

Welcome to PARADIGM Proposers Day!



Agenda:

9:00 AM MT	Registration + Poster Setup	
9:30 AM	Resilient Systems Office Intro	Gina Kost
9:45 AM	PARADIGM Program Overview	Bon Ku
10:00 AM	PARADIGM Agreements	Adrea Robinson
10:15 AM	International Relations	Megan Frisk
10:30 AM	BREAK	
10:45 AM	PATIO	Melissa Antman
11:00 AM	NIH All of Us Program	Chris Lunt
11:15 AM	Hepatitis C Eradication	Francis Collins
11:30 AM	Closing Remarks	Bon Ku
11:35 PM	Lunch + Poster Setup	
12:50 PM	Poster Session (in-person only)	Networking Event
1:00 PM	TA-Specific Breakout Sessions	PARADIGM Team
4:00PM	End	

Questions/Comments? Scan here:

Or use handouts. Questions not answered today will be addressed on our website.



Event Recording & Sharing

Our morning program will be recorded and shared. Afternoon sessions are closed, but information will be made available online.



Poster Session + TA Breakouts

Teaming and networking is encouraged. Please follow instructions for poster set-up, and join our teaming page here:



Ask a Question:



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

Platform Accelerating Rural Access to Distributed and Integrated Medical Care (PARADIGM)

Advanced Research Projects Agency for Health (ARPA-H)

Bon Ku MD, MPP, Program Manager

Resilient Systems Office, Mission Office (MO)

February 15, 2024

Ask a Question:



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The ARPA-H Model

Transforming Health for All

Dr. Gina Kost

Deputy Director, Resilient Systems Office

Ask a Question:



Mission

Accelerate better health outcomes for everyone.



Ask a Question:



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President Biden's Vision

"ARPA-H will **pursue ideas that break the mold on how we normally support fundamental research and commercial products** in this country."

"Ideas so audacious that people say they just might work only if, only if, we could try. Well, we're about to try in a big way."

– President Biden Remarks, March 18, 2022

Ask a Question:



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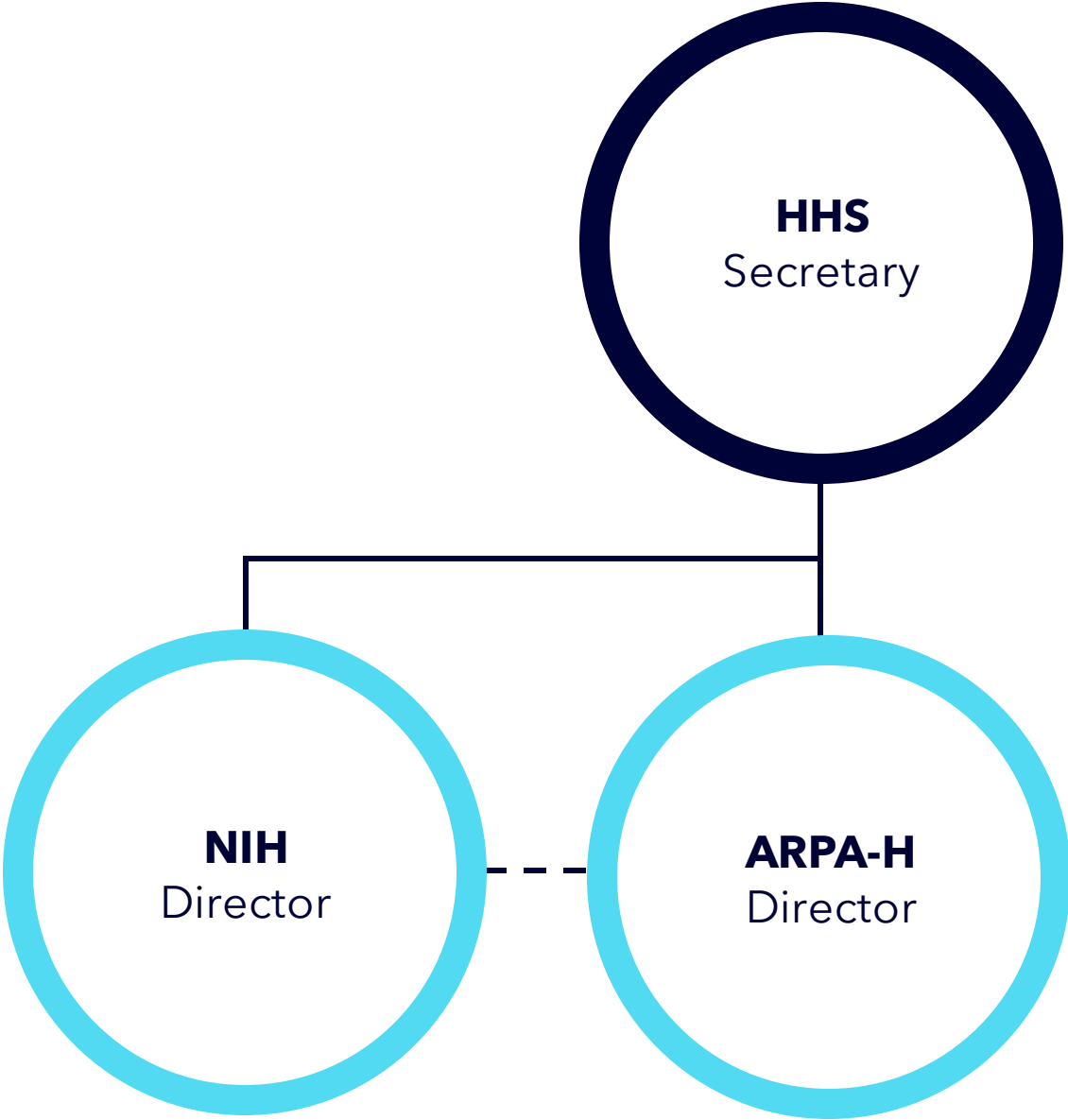
DELIVERING BIPARTISAN PROGRESS
THROUGH PRESIDENT BIDEN'S UNITY AGENDA

- ✓ Made it easier for doctors to prescribe effective treatments for opioid addiction
- ✓ Passed a gun safety law making historic investments in youth mental health
- ✓ Launched ARPA-H to drive breakthroughs in the fight against cancer, Alzheimer's, and diabetes
- ✓ Expanded benefits and services for veterans and their survivors

WH.GOV/SOTU

ARPA-H Organization within HHS

- Independent component of HHS within NIH; not an Institute
- ARPA-H Director reports directly to HHS Secretary
- No internal research labs; disease agnostic
- \$2.5B initial appropriation; budget independent from NIH
- Ability to directly reimburse FDA



Ask a Question:

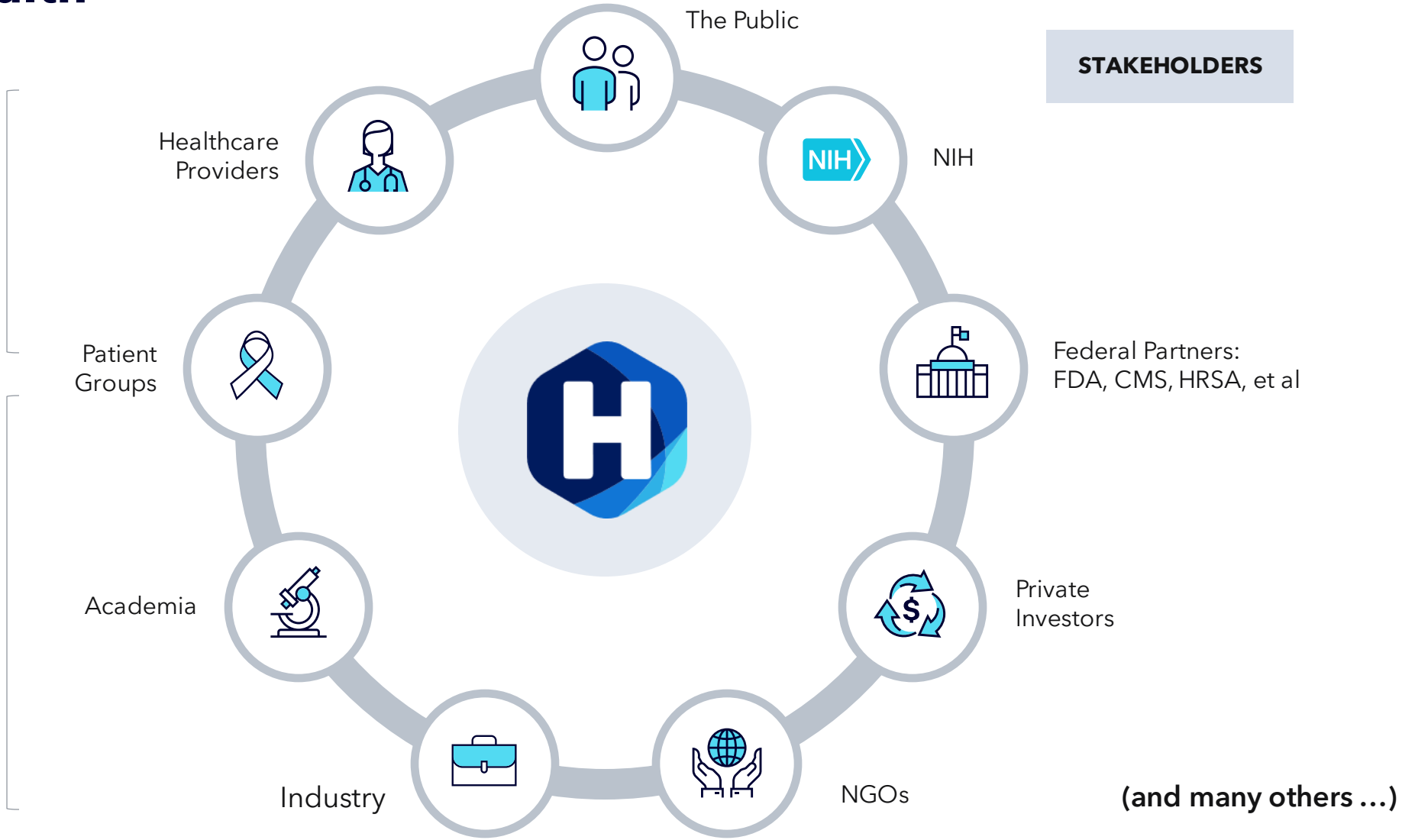


ARPA-H Health Ecosystem

CUSTOMERS

PERFORMERS

STAKEHOLDERS



Ask a Question:



Initial Mission Focus Areas



Health Science Futures

Expanding what's technically possible

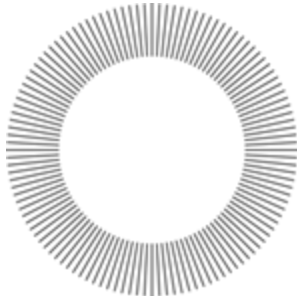
Accelerate advances across research areas and remove limitations that stymie progress towards solutions. These tools and platforms apply to a broad range of diseases.



Scalable Solutions

Reaching everyone quickly

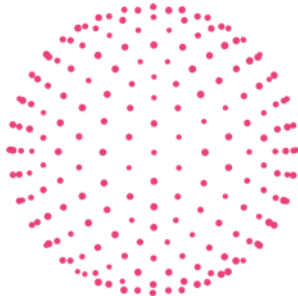
Address health challenges that include geography, distribution, manufacturing, data and information, and economies of scale to create programs that result in impactful, timely, and equitable solutions.



Proactive Health

Keeping people from being patients

Preventative programs will create new capabilities to detect and characterize disease risk and promote treatments and behaviors to anticipate threats to Americans' health, whether those are viral, bacterial, chemical, physical, or psychological.



Resilient Systems

Building integrated healthcare systems

Create capabilities, business models, and integrations to weather crises such as pandemics, social disruption, climate change, and economic instability. Systems are sustained between crises—from the molecular to the societal—to achieve better health outcomes.

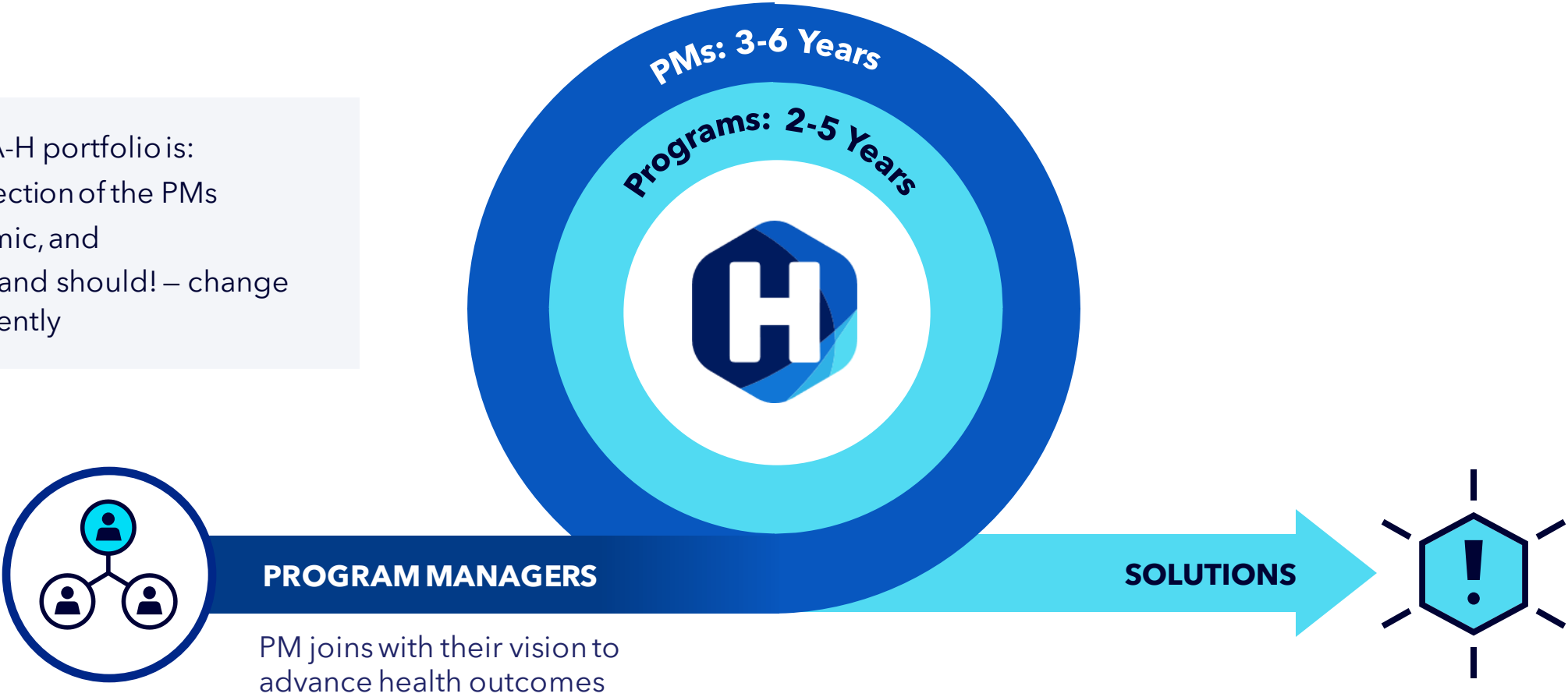
Ask a Question:



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The Program and Program Manager Flywheel

The ARPA-H portfolio is:
(1) a reflection of the PMs
(2) dynamic, and
(3) will – and should! – change frequently



Ask a Question:



ARPA-H Model: Program Formation

Program Manager

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

Challenge

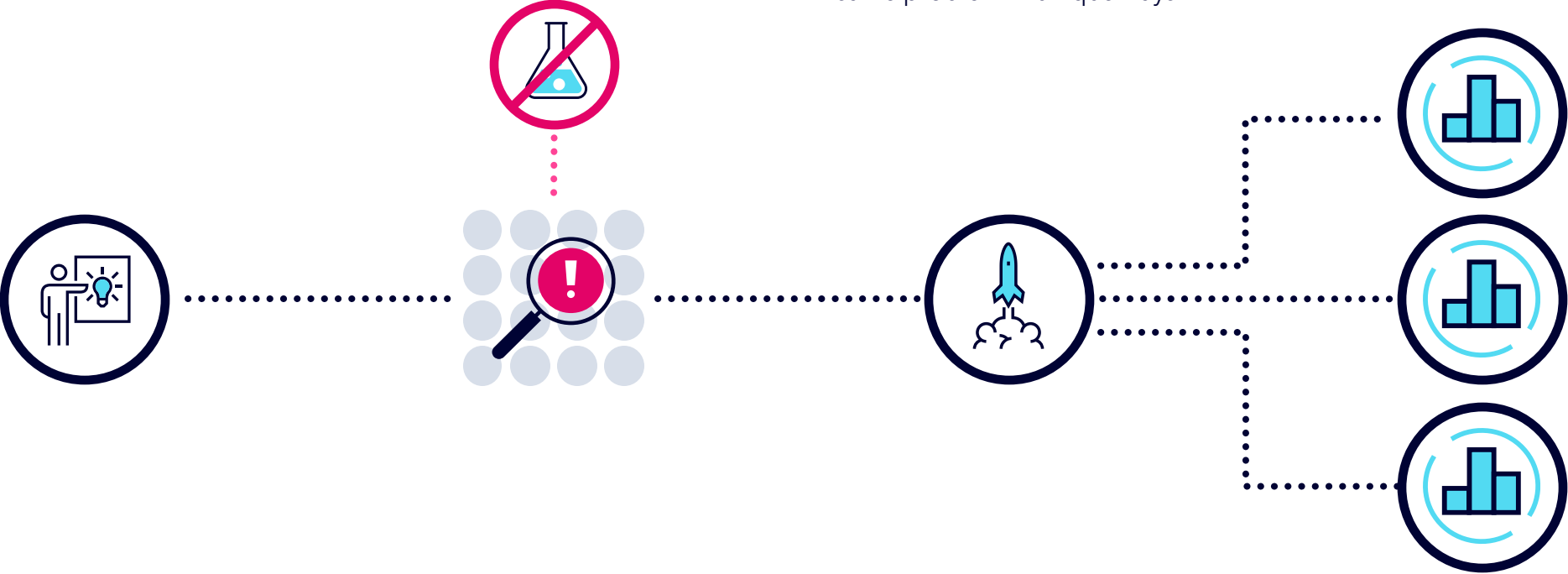
The challenge should NOT be easily solvable through traditional activities.

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



Ask a Question:



Program Launch!

Platform Accelerating Rural Access to Distributed & InteGrated Medical care (PARADIGM)

Vision:

Technology focus areas

1. **TA1: Decentralized Approach to Hospital-Level Care.**
2. **TA2: Care Delivery Platform Integration.**
3. **TA3: Medical Internet of Things (IoT) Platform.**
4. **TA4: Rugged & Miniaturized CT Scanner.**
5. **TA5: Intelligent Task Guidance.**

How to apply

- Submit abstract and full proposal
- **Visit arpa-h.gov** for more information about PARADIGM and applying to the PS or email: **PARADIGM@arpa-h.gov**

Important Dates

- Today! Proposers' Day for interested research teams
- **Program solicitation will close on April 26, 2024**



Ask a Question:



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WHAT IF WE COULD DELIVER
ADVANCED HOSPITAL-LEVEL CARE
TO EVERY RURAL COUNTY IN AMERICA?



PARADIGM

Platform Accelerating Rural Access to Distributed & InteGrated Medical care

Resilient Systems Office

Bon Ku, MD, MPP, Program Manager



Ask a Question:



ARPAH

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PARADIGM's mission is to solve rural America's most critical health challenges by revolutionizing access to hospital-level care.



Rural Healthcare Crisis

- **30%** of rural hospitals at risk of closing¹
- **~50%** of rural counties lack obstetric care²
- **1.7%** of eligible patients get lung cancer screening in 6 most underserved states³
- **60%** of eligible rural residents have no access to screening within 20 miles; **25%** have no access within 40 miles⁴

Rural health outcomes are worse than urban:

- Lung cancer rate is **30%** higher with **20%** higher mortality⁵
- Cervical and colorectal cancers have **13%** and **16%** higher mortality, respectively⁵
- Maternal mortality **2x** higher⁶
- Acute stroke mortality is **27%** higher⁷
- Acute heart attack mortality is **10%** higher⁸
- Acute heart failure mortality is **15%** higher⁸

Ask a Question:



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¹Rural hospital closures threaten access. American Hospital Association. 2022; ²Availability of hospital-based obstetric services in Rural Counties. GAO Report 2022; ³State variation in low dose CT scanning for lung cancer. J Nat Canc Inst 2021; ⁴Geographic access to lung cancer screening in rural and urban US. J Cancer. 2022. ⁵The Case for Rural Cancer Control. J Canc Epi. 2017; ⁶Rural-Urban Disparities in Adverse Maternal Outcomes in the United States, Am J Pub Health 2022; ⁷Urban-Rural Inequities in Acute Stroke Care and In-Hospital Mortality, Stroke 2020; ⁸Rural-Urban Disparities in Outcomes of Myocardial Infarction, Heart Failure, and Stroke in the United States, J Am Coll Cardiol 2022.

PARADIGM envisions a multipurpose care delivery platform that acts as a force multiplier for health systems.



Advanced Imaging



Multi-Cancer Screening



Perinatal Care



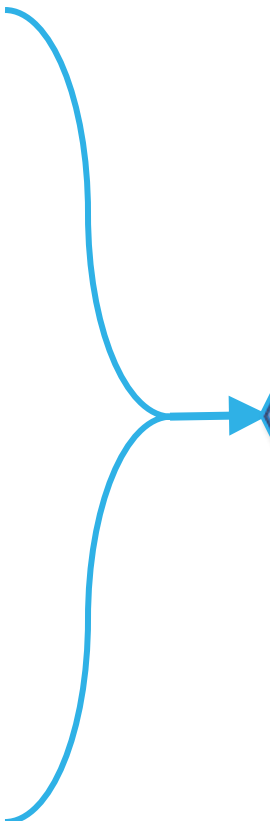
Hemodialysis



ER on Wheels



Additional Use Cases Developed by Performers



PARADIGM creates a **multipurpose** and **scalable** platform to deliver advanced care outside the walls of a hospital.



Rural Healthcare Needs a PARADIGM Shift

- ✓ Solves challenge
- ~ Partially addressed
- ✗ Not solved

Challenges	Are current approaches sufficient?				PARADIGM Distributed Care Delivery Solution
	Hospital care	Telemedicine	Hospital-at-home	Traditional mobile care	
Care delivery is scalable & commercially sustainable?	✗	✓	✗	✗	✓ TA1: Decentralized Approach to Hospital-Level Care
Provides a wide array of advanced healthcare services?	✓	✗	~	✗	✓ TA2: Care Delivery Platform Integration (integrate tech within SWaP constraints)
Addresses siloed and fragmented data?	✗	✗	✗	✗	✓ TA3: Medical IoT Platform (seamlessly connect devices & EHRs)
Convenient & equitable access to advanced diagnostics?	✗	✗	~	~	✓ TA4: Ruggedized CT Scanner (miniature, rugged, mobile)
Addresses healthcare worker shortages?	✗	✓	✗	✗	✓ TA5: Intelligent Task Guidance (reduce the skill barriers to quality care)

PARADIGM creates a **multipurpose** and **scalable** platform to deliver advanced care outside the walls of a hospital.



PARADIGM: A multipurpose, high-tech, advanced care delivery platform

PARADIGM Solutions

Distributed Care Platform

TA1: Decentralized Approach to Hospital-Level Care (field demos demonstrate clinical effectiveness and sustainability)

TA2: Care Delivery Platform Integration (creation of the scalable / multifunctional care delivery platform)

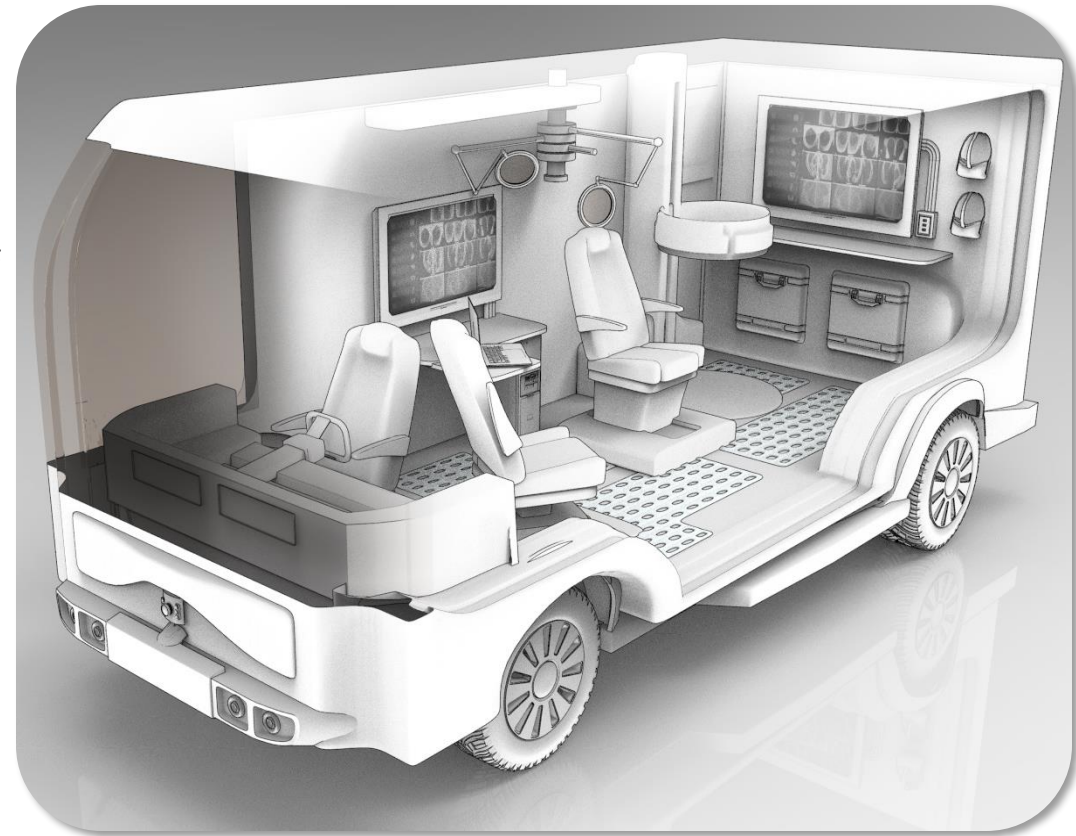
TA3: Medical IoT Platform (harmonize diverse medical device data with diverse EHR systems)

Advanced Imaging

TA4: Rugged CT Scanner (novel CT tech to bring advanced imaging directly into communities)

Workforce Multiplier

TA5: Intelligent Task Guidance (enable healthcare workers to perform tasks beyond their usual training)



PARADIGM creates a **multipurpose** and **scalable** platform to deliver advanced care outside the walls of a hospital.

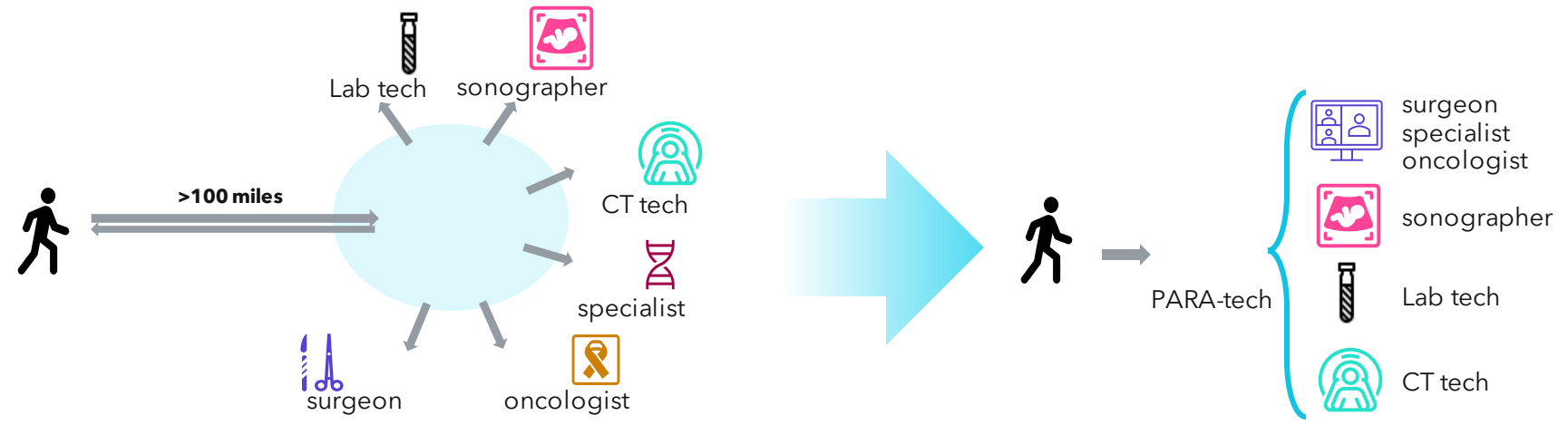


TA1: Decentralized Approach to Hospital-Level Care

A multifunctional clinical platform can increase healthcare access in rural areas

TA1: Decentralized Approach to Hospital-Level Care

- TA2: Care Delivery Platform Integration
- TA3: Medical IoT Platform
- TA4: Rugged CT Scanner
- TA5: Intelligent Task Guidance



Increase breadth of high-quality care provided outside of a hospital setting by evaluating the ability to directly treat patients using the multifunctional scalable care delivery platform.

Ask a Question:



TA2: Care Delivery Platform

Build a low-cost, reliable vehicle care delivery platform that can integrate current & future technologies



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance

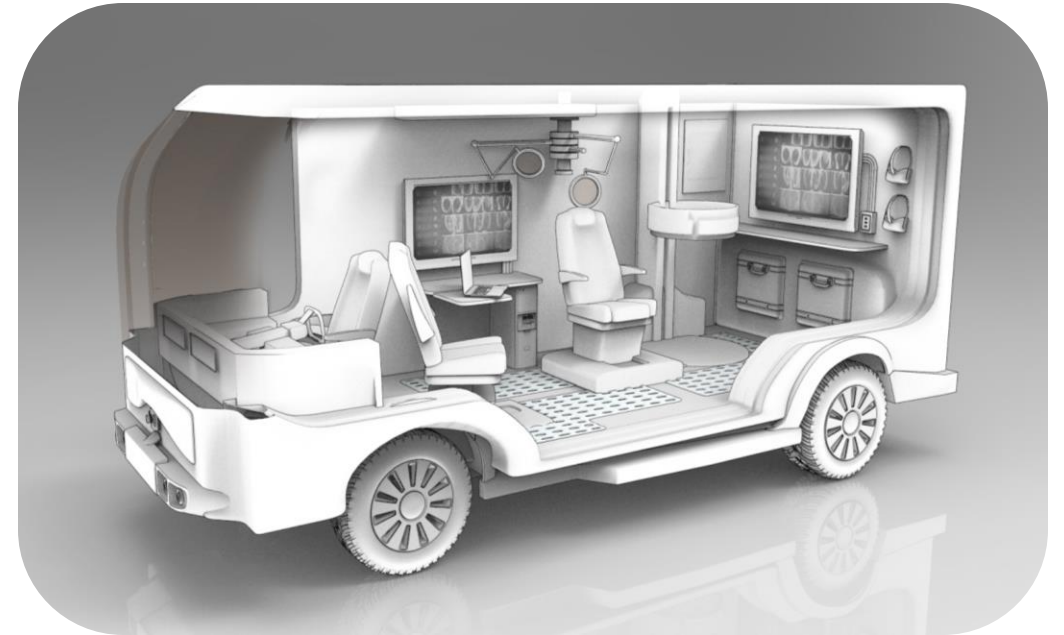
Miniaturized Components

Enables inclusion of diverse array of medical devices to provide multifunctional care.

User-centered design incorporated into the entire platform's design to enable efficient and high-quality care

Satellite networking & remote fleet management enables remote engagement w/ clinicians and proactive vehicle maintenance.

EV "skateboard" chassis design provides more efficient use of space.






Develop a multipurpose, scalable platform that can perform a wide range of clinical services outside the walls of a hospital.

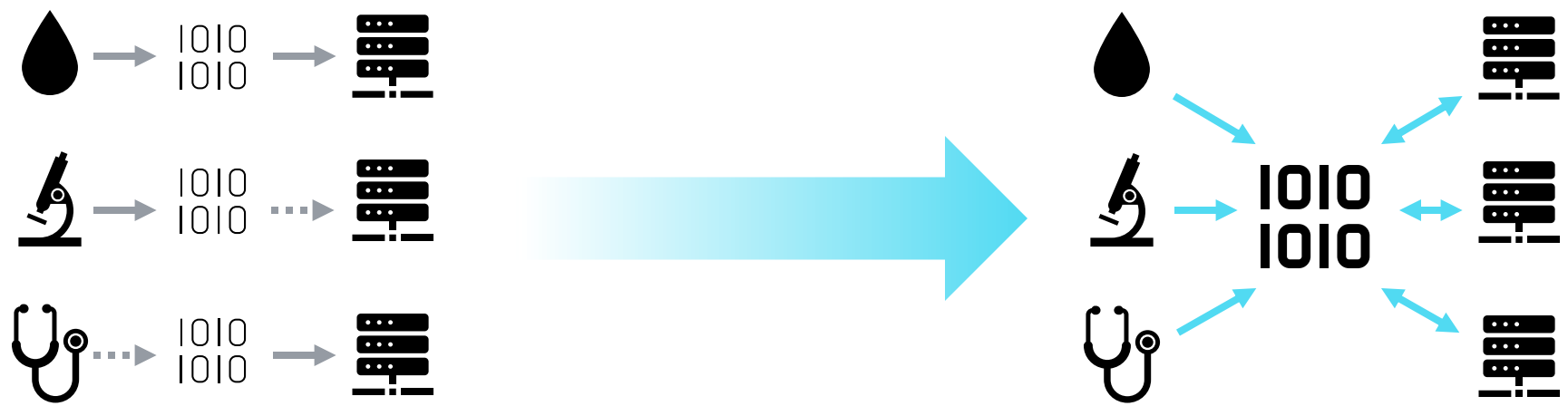
Ask a Question:



TA3: Medical IoT* Platform

Connect medical devices through a vendor agnostic software platform

-  TA1: Decentralized Approach to Hospital-Level Care
-  TA2: Care Delivery Platform Integration
-  **TA3: Medical IoT Platform**
-  TA4: Rugged CT Scanner
-  TA5: Intelligent Task Guidance



Develop a vendor agnostic software platform that enables seamless data ingestion, normalization, and translation between common medical devices and EHRs.

Ask a Question:



IoT = Internet of Things

TA4: Rugged CT Scanner

Miniaturize, ruggedize and simplify advanced imaging for use in a mobile unit.



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



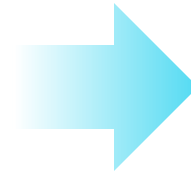
TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance



Enabling Technologies:
Carbon nanotube x-ray source
AI image algorithms

Build a miniaturized, ruggedized, self-shielded CT scanner by reimagining both the hardware and software design elements of the device technology.

Ask a Question:



TA5: Intelligent Task Guidance

Upskill healthcare workers to perform tasks beyond their usual training



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



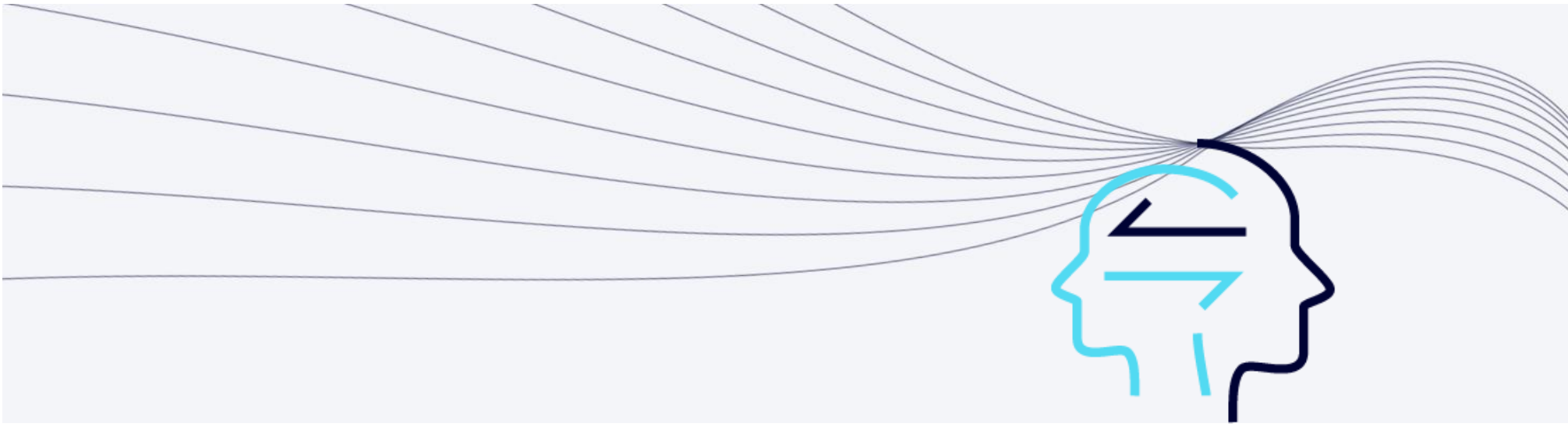
TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance



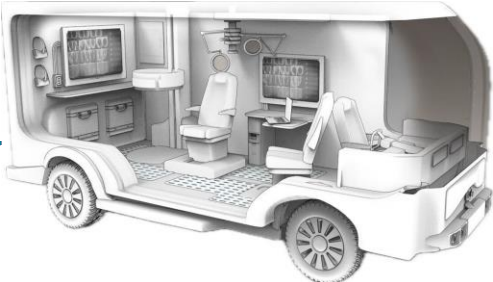
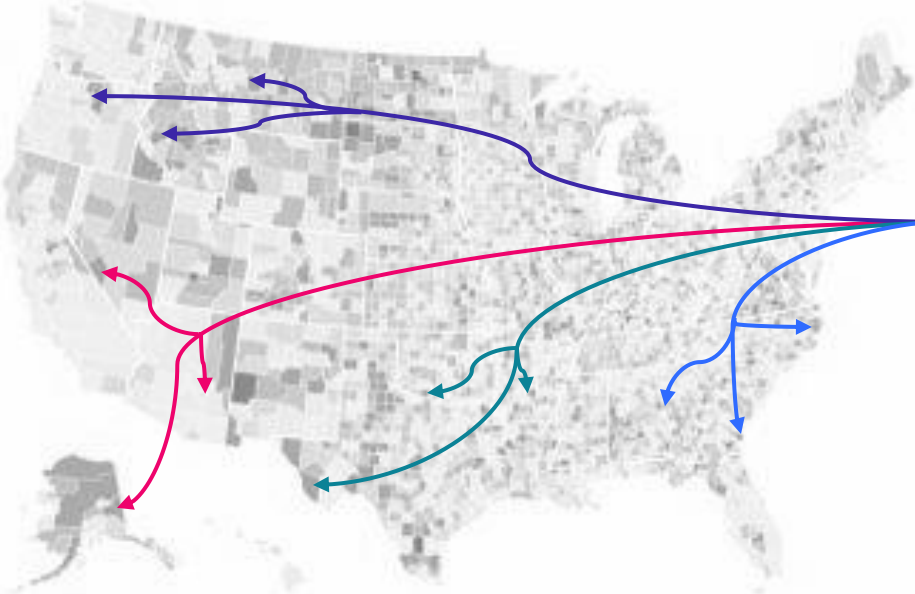
Develop an easy-to-use, interactive, and intelligent task guidance system that provides real-time decision support thus helping to turn a generalist into a just-in-time specialist.

Ask a Question:



PARADIGM Program Deliverables

12 multifunctional integrated Care Delivery Platforms deployed across rural America for testing and evaluation



Field testing of dozens of clinical services

Evidence-based clinical effectiveness and financial sustainability data

'Plug-and-Play' ready medical device system

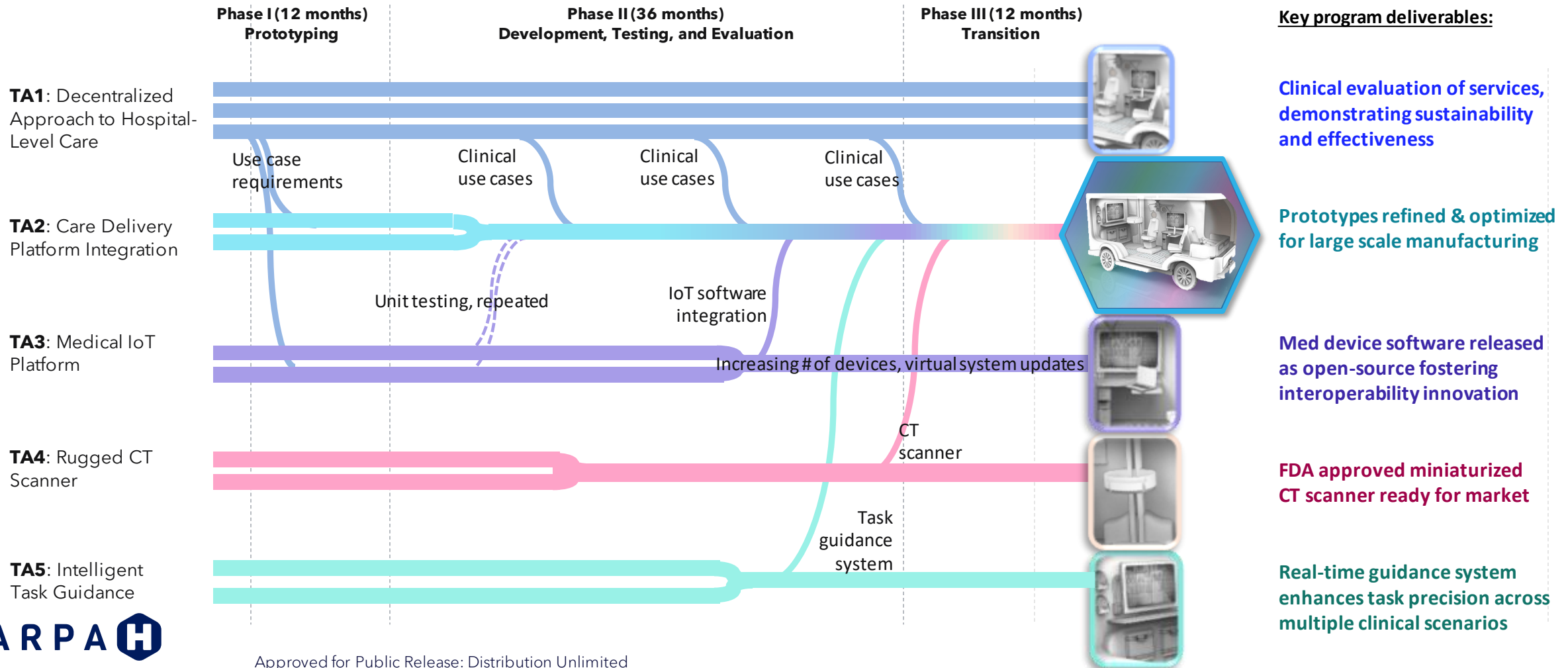
**Miniaturized FDA approved CT Scanner
Real-time intelligence guidance system supporting 7+ tasks**

Ask a Question:

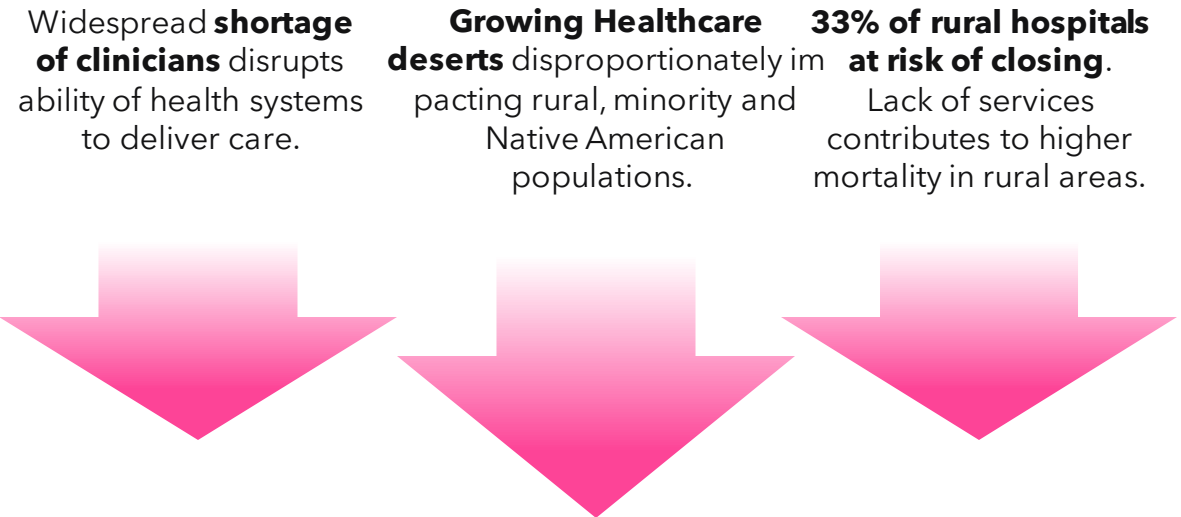
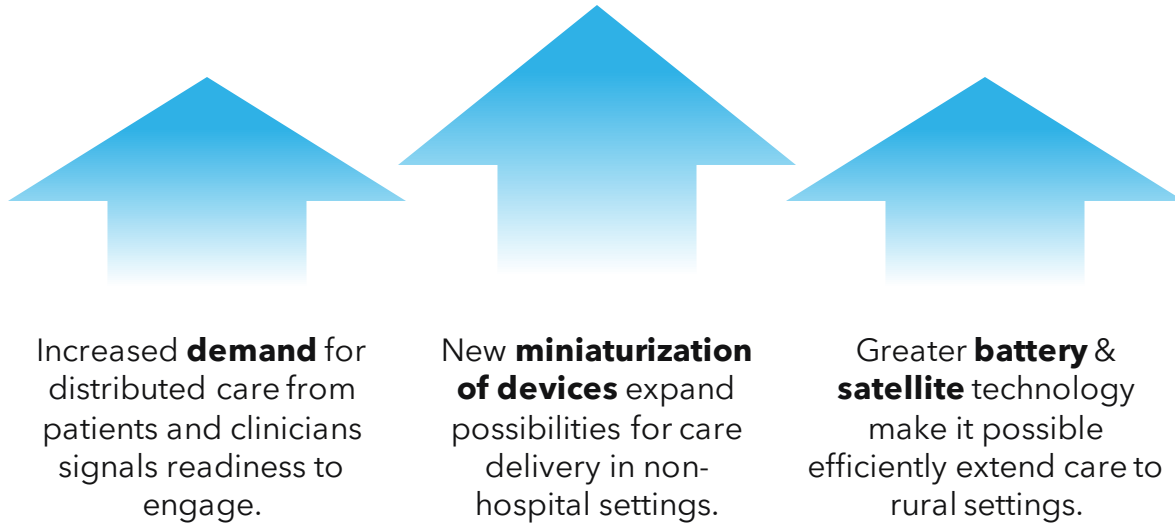


Testing & Evaluation for Performers

PARADIGM will yield an **integrated care delivery platform** and numerous **stand-alone technologies**



Why now?



Ask a Question:



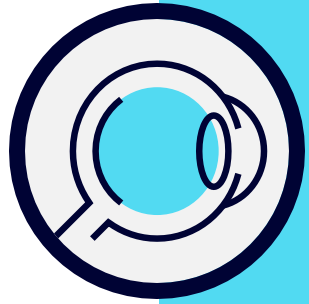
Final Guidance

Monitor SAM.gov and Grants.gov

- Any/all changes to the Program Solicitation (PS) will be made via formal amendments and posted online at [SAM.gov](https://sam.gov)
- No information discussed at Proposers' Day shall be construed as modifying the terms and conditions of the PS

Conform to all PS Requirements

- Thoroughly read the PS
- Pay special attention to the eligibility requirements outlined in the PS
- Non-conforming proposals **will not** be evaluated or considered for award



Dates and Deadlines

- Anticipated Abstract Due Date: February 27, 2024, 4:00 PM EST
- Anticipated Proposal Due Date: April 26, 2024, 2:00 PM EST

Questions

- Refer to the PARADIGM FAQ Website (frequently updated!):



Ask a Question:



Acquisitions Details

The Application Process

Adrea Robinson, Agreements Officer
Business Innovation Division

Ask a Question:



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PARADIGM Solicitation/Funding Opportunity Basics

- Program Solicitations (PS) are a flexible and recognizable method to competitively solicit proposals for R&D
- ARPA-H anticipates meaningful proposals with varying technical/scientific approaches

PARADIGM Program Solicitation Basics

Award Types

- Awards will be Other Transactions.

Award Timeline

- Estimate full proposal evaluations to be complete by 28 May. At that point, ARPA-H will begin negotiating award instrument SOWs and T&Cs with selected proposers.

Award Funding

- Funding for the first 18-24 months will be provided at award. Additional funding will be provided as the program progresses.

Award Types - Other Transactions (OT)

OTs are agreements

- Mutual assent, expressed by a valid offer and acceptance; adequate consideration; capacity; and legality (i.e., these are contracts, but not FAR procurement contracts.)
- Leverage commercial business practices more so than traditional FAR procurements.

Collaborative

- Increased collaboration and partnership, leading to more effective use of resources and knowledge sharing.

Flexible

- Many typical contract laws and regulations don't apply (e.g., CICA, FAR, CAS).
- Greater flexibility in project design and implementation.
- May fully negotiate data rights, patents, payment structure, etc.



Process Overview



Abstract Submission

- OPTIONAL
- Length should not exceed 3 pages (excludes cover page & ROM).
- Abstract should include all sections as specified in the provided template.
- Abstracts will be reviewed, not evaluated.
- All Abstracts to be submitted to solutions.arpa-h.gov



Full Proposal

- Government will recommend or discourage submission based on abstract review.
- Submitted in eCPS for
- Summary of Proposal & Detailed Proposal Info - no more than 40 pages in length (excludes TDD).



Evaluation and Selection

- The Government will evaluate each conforming proposal against criteria 1-4.
- Selection for award will be made as outlined in the PS.

Evaluation Criteria

Overall Scientific and Technical Merit

- Innovative, feasible, achievable, and complete.
- An outcome that achieves the goal can be expected as a result of award
- Risk identification with mitigation strategy.

Proposer's Capabilities and/or Related Experience

- Team expertise and experience.
- Experience in managing similar efforts.

Potential Contribution and Relevance to the ARPA-H Mission

- Future application, including unmet needs within biomedicine and to improve health outcomes.
- Potential for interdisciplinary approach.

Evaluation Criteria (continued)

Reasonableness/Realism/Funding Availability/Affordability

- **Submissions must include the specified spreadsheets**
 - Amendment forthcoming to provide both in SAM.gov

- **Price Reasonableness**

- **Cost Realism**

- **Availability/Affordability**
 - May only acquire goods or services that meet needs and are within budgetary constraints.
 - IP considerations.

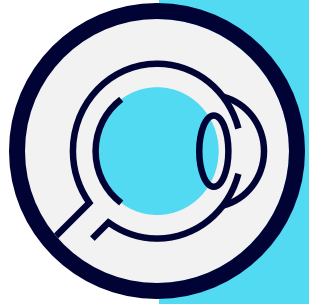
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Ask a Question:



ARPA-H and International Collaboration

Megan Frisk, PhD

ARPA-H Director of International Affairs



Mission

Accelerate better health outcomes for everyone.



ARPA-H International



While ARPA-H programs focus on the hardest problems faced in America, health issues exist everywhere and are often the same, regardless of borders.

ARPA-H is looking for innovative solutions **all over the world.**

International Cooperation

International research cooperation can bring together the best talent, technology, facilities, and knowledge from around the world to solve the various health challenges identified in ARPA-H programs.

Enabling R&D



Creating unique capability, laboratory, facility, or research infrastructure



Piloting and/or scaling invention in another country



Enabling research and/or policy environment

Fostering Transition



Engaging customer or investor engagement



Understanding foreign markets and/or regulatory landscape



Designing international clinical trial sites

Collaboration Can Take Many Forms



**International
spoke**



**Performer or team
member**



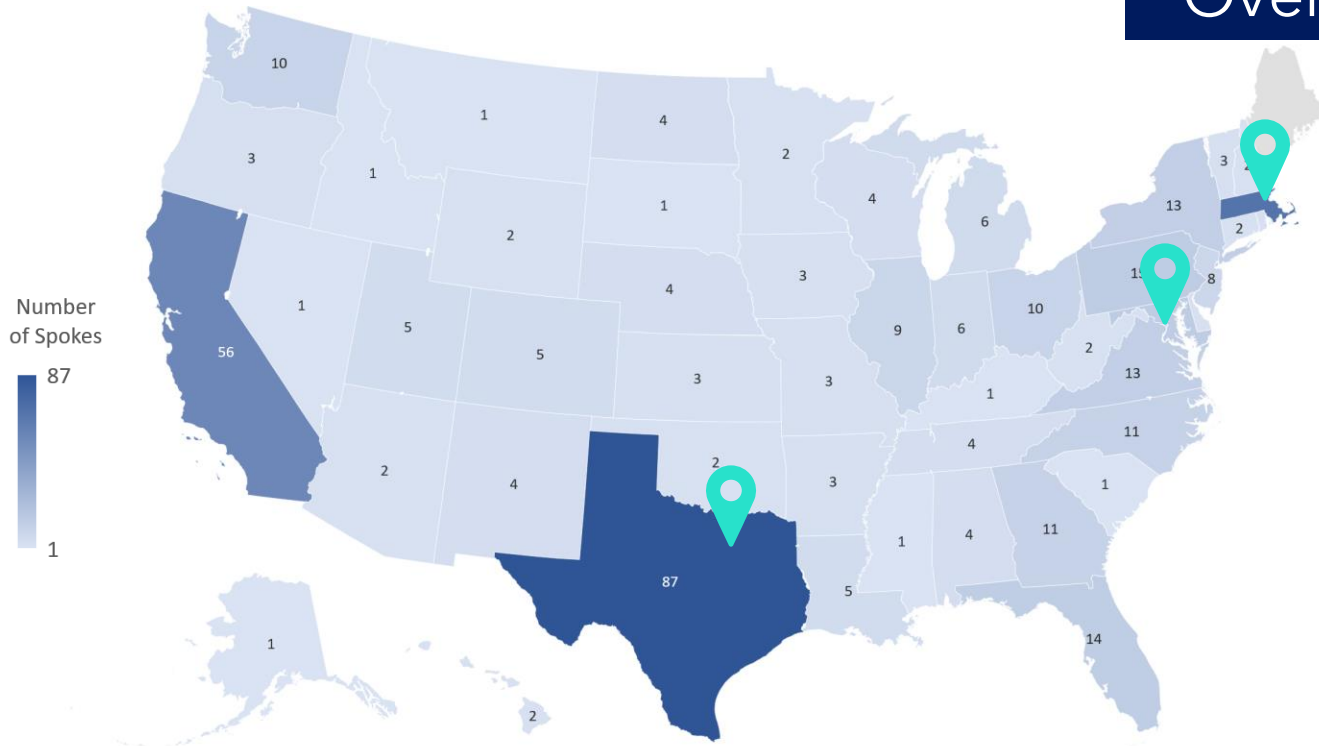
**Co-investment or
in-kind
contribution**



**Transition partner
or pathway**

ARPANET-H: Connecting the Health Ecosystem & Powering Communities, Domestic and International

Over 400 partners (spokes) and counting...



Investor Catalyst Hub - *Greater Boston, MA*

Collaborations focused on navigating the complexities of the market landscape so innovations can transition from government support to commercial success.

- *Example capabilities: investment due diligence, competitive landscape analysis, regulatory pathway, robust business model development*

Stakeholder and Operations Hub - *National Capital Region*

Stakeholder engagements with our critical regulatory and legislative partners to support transitioning new health capabilities.

- *Example stakeholders: regulatory (FDA), payers (CMS), administration (White House, HHS)*

Customer Experience Hub - *Dallas, Texas*

Unique capabilities focused on the patient, provider, and community experience for faster and broader adoption of ARPA-H health innovations.

- *Example capabilities: co-creation of designs with end-users, community engagement, advanced manufacturing, clinical trials*



International FAQs

Does ARPA-H fund international R&D?

Yes. Our world is interconnected, and the most challenging health problems (probably) cannot be solved by any one country. While ARPA-H prioritizes awards to entities that will conduct funded work and clinical trials in the United States, it is not a requirement.

Can ARPA-H directly fund a foreign entity?

Yes. Each ISO defines eligibility for non-U.S. persons.

Are all foreign entities eligible for ARPA-H funding?

Non-U.S. entities may participate if they comply with necessary nondisclosure agreements, security regulations, export controls, and other relevant governing statutes. In no case will awards be made to entities organized under the laws of a covered foreign country* or entities suspended or debarred from business with the U.S. Government.

**defined in the National Security Act of 1947 (50 U.S.C. § 3059)] as Russia, Iran, North Korea, and China.*

[More at arpa-h.gov](https://arpa-h.gov)



Engage with ARPA-H



Submit your Project Idea

Calling for proposals for breakthrough research and technological advancements to improve health outcomes across patient populations, communities, diseases, and health conditions



Sign up for Newsletter

Keep up to date with the ARPA-H Vitals Biweekly newsletter.



Collaborate with Us

We want to partner with subnational and foreign governments, community health centers, patients, caregivers, patient advocate groups to ensure we are delivering on our mission

international@arpa-h.gov

BREAK

PATIO

Melissa Antman, PhD

Deputy Director, Project Accelerator Transition Innovation Office



Project Accelerator Transition Innovation Office (PATIO)

Our Mission: PATIO increases the probability that ARPA-H funded health technologies **will reach those Americans** by identifying barriers and providing transition and commercialization services to program managers and performers.

Since ARPA-H will not fund performers in perpetuity, PATIO's services increase the odds that solutions attract private investment and customers—to translate the breakthroughs

Where might the solution go after ARPA-H?

Work backwards: design with the end in mind

Large
Established
Company

Emerging
Company with
VC Backing

De Novo
Startup

Health Care
System

Other Gov
Agency

Scaled NGO or
Non-Profit

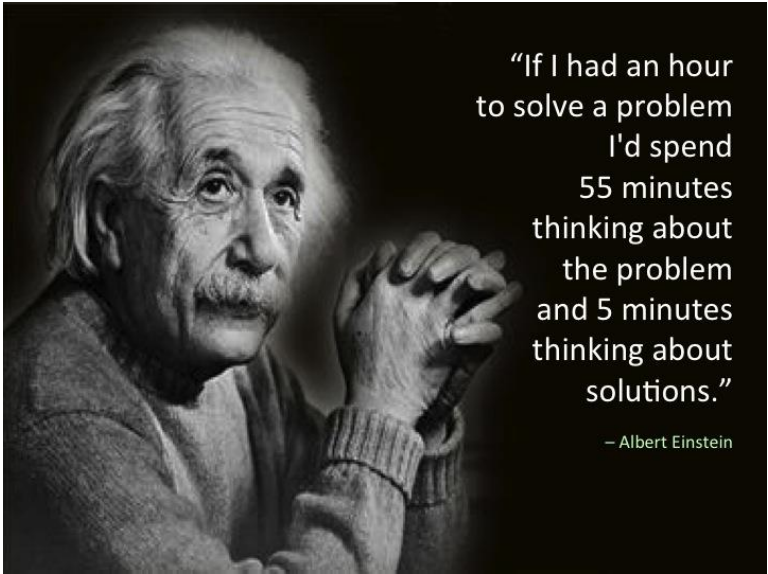
Startup NGO
or Non-Profit

Fast Fail &
Early
Offramps

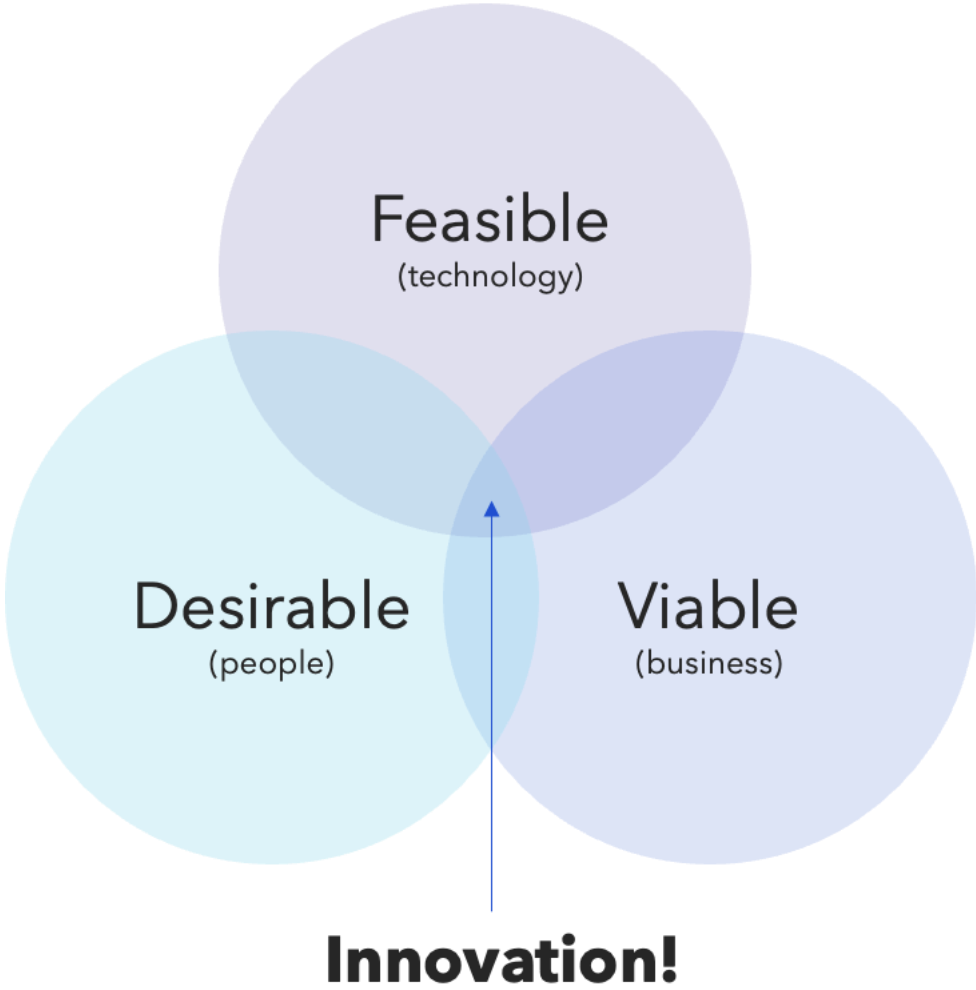
Most Common Startup Failures

Based on the analysis of 101 startup postmortems

60% of startups fail between the pre-seed and Series A funding stages



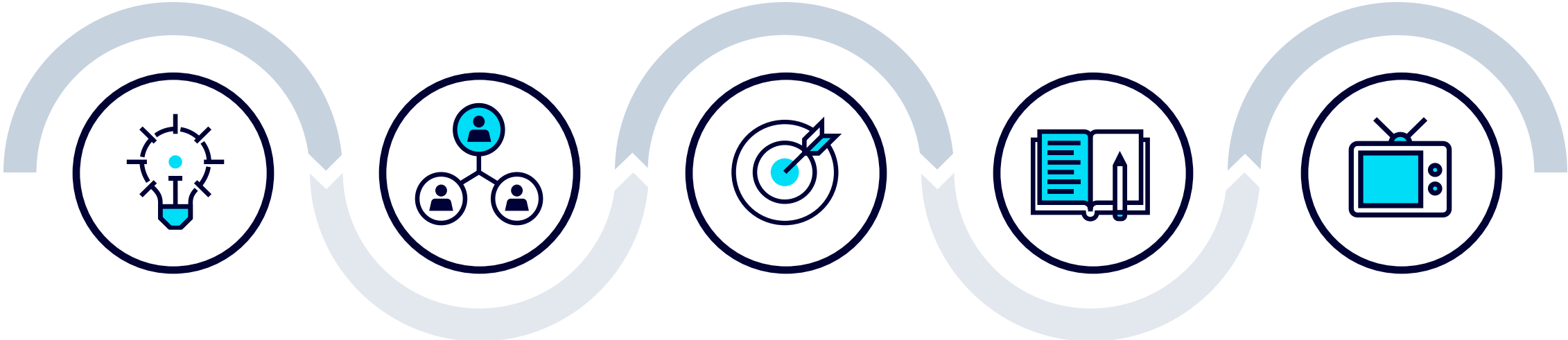
Design Rubric



Project Accelerator Transition Innovation Office (PATIO)

Increase the probability - at each step - that solutions can drive positive health outcomes & "survive in the wild"

SERVICES DURING PROGRAM LIFECYCLE



Program Design

- Identify opportunities and gaps
- Market/IP assessment
- Regulatory assessment

Solicitation Development

- Who are possible performers? Innovation Hubs?
- Develop technical areas
- Validate transition potential

Early Program Performance

- De-risk for investors
- Design MVPs to drive adoption
- Demystify regulatory process

Mature Projects

- Safeguard IP
- Help company formation
- Business strategy, legal and marketing services

Transition and Commercialize

- SBIR/STTR
- Transition partner/third-party investment
- Ongoing mentorship
- Access to key customers and investors

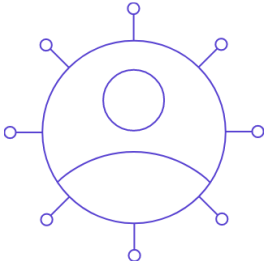
Our Capabilities



Technology Transfer and Transition Services (T3X)

Build transition-ready programs by de-risking solutions from program design through performance; runs agency SBIR/STTR program

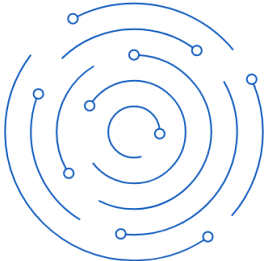
Led by *Janica Patterson*



Health Ecosystem and Engagements Team (HEET)

Create meaningful bi-directional communication between ARPA-H and America.

Led by *Dan Bram*



ARPANET-H (ANH)

Connect a fragmented health ecosystem through projects, events, and democratized learning

Led by *Amy Lin*



PATIO is led by Craig Gravitz (Director) and Melissa Antman (Deputy Director)



Technology, Transfer and Transition Services (T3X)



Build transition-ready programs by de-risking solutions from program design through performance.

Capabilities

- **Experts in Residence (XIR) Program** External, recognized transition/commercialization experts identify and solve for blind spots of ARPA-H PMs and programs.
- **Regulatory & Reimbursement Support** Demystify and assist in navigation of these processes. Get involved early to avoid traps.
- **Due Diligence / Landscape Analyses** IP analyses, commercialization landscape to understand a particular technology, competitive landscape to understand key players in the arena, etc.
- **Small Business Program** provides funding for small businesses that possess the expertise to use innovative approaches to enable revolutionary advances in science, technology, or systems leading to developments that contribute toward the agency's mission.

Health Ecosystem Engagement Team (HEET)



Create meaningful bi-directional communication between ARPA-H and America

Capabilities

- **Ecosystem Activities & Speaking Opportunities** Broad, in-person engagements where ARPA-H leaders explain the ARPA-H model and mission and build connections.
- **Network on Demand** A self-service platform for ARPA-H PMs and others to access key external stakeholders + ensure de-duplication of efforts.
- **Design Services** Capture the needs and perspectives of expected agency beneficiaries using design research tools and practices.
- **In-Person Discovery Trips** Targeted, deep dive trips with small groups of ARPA-H technical staff to deepen perspectives.

ARPANET-H (ANH)



Connect a fragmented health ecosystem through projects, events, and democratized learning

Capabilities

- **Funding Opportunities/R&D projects** Funded projects to accelerate transition.
- **Network Activation** Gather feedback at scale by drawing on the skills and reach of network members.
- **Consortium Events/Network Building Activities** Convene the ARPANET-H network to foster connections and enable information sharing.
- **Program Augmentation (future)** Support maturing ARPA-H efforts. Examples might include independent validation and verification, CROs for pre-clinical, clinical trial support, and manufacturing (facilitating the business relationships).

ARPA  H

Welcome to PARADIGM Proposers Day!



Agenda:

9:00 AM MT	Registration + Poster Setup	
9:30 AM	Resilient Systems Office Intro	Gina Kost
9:45 AM	PARADIGM Program Overview	Bon Ku
10:00 AM	PARADIGM Agreements	Adrea Robinson
10:15 AM	International Relations	Megan Frisk
10:30 AM	BREAK	
10:45 AM	PATIO	Melissa Antman
11:00 AM	NIH All of Us Program	Chris Lunt
11:15 AM	Hepatitis C Eradication	Francis Collins
11:30 AM	Closing Remarks	Bon Ku
11:35 PM	Lunch + Poster Setup	
12:50 PM	Poster Session (in-person only)	Networking Event
1:00 PM	TA-Specific Breakout Sessions	PARADIGM Team
4:00PM	End	

Questions/Comments? Scan here:

Or use handouts. Questions not answered today will be addressed on our website.



Event Recording & Sharing

Our morning program will be recorded and shared. Afternoon sessions are closed, but information will be made available online.



Poster Session + TA Breakouts

Teaming and networking is encouraged. Please follow instructions for poster set-up, and join our teaming page here:



Ask a Question:



TA-specific afternoon meetings

TA1: Decentralized Approach to Hospital-Level Care

1:00 - 1:25 pm MT

TA2: Care Delivery Platform Integration

1:35 - 2:00 pm

TA3: Medical IoT Platform

2:10 - 2:35 pm

TA4: Ruggedized CT Scanner

2:45 - 3:10 pm

TA5: Intelligent Task Guidance

3:20 - 3:55 pm

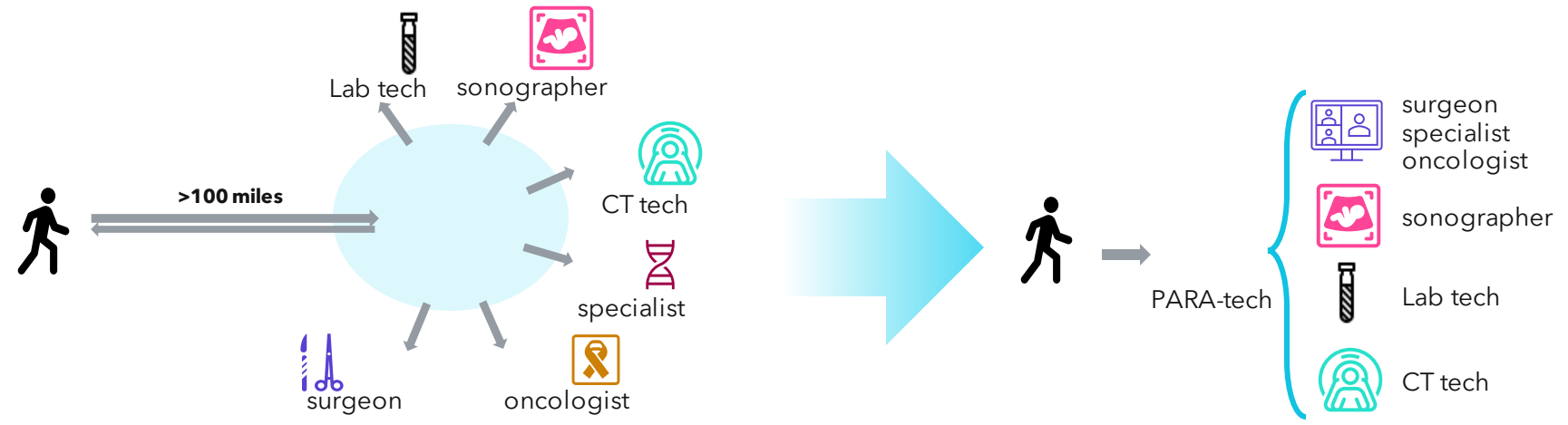
TA 1

TA1: Decentralized Approach to Hospital-Level Care

A multifunctional clinical platform can increase healthcare access in rural areas

TA1: Decentralized Approach to Hospital-Level Care

- TA2: Care Delivery Platform Integration
- TA3: Medical IoT Platform
- TA4: Rugged CT Scanner
- TA5: Intelligent Task Guidance



Increase breadth of high-quality care provided outside of a hospital setting by evaluating the ability to directly treat patients using the multifunctional scalable care delivery platform.

Ask a Question:



TA1 Example Strong Performer

- Provides direct patient care, across multiple clinical areas/use cases
- Focus on health professional shortage area (HPSA)
- Conduct culturally sensitive community engagement and outreach
- Capable of providing care in a consolidated care delivery platform (CDP), whether part of an existing or new model of care
- Selects hospital-level use cases and services that fundamentally revolutionize the quality and type of care available
- Analyzes and is prepared to demonstrate financial sustainability of providing services in a care delivery platform beyond the duration of the PARADIGM program's support

Ask a Question:



ARPA 

TA1 Milestone/Deliverable Schedule

Ask a Question:



TA1 Key Deliverables

1. Peer-reviewed clinical effectiveness research studies
2. Deployment Strategy Report
 - a) Care Delivery Platform Workflow Playbook
 - b) Financial Sustainability Analysis
3. Community Viability Plan
4. Care Delivery Platform product requirements via ongoing user experience testing

Ask a Question:



ARPA 

TA1 Metrics



TA2

Ask a Question:



TA2: Care Delivery Platform

Build a low-cost, reliable vehicle care delivery platform that can integrate current & future technologies



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance

Miniaturized Components

Enables inclusion of diverse array of medical devices to provide multifunctional care.

User-centered design

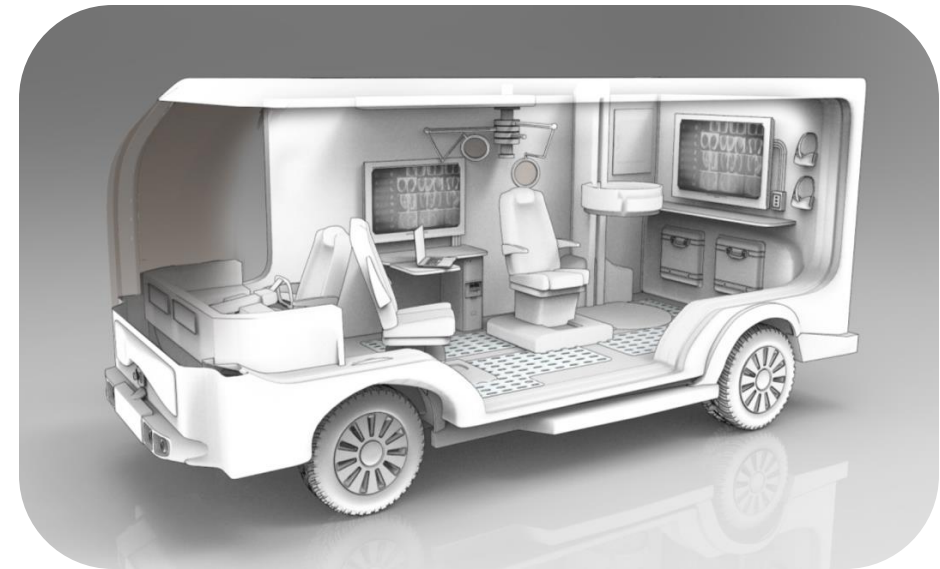
incorporated into the entire platform's design to enable efficient and high-quality care

Satellite networking & remote fleet management

enables remote engagement w/ clinicians and proactive vehicle maintenance.

EV "skateboard" chassis

design provides more efficient use of space.



Develop a multipurpose, scalable vehicle platform that is capable of performing a wide range of clinical services outside the walls of a hospital.

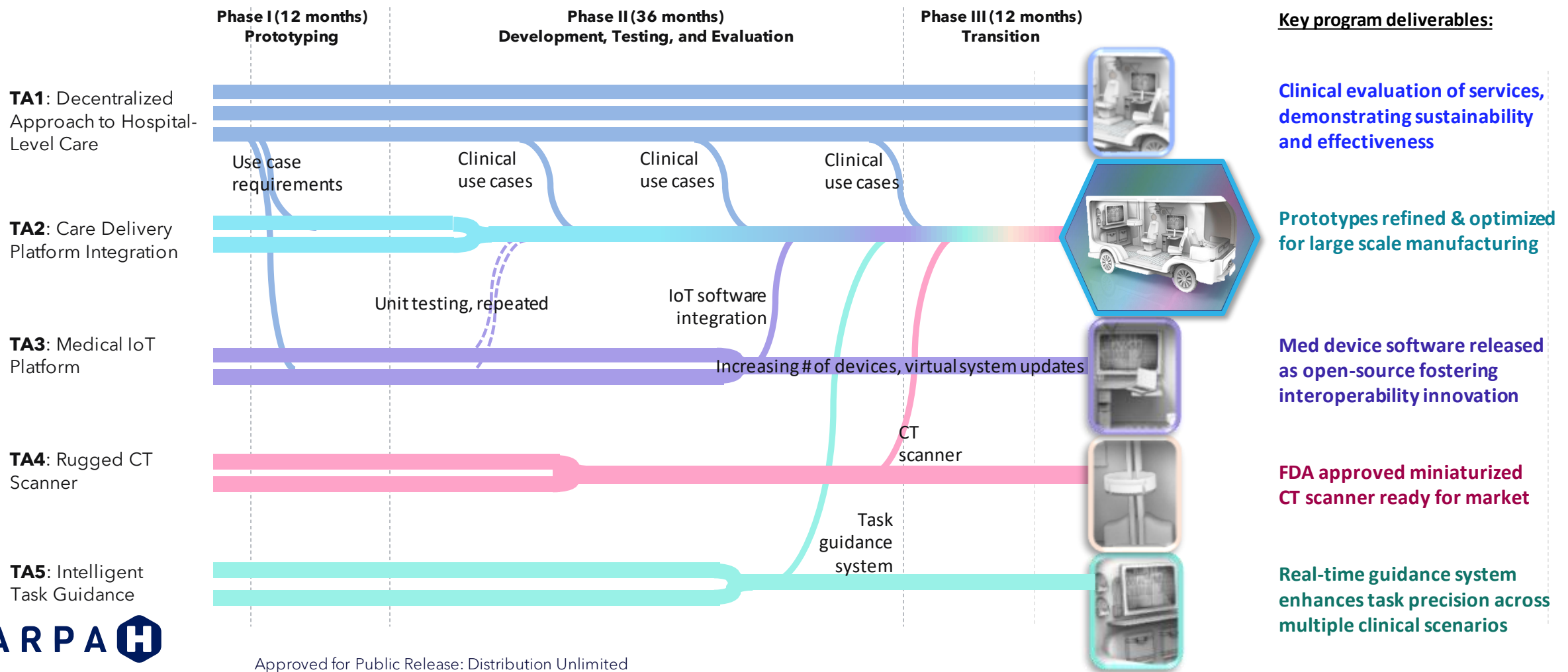
Ask a Question:



ARPA H

Testing & Evaluation for Performers

PARADIGM will yield an **integrated care delivery platform** and numerous **stand-alone technologies**



TA2 Example Strong Performer

- Designs and produces a fully operational vehicle care delivery platform (CDP) that
 - Conforms to constraints around licensure requirements, carrying capacity, size/weight/power (SWaP), operating conditions, telecommunications and ADA compliance
- Has a plan to minimize vehicle downtime
- Uses a human-centered design approach, incorporating iterative user experience feedback into the vehicle care delivery platform design

Ask a Question:



ARPA 

TA2 Milestone/Deliverable Schedule

Ask a Question:



TA2 Metrics








TA3

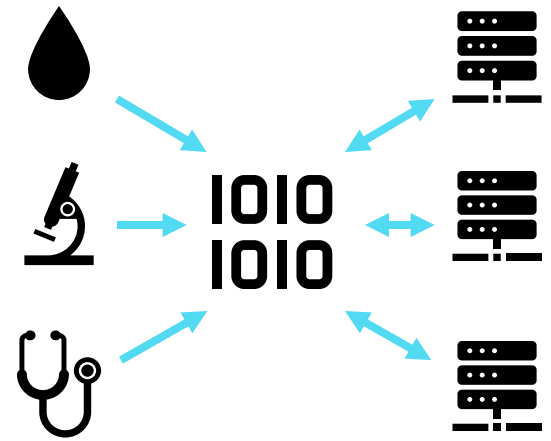
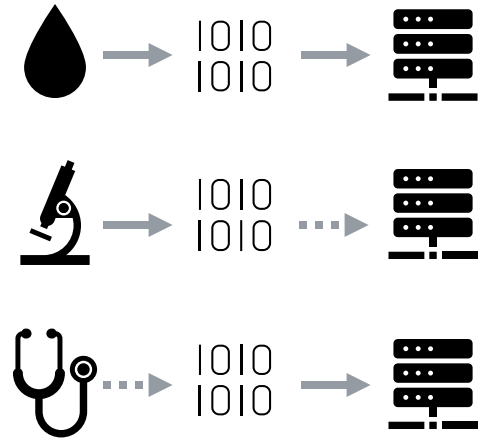
Ask a Question:



TA3: Medical IoT* Platform

Connect medical devices through a vendor agnostic software platform

-  TA1: Decentralized Approach to Hospital-Level Care
-  TA2: Care Delivery Platform Integration
-  TA3: Medical IoT Platform**
-  TA4: Rugged CT Scanner
-  TA5: Intelligent Task Guidance



Develop a vendor agnostic software platform that enables seamless data ingestion, normalization, and translation between common medical devices and EHRs.

Ask a Question:



IoT = Internet of Things

TA3 Key Deliverables

- Proposal that addresses:
 - Device integration
 - Data normalization
 - Data interoperability
 - Data security and privacy
 - Systems thinking applied to safety and data quality
- Software deployed in the mobile care delivery platform environment
- Caching strategy for intermittent internet connectivity
- Shippable open-source version of software
- Commercial transition plan

Ask a Question:



ARPA 

TA3 Milestone/Deliverable Schedule

Ask a Question:



TA3 Metrics

Ask a Question:



TA4

Ask a Question:



TA4: Rugged CT Scanner

Miniaturize, ruggedize and simplify advanced imaging for use in a mobile unit.



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



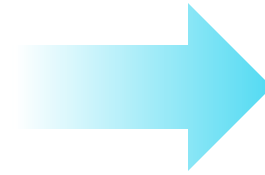
TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance



Enabling Technologies:
Carbon nanotube x-ray source
AI image algorithms

Build a miniaturized, ruggedized, self-shielded CT scanner by reimagining both the hardware and software design elements of the device technology.

Ask a Question:



ARPA 

TA4 Milestone/Deliverable Schedule

Ask a Question:



TA4 Metrics

Ask a Question:



TA5

Ask a Question:



TA5: Intelligent Task Guidance

Upskill healthcare workers to perform tasks beyond their usual training



TA1: Decentralized Approach to Hospital-Level Care



TA2: Care Delivery Platform Integration



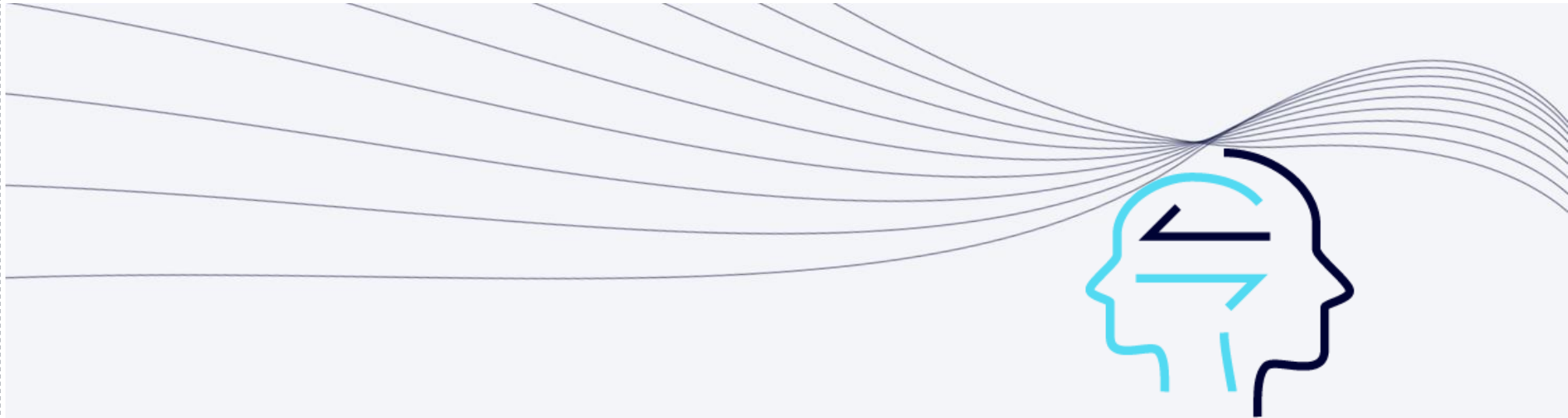
TA3: Medical IoT Platform



TA4: Rugged CT Scanner



TA5: Intelligent Task Guidance



Develop an easy-to-use, interactive, and intelligent task guidance system that provides real-time decision support thus helping to turn a generalist into a just-in-time specialist.

Ask a Question:



TA5 Example Strong Performer

- Experienced in a specific clinical service that can be divided into clearly defined subtasks
- Capable of developing intelligent guidance systems that consider
 - Component models leveraging datasets of varying sizes and sources
 - Hardware that guides a user within the care delivery platform (CDP)
 - Assessments that measure the system's impact on task proficiency and user trust
 - Strategies for addressing bandwidth limitations
- Has access to or ability to generate sufficient training datasets

Ask a Question:



TA5 Milestone/Deliverable Schedule

Ask a Question:



TA5 Metrics

ADJOURN

Ask a Question:

