STAR HIE Program Health Equity Workgroup

Office of the National Coordinator for Health Information Technology

July 21, 2021

The Office of the National Coordinator for Health Information Technology

Agenda

1. Welcome
2. ONC Workshop Recap: Advancing SDOH Data Use and Interoperability for Achieving Health
3. Health Equity Challenges Recap & Dialogue
4. Digital Health Equity: Introduction & Insights from the Field
5. Closing Remarks

ONC Workshop Recap: Advancing SDOH Data Use and Interoperability for Achieving Health

Ryan Argentieri, Brett Andriesen & Samantha Meklir, ONC
STAR HIE Program SDOH Workshop Participants

STAR HIE SDOH Workshop Participants Discussion

- What were your key takeaways from the panel and/or workshop?
- What stood out to you?
- What are your next steps? Where do we go from here?

Health Equity Challenges Recap & Dialogue

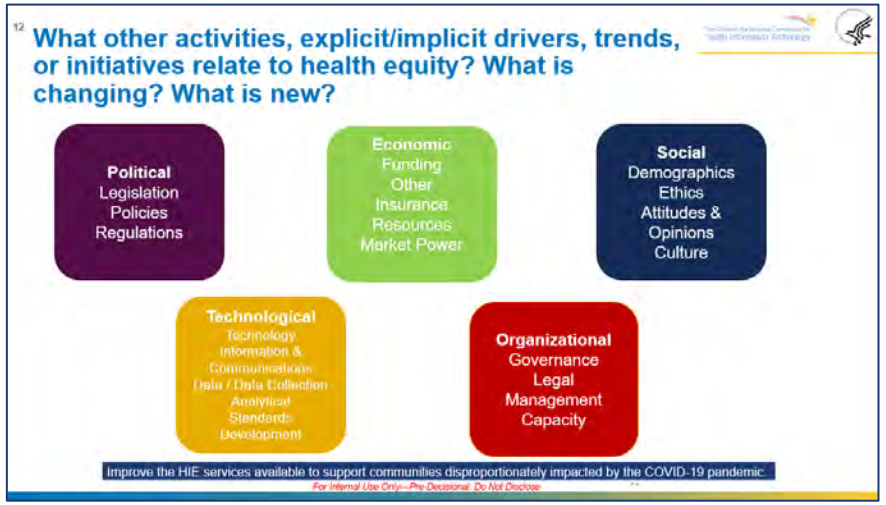
George Gooch, Texas Health Services Authority

Key Challenges

- **Data quality issues**: inconsistent and/or incorrect collecting and coding of race/ethnicity/SDOH by public health & healthcare

- **Lack of cross-sector data standards**: organizations have different data needs and therefore information sharing challenges are largely focused on the data itself rather than the ability to share referrals

- **IIS Integration issues**: states' use of incorrect/incomplete IIS data and their reluctance/inability to include the HIEs in data infrastructure decision-making leads to erroneous IIS data and/or additional downstream work for the HIEs



Questions for Discussion
Data Quality Issues

- Where are you experiencing this challenge (e.g., capacity building/training, technology, data, etc.)? What approaches are you taking to address this challenge?
- Have you considered augmenting/enhancing data in the HIE platform to address some of the data quality issues?

Please complete the poll! →

Questions for Discussion
Lack of Cross-Sector Data Standards

- How are you working with stakeholders in your region/state to better understand the landscape of SDOH IT vendors, data, and use of standards and related HIE opportunities (e.g., terminology mapping, integration, referral management services, etc.)?

- How are you engaging with initiatives (such as the Gravity Project) on emerging SDOH terminology standards across domains? What education needs do you have related to the Gravity Project?

Please complete the poll! →

Questions for Discussion
IIS Integration Issues

- How are data integration issues impacting health inequities and how have you dealt with this challenge?

Poll: Use Cases for Future Discussions

What use health equity-related use cases would you like this workgroup to discuss in a future meeting?

(May choose more than one)

Please complete the poll! →

Digital Health Equity: Introduction & Insights from the Field

Denise Hines, PhD, PMP, FHIMSS
Executive Director, Georgia Health Information Network

Just as COVID-19 highlighted health disparities in access, participation in clinical care and delivery, it also highlighted the digital divide and disparities in patients' ability to participate fully in healthcare services remotely, electronically and virtually.

Pulse check: What does digital health equity mean to you?

Please complete the poll! →

Defining Digital Health Equity

"Everyone, regardless of differences based upon social, economic, demographic or geographic differences, should have equal access to digital health resources AND should have the equal ability to achieve improved health outcomes through healthcare delivered virtually."

Dr. Allison Crawford, University of Toronto, "Digital Health Equity and COVID-19: The Innovation Curve Cannot Reinforce the Social Gradient of Health"

What do you consider to be the biggest barriers and challenges to digital health equity?

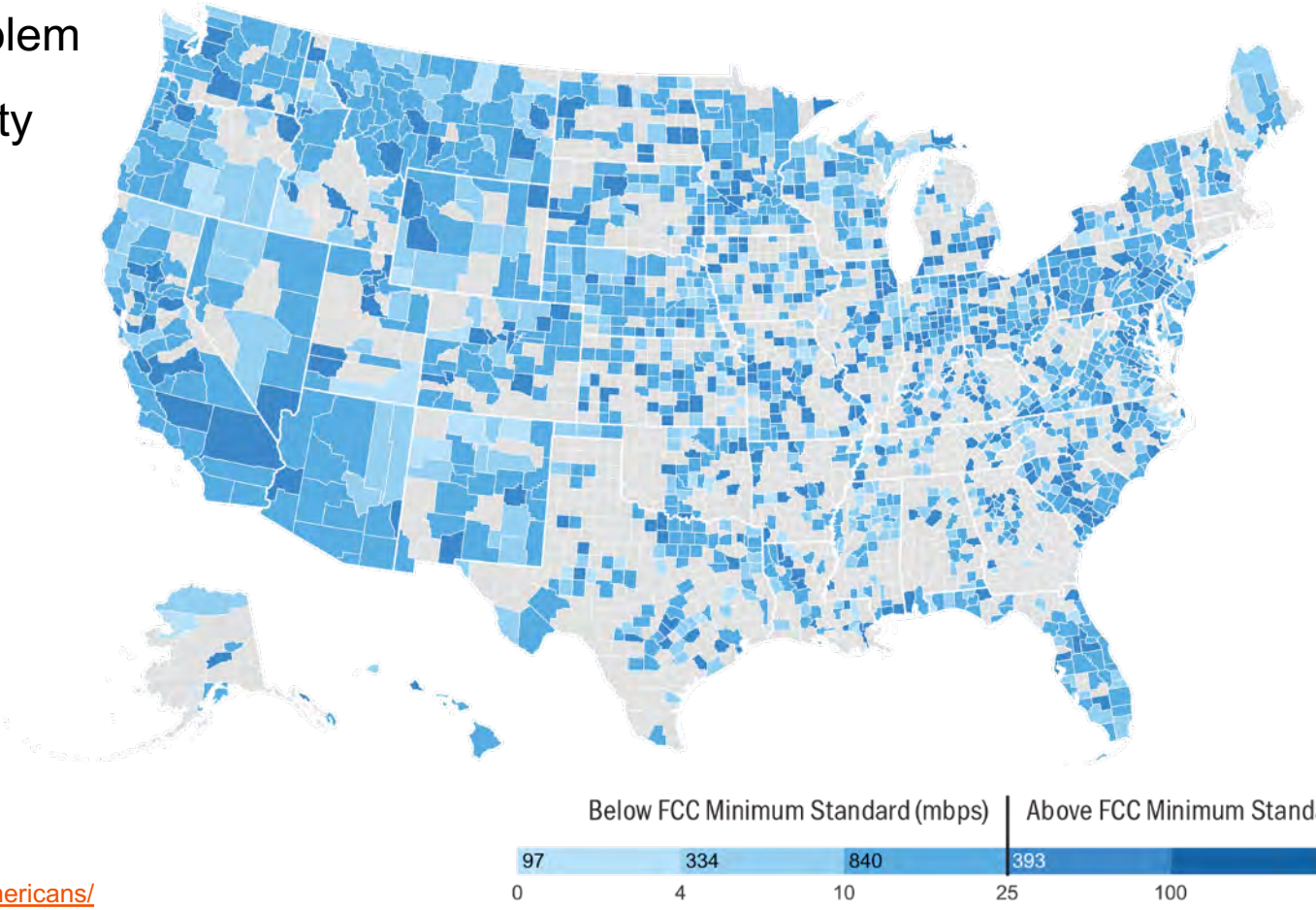
Please complete the poll! →

Barriers and Challenges – Access & Affordability

Please complete the poll! →

- A large percentage of patients lack access to technology and/or internet
  - In rural areas it is an access problem
  - In cities the problem is affordability

> "Tens of millions of Americans do not have access to or cannot afford quality internet."
>
> *Brookings Institute*



https://www.brookings.edu/research/5-steps-to-get-the-internet-to-all-americans/
Map: https://www.naco.org/resources/page/understanding-true-state-connectivity-america

How Do HIEs Meet Data Output Needs?

- Providers may only want relevant episodic data
- State agencies want all relevant clinical or case data
- Hospital or community care coordinators may want episodic and/or longitudinal data
- Researchers may want de-identified population health data
- Patients may only want what they believe is relevant

How Do HIEs Handle Growth In Data Input?

- Increased disparate data sources including mobile testing and vaccination sites, urgent care, non-traditional healthcare settings, state agencies, clinics, pharmacies, community and social care organizations, etc.
- HIE data may contain data from patient monitoring tools, telehealth visits, wellness trackers, etc.
- Competition from Apple for storing patient data
- Still not widely accepted by providers

How do you manage this data that is not standardized or structured? Is it usable patient information?

New Challenges for HIEs

Please complete the poll! →

New connections

New demands on interoperability

Data accuracy and completeness

More user requests for access

Problems with data flow

Privacy and security

More difficulty in patient matching

Data ownership and governance

Thank You!

Lisa-Nicole Sarnowski
Lisa-Nicole.Sarnowski@hhs.gov
202-573-6251

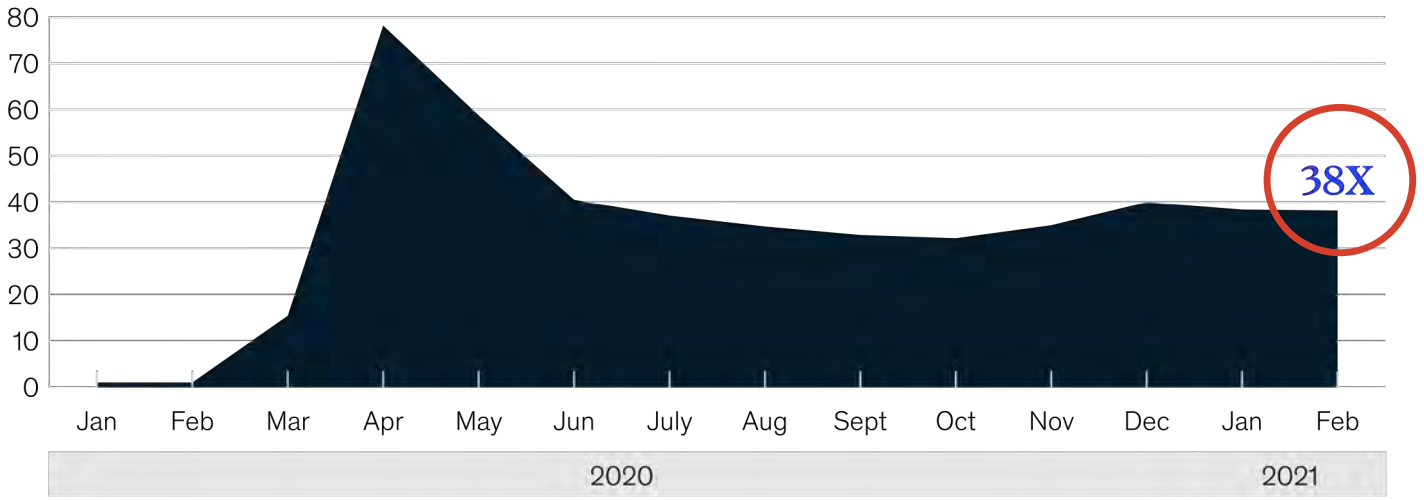
Appendices

The Acceleration of Digital Health/Digitally Enabled Care

- The COVID-19 pandemic has dramatically accelerated virtual visit adoption, but the rate and sustainability of adoption has varied dramatically nationwide.
- Adoption trends are beginning to stabilize (as society opens) with virtual and digital health moving forward as the “new normal” for providers and patient engagement.

Growth in telehealth usage peaked during April 2020 but has since stabilized.

Telehealth claims volumes, compared to pre-Covid-19 levels (February 2020 = 1)[1]



https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality#

Digital Health – More Than Telemedicine

- **Telemedicine** – Telehealth is the more common term, but telemedicine is also used sometimes; though they're technically different terms, these days they’re used largely interchangeably by most health organizations.
- **Virtual Visit** – A virtual visit is another term that typically connotes live, two-way audiovisual communication.
- **Remote Patient Monitoring** – Remote patient monitoring uses digital tools to collect medical and other health data and transmit it to a healthcare provider.
- **mHealth** – MHealth refers specifically to healthcare services delivered via a mobile device.
- **eHealth** – EHealth is a catch-all term related to electronic-based health information and services.

https://health.usnews.com/conditions/articles/a-beginners-guide-to-a-virtual-doctors-visit

The Pandemic Sparked Digital Health Technology Innovation and Investment

- Investors poured **$14.7 billion** into digital health companies so far in 2021 (7/1/21), already outpacing all of 2020's record-breaking funding.
- 2021 is on pace to more than double 2020 in terms of both number of deals (372) and companies funded (359).
- Public exit activity ballooned with 11 closed initial public offerings and special purpose acquisition companies, with another 11 SPACs expected to close in 2021 (in 2020, seven digital health companies exited to the public markets).
- And the sector isn't showing signs of slowing down: The last week in June saw more than $1 billion in funding.

$14.7 billion invested in digital health tech in 2021

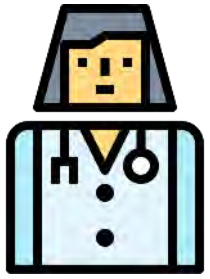
https://www.fiercehealthcare.com/digital-health/digital-health-funding-rockets-up-to-14-7b-speeding-past-2020-s-investment

Why Emphasize Digital Health?

- Health systems, HIEs, providers, payers, policymakers, etc. are recognizing the momentum and creating the focus on the value, benefits, needs and challenges.

Digital Health Benefits

Reduced costs from patients who would otherwise go to the emergency room because they can't get in to see a doctor



Increased access to care, helping to ease the effects of the physician shortage that's gripping wide sections of the United States (particularly in rural areas)

Improved chronic disease management specifically by easing the process of post-surgical follow-ups or for medication reconciliation after hospital discharge

Inclusion and Literacy

- **Digital Health Inclusion** – Activities that ensure individuals and disadvantaged groups have access to devices, connectivity, adoption and skills to participate in health delivery systems.
  - **Digital Divide** – Not a new term, but new/renewed focus on digital inclusion components:
    1. **Economic** – Providers' and patients' ability to afford computers, smartphones and internet, as well as EHRs for providers (access and connectivity)
    2. **Usability** – Tools, access and systems are available but may be too complicated for user navigation and data entry (adoption)
    3. **Empowerment** – Using the information and tools to advance or improve health outcomes and quality of life (health literacy)

- **Digital Health Literacy** – The ability to seek, find, understand and appraise health information from electronic/digital sources and apply the knowledge gained to addressing or solving a health problem.

Digital Health Equity & Literacy

- Factors that impact digital health equity:
  - Trust in the information, information overload, health literacy, lack of user-based design, difficulty in processing content-related information
  - Social determinants of health such as education, income, age and insurance or employment status
  - Geographic location/usage patterns of digital technologies; technical support

- Components of digital health literacy (users have access, tools, adoption)
  1. **Access Literacy:** Knowing how to access websites, download, install and use applications.
  2. **Media Literacy:** Critical thinking to discern the originality and authenticity of information accessed through different media outlets, applying a level of cognitive scrutiny to information before adopting them.
  3. **Security and Privacy Literacy:** Having skills to understand how to access only safe tools and sites, how to avoid scams, how to control online digital print.
  4. **Engagement Literacy:** Understanding how websites, platforms and other tools work; having a basic understanding of the different business models of media outlets and platforms.
  5. **Data Literacy:** Understanding basic concepts of data, how and why it is collected, by whom, what it can be used for, and how to manage your data.

eHealth Literacy Scale (eHEALS)

Item	FactorLoading	Mean Item-Total Correlation
Q1: I know how to find helpful health resources on the Internet	.77	.68
Q2: I know how to use the Internet to answer my health questions	.79	.70
Q3: I know what health resources are available on the Internet	.77	.68
Q4: I know where to find helpful health resources on the Internet	.84	.76
Q5: I know how to use the health information I find on the Internet to help me	.81	.73
Q6: I have the skills I need to evaluate the health resources I find on the Internet	.72	.63
Q7: I can tell high quality from low quality health resources on the Internet	.65	.55
Q8: I feel confident in using information from the Internet to make health decisions	.60	.51
Variance accounted for = 56%		
Coefficient alpha = .88		

Barriers and Challenges

- Consumer/patient issues center on access and affordability
- Providers and healthcare systems also face access and affordability challenges, plus:
  - Expertise/skill sets
  - Resources
  - Governance
  - Legal
- Concerns that digital health detracts and overwhelms the patient/provider experience
- Health disparities may increase without focus on digital inclusion; funding and focus might decrease post-COVID

Emerging Trends in Digital Health Equity

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FROM…	TO…	EXAMPLES
Treatment	Prevention, health, wellness	Digital screenings, prenatal education, medication reconciliation, online health coaching
Inpatient care	Home-based clinical care	Hospital-at-home, virtual urgent care, virtual home health
Episodic care	Real-time diagnostic care	Remote patient monitoring, asynchronous care, chatbots

Practical examples of digital health:

- Virtual visits
- Home-based care delivery models
- Telehealth
- Digital front door
- Remote patient monitoring

What are other examples????

New Protocols for Virtual Visits – Digital Determinants of Health

Do you have a device with a camera?

What language do you speak?

Do you have email and if so, what is your email address?

Do you have internet access?

What type of technology devices do you use and what is your level of comfort?

Do you have access to tech support?

Digital Health Transformation Is Here to Stay and Is the New Normal

- Portals
- Websites
- Mobile
- Chats
- SMS
- Voice
- Video
- Wearables