



Patient Arrival at non-PSCs: Importance of Fast Door-In-Door-Out times

Alberta Acute Stroke Day

May 29, 2017

Edmonton, AB

Disclosures

- None

Patient Arrival at Non-PSCs

- Patients that call 911 will usually be directed to a PSC
- Sometime patients/bystanders deem it faster to transport themselves to the closest hospital rather than call 911
 - The closest hospital is often not a PSC
- A patient's symptoms worsen enroute and red finding were not initially found thus bypass to PSC was not triggered
- Acute stroke symptoms were not a red finding (e.g. visual fields)




The Alberta EMS Stroke Screen

RED FINDINGS (Bypass to PSC)

- LOC
 - Responds to pain only
 - Unresponsive
- Speech
 - Incomprehensible or mute
- Leg Strength
 - Falls rapidly
- Arm Strength
 - Drifts down
 - Falls rapidly
- Grip Strength
 - No grip





Alberta Health Services

Affix patient label within this box

EMS Stroke Screen
 EMS must obtain critical patient information and complete this form on scene

Patient last seen neurologically normal Date (yyyy-Mon-dd)		Patient name	Event number
Time (hh:mm)		Patient last seen by (witness name)	Witness phone
History provided by <input type="checkbox"/> Patient <input type="checkbox"/> Family member <input type="checkbox"/> Other (specify) _____		History provider name	History provider phone

Complete **Physical Examination Findings** and **LAMS scoring**, then continue with **screening process**

Physical Examination Findings	LAMS	Screening Process
Level of Consciousness <input type="checkbox"/> Alert <input type="checkbox"/> Responds to Verbal <input type="checkbox"/> Responds to Pain only <input type="checkbox"/> Unresponsive	Speech <input type="checkbox"/> Normal <input type="checkbox"/> Slurred <input type="checkbox"/> Incomprehensible or mute	Is blood glucose level greater than 3.0 mmol/L? <input type="checkbox"/> No → Treat as per Adult Stroke MCP, then continue screening process <input type="checkbox"/> Yes → Continue screening process
Leg Strength <input type="checkbox"/> Normal <input type="checkbox"/> Right-Drifts down <input type="checkbox"/> Left-Drifts down <input type="checkbox"/> Right-Falls rapidly <input type="checkbox"/> Left-Falls rapidly		Is one or more red Physical Examination Findings checked? <input type="checkbox"/> No → Transport to closest medical facility <input type="checkbox"/> Yes → Continue with screening process
Facial Smile Smile, show teeth, raise eyebrows and squeeze eyes shut <input type="checkbox"/> Normal (0) <input type="checkbox"/> Right-Droop (1) <input type="checkbox"/> Left-Droop (1)		Patient last seen normal less than 6 hours ago or awoke with stroke symptoms ? <input type="checkbox"/> No → STOP screening process; Treat and transport as per local stroke strategy guidelines. <input type="checkbox"/> Yes → EMS Stroke Screen is positive; Continue with screening process
Arm Strength Elevate with palm down and hold for 10 second count (45 degrees if laying down, 90 degrees if sitting) <input type="checkbox"/> Normal (0) <input type="checkbox"/> Right-Drifts down (1) <input type="checkbox"/> Left-Drifts down (1) <input type="checkbox"/> Right-Falls rapidly (2) <input type="checkbox"/> Left-Falls rapidly (2)		Is the LAMS Score 4 or greater ? <input type="checkbox"/> No → STOP Provide early pre-notification and rapid transport to the most appropriate Primary or Comprehensive Stroke Centre. <input type="checkbox"/> Yes → STOP Call OLMC number and state: "I have a STAT Stroke patient with a LAMS Score of 4 or 5"
Grip Strength Have patient try to grasp examiners fingers <input type="checkbox"/> Normal (0) <input type="checkbox"/> Right-Weak grip (1) <input type="checkbox"/> Left-Weak grip (1) <input type="checkbox"/> Right-No grip (2) <input type="checkbox"/> Left-No grip (2)		Los Angeles Motor Scale (LAMS) Scoring 1. Score the affected side using the values provided 2. Score Facial Smile, Arm Strength and Grip Strength 3. Calculate Score (0-5) A score of 4 or greater is predictive of large artery occlusion
Total LAMS Score		

Practitioner Name (print)	Practitioner Signature	Date (yyyy-Mon-dd)
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09336 (Rev2017-02) White - Chart Canary - EMS EMS Stroke Screen

Acute Stroke = FAST DIDO



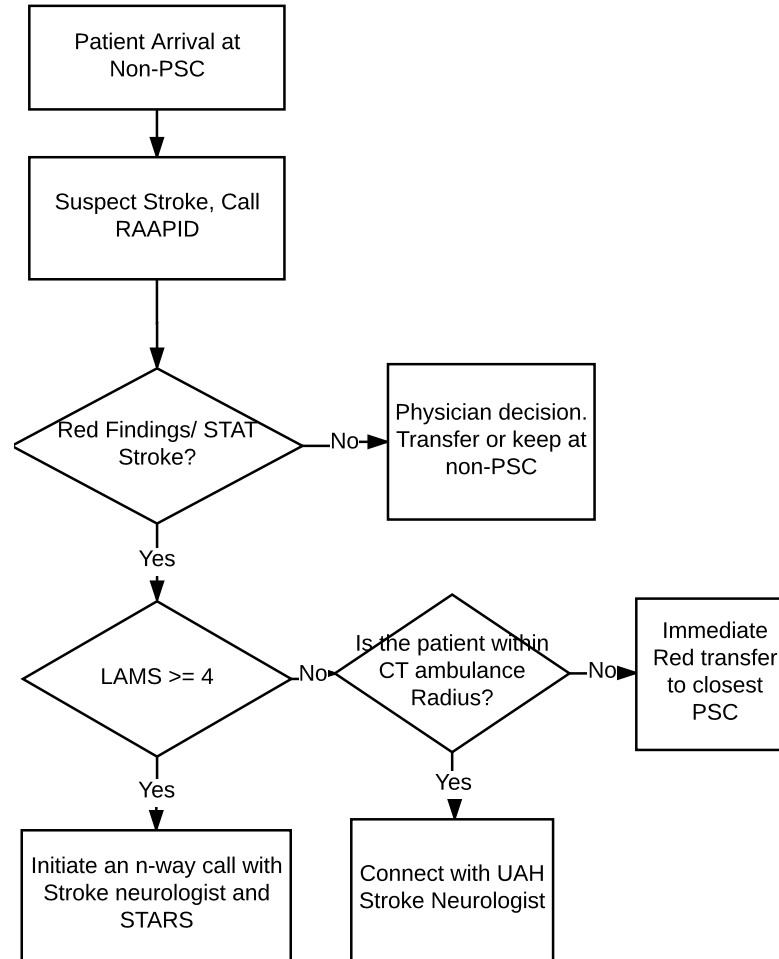
- The brain is dying every minute
- We must act fast to ensure that patient has access to treatment (alteplase and/or EVT)
- **Target Door-In-Door-Out (DIDO) is a median of 20 minutes**

Stroke is an Urgent Condition

- Stroke is just as urgent as
 - MI
 - Trauma
- We need to activate and drive the process to enable treatment



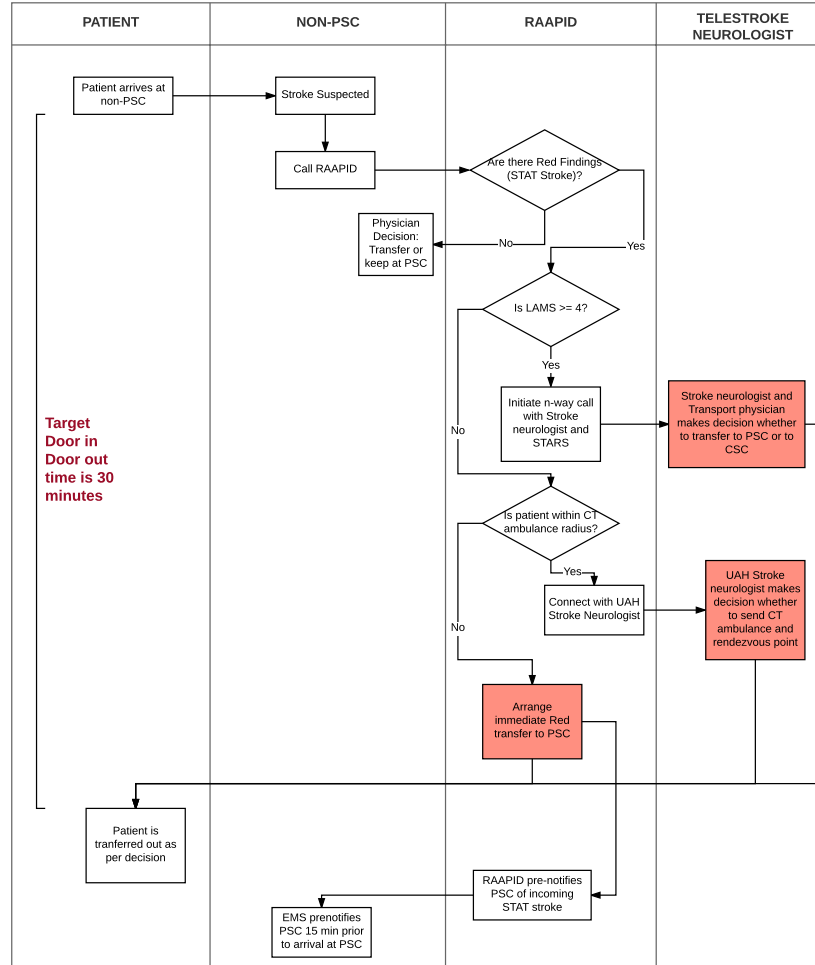
Arrival at non-PSC: Overview



Arrival at non-PSC: RAAPID is key

ARRIVAL AT NON-STROKE CENTER

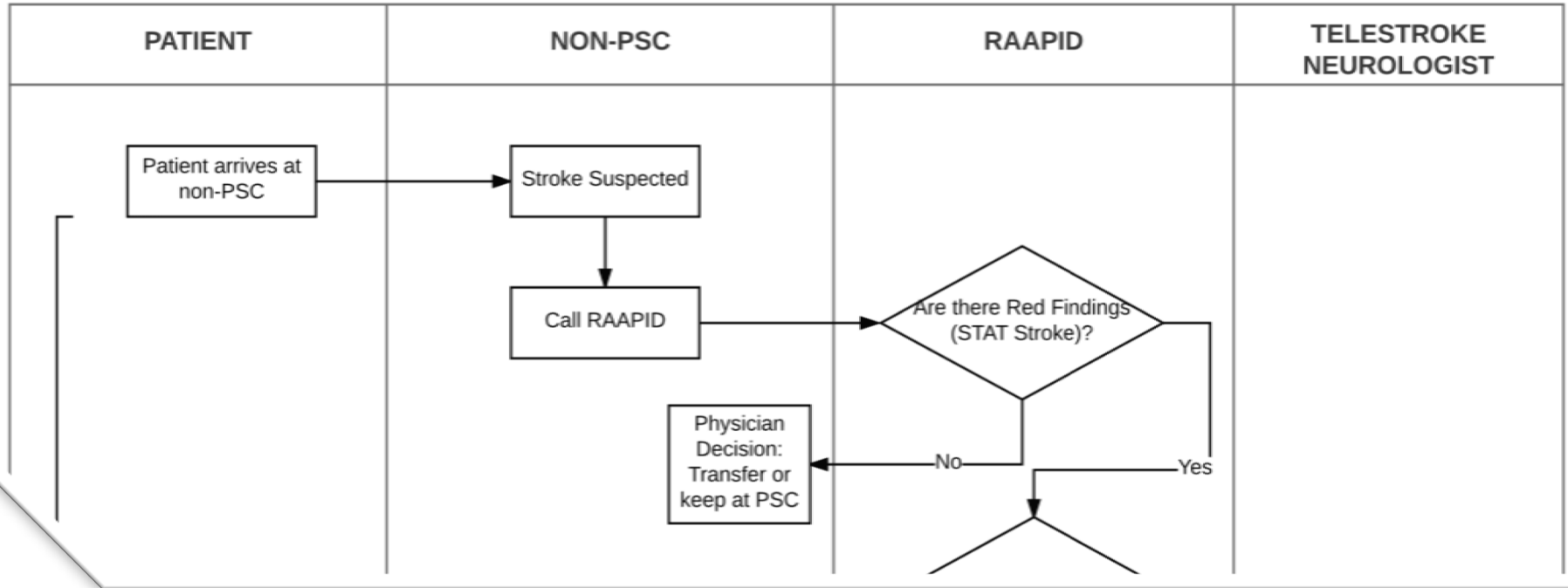
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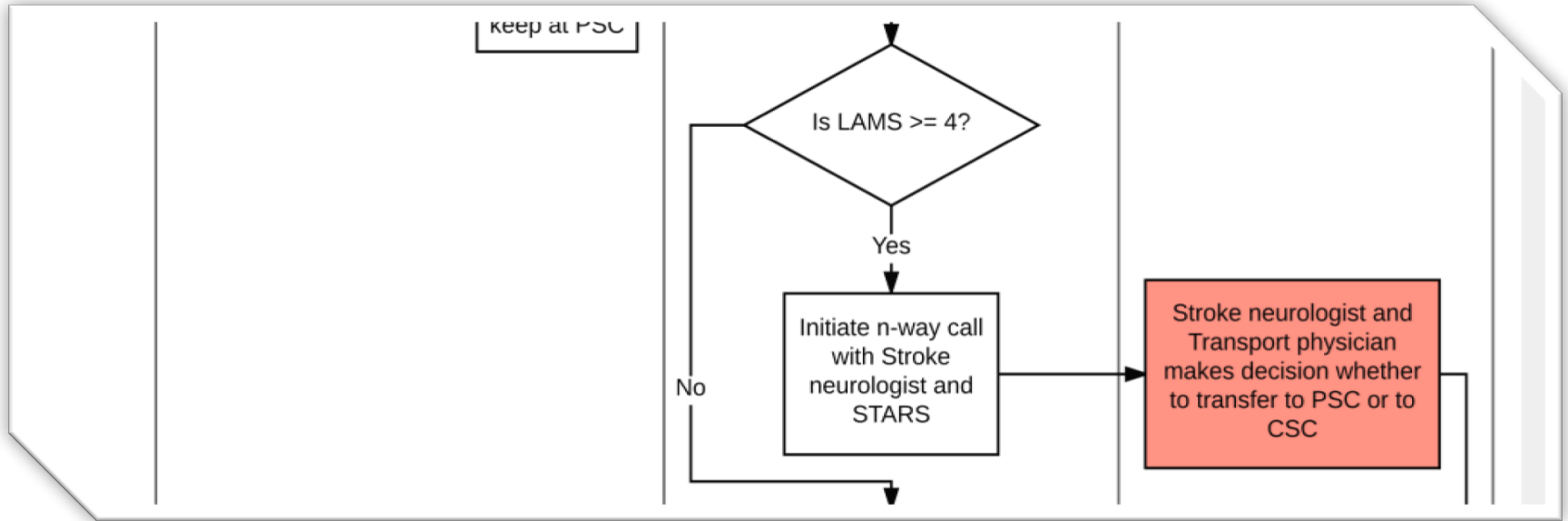
Arrival at non-PSC: RAAPID is key

ARRIVAL AT NON-STROKE CENTER

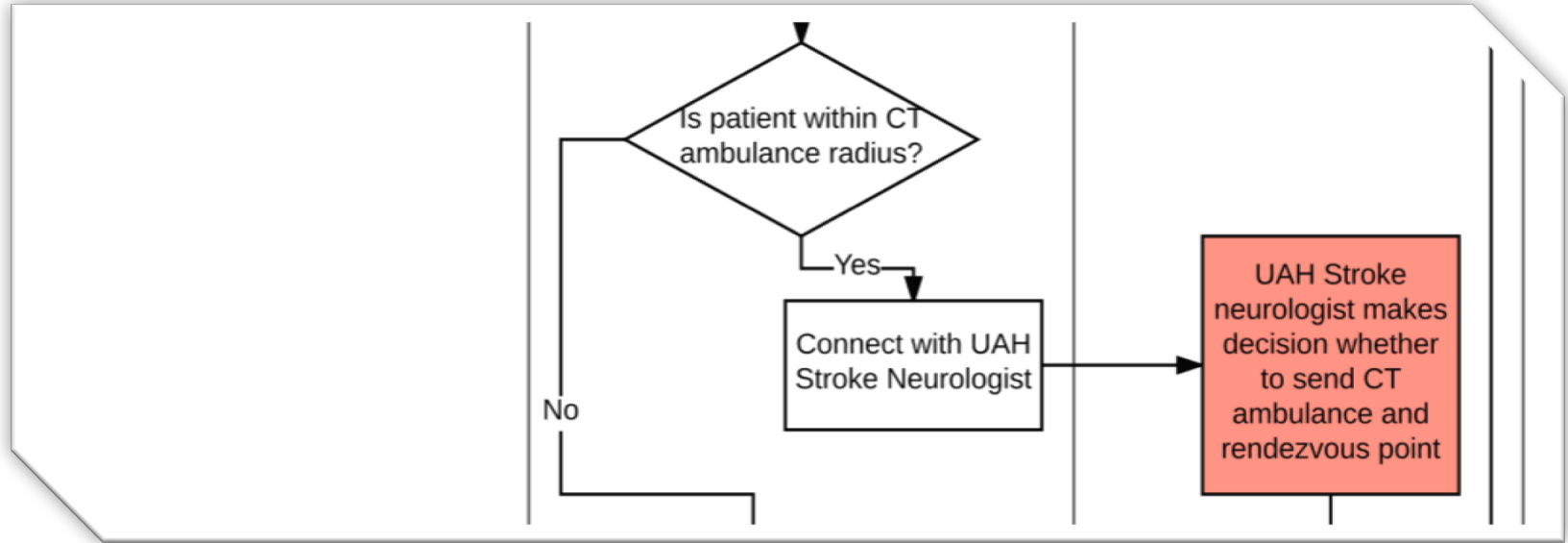
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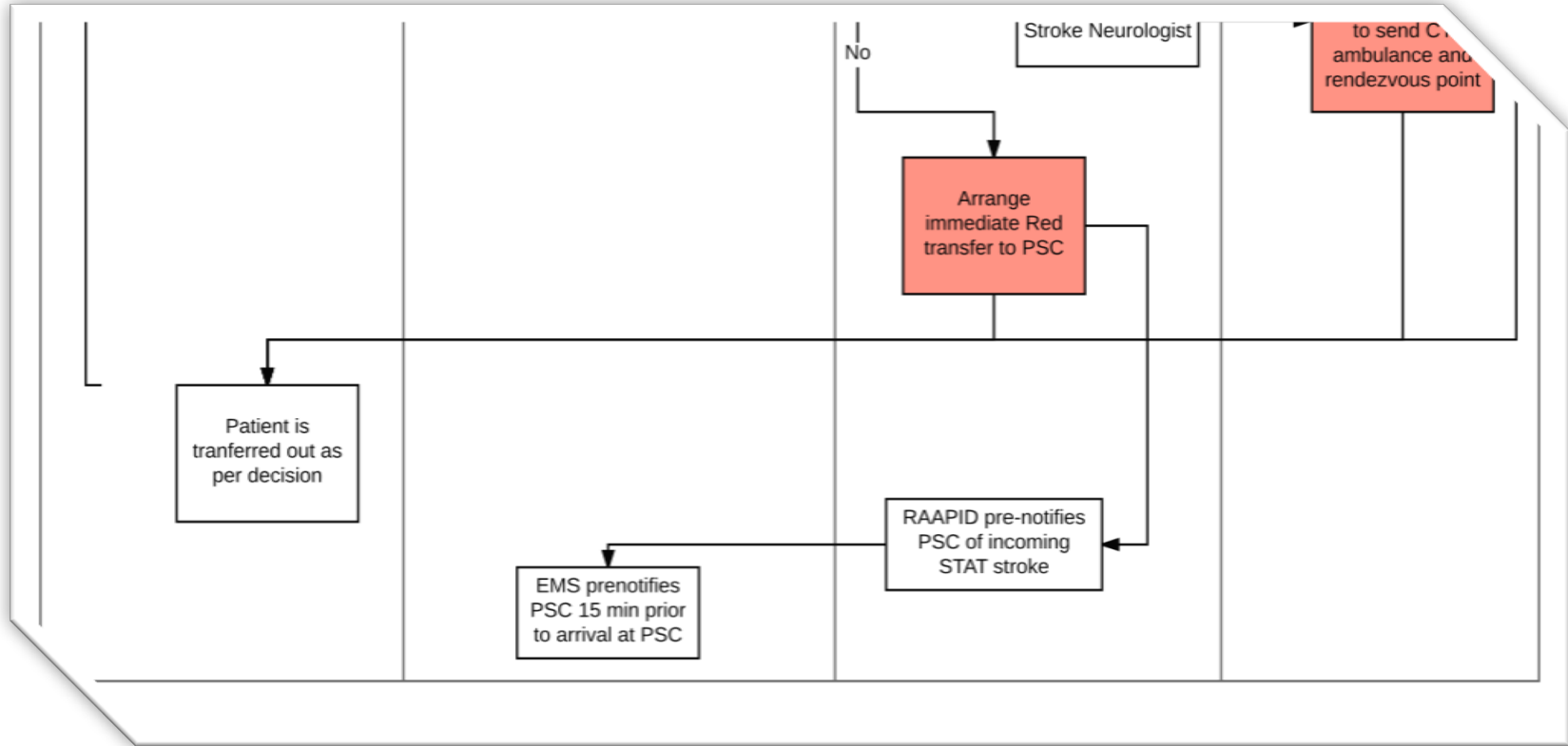
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Role of the non-PSC

- Need to be able to rapidly recognize an acute stroke patient
- F(ace) A(rm) S(peech) T(ime)
 - Or learn the stroke screen
- Drive the process to ensure that the patient is transferred rapidly

FACE is it drooping?
A RMS can you raise both?
SPEECH is it slurred or jumbled?
TIME to call 9-1-1 right away.

ACT **F****A****S****T** BECAUSE THE QUICKER YOU ACT,
THE MORE OF THE PERSON YOU SAVE.

Group Discussion

- What are your concerns?
- Does this process need to be updated?
- Can you make this happen at your site?

