

April 18, 2019 CDS Connect Work Group Call



AGENDA

3:00 – 3:05	Roll Call, Ginny Meadows (MITRE)
3:05 – 3:10	Review of the Agenda, Maria Michaels (CDC)
3:10 – 3:45	CDS Connect Sustainability Path Project, Lacy Fabian (MITRE) <ul style="list-style-type: none"> • Share draft sustainability models for discussion and feedback • Question and answer period
3:45– 4:00	CDS Authoring Tool: Review design for importing external CQL, Noranda Brown (MITRE) <ul style="list-style-type: none"> • Share proposed design • Question and answer period
4:00 – 4:15	OY2 Pilot Status and CDS Artifact Development, Ginny Meadows (MITRE) <ul style="list-style-type: none"> • Share information on OY2 pilot partner, as well as related CDS artifact development • Question and answer period
4:15 – 4:25	CDS Connect Outreach and Demonstrations, MITRE <ul style="list-style-type: none"> • AMIA 2019 Clinical Informatics Conference, Ginny Meadows • ACT-IAC Igniting Innovation 2019 Conference and Awards, Sharon Sebastian
4:25 – 4:30	Open Discussion and Close Out, Maria Michaels (CDC) <ul style="list-style-type: none"> • Open discussion and announcements • Concluding comments, review next steps and adjourn

- *CDS = Clinical Decision Support*
- *CQL = Clinical Quality Language*
- *OY2 = Option Year 2*
- *AMIA = American Medical Informatics Association*
- *ACT-IAC = American Council for Technology and Industry Advisory Council*

CDS Connect Sustainability Path Project Update

CDS Connect Sustainability Project Milestones and Timeline Update

CDS Connect Sustainability project (September 2018- September 2019)

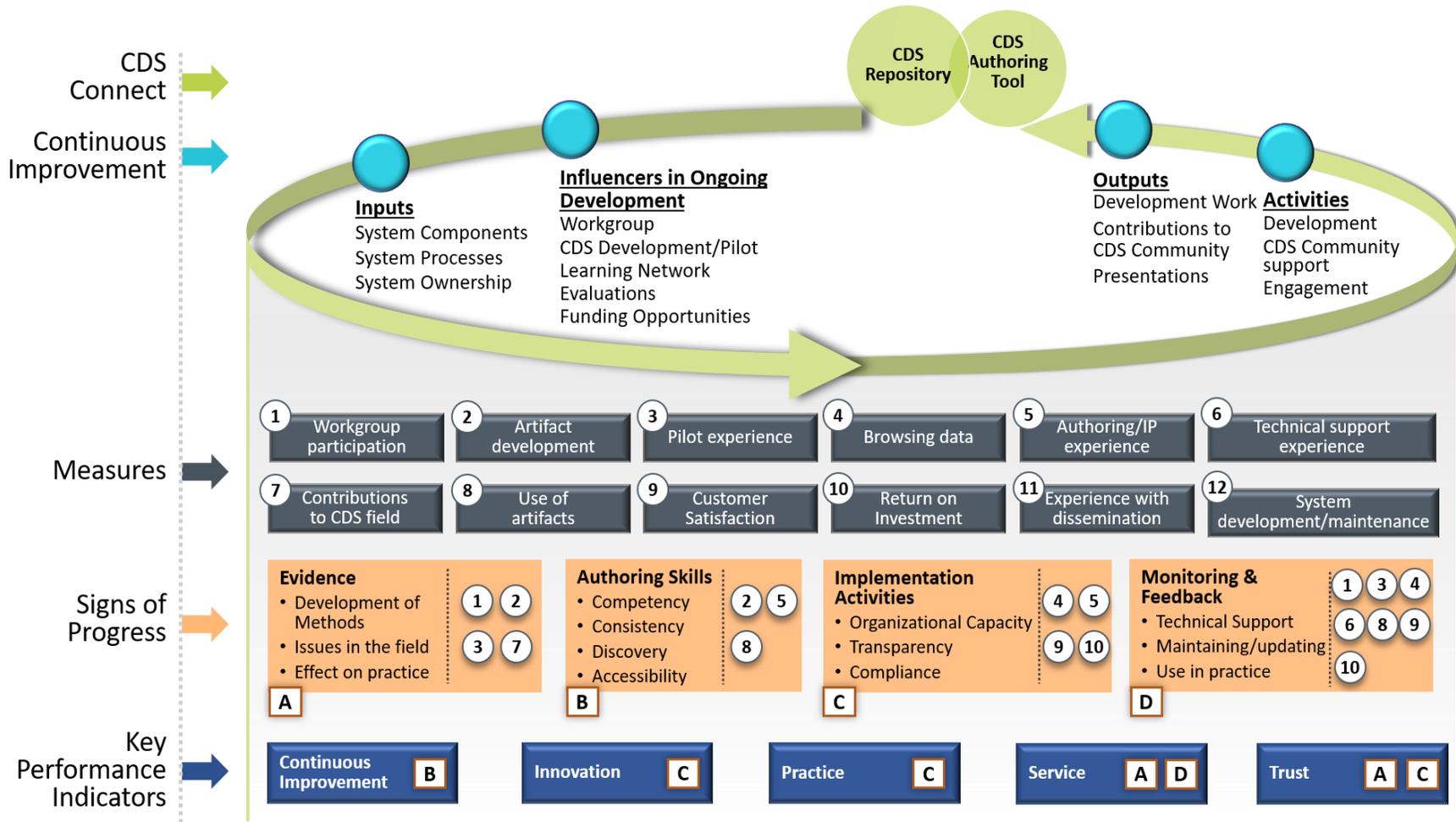
■ Current progress and next steps

- Analysis of CDS Connect sustainability options
 - Current State of CDS Connect (finalized)
 - Environmental scan (finalized)
 - Discussions with organizations (by end of April 2019)
 - Prepared sustainer model criteria for analysis (addressing AHRQ's comments) to inform detailed discussions
 - Report of Detailed exploration of models (finalized June 2019)
 - Analysis and recommendations (finalized-July 2019)
- CDS Connect Transition Plan (finalized September 2019)
- Capture lessons learned (at project closeout)

Objective

- **Discuss two potential sustainability models that AHRQ will consider in determining CDS Connect's next phase**
 - Public Sustainment Model
 - Public/Private Evolution Model
- **Once transition process begins, anticipate there will be a public process that allows everyone an opportunity to participate**

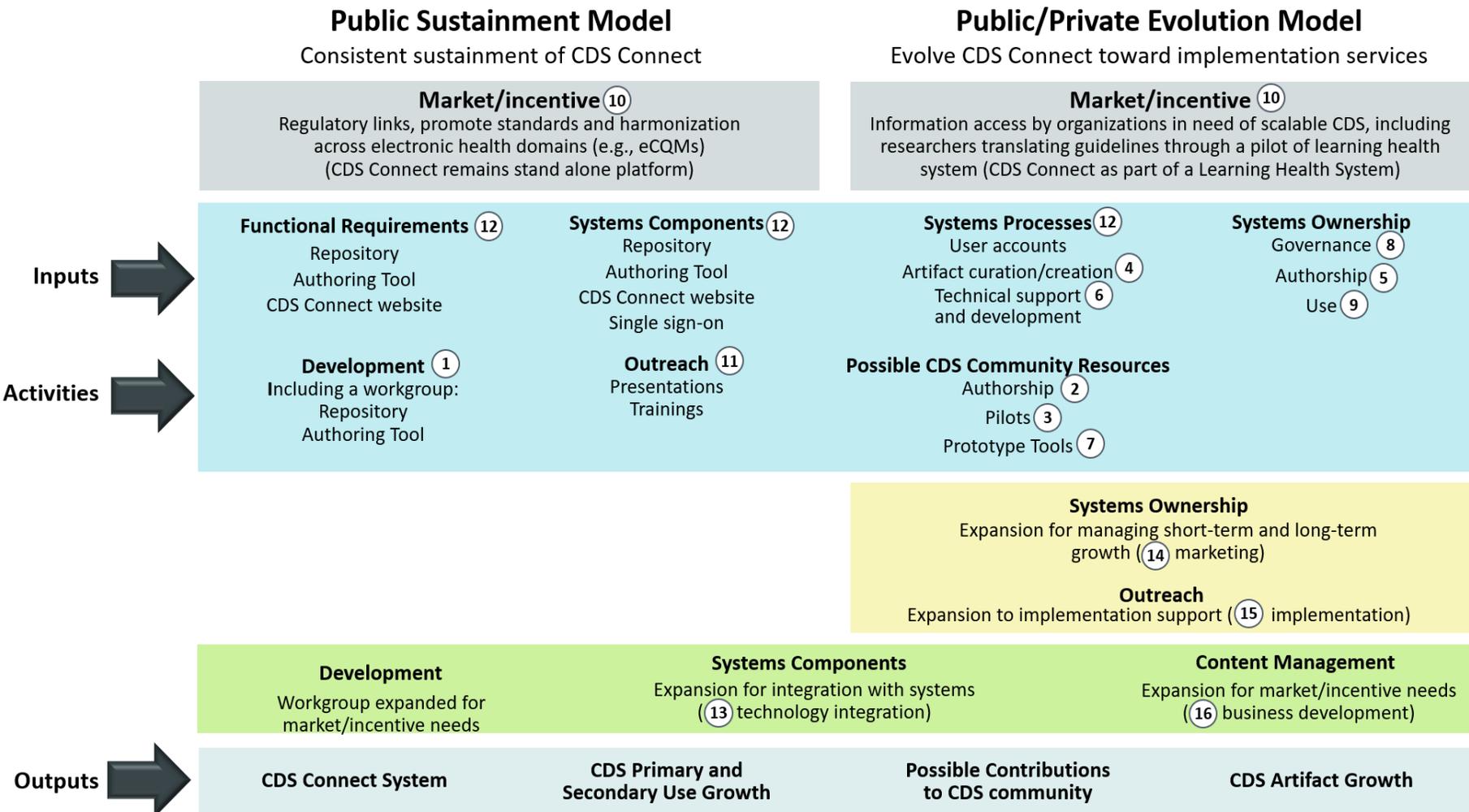
A Framework for CDS Connect



Potential Future State Success

- **Continuous improvement toward interoperability, knowledge translation, and human-computer interaction**
- **Fostering an environment of trust that promotes clinical decision support and sharing of knowledge artifacts**
- **Translating evidence into practice**
- **Promoting a business model that allows innovation in dissemination and resource use**
- **Providing service that is comprehensive and effective across each component of CDS Connect**

Exploring Capabilities of Two Potential Models



CDS Authoring Tool Demo: Importing External CQL

OY2 Pilot Status and CDS Artifact Development

Pilot Activities

Completed:

- ✓ Held Kick Off meeting
- ✓ Created plan for development of consumer-facing intervention content

In progress:

- ✓ Updated Level 2 and Level 3 representations of the CDS
- ✓ Create and deliver data requirement forms
- ✓ Develop CDS integration
- ✓ MITRE Institutional Review Board (IRB) submission

Next up:

- ✓ Finalize analytic plan
- ✓ Develop test plan
- ✓ Determine Pilot participant/organization

The logo for b.well, featuring the lowercase letters 'b.well' in a dark blue, sans-serif font. A small green dot is positioned above the letter 'l'.

Final Pilot USPSTF Recommendations

- **Statin Use for Primary Prevention of CVD**
 - Associated Logic: 10-Year ASCVD Risk Calculation
- **Healthful Diet and Physical Activity for CVD Prevention**
- **Abnormal Blood Glucose and Type 2 Diabetes Mellitus**
 - **Part 1:** Screening for abnormal blood glucose for those patients who meet the defined inclusion and exclusion criteria
 - **Part 2:** If the screening done in Part 1 is abnormal, offer or refer patient to intensive behavioral counseling interventions.
- ~~**Syphilis infection in Nonpregnant Adults and Adolescents Screening**~~

USPSTF = US Preventive Services Task Force

CVD = Cardiovascular Disease

ASCVD = Atherosclerotic Cardiovascular Disease

Statin Use for Primary Prevention of CVD

The USPSTF recommends initiating use of *low- to moderate-dose statins* in adults aged 40 to 75 years *without a history of CVD* who have *1 or more CVD risk factors* (dyslipidemia, diabetes, hypertension, or smoking) *and a calculated 10-year CVD event risk of 10% or greater.*

Inclusions:

1. **Age \geq 40 and \leq 75 years of age**
2. **AND 1 or more risk factor:**
 - LDL-C lab result $>$ 130 mg/dL (most recent, last 6 years)
 - OR HDL-C $<$ 40 mg/dL (most recent, last 6 years)
 - OR Diabetes (Type 1 or Type 2)
 - OR Hypertension
 - OR Smoking (most recent, last 6 years)
3. **AND 10-Year CVD risk score \geq 10% (most recent, last 6 years)**

*LDL-C = Low-density lipoprotein cholesterol
HDL-C = High-density lipoprotein cholesterol*

Exclusions:

1. Diagnosis of CVD
 - OR LDL-C lab result $>$ 190mg/dl (most recent, past 6 years)
 - OR Known Familial Hypercholesterolemia
 - OR Diagnosis of Active Pregnancy OR Pregnancy Observation in the past 42 weeks
 - OR Diagnosis of Active Breastfeeding OR Breastfeeding Observation in the past 1 year
 - OR Diagnosis of End Stage Renal Disease
 - OR Actively undergoing dialysis (i.e., within past 7 days)
 - OR Diagnosis of Active Cirrhosis
 - OR Diagnosis of Rhabdomyolysis
 - OR Already receiving a statin (Medication is Active or has been Ordered or a Medication Statement)

10-Year ASCVD Risk Calculation

- **Recommendation:** The race- and sex-specific Pooled Cohort Equations* to predict 10-year risk of a first hard ASCVD event should be used in non-Hispanic African Americans and non-Hispanic whites, 40–79 years of age. (ACC/AHA Class 1 Recommendation)
 - “first hard ASCVD event” = nonfatal myocardial infarction, coronary heart disease, nonfatal or fatal stroke
- **Equation/Risk Calculator Data Inputs:**
 - Age
 - Gender (M/F)
 - Race (White/African American/Other)
 - Total Cholesterol (mg/dL)
 - HDL Cholesterol (mg/dL)
 - Systolic Blood Pressure (mmHg)
 - Treated for high blood pressure
 - Hypertension (HTN) diagnosis + active anti-HTN med
 - Diabetes (Y/N)
 - Current Smoker (Y/N)

ACC= American College of Cardiology
AHA = American Heart Association

Age (years)	<input type="text" value="40-79"/>
Gender	<input checked="" type="radio"/> Male <input type="radio"/> Female
Race	<input type="radio"/> African American <input checked="" type="radio"/> Other
Total cholesterol (mg/dL)	<input type="text" value="130-320"/>
HDL cholesterol (mg/dL)	<input type="text" value="20-100"/>
Systolic blood pressure (mmHg)	<input type="text" value="90-200"/>
Diastolic blood pressure (mmHg)	<input type="text" value="30-140"/>
Treated for high blood pressure	<input checked="" type="radio"/> No <input type="radio"/> Yes
Diabetes	<input checked="" type="radio"/> No <input type="radio"/> Yes
Smoker	<input checked="" type="radio"/> No <input type="radio"/> Yes

Healthful Diet and Physical Activity for CVD Prevention

The USPSTF recommends offering or referring adults who are overweight or obese and have additional cardiovascular disease (CVD) risk factors to intensive behavioral counseling interventions to promote a healthful diet and physical activity for CVD prevention.

Inclusions:

1. Age ≥ 18 years old AND overweight or obese (BMI ≥ 25)
2. AND Known CVD risk factors
 - Hypertension
 - Dyslipidemia
 - Impaired fasting glucose
 - Metabolic syndrome (**waist circumference**, BP, triglyceride, HDL, cholesterol, fasting blood sugar)

Exclusions:

1. Diagnosis of **Active Pregnancy OR Pregnancy Observation** in the past 42 weeks
2. **Diagnosis of CVD** (MI, acute MI, coronary artery bypass graft (CABG) surgeries, CABG, percutaneous coronary intervention, ischemic vascular disease, carotid intervention)
3. **Existing Behavioral Counseling** for
 - Nutrition
 - Physical Activity

BMI = Body Mass Index

BP = Blood Pressure

MI = Myocardial Infarction

Abnormal Blood Glucose and Type 2 Diabetes Mellitus

The USPSTF recommends (1) screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. (2) Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.

Inclusions (Part One, Screening):

1. **Age: ≥ 40 and ≤ 70 AND Overweight or obese (BMI ≥ 25)**
2. **OR Age: ≥ 18 and < 40 AND BMI ≥ 25**
 - AND first degree relative with diabetes
 - OR polycystic ovary syndrome
 - OR African American; Hispanic/Latino; American Indian or Alaskan Natives; Native Hawaiians or Pacific Islanders
3. **OR Age: ≥ 18 and ≤ 70 AND BMI ≥ 23**
 - AND Asian American
4. **OR Age: ≥ 18 and ≤ 70 AND female with hx of gestational diabetes**

Exclusions (Part One, Screening):

1. **Diagnosis of Active Pregnancy OR Pregnancy Observation in the past 42 weeks**
2. **Presence of (within the past 3 years)**
 - Hemoglobin A1c lab test
 - Fasting glucose test
 - Glucose tolerance test
3. **Diagnosis of**
 - Diabetes mellitus
 - Impaired fasting glucose
 - Impaired glucose tolerance

Abnormal Blood Glucose and Type 2 Diabetes Mellitus

The USPSTF recommends (1) screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. (2) Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.

Inclusions (Part Two, Intervention):

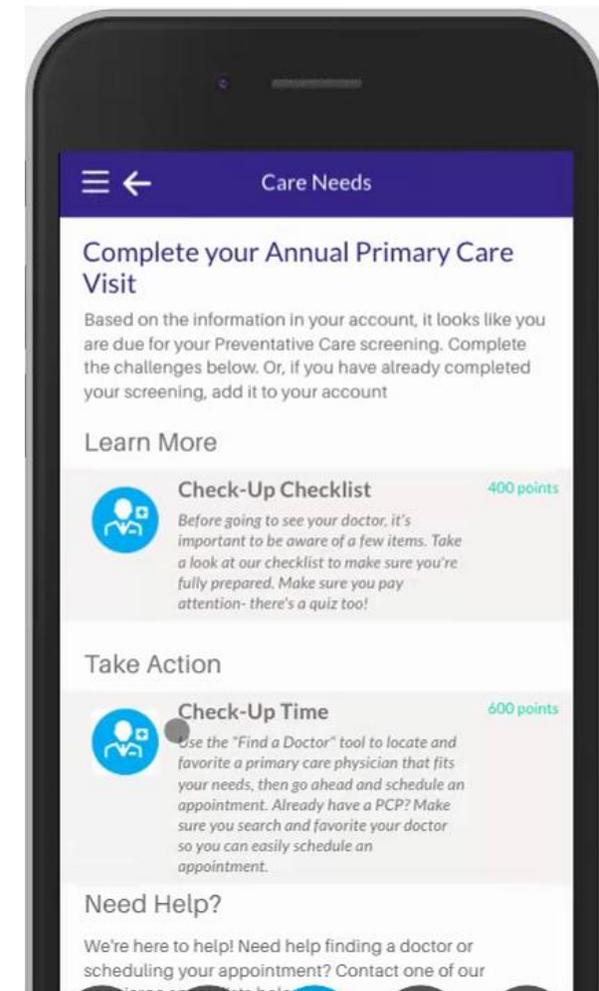
1. Hemoglobin A1c $\geq 5.7\%$ (most recent, last 3 years)
 - OR Fasting plasma glucose level (≥ 5.6 mmol/L or ≥ 100 mg/dl) (most recent, last 3 years),
 - OR oral glucose tolerance test (OGTT) (≥ 7.8 mmol/L or ≥ 140 mg/dl), (most recent, last 3 years)

Exclusions (Part Two, Intervention):

1. **Diagnosis of Active Pregnancy OR Pregnancy Observation in the past 42 weeks**
2. **Existing Behavioral Counseling for**
 - Nutrition
 - Physical Activity

Designing the Intervention Content

- **b.well defines possible interventions as “Care Needs”**
- **Each Care Need provides tailored information to the end user, which may include:**
 - Additional educational information, including quizzes and videos
 - The ability to schedule an appointment with their PCP
 - Links to other useful resources
- **Users receive points for completing each activity, which can be exchanged for healthy “prizes”**
- **MITRE is working with b.well to provide source references from sites like healthfinder.gov**
- **B.well will design the interventions to match their look and feel**



CDS Connect Outreach

CDS Connect at AMIA 2019 Clinical Informatics Conference

- **Panel Discussion LB02: [To Share is Human! CDS Connect: A Growing National Repository of Shareable, Interoperable Clinical Decision Support](#)**
 - Ed Lomotan, AHRQ; Ginny Meadows, MITRE; Maria Michaels, CDC; Jeremy Michel, CHOP; & Kristen Miller, Medstar
 - Thursday, May 2, 12:45 p.m.- 1:45 p.m.
- **[View the Video Abstract](#)**



ACT-IAC Igniting Innovation Finalist!

- **American Council for Technology and Industry Advisory Council (ACT-IAC)**

- 12,000+ members
- Mission: Advancing government through education, leadership and collaboration



- **Igniting Innovation Conference and Award – May 23rd**

- 40 exhibits of competitively selected, cutting-edge innovations
- Attendance by innovation leaders from government, industry, and academia
- Top finalists and overall award winner selected by attendees
- Onsite and post-event coverage by multiple media outlets

<https://www.actiac.org/igniting-innovation-2019-conference-and-awards>

Open Discussion and Close-out

Date Rights Notice

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