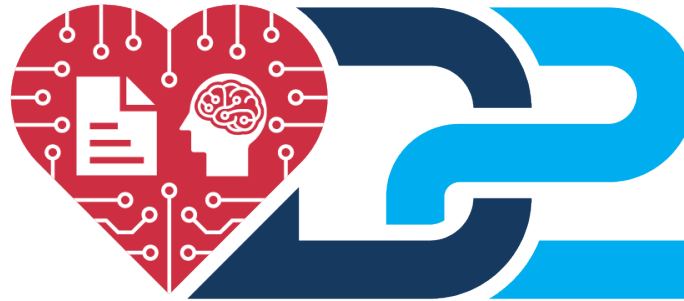


DARPA Documentation and Decision Support Sprint Industry Day



September 15 2026





Purpose of this Meeting

- Discuss D2 objectives and structure
- Provide information on qualifying for the Competition
- Provide opportunity for teaming prior to submission deadline

Communications

- Open communications between competitors and the D2 Team are encouraged
- Information given to one competitor will be made available to all competitors

Questions

D2Sprint@darpa.mil



Agenda

Start	End	Duration	September 22, 2026
			Industry Day
1:45	2:00	15	Webinar Log-In Available
2:00	2:05	5	Welcome and Meeting Logistics Jeremy Pamplin, Program Manager, DARPA/BTO
2:05	2:20	15	D2 Sprint Overview Jeremy Pamplin, Program Manager, DARPA/BTO Rebecca McFarland, SETA, DARPA/BTO
2:20	2:30	10	Qualification Process Rebecca McFarland, SETA, DARPA/BTO
2:30	2:55	25	Q&A Proposers submit questions electronically
2:55	3:00	5	Closing Remarks Jeremy Pamplin, Program Manager, DARPA/BTO
END			

Combat Casualty Care



was

is



Casualty care is task saturated



Gurney, Jennifer M., et al.
"The "Survival Chain". JFQ
112, 1st Quarter 2024

Special Amphibious Reconnaissance Corpsmen assigned to November Company, 3rd Raider Battalion, provide tactical combat casualty care training to Soldiers of 1st Battalion, 102nd Cavalry Regiment, during routine deployment to Somalia, August 24, 2019 (U.S. Navy/Patrick W. Mullen III)

Distribution Statement 'A' (Approved for Public Release, Distribution Unlimited)



Documentation and Decision Support (D2) Challenge

Problem: 75 % of pre-hospital combat casualty care is un-documented.
The only care provided is by trained warfighters.

TACTICAL COMBAT CASUALTY CARE (TCCC) CARD

NAME (Last, First): Smith, John LAST 4: 1234
DATE (DD-MM-YY): 25-12-14 TIME: 0350
UNIT: 3/325 ALLERGIES: NA

Mechanism of Injury: (X all that apply)
☐ Artillery ☐ Burn ☐ Fall ☐ Grenade ☒ GSW ☐ IED
☐ Landmine ☐ MVC ☐ RPG ☐ Other: _____

Injury: (Mark injuries with an X)
TQ: R Arm TYPE: _____ TIME: _____
TQ: L Arm TYPE: _____ TIME: _____
TQ: R Leg TYPE: _____ TIME: _____
TQ: L Leg TYPE: SOFTW TIME: 0330

Signs & Symptoms: (Fill in the blank)

Time	0340	0355	0410	0425
Pulse (Rate & Location)	120	90	105	110
Blood Pressure	R	130/100	110/90	100/80
Respiratory Rate	24	18	16	20
Pulse Ox % O2 Sat	86	96	98	97
AVPU	P	V	A	V
Pain Scale (0-10)				



Vision: AI tools will automatically assess casualties and then recommend, guide, monitor quality of, and document care in real-time.



Timeline

**Team
Qualification**
9/10/26 – 12/1/2026

**Algorithm
Submission**
3/1/2026



Industry Day
9/22/2026

Awards
3/26/2027

Lane 1: Documentation



Competitor Software run on IV&V Dataset

TACTICAL COMBAT CASUALTY CARE (TCCC) CARD				
NAME (Last, First):	Smith, John		LAST #:	1234
DATE (DD-MM-YY):	25-12-19		TIME:	0350
UNIT:	3/325		ALLERGIES:	NR
Mechanism of Injury: (X all that apply)				
☐ Artillery ☐ Burn ☐ Fall ☐ Grenade ☒ GSW ☐ IED ☐ Landmine ☐ MVC ☐ RPG ☐ Other:				
Injury: (Mark spaces with an X)				
TQ: R Arm	TQ: L Arm	TQ: R Leg	TQ: L Leg	
TYPE: _____	TYPE: _____	TYPE: _____	TYPE: <i>SOFTW</i>	
TIME: _____	TIME: _____	TIME: _____	TIME: <i>0330</i>	
Signs & Symptoms: (If R in the blank)				
Time	0340	0355	0410	0425
Pulse (Rate & Location)	120	90	105	110
Blood Pressure	R	130/100	110/90	100/80
Respiratory Rate	24	18	16	20
Pulse Ox % O2 Sat	86	96	98	97
AVPU	P	V	A	V
Pain Scale (0-10)				

Task

Algorithm autonomously completes a DD1380 and document start and end time of select LSIs

Metrics:

Accuracy and Completeness

Ground truth annotated by IV&V Medic SMEs

Lane 2: Decision Support



Competitor Software run on IV&V Dataset



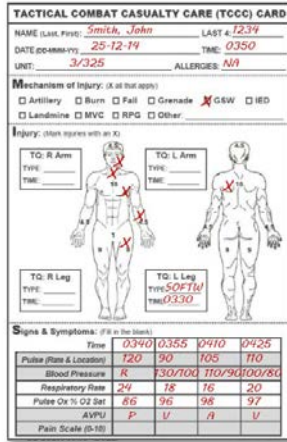
Task

Algorithm provides detailed guidance on needed treatments and steps for a layperson

Metrics:

Accuracy and Usability

Ground truth annotated by IV&V Medic SMEs



TACTICAL COMBAT CASUALTY CARE (TCCC) CARD

NAME (Last, First): Smith, John LAST # 1234
 DATE (DD-MM-YY): 25-12-19 TIME: 0350
 UNIT: 3/325 ALLERGIES: NA

Mechanism of Injury: (X at all that apply)
☐ Artillery ☐ Burn ☐ Fall ☐ Grenade ☒ GSW ☐ IED
☐ Landmine ☐ MVC ☐ RPG ☐ Other

Injury: (Mark squares with an X)
 TO: R Arm ☒ TO: L Arm ☒
 TO: R Leg ☒ TO: L Leg ☒

Signs & Symptoms: (Fill in the blank)

	Time	0340	0355	0410	0425
Pulse (Rate & Location)		120	90	105	110
Blood Pressure		R	130/100	110/90	100/80
Respiratory Rate		24	18	16	20
Pulse Ox to O2 Sat		86	96	98	97
AVPU		P	V	A	V
Pain Scale (0-10)					



Lane 1: Documentation

Candidate Scoring (subject to change):

Task	Targeted Features
Task 1: DD1380 completion	- Casualty ID, Gender, Mechanism of Injury, Injury Location, AVPU - Treatments applied
Task 2: DD 1380 Time Documentation	Identification of start and end times of individual treatment instances

The score is an integer between 0 and 100, where 100 indicates 100% accurate and complete assessments.

Lane 2: Decision Support

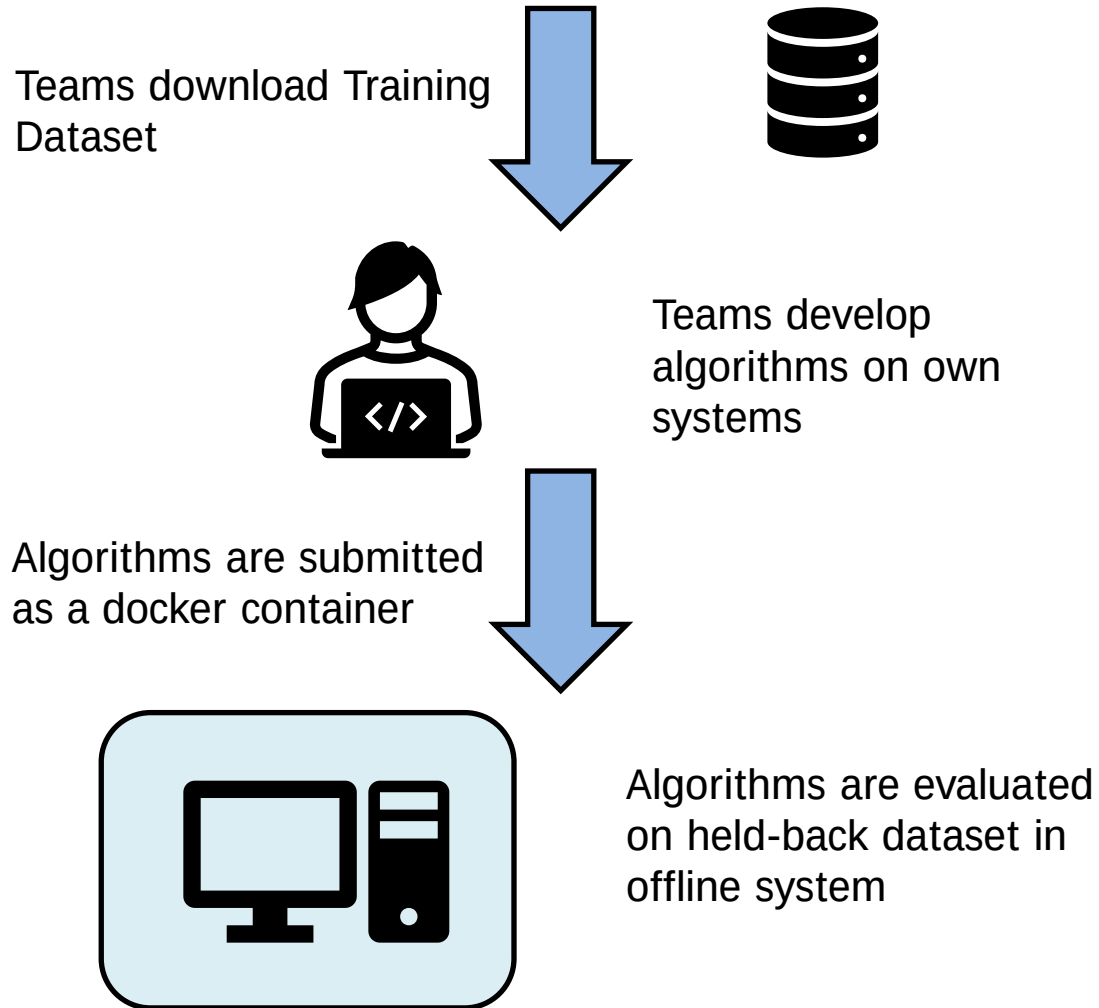
Candidate scoring – 2 tasks:

Task	Evaluation Method	Target Metrics	Outcome
Task 3: Algorithmic Performance	Automated comparison against Perfect Guidance (CPGs & SME gold standard).	Temporal accuracy, clinical correctness, state tracking.	Top 5 teams advance to Round 2.
Task 4: Human-in-the-Loop Usability	Panel of experts evaluating the interface and decision support via Likert scales.	Usability for novice users Does the system provide clear, foolproof and trustworthy guidance?	Selection of the final winning system(s).



Submission Development

Submission Pipeline



Evaluation Environment

JHU/APL will run each submitted container on one of the following NVIDIA GPUs:

- NVIDIA A40
- NVIDIA L40
- NVIDIA H100

The evaluation environment will use:

Component	Evaluation Configuration
NVIDIA driver	Version 580 or later
CUDA compatibility	CUDA 13 or earlier
Maximum GPUs	1
CPU architecture	x86-64
Operating system	Linux
Container runtime	Docker with NVIDIA Container Toolkit



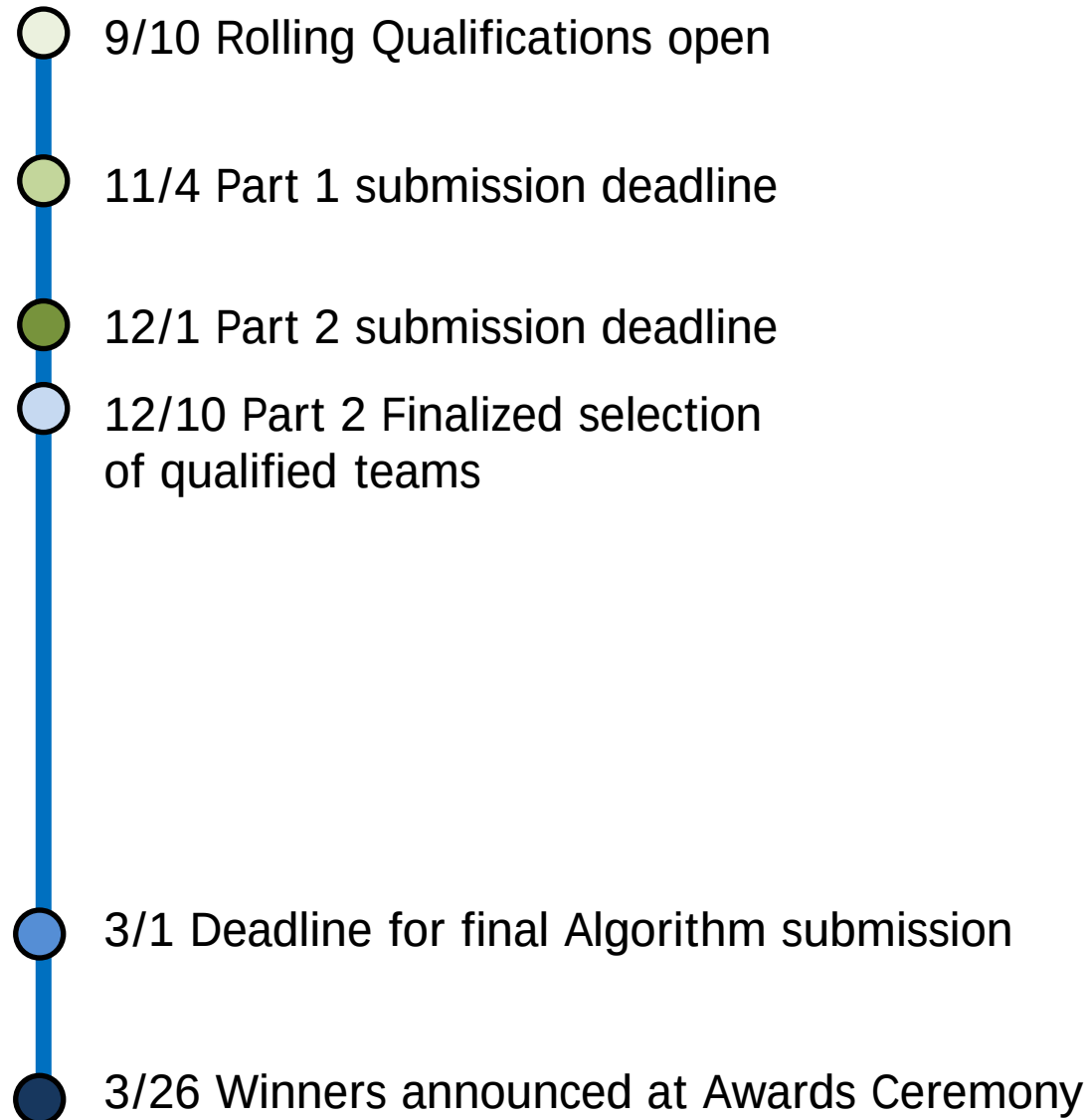
Prize Distribution

Total: \$1M

Place	Documentation	Decision Support
1 st	300k	300k
2 nd	150k	150k
3 rd	50k	50k



Steps to Participate



- Qualify
 - Submit Part 1 qualification on portal, submissions will be reviewed as they are received and early submitters will have more time to develop part 2
 - Teams who qualify in Part 1 will receive an email with details and links to a training dataset
 - Teams may develop solutions for part two on their own systems.
 - Teams will submit Part 2 through GitLab
- Compete
 - Fully qualified teams will receive an email with directions to create an account in RAPIDS where they will find the datasets for development
 - Teams can download the datasets and develop on their own systems
 - Submit final algorithms as docker containers through GitLab
 - Winners announced at hybrid Awards event, March 26th



How to Participate: Qualifications - details

Two Part Qualification: Narrative Description and Qualification Task

- Teams will have access to part 2 dataset as soon as they pass part 1

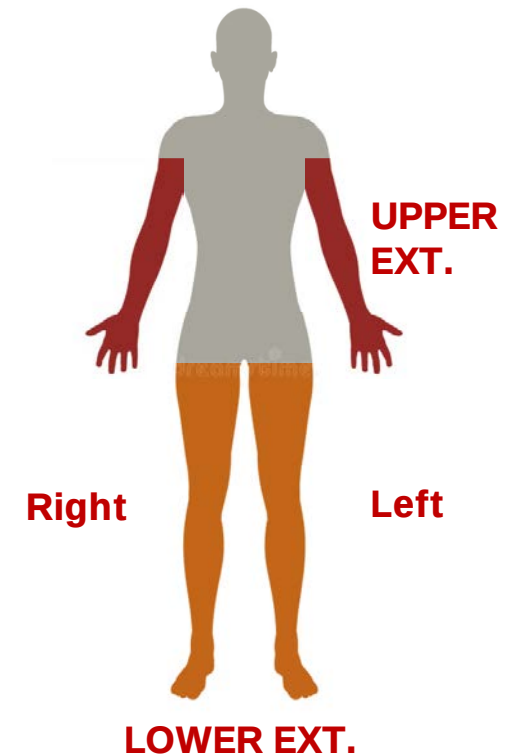
Part 1: *Narrative Description*

- Team Information
- Technical Approach
 - Experience
 - Workflow
 - Algorithm development plans
 - Algorithm training
 - Transition plans

Part 2: *Qualification Task*

- Teams will be evaluated on how accurately their models classify the injury status at each of four body sites: the left and right lower and upper extremities.
- The following injury classes will be used in this task:
 - No injury*: No visible injury; the limb is intact and healthy.
 - Wound*: Visible trauma present (e.g., severe lacerations, burns, shrapnel wounds, compound fractures) but the limb is still anatomically attached.
 - Amputation*: The limb is completely severed.
 - Not Testable*: Limbs are not visible in the image.
- Dataset for task will consist of series of photos of manikins from the DTC dataset.
- Solutions will be submitted in a Docker Container. Further details will be included in the Qualification ICD

Body regions

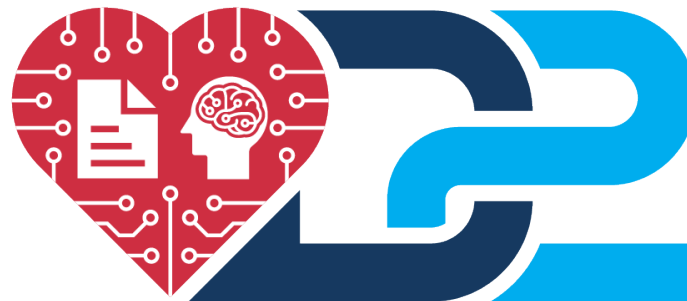




Closing Remarks

- **Resources:**

- Competition Website: <https://www.darpa.mil/research/challenges/D2>
- Competition Email: D2Sprint@darpa.mil
- Qualification Portal: <https://centralfloridatechgrove.org/darpa-d2-sprint/>
- Competition Forum (Accessible to qualified teams): Coming Soon





www.darpa.mil