



AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



AHRQ evidence-based Care Transformation Support (ACTS) Initiative

MCBK Annual Conference

Steve Bernstein, July 1st, 2020

Presentation Outline



ACTS

- ▶ Objectives
- ▶ Stakeholder Community / Work Groups / Process
- ▶ Roadmap Overview
- ▶ AHRQ Digital Knowledge Platform
- ▶ Knowledge Ecosystem / Learning Health System
- ▶ Benefits
- ▶ ACTS COVID-19 Guidance Collaborative & Pilot
- ▶ Next Steps

ACTS Objectives

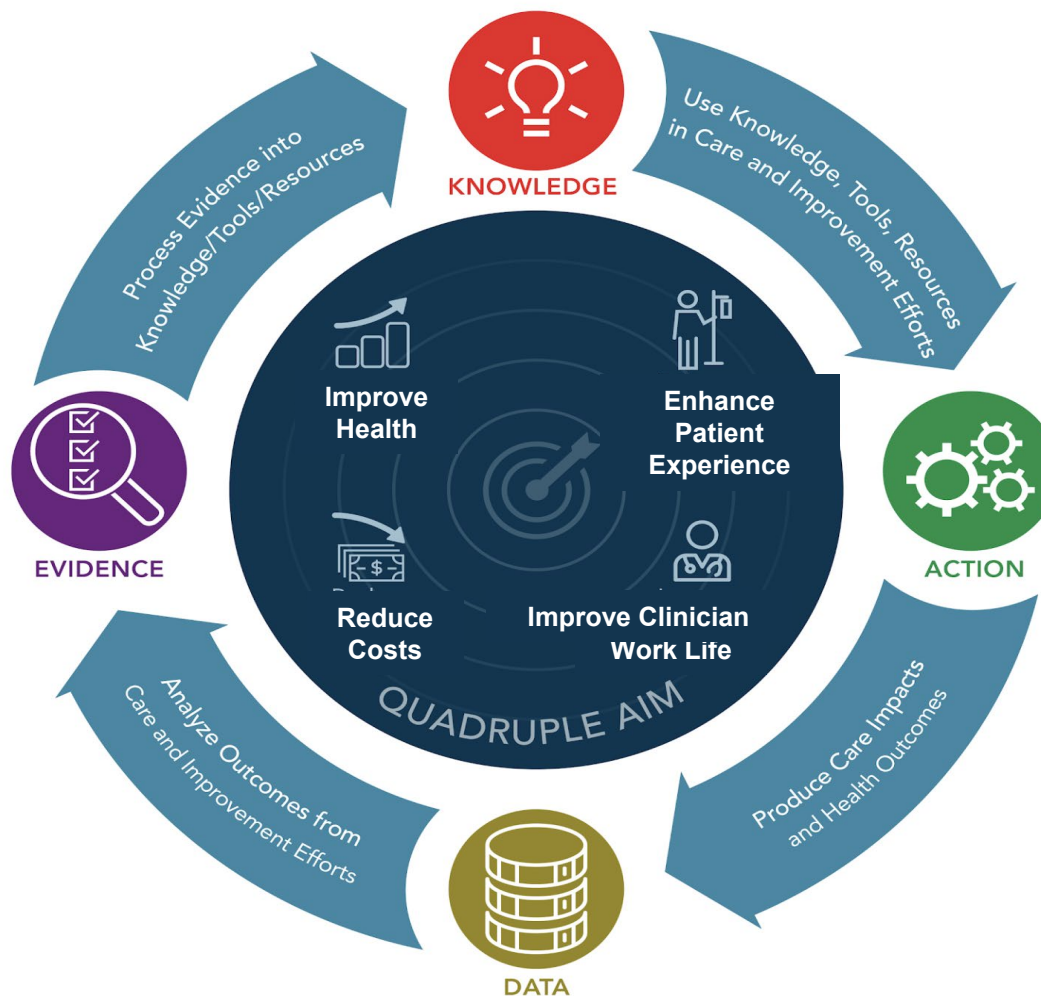
- Establish requirements for an AHRQ Digital Knowledge Platform to make AHRQ resources more FAIR (*Findable, Accessible, Interoperable, and Reusable*), computable and useful
- Ensure this platform interoperates seamlessly with other public and private knowledge platforms in an integrated knowledge ecosystem to improve knowledge creation, interoperability and use at the point of care
- Build a stakeholder-driven Roadmap that ensures the AHRQ Digital Knowledge Platform and the knowledge ecosystem support the AHRQ mission and priorities, and enable learning health systems to achieve the quadruple aim

How ACTS Supports AHRQ

Knowledge Ecosystem & Learning Health System

AHRQ Mission:

- Produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable.
- Work within the US DHHS and with other partners to make sure that the evidence is understood and used.



ACTS Approach



- Stakeholder Community and Workgroups to produce a Roadmap
- Current State vs. Future Vision
- Stakeholder-driven actions AHRQ/ others can take
- Volunteer Stakeholder Community Effort
- Coordinated with other related activities (MCBK ...)

ACTS Stakeholder Community

(n = 240* as of 06/16/20)



| Care Delivery Organizations (72) | | Quality Organizations/Consultants (37) | HIT/CDS Suppliers (41) | | Other Govt Agencies (17) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Adventist Healthcare • ASU • Cedars-Sinai • Children's Hospital of Atlanta (2) • Children's Hospital of Philadelphia • City of Hope National Med Center • Emory University • George Washington University • Harvard Medical School/BWH • HealthPartners • Hennepin Healthcare • Inova Health System (2) • Intermountain Healthcare (3) • Kaiser Permanente • Kittitas Valley Healthcare • Lehigh Valley Health Network • Mayo Clinic (4) • Montefiore Medical Center | <ul style="list-style-type: none"> • Northwestern Medicine • Oregon Health & Science University (2) • Peninsula Regional Med Center (2) • RWJBarnabas Health/Rutgers Health • Sparrow Health • Texas Health Resources • University of Chicago/ Cochrane US Network (2) • University of Arizona • University of Kansas Medical Center • University of Minnesota (2) • University of Pennsylvania Medicine (3) • University of Utah (5) • University of Washington • VA (12) • Vanderbilt University Medical Center (9) • Virginia Commonwealth University (2) • Virginia Mason Medical Center | <ul style="list-style-type: none"> • Advanced Health Outcomes • Arizona Alliance for Community Health Centers • BookZurman • Clinical Informatics • Database Consulting Group • EBQ Consulting • ecGroup Inc. • Fusion Consulting • HLN Consulting • IPRO (2) • JBI (2) • KLAS • Klesis Healthcare • Mathematica • MITRE (2) • NACHC (3) • NCQA (6) • Overhage • Premier • Principled Strategies • RTI (5) • sEA Healthcare • Stratis Health | <ul style="list-style-type: none"> • AgileMD • AiCPG • Apervita (2) • Cerner (2) • Clinical Architecture • Clinical Cloud Solutions • Crisp Health • Decisions/UMN • EBSCO • EHRA/Allscripts • Elimu Informatics, Inc. • Epic (2) • EvidenceCare (4) • Health Catalyst (2) • Healthwise (2) • International Guidelines Center | <ul style="list-style-type: none"> • Intersystems (2) • Logica/HSPC • MAGIC Evidence Ecosystem Foundation (2) • Medisolv Inc. • Meditech (2) • Microsoft (2) • Motive Medical Intelligence • Optum • Smedy • Triostech • Verily Life Sciences • Visible Systems Corporation • Wolters Kluwer | <ul style="list-style-type: none"> • CDC (4) • CMS (5) • Idaho Dept of Health • NIDDK - NIH (2) • NLM - NIH • ONC (2) • Pima County Health Department • (VA) • Washington State Dept of Health |

*Names in parentheses are counted elsewhere; numbers in parentheses are individuals

ACTS Stakeholder Community - Continued

(n = 240* as of 06/16/20)



| Informatics/ Researchers (14) | Specialty Societies (14) | Patient Advocates (2) | Guideline Developers | AHRQ (36) | Payers (2) | Other (5) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Duke University (2) • Idaho State University • Indiana University • (Mayo Clinic) • Stanford University • UCSF • University of Michigan (3) • University of Pittsburgh (2) • (University of Utah) • UT Health at San Antonio • UT Southwestern • (Vanderbilt University) • West Virginia University | <ul style="list-style-type: none"> • AAFP • AAP (3) • ACCME (2) • ACEP (3) • ACP • AHA • AMA • AMIA (2) | <ul style="list-style-type: none"> • Health-Hats • Engaging Patient Strategy | <ul style="list-style-type: none"> • (AAP) • (CDC) | <ul style="list-style-type: none"> • Center for Evidence & Practice Improvement (25) • Center for Financing, Access and Cost Trends (5) • Center for Quality & Patient Safety (1) • Office of Management Services (3) • ACTS Project (2) | <ul style="list-style-type: none"> • (CMS) • BCBS CA • BCBSMN | <ul style="list-style-type: none"> • HL7 • Jodi Wachs • McMaster • OHRI • UK National Health Service |

*Names in parentheses are counted elsewhere; numbers in parentheses are individuals

ACTS Stakeholder Workgroups

Future Vision

Develop Future State Vision grounded by finalizing compelling case examples, or Care Scenarios, focusing on 4 Perspectives:

- Care Delivery
- Care Transformation
- Learning Health System, and
- Resource Development.

Evidence / Knowledge/ Tools Marketplace

Outline current state of Marketplace(s) & identify gaps.

Provide recommendations for how collective assets can be aggregated, organized to achieve future state vision.

Infrastructure/ Standards

Outline current state of Infrastructure/ Standards & identify gaps.

Map technology infrastructure needed to achieve future state vision.

Concept Demonstration

Define/refine concept demonstration protocols, activities, tools, etc.

Define high value, potential follow-on pilot implementations.

Integrate results into and inform Roadmap.

Roadmap

Create Roadmap template. Create process for continuous integration of feedback from above WGs. Develop and finalize Roadmap to support organizations' care delivery, care transformation, learning health system and resource developer efforts. Recommend projects, challenge grants, pilots, research agenda, next steps.

ACTS Roadmap Overview

This stakeholder-driven, collaborative project has 5 key milestones. This roadmap ends with an enterprise solution that weaves together major public and private initiatives.

▼ A Ten Year Transformation

- 2020: Lay foundations
- 2021: Begin broad implementation pilots
- 2022 – 2024: Implement future vision
- 2025-2027: Realize FAIRness and Quadruple Aim improvements
- 2028-2030: Deliver and evaluate

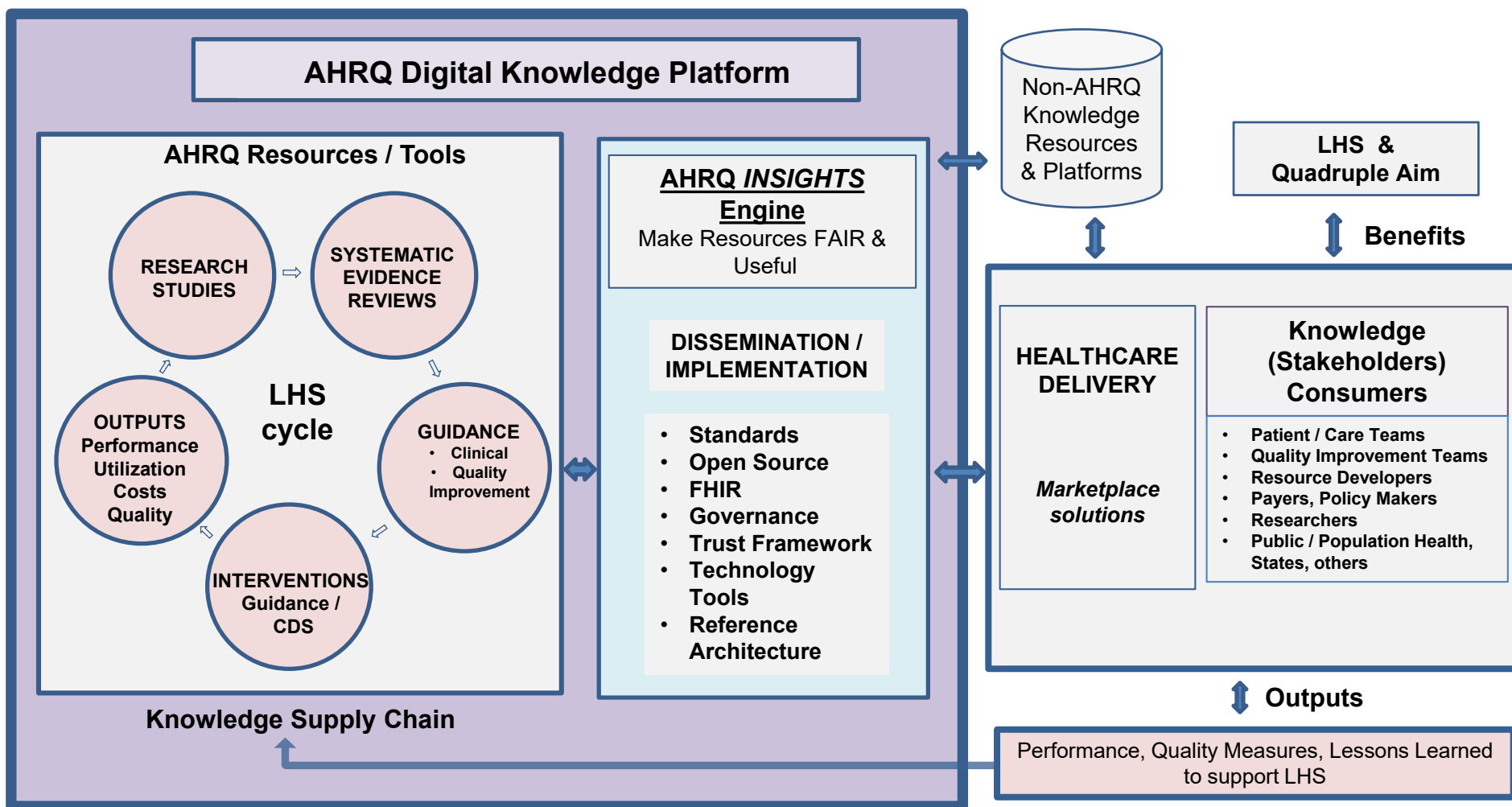


AHRQ Digital Knowledge Platform

Improve Dissemination and Use of AHRQ's resources to support Practice Improvement and Care Transformation to Achieve Better Health and Healthcare Delivery

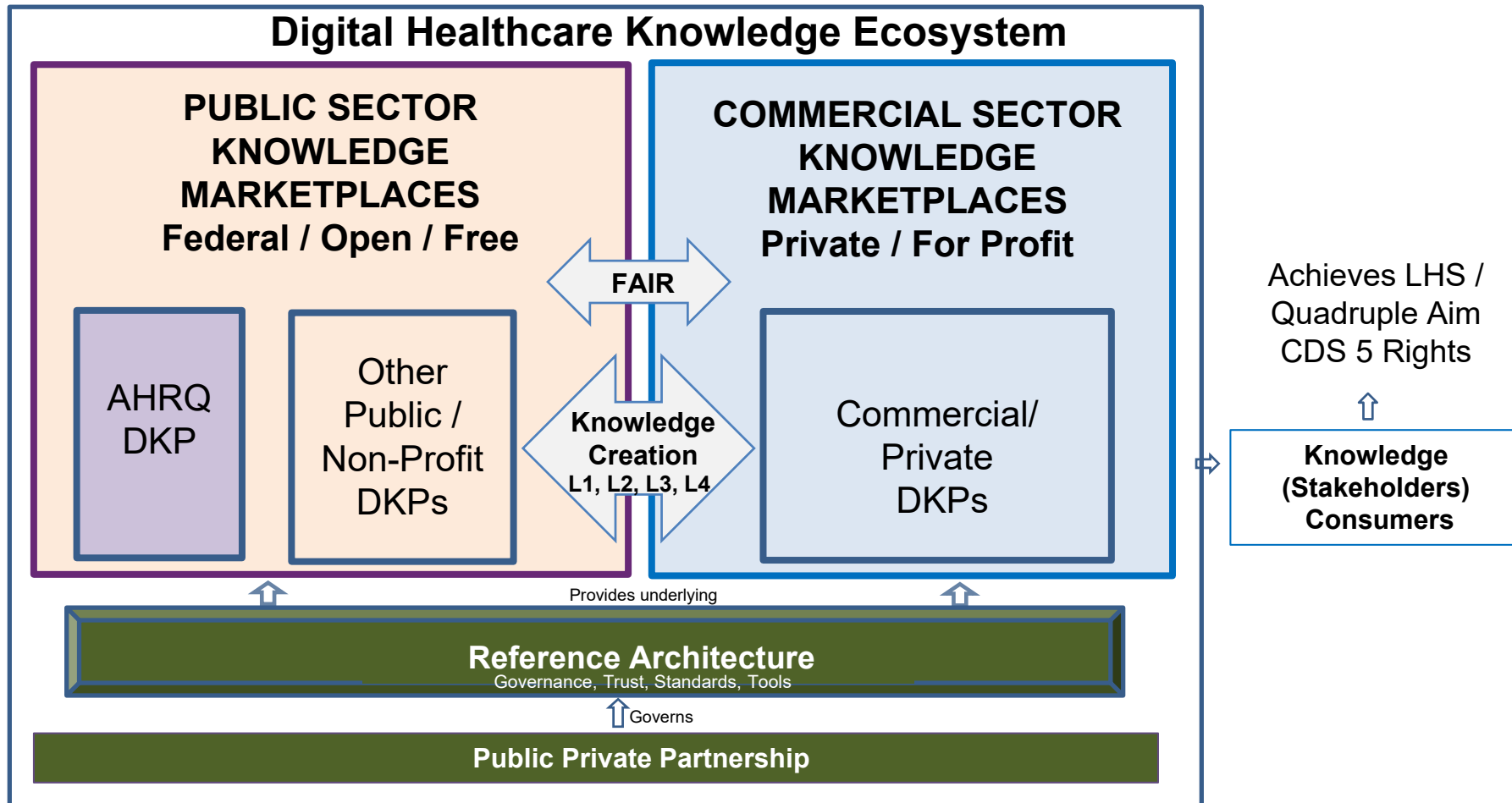


Integrates AHRQ resources/ tools to be more FAIR, computable / useful; Interoperates with other Knowledge Sources & Platforms
Accelerates Dissemination & Implementation of Latest Evidence into Practice



KNOWLEDGE ECOSYSTEM

The AHRQ Digital Knowledge Platform and other Digital Knowledge Platforms (DKPs) combine to form the Knowledge Ecosystem



ACTS Roadmap Benefits

Digital Knowledge Platforms/ Knowledge Ecosystem Delivers LHS that Achieve the Quadruple Aim



- \$ Billions/year spent on care evidence/ guidance/ tools that aren't optimally accessed/used/useful
- Efforts to address this are fragmented/ siloed and without clear path to a comprehensive solution
- Care Delivery Stakeholders can't get information when/where and how it's needed

Waste from Poor Info Flow

- \$210 billion wasted on unnecessary services and \$130 billion on inefficient services/year (1)
- 80-90% Healthcare costs influenced by physician decisions (2)

Sub-Optimal Patient Outcomes

- NEJM - patients get only 50% recommended care (3)
- Preventable harm results in many deaths/day (4)

Clinician Burnout

- Physician turnover/reduced clinical hours costs \$ billions/year, lowers care quality (5)
- "public health crisis: ... pressure to meet quality measures without resources/support" (6)

***Recoverable** Waste in the US Health Care System (7)

| Healthcare Waste Domain | Savings/Year from Measures to Eliminate Waste |
|----------------------------------|-----------------------------------------------|
| Care Delivery | \$44.4 billion to \$93.3 billion |
| Care Coordination | \$29.6 billion to \$38.2 billion |
| Over-treatment or low-value care | \$12.8 billion to \$28.6 billion |

Total = \$86.8B-\$160.1B/Year

(1) [Hung; Healthcare Leadership; 2018; July 15](#); (2) [Crosson; Commentary The Commonwealth Fund 2009; April 27](#) ; (3) [McGlynn NEJM 2003; 348:2635-45](#) ; (4) [Bernazzani; Costs of Care; 2015; Oct 5](#)
(5) [Han; ACP Annals of Internal Medicine; 2019; June 4](#) (6) [Vajracharya; Physician Burnout: A Public Health Crisis" panel; 2018; April 4](#) ; (7) [Shrank; JAMA 2019; 322\(15\):1501-1509](#) ;

ACTS COVID-19 Guidance Collaboration Website

(digital.ahrq.gov/covid-acts)



- ▶ Disseminate guidance summaries
- ▶ Provide a 'workbench' that helps automate retrieval of - and change tracking within - evidence-based information
- ▶ Learning network / Collaborative to foster collaboration via discussion forums and other tools to improve clinical guidance development and workflow integration for COVID-19 (and beyond)
- ▶ Supports web-based, peer-to-peer discussions and coordination to make the knowledge supply chain more efficient and effective
- ▶ Synthesizes via new tools info from CDC, WHO, ECDC, *leading CDO efforts*, others
- ▶ Grades answers based on their support in various guidelines
- ▶ Provides mechanism for providers to submit questions and discuss how they are implementing answer

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AHRQ Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

COVID-19 Guidance Collaborative

Accelerating COVID-19 Evidence Into Care

COVID-19 Guidance Collaborative Pilot

Site In Development and Under Review.
DATA TEST SITE. NOT AVAILABLE YET FOR PUBLIC RELEASE OR USE.

Overview

- Goal of the [COVID-19 Guidance Collaborative](#) is to improve the development, dissemination and use of "living" COVID-19 guidance.
- Users are participants of the AHRQ evidence-based Care Transformation Support (ACTS) Initiative Stakeholder Community.

Key Functions

- Providing current answers for urgent clinical questions faced by healthcare providers and leaders: see COVID-19 Guidance Summaries (initially from Penn Medicine's Center for Evidence-based Practice)
- Helping guidance developers/other track COVID-19-related recommendations - and updates - from CDC and other authoritative agencies (the "Workbench" functionality is in development and pending public release)
- Fostering collaboration among those implementing the COVID-19 guidance summaries: via a Guidance Implementer Discussion Forum
- Facilitating coordination/collaboration to optimize flow of COVID-19 "evidence - to guidance - to action - to data"

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COVID-19 Guidance Summaries Sampling

Patient Care

- Surge Triage for Suspected Influenza-Like Illness
- Post-Discharge Care Guidance for COVID-19 Patients
- Criteria for Advising Home Care Patients to Return to the Hospital
- High Flow Nasal Cannula (HFNC)/Non-Invasive Positive Pressure Ventilation (NIPPV)
- Prophylactic Use of Hydroxychloroquine (HCQ)
- Treatment with Hydroxychloroquine (HCQ)
- Proning Considerations for Patients on HFNC or BIPAP
- Criteria for Discharging Patients from Inpatient Care

Operations

- Masks and Respirators for Health Care Providers
- Healthcare Worker Temperature Screening

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Next Steps



- Roadmap Report
- RFI
- ACTS COVID-19 Guidance Collaborative & Pilot
- Roadmap Status / Actions – Under Advisement by AHRQ leadership

Contact Information



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