



PROPOSERS' DAY | 10 DEC 2025

# EVIDENT

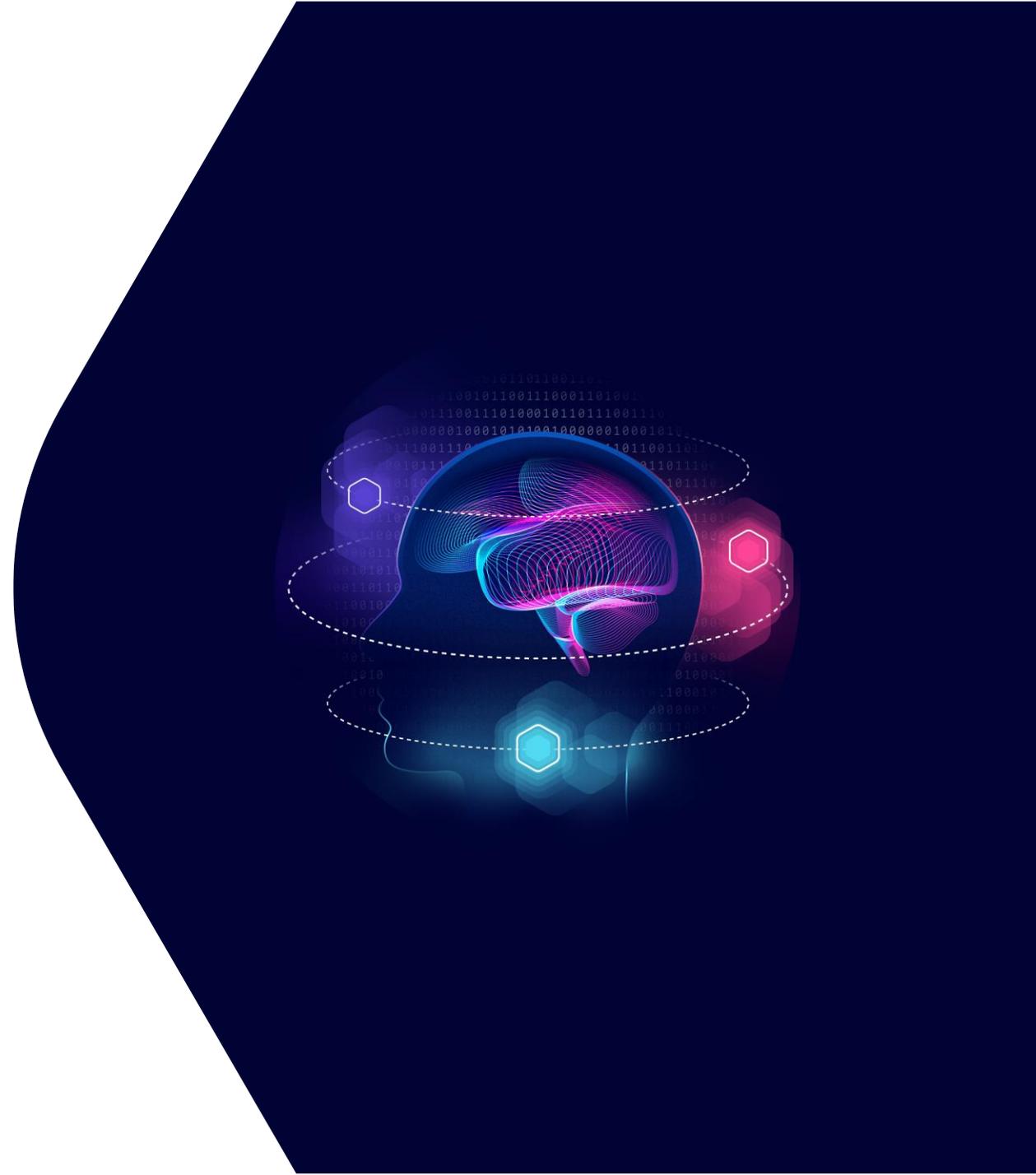
## Evidence-Based Validation & Innovation for Rapid Therapeutics in Behavioral Health

**Nate Mohatt, Ph.D.**

Program Manager, Proactive Health Office (PHO)

Advanced Research Projects Agency for Health (ARPA-H)

*Approved for Public Release: Distribution Unlimited*



# Agenda

All times below are Eastern Time.



Time	Topic	Presenter
8:30am – 9:30am	Registration & Check-in	
9:30am – 9:45am	Welcome & Introduction	<b>Alicia Jackson</b> , Director, ARPA-H
9:45am – 10:30am	EVIDENT Program Description	<b>Glen Coppersmith</b> , Acting Director, Proactive Health Office <b>Nate Mohatt</b> , Program Manager, Proactive Health Office
10:30am – 10:45am	Break	
10:45am – 11:15am	Customer Experience Hub Introduction	<b>Mike Stebbins</b> , Sr. Vice President of Medical & Health Division <b>Sarah Bailey</b> , Program Manager
11:15am – 11:45am	BID OTA Overview	<b>Caitlin Burns</b> , Agreements Officer, ARPA-H
11:45am – 12:00pm	Morning Q&A and Morning Wrap-up	<b>Glen Coppersmith</b> , Acting Director, Proactive Health Office
12:00pm – 1:30pm	Lunch Break	
1:30pm – 4:15pm	One-on-Ones	
1:30pm – 4:15pm	Lightning Talks	
4:15pm – 4:30pm	Networking Break	
4:30pm – 5:00pm	Q&A and Closing Remarks	<b>Glen Coppersmith</b> , Acting Director, Proactive Health Office

# The ARPA-H Model

Alicia Jackson, Ph.D.

Director, ARPA-H

# Who We Are

- Our agency is lean by design and disruptive by mission. We forge unconventional public-private alliances to develop transformative solutions, in areas from cancer to chronic disease to aging.
- We move at the speed of startups to tackle health care's toughest problems — not by expanding bureaucracy, but by unleashing the power of markets and innovation.
- We deploy flexible funding tools — primarily like Other Transactions — to accelerate results, increase accountability, cut costs, and attract the boldest minds from the private sector.

## How it Works

### Our Funding Award Process



- Each program frames a challenge and awards projects to multidisciplinary teams, whose work is then measured and evaluated by our Program Managers, to ensure that only the best solutions advance.
- Programs start with commercialization as a priority and continue throughout the process to get solutions to deployment.
- Our rapid program development and deployment enables transformative advancements extending in a condensed timeline, up to 5 years, not decades.



## Administration Aligned Research Topic Areas:



**America-Made Manufacturing and Rural Access**



**American Leadership in Frontier Health Technologies**



**Proactive Approaches to Healthy Well-Being**

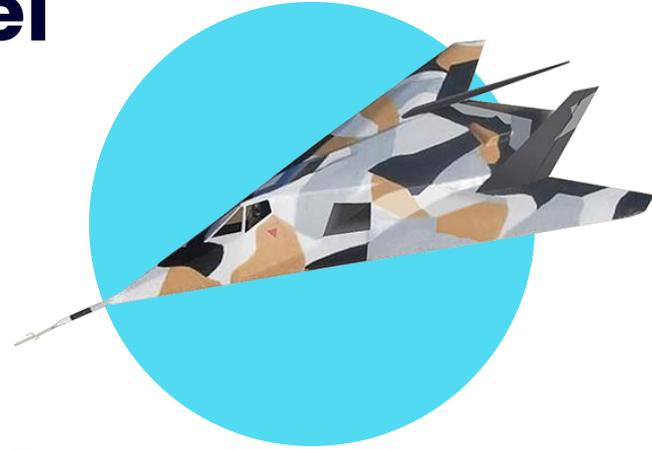
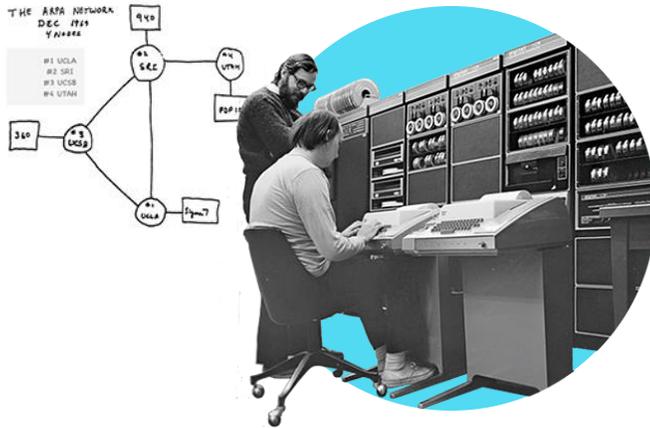
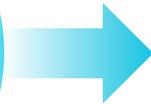
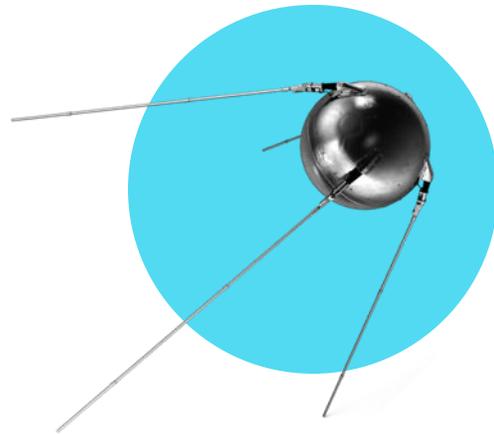


**Health Care Security, Efficiency, and Transparency**



**Addressing Chronic Disease**

# The Promise of the ARPA-H Model





# ARPA-H Key Features and Authorities

ARPA-H has unique structures and legal authorities that allow it to **function like a business — quickly, nimbly, and decisively.**

- ARPA-H is a **funding agency**
- **Independent** component of HHS
- No internal research labs; **disease agnostic**
- Generally **fund outcome-based contracts**, not grants; accelerated award timelines
- Unique **FDA reimbursement authority**



**Lean and nimble management structure** with autonomy in decision-making.

ARPA-H Director **reports directly to HHS Secretary.**



**Term limits** of 3-6 years bring urgency and idea flow.

**Flexibility in hiring** allows ARPA-H to recruit at levels competitive with industry.

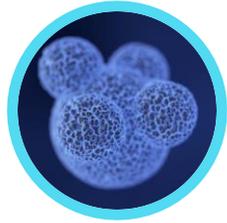


**Bottom-up decision-making.** Program Managers have autonomy to make decisions quickly.

**ARPA-H is a problems focused organization.**

FY 2022	FY 2023	FY 2024	FY 2025
\$1B	\$1.5B	\$1.5B	Request: \$1.5B

# ARPA-H: The ARPA Model at Work for Health



## HOW?

We are a unique funding agency *by design*



## WHO?

Problem-focused Program Managers (PMs) drive innovation



## WHAT?

We are seeking radical change

## Attributes that Support the Mission

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### Radical Change

ARPA-H investments should seek to address seemingly impossible barriers in demonstrating “proof of concept” for solutions to major challenges — not incremental advances.

### Autonomy

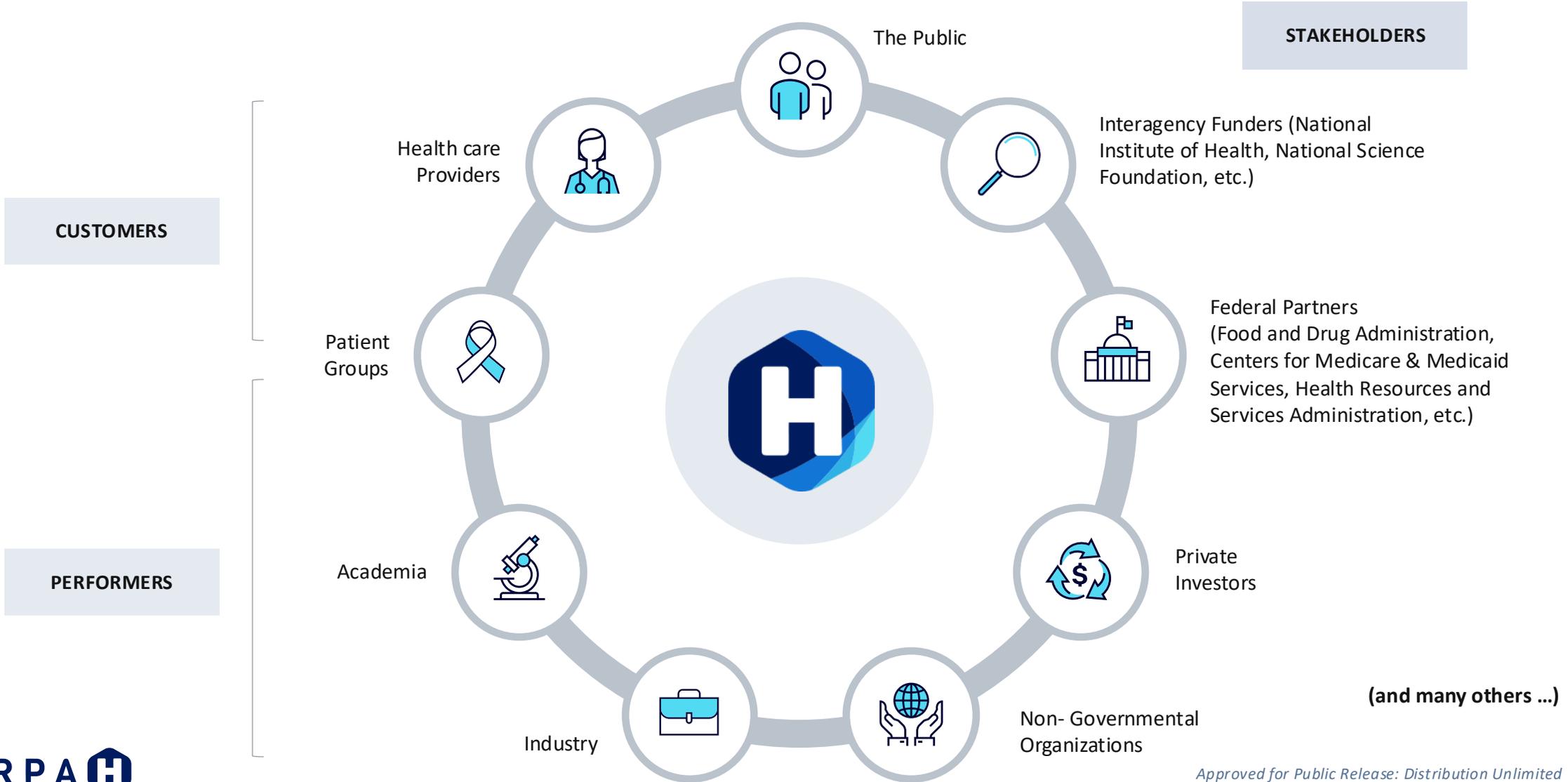
PMs practice “full contact” management to maintain vision and deliver results, with metrics/milestones for programs, empowered to stop underperforming projects.

### Term limits

Terms limited to 3 years (renewable once for 6 total years) for PMs, Office Directors, and Deputy Directors, allowing inflow of new ideas.

*Success for ARPA-H is defined by real-world impact*

# ARPA-H Accelerates the Entire Health Ecosystem



# ARPA-(H)eilmeier Questions

Towards a well-defined problem



- 1 What are you trying to do? What health problem are you trying to solve?
- 2 How does this get done at present? Who does it? What are the limitations of present approaches?
- 3 What is new about our approach? Why do we think we can be successful at this time?
- 4 Who cares? If we succeed, what difference will it make? What health outcomes are we accelerating?
- 5 What are the risks that may prevent you from reaching your objectives? Any risks the program itself may present?
- 6 How long will the program take?
- 7 How much will the program cost?
- 8 What are our mid-term and final exams to check for success?
- 9 How will cost, accessibility, and user experience be considered to reach everyone?
- 10 How might this program be misperceived or misused (and how can we build trust and prevent that from happening)?

# ARPA-H Model: Program Lifecycle



## LAUNCH

### Program Manager

Program Manager identifies a difficult health-related challenge that is ripe for solving.



### Challenge

The challenge should NOT be easily solvable through traditional activities.



### Program Launch

A Program Manager seeks — and oversees — several groups of performers aiming to solve the same problem in unique ways.



### Performers

Performers compete to carry out their potential innovative solutions to the challenge.

### Support

ARPA-H will provide contracts — not grants — for projects with well-defined endpoints. Additional support will be provided by Program Managers, partners, and ARPA-H offices to ensure the best chance of success throughout the process.

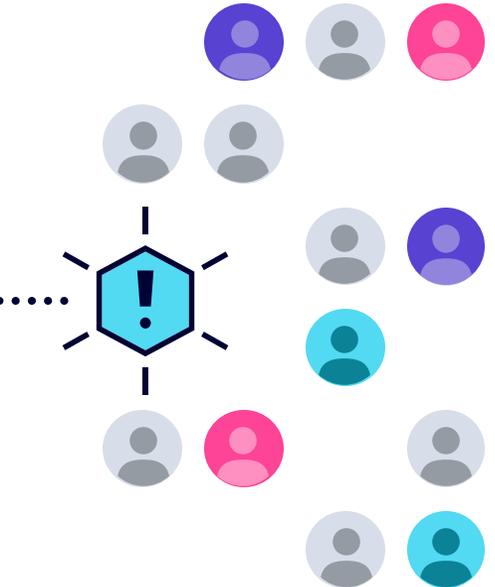
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✓	✓	✓	✓
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## PERFORM

### Performance

Contract performance will be regularly evaluated to allow ARPA-H to concentrate resources on the most effective approaches to reaching the desired goals.

## TRANSITION

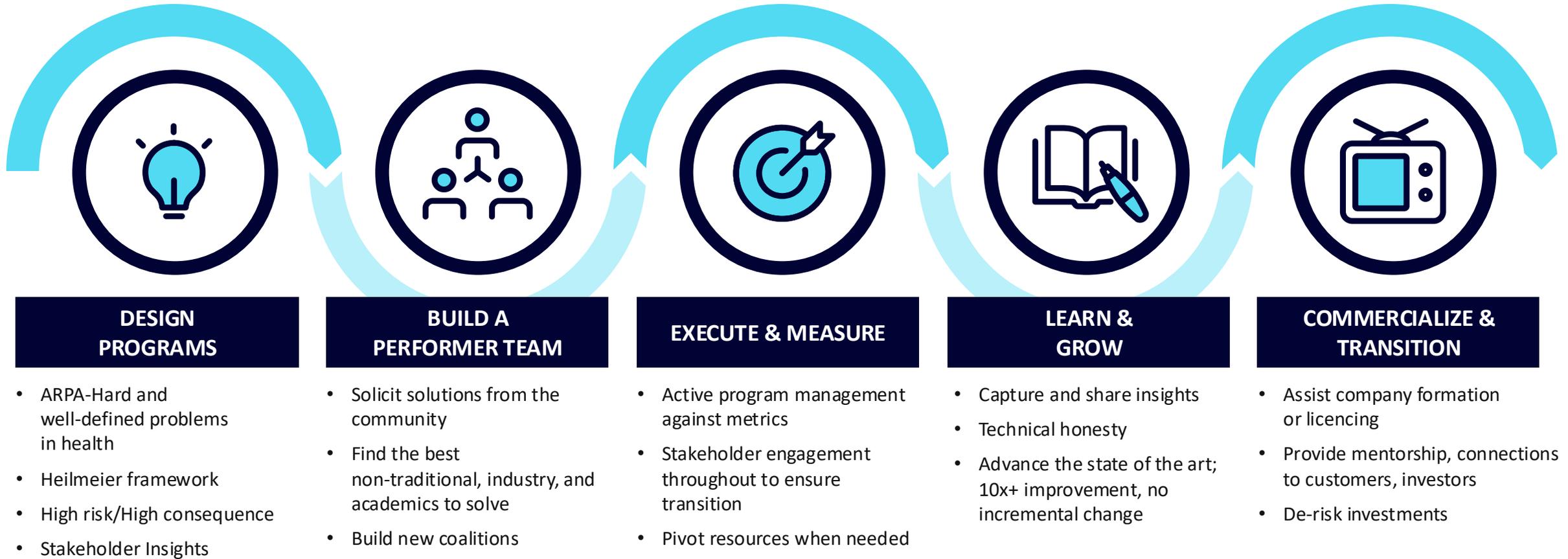


### Graduation

Graduation occurs when the challenge is solved. The project then transfers to partners, who have been involved from the start and can scale the solution for large, diverse communities everywhere.

# Program Lifecycle

From ideas to solutions in the real world



# The Program and Program Manager (PM) Flywheel



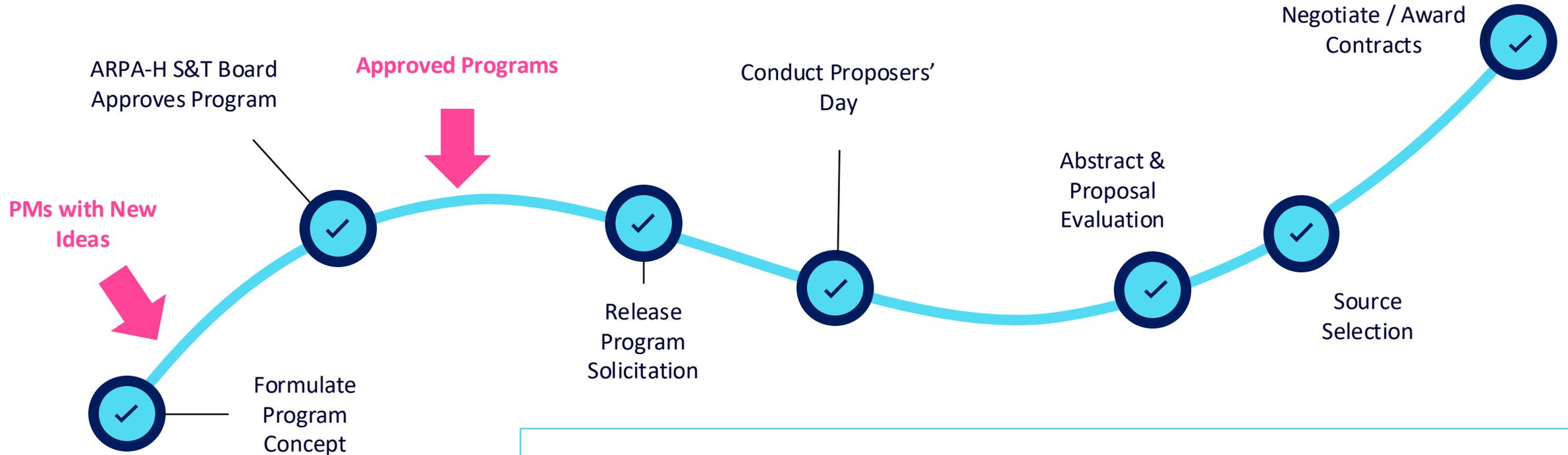
The ARPA-H portfolio is:

- (1) a reflection of the PMs
- (2) dynamic, and
- (3) will — and should! — change frequently



# Program Development Lifecycle

~9 months from concept to contract award



## Key Elements to Launching ARPA-H Program Toward Success

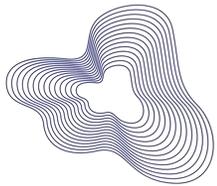
- **Technical Discipline**
- **Due Diligence**
- **Financial Risk Management**

The time to formulate ARPA-H programs is 2-4 months (engage stakeholders and potential performers, develop metrics), followed by ~6 months from program approval to launch, evaluate proposals and negotiate contracts.

# Initial Mission Focus Areas



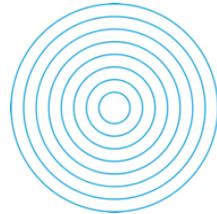
Further ARPA-H investment in these areas will generate asymmetrical benefits to the health ecosystem.



## Health Science Futures

### Expanding what's technically possible

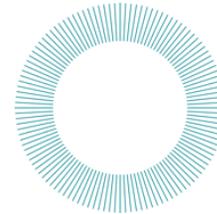
Accelerate advances across research areas and remove limitations that stymie progress towards solutions. These innovative tools, technologies, and platforms apply to a broad range of diseases.



## Scalable Solutions

### Reaching everyone quickly

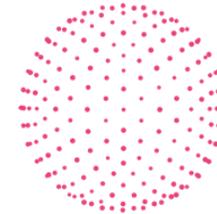
Address health challenges that include geography, distribution, manufacturing, supply chain, data and information, and economies of scale to create programs that result in impactful, timely solutions.



## Proactive Health

### Keeping people from getting sick

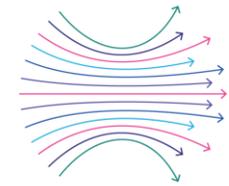
Prevent disease and extend the health span of all Americans through new capabilities to promote healthy physiology and detect or characterize disease risk. Promote treatments and behaviors to anticipate threats to health, whether those are viral, bacterial, chemical, physical, or neurological.



## Resilient Systems

### Building integrated health care systems

Develop capabilities, business models, and integrations to endure crises such as pandemics, social disruption, and economic instability. Resilient systems need to sustain themselves between crises – from the molecular to the societal – to better achieve outcomes that advance American health and wellbeing.

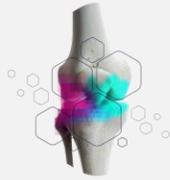


## Office of Commercialization

### Ensuring programs "survive in the wild"

Translate scientific and technical breakthroughs into real world products and services, ensuring they result in better health outcomes for all Americans. OC serves the four technical mission offices to ensure innovations are enthusiastically adopted by the private sector, providers, and patients.

# ARPA-H Investment Portfolio Snapshot



## NITRO

What if we could make our joints heal themselves?



## REACT

What if your body could make its own medicine?



## DIGIHEALS

What if we could strengthen the nation's digital health infrastructure to protect against cyberattacks?



## APECx

What if we could eliminate viruses as current and future health burdens?



## PRINT

What if we could bioprint any organ on demand?



## PROSPR

What if we had therapies to extend healthspan and prevent the onset of age-related diseases?



## PARADIGM

What if we could deliver advanced hospital-level care to every rural county in America?



## SPIKEs

What if programmable bacteria could be directed to kill cancer inside the body?



## DARTS

What if we could identify antibiotic-resistant bacteria in minutes?



## MATRIX

What if we could immediately determine if FDA-approved drugs could treat rare and/or untreatable diseases?



## ADAPT

What if we could adapt cancer treatments as tumors mutate and change?



## RAPID

Rare Disease AI/ML for Precision Integrated Diagnostics

# ARPA-H Behavioral and Mental Health Topics

Glen Coppersmith, Ph.D.  
Acting Director,  
Proactive Health Office (PHO)



# ARPA-H Mental and Behavioral Health Topics

**Objective:** Addressing America’s growing mental and behavioral health epidemic will require multiple radical changes. We must reimagine the system around answering the question **what works for this specific person, right now?**

  
**1 in 2**

Americans will have a behavioral health disorder during their lifetime<sup>1</sup>



Left unaddressed, these form a vicious cycle and **exacerbate other chronic diseases**<sup>2-5</sup>

**Topic Focus Areas:**



**1: Widely adopted objective measurement.** Measurements that capture what matters, are less time consuming, and are incentivized



**2: Effective prevention and treatment for everyone.** More durable evidence-based interventions, personalized to what each patient needs, and adjusted if they are not working



**3: Reimagined system of care, with expanded capacity and improved training.** Renewed focus on familial & community interventions, not just 1:1 treatments

**Why ARPA-H:**

- **Complexity:** Multiple things need to get fixed at once; fixing one-off problems is insufficient
- **Catalyze and focus industry:** Currently working on the margins as these foundations are "too big to move"

**Potential specific efforts of interest:**

- Biomarker identification
- Early, fast, effective prevention
- Interventionist training and treatment delivery
- Scaled-up prevention approaches



[1] Mental Health America, [2025](#); [2] Correll et al., [2017](#); [3] Graham et al., [2010](#); [4] Mannan et al., [2016](#); [5] Garcia-Garcia et al., [2023](#)



# Financial toll of behavioral illness is larger than heart disease or cancer



**Costly:** US spends nearly **\$200 billion** on behavioral health treatments annually

**Compounding:** Behavioral illness exacerbates other chronic conditions, multiplying costs by **3-6x**

<b>Total cost of behavioral health disorders</b>	<b>1 billion</b> People are living with behavioral health condition, globally <sup>1</sup>	<b>\$5 trillion</b> Global cost of mental health each year <sup>2</sup>	<b>3-6x</b> Greater healthcare cost vs. those without a behavioral health condition <sup>3,4</sup>	<b>\$282 billion</b> Economic cost per year (2024 USD) <sup>5</sup>
<b>Estimated annual US healthcare spending (2019)<sup>6</sup></b>	<b>\$166 billion</b> Mental disorders	<b>\$30 billion</b> Substance use	<b>Chronic pain<sup>7</sup></b> <b>80%</b> Of chronic pain population cannot work	<b>\$700 billion</b> In lost wages and healthcare utilization
<b>Estimated annual US spend, specific conditions (2019)</b>	<b>\$41 billion</b> Depressive disorders	<b>\$38 billion</b> Anxiety disorders	<b>Major depressive disorder<sup>8</sup></b> <b>38%</b> Increase in cost since 2010	<b>\$326 billion</b> Cost per year
	<b>\$49 billion</b> Dementias	<b>\$52 billion</b> Low back pain		<b>35%</b> Direct costs of care <b>61%</b> Workplace costs <b>4%</b> Suicide-related costs

[1] World Health Organization, [nd.](#); [2] Arias et al., [2022](#); [3] Davenport et al., [2020](#); [4] Sporinova et al., [2019](#); [5] Abramson et al., [2024](#); [6] Dieleman et al., [2025](#); [7] Young et al., [2022](#); [8] Fournier et al., [2021](#)



# Today, mental health measurement is rare and inconsistent

126 different assessments screen and diagnose for 10 different disorders<sup>1</sup>

Disorder	#tools	#items	List of assessments
Depression	19	369	<i>Adult:</i> APA-Dep-A, BDI-II, CES-D, CESDR, EPDS, GDS-LF, GDS-SF, HAMD, IDS, MADRS, PHQ9, QIDS, ZDS, <i>Peds:</i> APA-Dep-C, CDI2, CESDC, MFQ, MFQS, RADS2
Anxiety	13	483	<i>Adult:</i> APA-Anx-A, BAI, GAD7, HAMA, LSAS, SPIN, STAI, ZAS, <i>Peds:</i> APA-Anx-C, MASC, RCMAS, SCARED, SCAS
PTSD	9	376	<i>Adult:</i> APA-PTSD-A, CAPS-5, PC-PTSD-5, PCL-5, PSS-SR5, SPRINT, <i>Peds:</i> APA-PTSD-C, CAPS-5-CV, CPSS-V
Bipolar/Mania	5	90	<i>Adult:</i> ASRMS, HCL32, ISS, MDQ, YMS
OCD	8	330	<i>Adult:</i> DOCS, FOCI, OCI-R, PI-WSUR, VOCl, Y-BOCS, <i>Peds:</i> CY-BOCS, OCI-OV
Addiction	13	319	<i>Adult:</i> ADS, ASI-5, ASSIST-3, AUDIT, CAGE, DAST-10, DAST-20, DUDIT, MAST, OCDS, SMAST, TWEAK, <i>Peds:</i> CRAFFT
ASD	22	1213	<i>Adult:</i> AAA, AQ-A-10, AQ-A, BAPQ, EQ-A, SQ-A, <i>Peds:</i> ADI-R, AQ-Adol-10, AQ-Adol, AQ-C-10, AQ-C, ASSQ, CARS2-HF, CARS2-ST, CAST, EQ-Adol, EQSQ, GARS-3, M-Chat, SCQ, SQ-Adol, SRS2
ADHD	9	418	<i>Adult:</i> ASRS-5, ASRS-Checklist, CAARS, DIVA 2.0, WURS, <i>Peds:</i> APA-Inatt, Connors 3, DBDRS, NICHQ
Schizophrenia	6	136	<i>Adult:</i> BPRS, CGI-SCH, NSA-16, PANSS, SANS, SAPS
Eating disorder	6	230	<i>Adult:</i> BITE, EAT-26, EDDS, EDE-Q, EDI-3, SCOFF
Cross-category	16	6190	<i>Adult:</i> APA-CC-A, BSI, CIDI CAPI, K10+, MINI, PROMIS-Profile-A, PROMIS-QB-A, SCID-5-CV, SCL-90-R, <i>Peds:</i> APA-CC-C, CBC, DISC-IV, KSADS-PL-5, PROMIS-Profile-C, PROMIS-QB-C, SDS



- Clinicians find questionnaires **limited, labor-intensive, error-prone, and subject to bias**<sup>2-3</sup>
- **<20%** of clinicians use measurement-based care in practice<sup>4</sup>



- **29-58%** of items overlap within questionnaires for the same disorder<sup>1</sup>
- Limited to no consistency assessing time periods across disorders

[1] Newson et al., 2020; [2] Bradford et al., 2024; [3] Horwitz et al., 2023; [4] Aboraya et al., 2018



# What do we need measurement to look and feel like?

Continuous Glucose Monitors (CGMs) shifted the paradigm for diabetes care by giving people direct **access to actionable information** in **real time** for a **causal biomarker** for the disease.

What is the equivalent of a CGM for mental and behavioral health?

## ✓ Accessible

- How does this integrate into a person's life?
- How does this integrate into a clinician's practice?

## ✓ Actionable

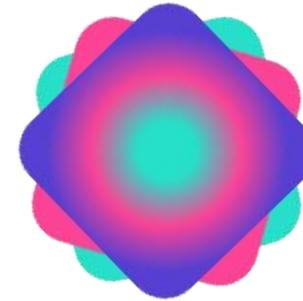
- Clear enough to indicate the direction to take
- Reliable enough to change the course of treatment

## ✓ Real-time

- At the speed of relevance for decision making
- Time scale and delay may be less demanding than diabetes, perhaps daily or hourly

## ✓ Causal

- Able to predict (with some fidelity) downstream disease effect, with a chance for intervention



## Success enables:

- Quick changes to the course of treatment when it isn't working
- Prevention of downstream compounding effects from chronic disease



# A first approximation of ground truth can be created from bio-psycho-social root of behavioral health and illness.

Validated measures exist that capture key elements of behavioral health.

## Biological

Downstream physiological effects of behavioral health indicate when the body is under physical, mental, and/or emotional strain (e.g., **HRV, SOL**)



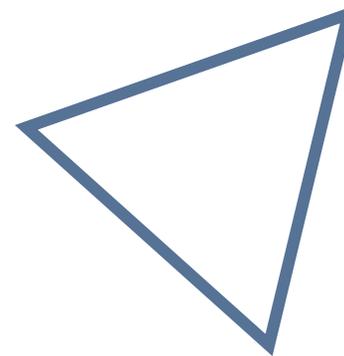
## Psychological

Subjective elements of behavioral health (e.g., **Flourishing, PHQ-9, GAD-7**)



## Social + Environmental

Changes in **homestay** are correlated with depression and social connection  
Environmental changes have day-to-day impact (e.g., **travel, weather**)



These measures are largely independent of one another, providing the opportunity for **convergent evidence of wellbeing**, somewhat robust to single dimension measures.



# Alignment in time of uncorrelated measurements provide some plausibly robust indication of "Well" and "Unwell" moments.

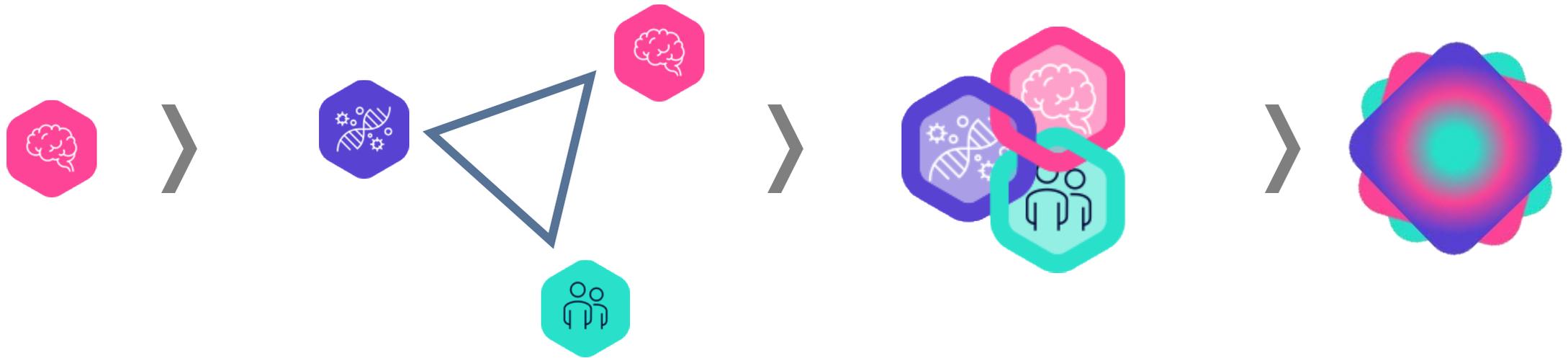


When independent measurement of bio, psycho, and social components indicate the same direction, we can assume some confidence, e.g., **"Good days"** and **"Bad days"**.

**Triangulation of these measures forms a first draft of ground truth**, rooted in biopsychosocial aspects of symptoms and wellbeing, and measurable with technology widely available today.



# Development of effective and widely adopted mental health measurement will be progressive and compounding, with intermediately useful milestones.



**EVIDENT**  
**Evidence-Based Validation &  
Innovation for Rapid  
Therapeutics in Behavioral  
Health**

**Nate Mohatt, Ph.D.**  
Program Manager,  
Proactive Health Office (PHO)

# Emerging, rapid-acting treatments



The New York Times

## *Seeking Relief From Brain Injury, Some Veterans Turn to Psychedelics*

Unable to find effective treatments at home, veterans with brain-injury symptoms are going abroad for psychedelics like ibogaine that are illegal in the U.S.



<https://www.nytimes.com/2024/12/16/us/psychedelic-ibogaine-veteran-brain-injury-ptsd.html>



**What if we had widely adopted objective measures for mental health and wellbeing?**

# EVIDENT will kickstart objective behavioral health measurement



Current behavioral healthcare lags far behind the need and scientific opportunity



Treatments are often inaccessible or ineffective

- 50% of people go untreated<sup>1</sup>



Treatment outcomes are suboptimal

- 30% of depression patients are “treatment resistant”<sup>2</sup>
- 40-60% of people treated for substance use relapse within a year<sup>3</sup>



Routine measurement can improve outcomes

- Fewer than 20% of providers use it<sup>4</sup>
- Diagnostics and management rely on self-report
- “Trial-and-error” treatment is the norm<sup>5</sup>

There are **no predictive, scalable, objective, standardized measures** of behavioral health



We don't know what is working, when, or for whom

EVIDENT will:

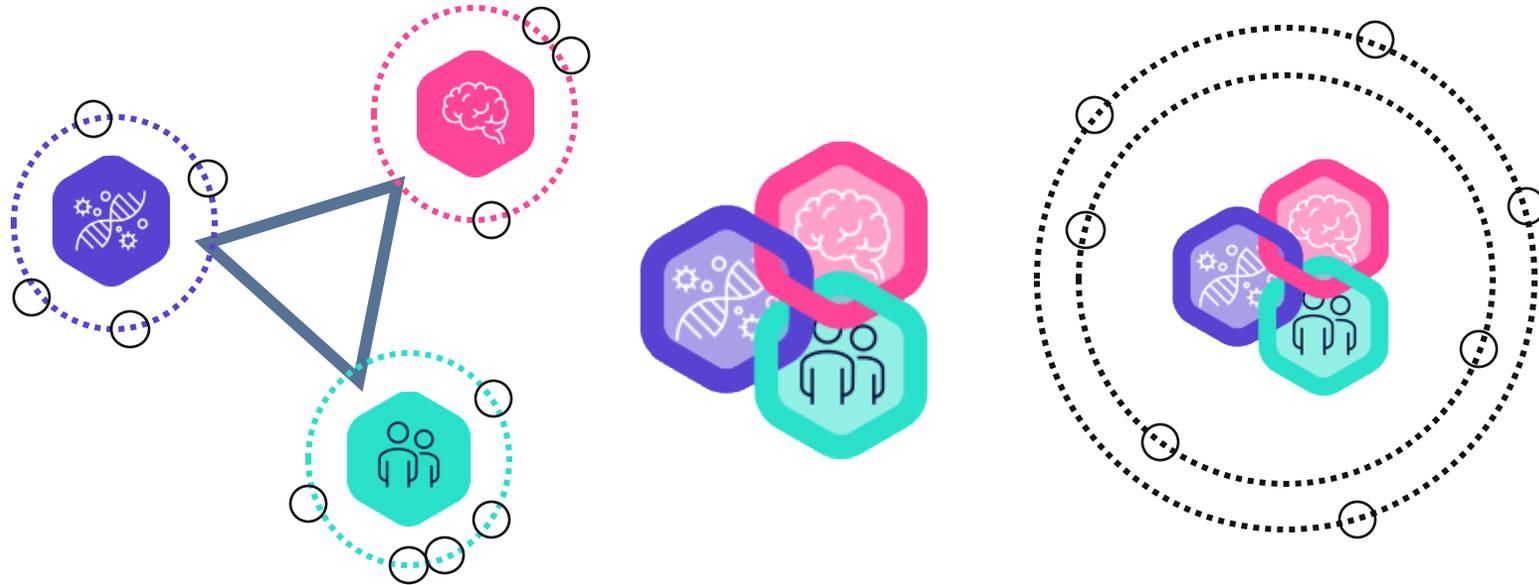
- ✓ Identify likely candidates for **objective clinical endpoints** for interventions
- ✓ Accelerate **rapid, personalized, and durable** mental and behavioral health treatment

[1] National Academies of Sciences, Engineering, and Medicine, [2024](#); [2] Zhdanova et al., [2021](#); [3] National Institute on Drug Abuse, [2020](#); [4] Aboraya et al., [2018](#); [5] Kern et al., [2020](#)

# EVIDENT is the first step towards widely adopted objective measurement of mental health



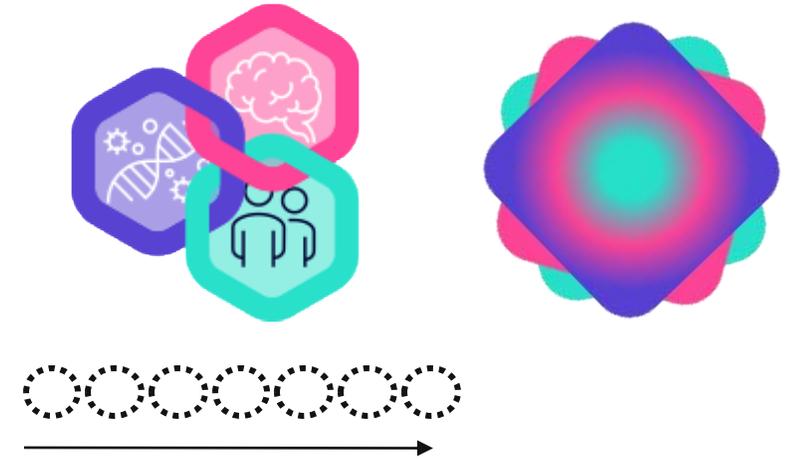
## EVIDENT



Taken together, the data from EVIDENT will:

- **Establish which biomarker(s) might best predict** subjective & objective aspects of behavioral health, at minimum replacing unreliable and impractical self-report elements
- **Provide a quantitative approach** to select biomarker(s) for future causative studies
- **Act as a Rosetta Stone** for comparing wide variety of datasets & findings within behavioral health

## Future



If EVIDENT is successful, data will be available to enable future efforts. For example:

- **Establish causal biomarkers**
- Optimize **predictive capability** (in accuracy and time)
- **Improve integration** into user life, clinician practice, and/or automated systems (e.g., machine learning or AI)
- Impact to **downstream physical health**

# Technical Areas



**TA1** Objective Measurement of Clinical Change



**TA2** Mechanisms of Rapid, In-Session Change



**TA3** Personal Risk & Durability Profiles



## Exploratory

- Fixed \$4 million over max 24 months per TA



**TA4** Clinical Trial Data & Biosamples



## Contribute to Data Repository

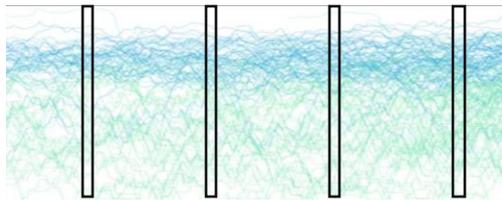
- Calculated \$ amount by data provided by performer



# TA1: Objective Measurement of Clinical Change



**Challenge:** Clinical endpoints are subjective and lack temporal granularity

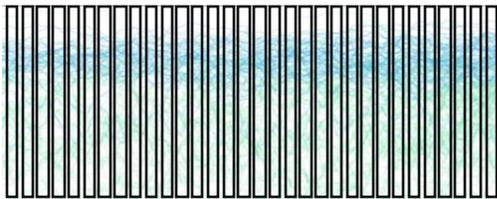


Rate of change is greater than measurement frequency

Rapid-acting interventions require rapid, objective measurement



**Solution:** Real-time, biological, digital, and physiological biomarkers of rapid clinical effects



Measurement is frequent enough to be relevant

**TA1 Goal**  
Likely candidates for continuous, minimally invasive, scalable indicators of behavioral health



# TAI: Data of interest includes, but is not limited to:



## Biological

- Heart rate variability
- Sleep onset latency



## Psychological

- Patient Health Questionnaire (PHQ-9)<sup>1</sup>
- General Anxiety Disorder-7 (GAD-7)<sup>2</sup>
- Depression Anxiety Stress Scale-8 stress items (DASS-8)<sup>3</sup>
- Brief Resilience Scale (BRS)<sup>4</sup>
- Flourishing Scale<sup>5</sup>



## Social + Environmental

- Homestay

• Biopsychosocial measures are **required** for new data collection

• FDA clinical endpoints are strongly preferred

*Digital health*

*Brain Imaging*

*Neurotropic Factors*

*Oxidative/Cellular Stress*

*Metabolic Markers*

*Inflammation*

*Hormones*

*Positive/Negative Affect*

*Travel and Weather*

See Table 1 in Request for Solutions (RFS) for more detailed information. Other relevant data may be considered.

[1] Kroenke et al., 2001; [2] Spitzer et al., 2006; [3] Ali et al., 2021; [4] Smith et al., 2008; [5] Diener et al., 2010



# TA2: Mechanisms of Rapid, In-Session Change



**Challenge:** Impact of therapeutic session context is unknown



What is happening for the person in the moment?



What is happening between the person and the facilitator?



What are the ideal environmental conditions?



**Solution:** Capture session-related data from patients, facilitators, and/or the environment

- Before, during, and after session (e.g., debrief)
- Unobtrusive sensors (e.g., wearables)
- Comfortable, wireless EEG
- Behavioral analytics
- Setting, lighting, temperature
- Others

**TA2 Goal**  
Individual-, dyadic-, and environmental predictors of effectiveness

EEG: electroencephalogram



# TA3: Personal Risk & Durability Profiles



**Challenge:** Trial-and-error treatment approaches exacerbate suffering and illness

Who is at-risk for an **adverse event**?

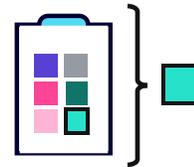
Who is most likely to **respond** well to this treatment?

Which intervention is most **durable** for this person?



**Solution:** Advanced analytics of multimodal data to develop predictive, personalized models

- Biopsychosocial measures
- Digital health data
- Clinical data
- Genetics
- Biomarkers
- And/or other proposed data sources



## TA3 Goal

Actionable insights for:

- ✓ Risk mitigation,
- ✓ Treatment-matching, and
- ✓ Monitoring



# Exploratory TA Requirements (TAs 1-3)

Data collected in the context of **emerging, rapid-acting intervention research\***

**Neuroplastogens** Ketamine, ibogaine, scopolamine, psilocybin, dimethyltryptamine (DMT), lysergic acid diethylamide (LSD), and others

**Neuromodulation** Transcranial magnetic stimulation (TMS), transcranial electrical stimulation (tES), focused ultrasound, transcutaneous vagus nerve stimulation (tVNS), and others

**Digital Therapeutics** Virtual reality, smartphone apps, and others

- ✓ Prior evidence of safety in humans (e.g., phase I clinical trial)
- ✓ Prior evidence of producing rapid clinical effects (e.g., within 1-2 weeks)

\*Intent is to focus on rapid-acting treatments, but strong proposals working with other types of intervention data may be considered



Data collection should **supplement existing protocols**; awards are not intended to fund brand new studies

- ✓ Complete IRB protocol required, either approved or under review at time of Solution Summary submission
- ✓ Proposed IRB amendments for supplemental data collection and/or analyses required by awardees at kick-off

**Methodologies** Clinical trials, observational studies, regular clinical practice settings, and others

IRB: Institutional Review Board



# Exploratory TAs: In-Scope Activities

- ✓ Thoughtful inclusion of Veterans as well as broader groups
- ✓ Intervention research targets behavioral health symptoms (e.g., preclinical, subclinical, mild-to-moderate) and/or behavioral health disorders (e.g., anxiety, depression, substance use disorder, PTSD)
- ✓ Proposals to analyze existing data collected in the context of emerging, rapid-acting intervention research including neuroplastogens, neuromodulation, digital therapeutics or other compelling interventions
- ✓ Proposals to collect and analyze new data collection supplementary to existing study protocols
- ✓ Collection of supplemental data from a subset of enrolled participants, from entire study samples, during planned or new follow-up assessments, and/or from intervention, control, and/or healthy participants
- ✓ Proposals limited to existing IRB protocol modification or amendment
- ✓ Data collection in the context of existing clinical trials (e.g., already planned, registered, or on-going, recruitment started or not yet started)
- ✓ Data collection outside the context of clinical trials (e.g., observational studies, regular clinical settings)
- ✓ Adult populations ( $\geq 18$  years old)

**PTSD:** posttraumatic stress disorder

# Exploratory TAs: Out-of-Scope Activities



- Data collected outside the context of behavioral health interventions
- No prior evidence of safety in humans (e.g., no prior phase I clinical trial)
- No inclusion of human subjects (e.g., simulations, models, animal studies)
- Brand new clinical trials (e.g., no existing protocol)
- Brand new development/testing of new therapeutic devices or new interventions (e.g., no existing protocol)
- New human subjects research requiring new IRB protocols rather than an amendment or modification
- Data collection from pediatric populations (< 18 years old)

# TA4: Clinical Trial Data & Biosamples



**Challenge:** Lack of standardized, multimodal, longitudinal data collected during rapid-acting clinical trials limits scientific discovery



**Solution:** Collect standardized biopsychosocial data—plus biospecimens—across multiple ongoing rapid-acting interventional clinical trials.

- No technical volume
- Eligibility and conformity
- Rolling submissions



**TA4 Goal**  
Standardized, multimodal, longitudinal data, curated and harmonized for future scientific discovery

[1] Newson et al., 2020

# TA4: Eligibility



- ✓ A registered, interventional clinical trial (registration website, protocol number).
- ✓ Tests either: 1) a neuroplastogen, or 2) an accelerated neuromodulation treatment (specify).
- ✓ Treatment has demonstrated safety in humans (phase I clinical trial protocol number or equivalent).
- ✓ Treatment has demonstrated rapid effects for mental or behavioral health symptoms or disorders (within 1-2 weeks).
- ✓ Trial collects data on one or more FDA-approved clinical endpoints.
- ✓ A complete IRB protocol, approved or under review (protocol and submission status documentation required).
- ✓ Collect **essential data** at baseline, ~1 week, and ~3-months post-treatment.
- ✓ Accepts data submission requirements and data rights.
- ✓ Data collection to begin no later than **1 OCT 2026**.
- ✓ Accepts all terms and conditions in CX Hub Base Agreement; will become a CX Hub Consortium Member.

## Ineligible

- Other types of interventions.
- Interventions without demonstrated safety.
- Interventions without demonstrated rapid effects for mental/behavioral health symptoms or disorders.

# TA4: Essential Data Collection



## Biological

- Heart rate variability
- Sleep onset latency
- *Other digital health data from consumer wearables*

## Psychological

- Patient Health Questionnaire (PHQ-9)<sup>1</sup>
- General Anxiety Disorder-7 (GAD-7)<sup>2</sup>
- Depression Anxiety Stress Scale-8 stress items (DASS-8)<sup>3</sup>
- Brief Resilience Scale (BRS)<sup>4</sup>
- Flourishing Scale<sup>5</sup>
- **FDA Clinical Endpoints**

## Social + Environmental

- Homestay
- *Other GPS data from consumer wearables*

## Timing

### Required

Baseline (pre-treatment)  
~**1-week** post-treatment\*  
~**3-months** post-treatment

### Optional

6-months post-treatment  
12-months post-treatment  
(requires 6-months as well)

# TA4: Optional Add-On Biospecimen Collection



## Biospecimens\*

Blood

Saliva

Stool

EEG

## Timing

Baseline (pre-treatment)

Plus, *one or more* of the following:

< 24 hours post-treatment

Post-treatment timepoint 1

Post-treatment timepoint 2

Post-treatment timepoint 3

Add-on post-treatment timepoints are flexible and defined by performers to align with existing protocols.

\*Standard Operating Procedures (e.g., processes, amounts, storage, shipping) are forthcoming.



# TA4: Calculating Data Collection Costs



**Instructions: Enter the number of participants planned for each type of data collection at each time point in the yellow-highlighted cells. Costs per participant are fully loaded and include reasonable costs for indirects.**

All performers must collect Essential Data Collection at baseline (i.e., pre-treatment) and approximately 1 week and 3-months post-treatment.

Essential Data Collection (Baseline, ~1 Week, ~3 Months)	Cost Per Participant	# of Participants	Total Cost
Consenting + Devices	\$ 2,686		\$ -
Data Collection (Baseline, ~1 Week, ~3 Months)	\$ 1,492	0	\$ -
<b>Subtotal Essential Data Collection</b>			\$ -

Maximum number of participants

Performers may choose to extend Essential Data Collection to 6 months or 12 months post-treatment. The 6-month extension is required for the 12-month extension.

Extended Essential Data Collection	Cost Per Participant	# of Participants	Total Cost
Extra Timepoint - 6 Months	\$ 1,297		\$ -

May be fewer participants, but not more than the maximum number

Performers may choose to add-on biospecimen collection to Essential Data Collection. Total number of participants for biospecimen collection cannot exceed total number of participants for Essential Data Collection. At minimum, biospecimens must be collected at baseline (i.e., pre-treatment) and at one or more additional post-treatment timepoints. Specify extra timepoints in the orange-highlighted cells.

Add-On Data Collection - Blood	Cost Per Participant	# of Participants	Total Cost
Add-On Blood - Baseline (Required for Add-On Blood)	\$ 1,729		\$ -
<b>Add-On Blood - One or More Follow-ups Required</b>			
Add-On Blood - <24 Hours Post Treatment	\$ 1,729		\$ -
Add-On Blood - Extra Timepoint 1 (Specify)	\$ 1,729		\$ -
Add-On Blood - Extra Timepoint 2 (Specify)	\$ 1,729		\$ -
Add-On Blood - Extra Timepoint 3 (Specify)	\$ 1,729		\$ -
<b>Subtotal Add-On Blood</b>			\$ -

Specify Extra Timepoint(s) (e.g., 1-month post-treatment)



# TA4: Milestone Payment Calculator



Milestones					
The milestones and deliverables listed below are required for all awards. Months indicated represent the latest allowable completion dates (“no later than” deadlines). Entities are encouraged to submit all data and successfully accomplish the project on an accelerated schedule whenever possible.					
Month	Task 1. Regulatory Preparation and Compliance	Task 2a. Collect Essential Data Task 2b. Collect Add-On Data	Task 3. Deliver Data to Data Repository	Payment	Explanation
1	Kick-Off Meeting; Submission of Amendments to Approved IRB Protocols	Review SOPs	Review SOPs	\$ -	25% of Consenting + Devices
3	IRB Approval for Data Collection; FDA Approval for Data Collection (as applicable); Data Sharing Agreements in Place; Submit All Monthly Reports	N/A	N/A	\$ -	75% of Consenting + Devices
6	Submit All Monthly Reports	10%	>80%	\$ -	10% of Remaining Costs
9	Submit All Monthly Reports	20%	>80%	\$ -	10% of Remaining Costs
12	Submit All Monthly Reports	40%	>80%	\$ -	20% of Remaining Costs
15	Submit All Monthly Reports	60%	>80%	\$ -	20% of Remaining Costs
18	Submit All Monthly Reports	80%	>80%	\$ -	20% of Remaining Costs
21	Submit All Monthly Reports	90%	>80%	\$ -	10% of Remaining Costs
24	Submit Final Report	>90%	100%	\$ -	10% of Remaining Costs
<b>Total</b>				\$ -	
<b>Balance Remaining</b>				\$ -	

Automatically Populates based on Data Collection Worksheet numbers

# Performer Expectations



Collaboration among performers within and across TAs is strongly encouraged to ensure interoperability of data, methodological and regulatory alignment, and collective learning, but **collaboration is not mandatory**.



Participation is required in coordination meetings and events such as: program kick-off, virtual monthly status meetings, quarterly hybrid technical exchanges (TAs 1-3 only), 12-month ARPA-H review, and a final close out meeting.



Ensure all milestones are completed and documentation is submitted on-time; TA4 performers must begin collecting data no later than October 1, 2026.

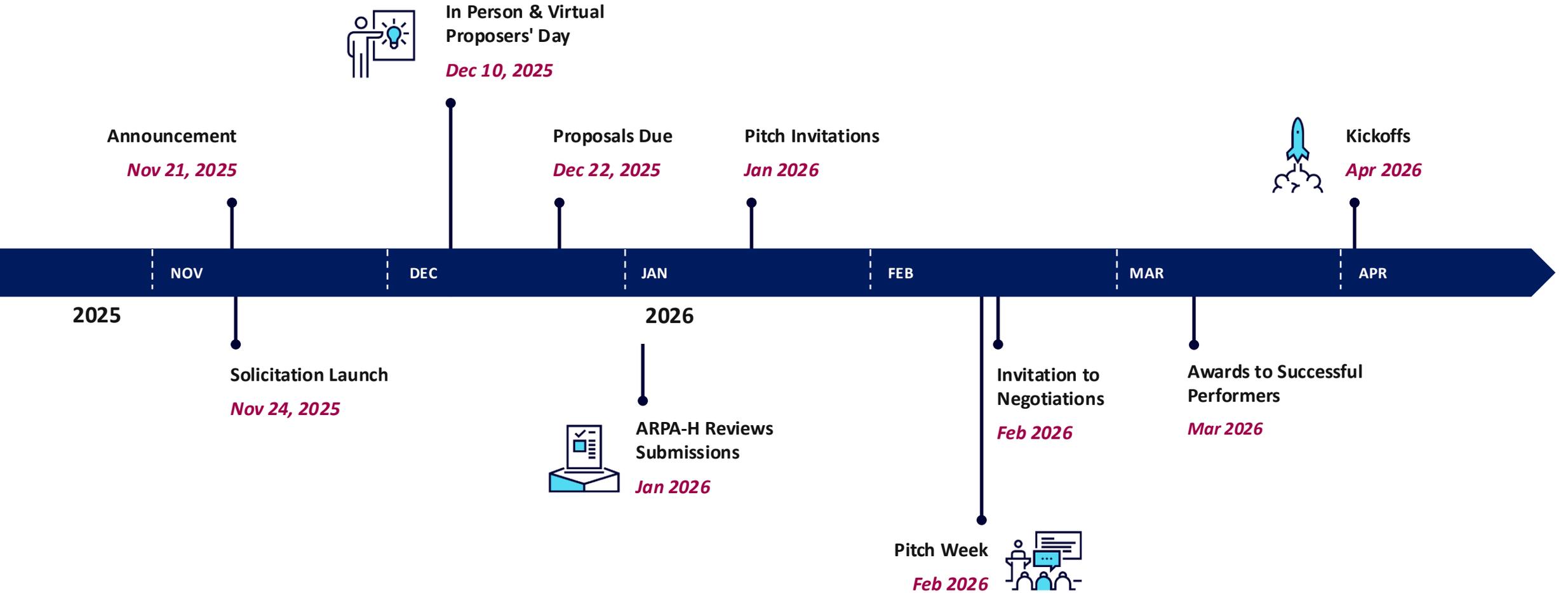


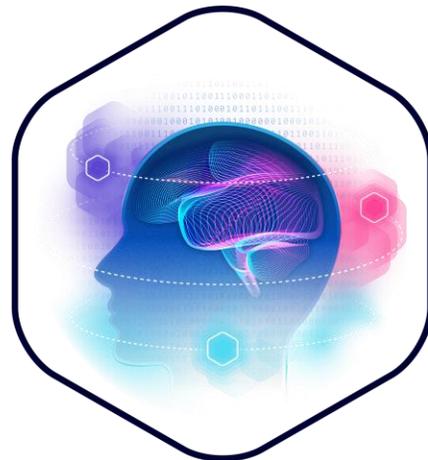
Maintain all regulatory documentation, IRB protocols, and data sharing agreements throughout the period of performance.



Contribute deidentified data, biospecimens, and supporting documentation (e.g., data dictionaries, code) to the ARPA-H designated Data Repository.

# Timeline





For more information on:

**EVIDENT**

Please visit [arpa-h.gov](https://arpa-h.gov)



DECEMBER 10, 2025

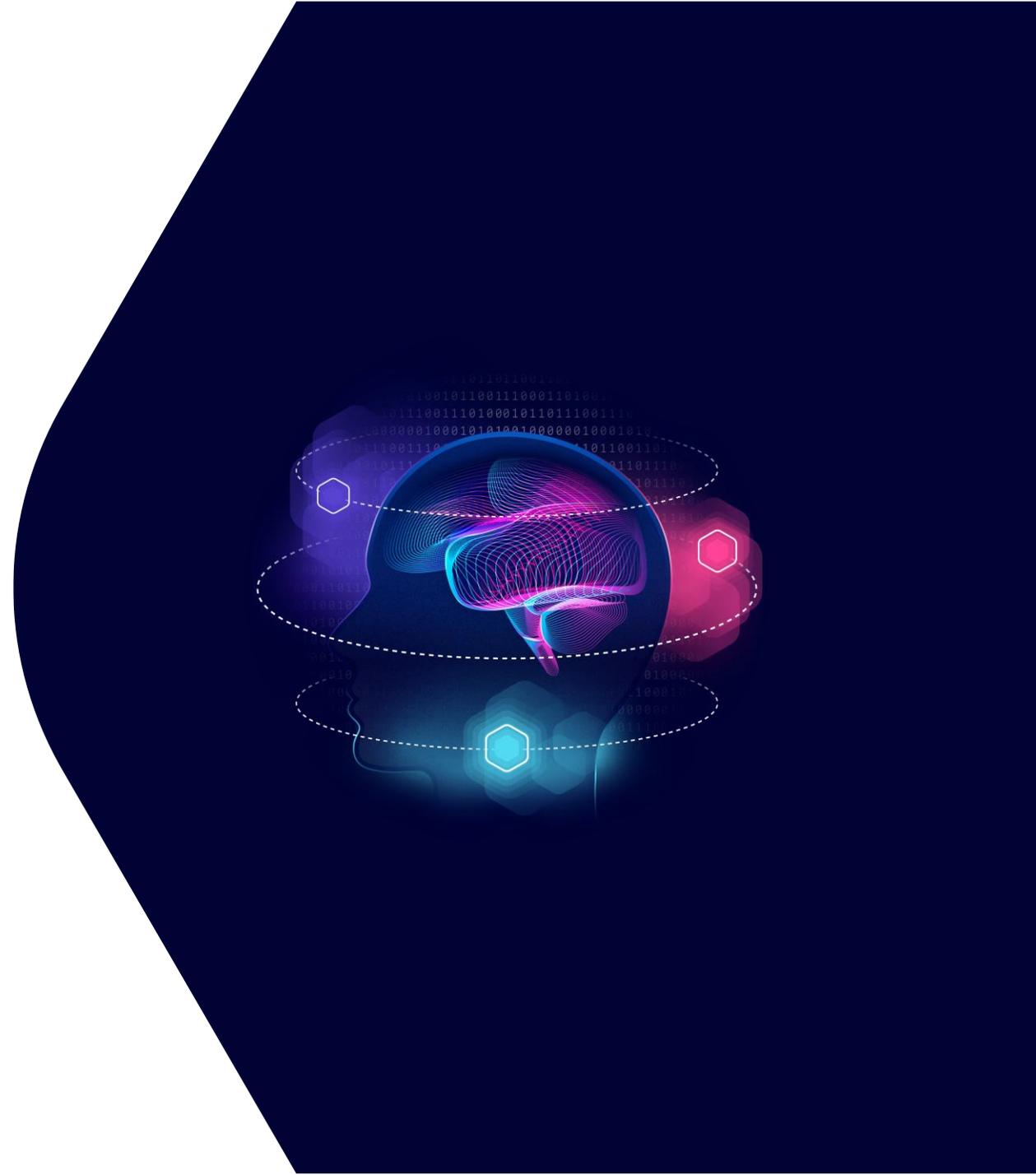
# Request for Solutions

**ARPA-H-CXHUB-26-109 and  
ARPA-H-CXHUB-26-110**

**Caitlin Burns**

Agreements Officer, Business Innovation Division

*Approved for Public Release: Distribution Unlimited*



# Overview

## ARPA-H-CXHUB-26-109

### *Technical Areas 1-3*

- Technical Area 1: Objective Measurement of Clinical Change
  - Technical Area 2: Mechanisms of Rapid, In-Session Change
  - Technical Area 3: Personal Risk and Durability Profiles
  - Solution Summary --> Pitches --> Award
- 
- Submission Portal opens Dec 11, 2025



## ARPA-H-CXHUB-26-110

### *Technical Area 4*

- Essential Data Collection
  - Add-On Biospecimen Collection
  - Rolling Submission
  - Fixed Price per Participant
  - Award Application Package --> Compliance/Eligibility --> Award
- 
- Submission Portal is open now



# Request for Solutions (RFS)

ARPA-H-CXHUB-26-109

Technical Areas (TAs) 1-3

# ARPA-H-CXHUB-26-109 (TAs 1-3) Highlights



- **Solution Summaries are required**
- **Invitation to Pitch**
- **One Solution Summary per TA**
- **Fixed amount of \$4M per TA award**
- **Maximum period of performance of 24 months**
- **ARPA-H will direct ATI to issue award (will still be an ARPA-H project)**
- **Negotiable Statement of Work**

# Solution Summaries



- **Due December 22, 2025, by 1pm Eastern**
- **One Solution Summary for each Technical Area**
- **All conforming Solution Summaries will be evaluated IAW the Request for Solutions**
- **Select submissions will be invited to Pitch**
- **Submission portal opens December 11, 2025**

# Entity Eligibility Information (see Section 4 of RFS)



- No awards will be made to FFRDCs at either the prime or sub level
- SAM.gov Unique Entity ID is required for award
  - New submissions can take significant time
- Non-U.S. Entities See Section 4

# Submission & Selection Overview (See Section 5 of the RFS)

## Solution Summary

- Solution Summaries are mandatory
- Not to Exceed (NTE) six (6) pages
- Follow guidance in Appendix A
- Submitted via ATl's submission system
- Notification of invitation to Pitch will be sent via email. No further feedback will be provided



## Pitch

- Informed via email of designated date and time
- Submission documents due one week prior to assigned Pitch
- 15-minute presentation, 30-minute Q&A
- Virtual or in person

# Request for Solutions (RFS)

ARPA-H-CXHUB-26-110

Technical Area 4

# ARPA-H-CXHUB-26-110 (TA 4) Highlights



- Rolling Submissions
  - Submission portal is open
  - Submissions will be accepted until funds are expended
- Fixed award amount based on number of participants
- Maximum period of performance of 24 months
- Fixed Statement of Work
- ARPA-H will direct ATI to issue award (will still be an ARPA-H project)

# Eligibility Information (see Section 4 of RFS)



- No awards will be made to FFRDCs at either the prime or sub level
- SAM.gov Unique Entity ID is required for award
  - New submissions can take significant time
- Non-U.S. Entities See Section 4

# Submission & Selection Overview (See Section 5 of the RFS)

## Award Application Package

*Packages reviewed in order of receipt for compliance and eligibility.*

*\*Submission portal is open*



## Award

*If deemed compliant and eligible, awards will be initiated based on:*

- Fixed Statement of Work
- Fixed price award amount based on the Data Collection Cost Worksheet (Appendix D) with fixed per participant pricing

# Final Guidance



Nothing discussed today should be construed as amending the RFS. The final RFS is binding until/unless changes are posted.



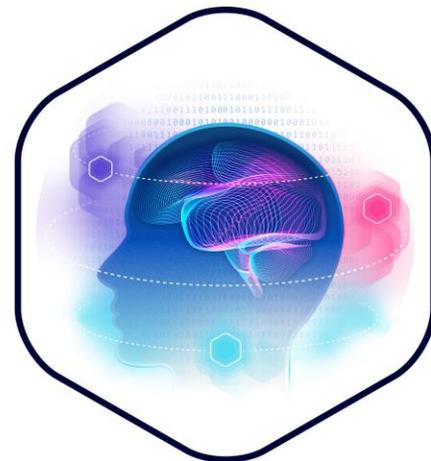
Ask questions to [arpa-h-cx-hub@ati.org](mailto:arpa-h-cx-hub@ati.org) after checking posted FAQs.



Register for a UEI in SAM.gov as early as possible.



Read the RFS.



For more information on

**EVIDENT**

Please visit [arpa-h.gov](https://arpa-h.gov)



# EVIDENT

## Evidence-Based Validation & Innovation for Rapid Therapeutics in Behavioral Health

*Launched November 21, 2025*



## *What if we had widely adopted objective measures of mental health and wellbeing?*

### VISION

---

EVIDENT will develop more quantitative measures of mental and behavioral health to help usher in a new era of safe, tailored, cutting-edge diagnostics and treatments.

### TECHNOLOGY FOCUS AREAS

---

- Objective Measurement of Clinical Change
- Mechanisms of Rapid, In-Session Change
- Personal Risk & Durability Profiles
- Clinical Trial Data & Biosamples

*EVIDENT page on the Customer Experience Hub*



<https://www.customerexperiencehub.org/evident/>

# Customer Experience Hub Introduction



**Mike Stebbins , PhD**  
SVP, Medical and Health  
Division



**Sarah Bailey , MS**  
CX Hub, Program  
Manager II

# From Design to Delivery

**The focus of the Customer Experience Hub is putting people at the center of ARPA-H programs and projects in every stage of design and development.**

Applying human centered design principles to engage patients, providers, and other stakeholders to ensure that solutions developed are desirable, feasible and viable.



 @custexperiencehub

 @custexphub

# Caution

The **ARPA-H-CXHUB-26-109 and ARPA-H-CXHUB 26-110 Request for Solutions** (RFSs) are the official source of information regarding the active solicitation.

If you act on information from **any** source other than the RFS, it is at your risk.

CX Hub membership is **required** for an award to be made.

To join the CX Hub, please visit <https://www.customerexperiencehub.org/how-to-join/>

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

## Key Dates

Item	Date
Request for Solutions (RFS) posted	21 NOV 2025
Proposers' Day	10 DEC 2025
Submission Portal Opens	<b>11 DEC 2025</b>
Questions Deadline	12 DEC 2025
Solution Summary Deadline	<b>22 DEC 2025</b> <b>1:00PM ET</b>

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

## Required Submission Documents

Solution Summary      Solution Pitch

- Solution Summary - One (1) Document in pdf format. Should NOT exceed 6 pages for a single technical area. The page limit is exclusive of cover page and references. Appendix A of the RFS is the required format.
- Proposers can submit to more than 1 TA but a separate Solution Summary is required for each technical area

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

## Required Submission Documents

### Solution Pitch – Three (3) Documents

1. Statement of Work– word document. (Template will be provided)
2. Solution Pitch Deck- .pdf document. (Template will be provided)
3. Administrative and National Policy Requirements Document .pdf document. (Template will be provided)
  - o Biographical Sketch
  - o Current and Pending Support

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

- **Stage 1, Solution Summary:** Proposers are invited to submit a Solution Summary using the format contained in Appendix A of this RFS. The program manager and their team will evaluate proposed solutions using the criteria listed in the RFS.
- **Stage 2, Solution Pitches:** Only proposers who are invited to stage 2 will be able to submit all required proposal documents. Selected Stage 2 proposers will utilize the templates provided to them.
- **Stage 3, Invitation for Collaborate & Negotiation (IC&N):** Upon completion of the Program Manager's evaluation, Proposer(s) will be notified of the final award decision.

*Selected proposers must be a CX Hub Spoke before an award is made.*

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

- Scientific and technical merit
- Feasibility
- Innovation of the solution, given the \$4 million fixed award

ARPA-H will use the criteria to determine which submissions will be invited to move to the next phase of the evaluation process and ultimately be selected as most advantageous to the Government.

*See section 5.2 of the RFS for information on the evaluation criteria.*

# EVIDENT: Technical Areas (TA) 1-3

ARPA-H-CXHUB-26-109

- Proposers should submit a **separate Solution Summary** for **each Technical Area** to which they wish to apply.
- Proposers may submit to multiple Technical Areas
- Only proposers who are invited to stage 2 may submit a **Solution Pitch**
- **Solution Pitch** templates will be provided later

# EVIDENT: Technical Area (TA) 4

## ARPA-H-CXHUB 26-110

- TA 4: Collection of Supplemental Data & Biological Samples in Existing Clinical Trials
- Funding will operate under a fixed-price, milestone-based funding structure in which payments are tied to completion of specific milestones and successful review by ARPA-H.
- The maximum total award amount is **\$10 million**.

# EVIDENT: Technical Area (TA) 4

## ARPA-H-CXHUB 26-110

### Required Submission Documents

Compliant Award Application Packages will include the following required documents: (5MB or lower).

1. Cover Page
2. Completed Eligibility Criteria Matrix
3. IRB Protocol
4. Proof of IRB Submission or Approval
5. Research Security Disclosures and Review Form
6. Biographical Sketch (for all Senior/Key Personnel) Template available at <https://www.nsf.gov/bfa/dias/policy/nspm-33-implementation-guidance>.
7. Current & Pending support (for all Senior/Key Personnel) Template available at <https://www.nsf.gov/bfa/dias/policy/nspm-33-implementation-guidance>.
8. Data Collection Cost Worksheet submitted as an Excel Spreadsheet

# EVIDENT: Technical Area (TA) 4

ARPA-H-CXHUB 26-110

## Key Dates

Item	Date
Request for Solutions (RFS) posted	21 NOV 2025
Proposers' Day	10 DEC 2025
Submission Portal Opens	24 NOV 2025
Questions Deadline	12 DEC 2025
Solution Summary Deadline	Until funding is expended

# Administrative Notes For All Technical Areas

ARPA-H-CXHUB-26-109 & ARPA-H-CXHUB 26-110

- **Period of Performance** is not to exceed **24 months** for all Technical Areas.
  - There will be an annual Performance review.
- **System for Award Management (SAM):** A SAM.gov **Unique Entity Identifier (UEI)** is required for award.
  - New SAM registrations and renewals may take more than 14 business days to process. SAM is independent of ARPA-H and thus ARPA-H representatives have no influence over processing timeframes.

# How to Get a UEI and Register in SAM.gov

## Step 1: Create a Login.gov Account

1. Go to SAM.gov and click **Sign in**.
2. Select **Create an Account**
3. Once signed in, you'll return to SAM.gov.

## Step 2: Get a UEI (Unique Entity ID)

1. Sign in to SAM.gov via Login.gov.
2. Click Get Started → Get Unique Entity ID.
3. Enter your business's legal name and physical address.
4. Submit and receive your 12-character UEI (usually processed quickly)

**Tip:** A UEI is required even if you are only a subrecipient or not yet seeking federal contracts

## Step 3: Register Your Entity (for Contracts or Grants)

1. From SAM.gov, click Get Started → Register New Entity.
2. Complete all sections: legal info, TIN/EIN, business type, NAICS codes, bank details, and points of contact.
3. Review and submit. Registration is free and must be renewed annually.

Note: You only need full registration if applying directly for federal awards or contracts.

## Before You Start – Gather This Information

- Legal business name & physical address
- Taxpayer Identification Number (TIN/EIN)
- Business type/structure (LLC, Corp, Nonprofit, etc.)
- Bank routing & account info (if paid directly)
- NAICS code(s) and point of contact details

# BIDS Submission Guide

- Submissions will be submitted using the BIDS Platform: <https://solutions.arpanet-h.org/CXHUB/BIDS.NSF/Start?ReadForm>
- To respond to an RFS on BIDS, you first must register for a CX Hub BIDS account.
- After registering, you will then be able to submit a proposal to an open RFS.
- Step by step directions on how to submit a proposal are posted to the CX Hub Members Only Site and included as Appendix B to the RFS.

# BIDS: New Registration

The screenshot shows the ARPA-H Customer Experience Hub website. At the top, there is a navigation bar with 'Portal' and 'CX Hub Home' links. The main content area is divided into several sections:

- Information:** Contains links for 'Privacy Notice' and 'Portal'.
- Request for Solutions (RFS) - Open:** A notice dated September 4, 2025, regarding RFS ARPA-H-CXHUB-25-104, with a link to the CX Hub website.
- ARPA-H Customer Experience (CX) Hub:** A paragraph describing the hub's mission to target prevention, treatment, and diagnosis needs through a proactive approach.
- CX Hub Membership:** A note stating that users must be members of the CX Hub Consortium to be eligible for awards, with a link to the membership page.
- Login/Registration:** A sidebar menu with links for 'Log In', 'Forgot Your User Name?', 'Forgot Your Password?', and 'New Registration' (circled in red). Below these links is a 'NOTE:' stating that users must register for a submitter account to respond to an RFS.
- Need Help?:** A section with a 'Contact CX Hub' link and a brief description of the help provided.
- Reference Materials:** A section with a link to download reference materials like quick cards and training materials.

At the bottom of the page, there is a 'SECURITY NOTICE' regarding unauthorized attempts to deny service or access non-public sites.

# BIDS: New Registration

Welcome, Anonymous

**ATI**  
ADVANCED TECHNOLOGY INTERNATIONAL  
Portal

Please select the type of account you are registering for:

**Government**

- Government Requirement Submitter/Evaluator/AOR – Select this in order to submit requirements, evaluate whitepapers and proposals, and/or make an award. Please note you must be approved by the CX Hub team.

**Industry**

- Submitter - Select this in order to submit responses to solicitations.**

SECURITY NOTICE: Unauthorized attempts to deny service, upload information, change information, or attempt to access a non-public site from this service are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act.

**BIDS** Copyright © 2024. All Rights Reserved. This website was created by...

- Make sure to select Industry/Submitter Registration Type
- Registration is instantaneous and does not require verification by the CX Hub team.
- Once registered, you will then be able to access the CX Hub BIDS portal to submit your proposal. Step by step submission directions can be found on the CX Hub Members Only site.

# Lunch Break

## 12:30 – 1:30PM

# 1:1 Discussions Networking Break 1:30 – 2:30PM

# Lighting Talks

## 2:30 – 4:30PM

# Closing Remarks

# Questions

- For inquiries on this RFS, please direct your correspondence to the following contacts:
  - Contractual questions related to this RFS should be directed to the CX Hub Contracts Manager, Alexis Hirr, [arpa-h-cx-hub-contracts@ati.org](mailto:arpa-h-cx-hub-contracts@ati.org)
  - Technical and membership questions should be directed to the CX Hub Program Manager, Sarah Bailey, [arpa-h-cx-hub@ati.org](mailto:arpa-h-cx-hub@ati.org)
  - All questions should be submitted no later than December 12, 2025 by 5PM ET.



Combradarie