**Use Case Title:** Detecting Human Trafficking

**Short Description:** Combating human trafficking is a complex task often seen as insurmountable given the lack of awareness and shared understanding of what constitutes trafficking, often with victims hidden in plain sight. Worse, individual attitude and bias towards victims leads to inconsistent response by law enforcement and evaluation by healthcare workers. The impact of the overarching lack of awareness around human trafficking results in healthcare practitioners missing the signs of when a patient is being held captive. This results in the patients’ continued suffering of physical and mental abuse, exacerbating the fear that their current reality will go unnoticed. Often, in the case of human sex trafficking, the best domain for detection and escalation is within the Emergency Department (ED). The ED is a controlled environment, with a workforce accustomed to working under protocols, and workflow informed by the latest research and best practices. But challenges remain; lack of awareness, training, data access, and clear measurable objectives means detecting human sex trafficking in the ED often falls on an overly stressed clinical workforce whose attention may be diminished. Unfortunately, most clinical providers still don’t have access to usable tools to help them identify and safely help victims of human trafficking.

Please join us as we demonstrate automated interoperable processes that ensure consistent, unbiased, and measurable quality outcomes. Follow the patient as they move through registration, triage, examination, and discharge. The structure of our software solutions works in concert to assist and direct the detection of human trafficking processes consistently in a high-volume, complex emergency department.

**Participating Vendors:** Cerner, Redhat, Smile CDR, Trisotech, Visible Systems Corporation

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Vendor</th>
<th>Products</th>
<th>Standards</th>
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<tbody>
<tr>
<td>Introduction to use-case</td>
<td>Trisotech (and more)</td>
<td>Process Animator</td>
<td>BPM+ Health (BPMN)</td>
</tr>
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</table>
Patient (Pt) is a 16 year old female taken to the Emergency Department (ED) with the Sheriff and school counselor for involuntary confinement for suicidal ideation (SI). Pertinent history: assaulted by a peer at age 13 with other peers present who did not intervene, reports of bullying to the point of moving schools. After assault at 13, pt. gained 100 lbs. in the course of a year. Patient states mom became pregnant at 16 with her, and her biological father was 32 years old at that time. She does not have a relationship with her dad because he reportedly “prefers his other children.” Pt ran away from home with 3 boys she met on Instagram and was dropped off at another man’s house who then sold her to 6 different adult men, and withheld food and water over the course of 4 days of involuntary confinement.

**Introduce Patient and Personas**

- **Patient** - 16 year old female
- **School Counselor** - TBD
- **Sheriff Officer** - TBD
- **Registrar** - Carl Hartman is our Registrar. Carl is a 55-year-old white male who has been working in this role for 8 years and started his career in data entry with another hospital system
- **Primary Nurse** - Janey Chatterly - 45-year-old Latino female, 12 years in emergency care nursing, background in population health and pediatrics.
- **Clinician/Doctor or NP** - Meghan Gotta - 32-year-old white female, is a mother. Pediatric emergency background, right out of residence
- **Social Worker** - Clarence Hawlett - 62-year-old African American man, is a grandfather. Hand-off is better and more experienced and has seen these cases.

**ED Arrival/Registration**

Our patient presents to Emergency Department (ED) with school counselor and local Sheriff

- Patient Medical History is consulted in local EMR
- National HIE Registries are consulted for outside medical records

Pt transferred to Triage Room
**Primary Nurse**

*Patient is tearful in triage with the School Counselor and Sheriff Officer. Per school counselor, patient disclosed thoughts of self-harm during weekly therapy sessions. When asked by the Nurse, patient endorses SI, and states “nobody would care if I wasn’t around.”*

- Nurse Triage Data Collection
- ED Prescreen
- Administer CST Greenbaum Survey
- Sex Trafficking Suspected. Alarm sent to Social Working

*Pt transferred to ED Exam Room*

<table>
<thead>
<tr>
<th>Smiley CDR</th>
<th>Trisotech</th>
<th>Cerner</th>
<th>HL7® FHIR®</th>
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<tbody>
<tr>
<td>Smile CDR Data Fabric</td>
<td>Trisotech Digital Enterprise Suite (DES)</td>
<td>BPM + Health (BPMN, DMN) (observations and questionnaire)</td>
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</table>

**Clinician/Doctor or NP**

*Orders Placed: Urine Pregnancy Test, Urinalysis, Bloodwork (CBC, BMP, etc.), IVC/Physician Hold*

- Collect Patient Data
- Check for Alarm Sign for Human Trafficking
- Clinician Completes examination
- Findings Recorded in Medical Record
- Suspicious Findings. Alarm sent to Social Worker
- Diagnosis
- Immediate Care Delivered
- Discharge Planning

*Orders Placed: Consult to SW/CM, Pelvic Exam, STI testing*

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**Social Worker**

- On reception of Alarm: Opens a case
  - Completes assessment
  - Report made to appropriate authorities, per state law
  - Pt transferred to local pediatric psychiatric facility

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<thead>
<tr>
<th>Cerner</th>
<th>SMART on FHIR Cerner Provider Application</th>
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Data exchange standards (examples below):

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<tr>
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<th>Category</th>
<th>Protocol</th>
<th>Interop Body</th>
<th>Interop Profile</th>
<th>Interop Actor</th>
<th>Interop Message</th>
<th>Send or Receive</th>
<th>Transaction Description</th>
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<td>FHIR</td>
<td>/Observation</td>
<td>USCORE</td>
<td>Consumer Clinician</td>
<td>/Observation</td>
<td>Send / POST</td>
<td>Post observations to HAPI</td>
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<tr>
<td>FHIR</td>
<td>/RiskAssessment</td>
<td>USCORE</td>
<td>RedHat AI</td>
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<tr>
<td>FHIR</td>
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<td>Post service request to HAPI</td>
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References:

4. Patient Statement/Actions

<table>
<thead>
<tr>
<th>Health Record Data Entries</th>
<th>Healthcare Staff Assessments</th>
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<tbody>
<tr>
<td>Pt presents to ED with school counselor and local Sheriff</td>
<td>ED Arrival/registration</td>
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<tr>
<td>Pt transferred to Triage Room</td>
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<tr>
<td>Pt tearful in triage.</td>
<td>Triage data:</td>
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<tr>
<td></td>
<td>• CC: Suicidal Ideation</td>
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<tr>
<td></td>
<td>• CC: Psychiatric Evaluation</td>
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<td></td>
<td>• VS: 129/92, 103, 16, 99%RA, 98.0F (oral), 0/10</td>
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<tr>
<td></td>
<td>• RN Note: “Pt tearful in triage with school counselor and SO. Per</td>
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</tbody>
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counselor, pt. disclosed thoughts of self harm during weekly therapy session. When asked by this RN, pt. endorses SI, and states ‘nobody would care if I wasn’t around.’
- **PMHx:** ADHD, Anxiety, Depression
- **PSHx:** none
- **Current Meds:** Vyvanse, Lexapro

*Note: based on age and CC, system should trigger staff to screen for CST.*

**BPA/Popup:**
- “Administer CST Greenbaum Survey”

**Pt transferred to ED Exam Room**

**Orders Placed:**
- Urine Pregnancy Test
- Urinalysis
- Bloodwork (CBC, BMP, etc.)
- IVC/Physician Hold

**Greenbaum Survey:**
1. Have you ever broken any bones, had any cuts that required stitches, or been knocked unconscious? Y/N
   - No
2. Some kids have a hard time living at home and feel they need to run away. Have you ever run away from home? Y/N
   - Yes
3. Kids often use drugs or drink alcohol, and different kids use different kinds of drugs. Have you used drugs or alcohol in the last 12 months? Y/N
   - No

Primary RN administers survey while changing pt. into hospital scrubs, and obtaining labs.
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| 4. | Sometimes kids have been involved with the police. Maybe for running away, for breaking curfew, for shoplifting. There can be lots of different reasons. Have you ever had any problems with the police? Y/N  
Yes |
| 5. | If you have had sex before, how many sexual partners have you had? 0 partners/1-5 partners/6-10 partners/ >10 partners  
9 partners |
| 6. | Have you ever had a sexually transmitted infection (STI), like herpes or gonorrhea or chlamydia or trichomonas? Y/N  
Yes |

*Note: Based on 3 positive answers (#2, #4 & #5) staff is alerted to consult Social Work/Case Management for further assessment*

**Orders Placed:**
- Consult to SW/CM
- Pelvic Exam
- STI testing

**SW/CM completes assessment, without Uncle present**  
Report made to appropriate authorities, per state law.

**ADT: Transfer**

*Pt transferred to local pediatric psychiatric facility*