**APPENDIX A: ASSESSMENT TOOL WITH EXPERT TRIAGE SCORES**

***Case 1:***

A 79-year-old female presents walking to the triage desk with a laceration to the base of his right thumb that occurred while trying to help the passenger of his vehicle to get out of the car that was damaged in a motorized vehicle collision. The patient reports 2 out of 10 pain and denies other injuries. Previous history of a cerebrovascular accident with left sided weakness and controlled hypertension. Vitals are RR 16, HR 74 (radial pulse present), BP 135/80, T 36.7, O2Sat 93%, and GCS 15. The exam reveals that bleeding is controlled. Normal movement is observed and no evidence of neurovascular compromise or open fractures. The remainder of the exam is normal. The patient will not require sutures.

Expert triage score: CTAS (5, 5, 5), START (G, G, G)

***Case 2:***

A 40-year-old male complains of 6 out of 10 back pain that started after being involved in a motor vehicle collision. The patient was travelling at approximately 50 km/hr and ran into the side of another vehicle. He was wearing a seatbelt and the airbag deployed. The patient was extricated through the driver side window by the fire department while in spinal precaution and transported by EMS on a stretcher. Vitals are RR 24, HR 70 (radial pulse present), BP 152/75, T 36.1, O2Sat 98%. The patient describes pain over the lumbar region; there is no radiation of the pain or neurological symptoms with a GCS 15. The remaining exam is normal.

Expert triage score: CTAS (3, 3, 4), START (Y, Y, Y)

***Case 3:***

A 31-year-old male presents with a productive cough for the last 3 days on an EMS stretcher. He reports feeling short of breath with fever and chills. The patient has a 10 pack-year history of smoking and is morbidly obese. Vitals are RR 25, HR 120 (radial pulse present), BP 115/62, T 38.7, O2Sat 98%, and GCS 13 but obeys commands. The patient looks unwell and produces blood stained sputum in front of you. The patient displays increased work of breathing and is speaking in short sentences. The remainder of the exam is normal.

Expert triage score: CTAS (2, 2, 2), START (Y, Y, Y)

***Case 4:***

A 48-year-old male has sustained severe abdominal trauma after being involved in a high-speed motor vehicle collision. After a long extraction from the car the patient presents on a stretcher with EMS and two large bore IVs. Vitals are HR 160 (radial pulse absent), BP 65/30, T 36.6, RR 28, O2Sat 90%. EMS report extensive abdominal and flank bruising, a rigid abdomen, and suspect an unstable pelvis. In addition, he has a decreased level of consciousness with a GCS of 12, however, his pupils appear equal and reactive with no signs of a head injury. The remainder of the exam is non-contributory.

Expert triage score: CTAS (1, 1, 1), START (R, R, R)

***Case 5:***

A 25-year-old male was found in the middle of a park unresponsive and making purposeful movements. No further history is available and the mechanism of injury is unknown. The patient was placed in spinal immobilization and brought in on a stretcher by EMS. Vitals are RR 20, HR 95 (radial pulse present), BP 128/60, T 37.7, O2Sat 92%. The patient is unresponsive to verbal stimuli, but responds to pain. His right pupil appears fixed and he has a GCS of 8. There is swelling and bruising over the left eye and side of the head. No other signs of trauma are present. The remainder of the exam is normal.

Expert triage score: CTAS (1, 1, 1), START (R, R, R)

***Case 6:***

A 54-year-old female presents walking to the triage desk with chronic abdominal pain for the last 2 years which she reports as being 6 out of 10. The patient has seen her family doctors several times with the same complaint and testing has not yet identified a cause for the pain. Vitals are RR 16, HR 54 (radial pulse present), BP 135/75, T 37.1, O2Sat 95%, and GCS 15. The patient is sitting comfortably on a chair while talking. The rest of the exam is normal.

Expert triage score: CTAS (4, 4, 4), START (G, G, G)

***Case 7:***

A 20-year-old male presents to the emergency department escorted by EMS and police on a stretcher with hands restraints. At the scene of a motorized vehicle collision the patient refused to walk and he was verbally abusive with fire fighters, displaying agitated behavior. He denies any physical injuries. The patient has a history of schizophrenia and last use of street drugs was approximately 48 hr prior. Vitals are RR 18, HR 110 (radial pulse present), BP 120/84, T 37.5, O2Sat 97% and GCS 15. He is currently cooperative, talking about being Jesus Christ, he denies suicidal and homicidal tendencies and wants to leave the hospital. Otherwise the exam is normal.

Expert triage score: CTAS (2, 2, 4), START (Y, Y, Y)

***Case 8:***

A 57-year-old female has left foot pain and swelling. The patient twisted her foot while running from the site of the motor vehicle collision and has difficulty ambulating due to pain that she describes as 5 out of 10. Vitals are RR 18, HR 98 (radial pulse present), BP 140/95, T 36.1, O2Sat 98%, and GCS 15. No evidence of neurovascular compromise or open fractures is noted. The exam is otherwise normal.

Expert triage score: CTAS (4, 4, 4), START (G, G, Y)

***Case 9:***

A 30-year-old male was ejected from motor vehicle during a collision. He was found unresponsive at scene;EMS personnel used a jaw thrust maneuver and the patient begun to breath spontaneously. On route to the hospital the EMS personnel elected to intubate the patient secondary to decreased level of consciousness. Vitals are RR 8, HR 40 (radial pulse present), BP 225/110, T 37.5, O2Sat 90%. His pupils appear fixed and his GCS 3. The patient is immobilized with no obvious deformity. There are abrasions and bruising on the right side of his face and head. An abnormal breathing pattern is observed. Otherwise the exam is normal.

Expert triage score: CTAS (1, 1, 1), START (R, R, R)