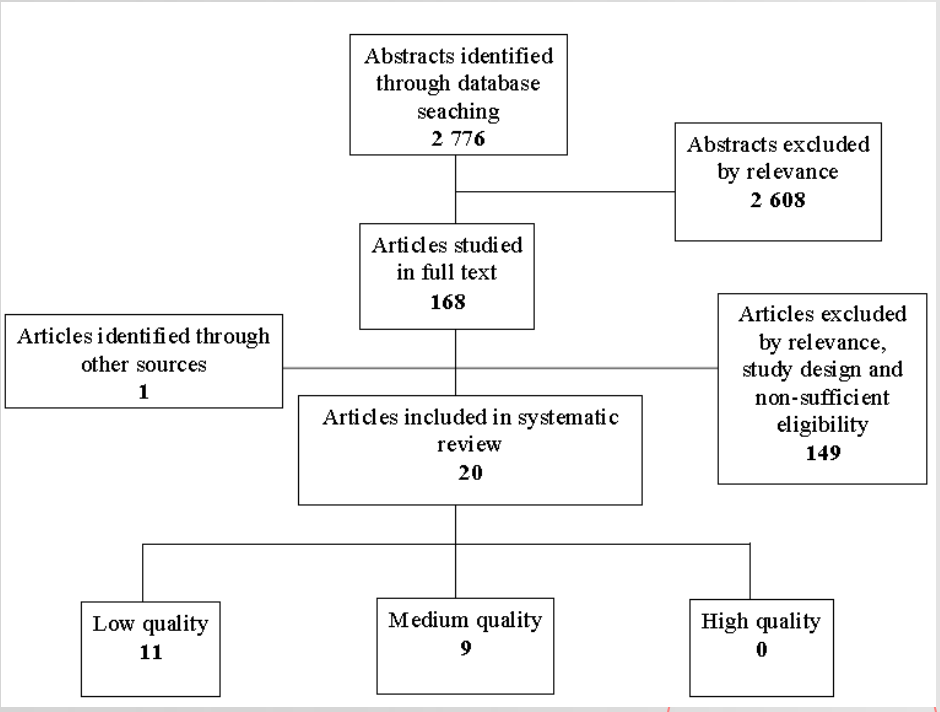
Emergency Department Triage Scales and Their Components: A Systematic Review of the Scientific Evidence

Nasim Farrohknia[1*], **Maaret Castrén**[2], **Anna Ehrenberg**[3], **Lars Lind**[4], **Sven Oredsson**[5], **Håkan Jonsson**[6], **Kjell Asplund**[7] and **Katarina E Göransson**[8],



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Evaluation en utilisant GRADE

- La reproductibilité du TRI
- La validité des échelles de triage en regard de la mortalité

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Our systematic review shows that when adjudicated by standard criteria for study quality and scientific evidence, the triage scales used in EDs are supported, at best, **by *limited evidence***. Often, the evidence is weaker, not above *insufficient* by the GRADE criteria. The ability of the individual vital signs included in the different scales to predict outcome has seldom, or never, been studied in the ED setting. The scientific evidence for assessing interrater agreement (reproducibility) was limited for one triage scale (Brillman) whereas it was insufficient or lacking for all other scales. Two of the scales (CTAS and ATS) offered limited scientific evidence, and the scientific evidence for one scale (METTS) was insufficient to assess the risk of early death or hospitalization in patients assigned to the two lowest triage levels in 5-level scales; the studies showed the risk of death to be low, but a need for inpatient care was not excluded (about 5% hospital admission rate on average). Studies on validity of the triage scales across all levels, i.e. their ability to distinguish the urgency in patients assigned the five different levels, were generally of low quality. Consequently, evidence was insufficient to assess the validity of the scales.

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MTS and eCTAS include the chief complaint leading to the ED visit, but we did not find any studies that analyzed which of the chief complaints are important predictors of mortality early after triage. It appears likely that in the construction of triage scales, much of the information was deduced from studies performed in settings other than EDs.

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Conclusion

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- Echelle et EVB ????
- Importance de l'adaptation locale
- Echelle = outil
- On soigne des patients pas un flowchart
- Importance de la démarche clinique
- Etat du patient est dynamique donc importance de la réévaluation.
- Soigner l'implémentation, besoin en formation +++