EHEALTH COMMISSION MEETING

JANUARY 10, 2018
<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00</td>
<td>Call to Order&lt;br&gt;Roll Call and Introductions, Approval of November minutes, and January Agenda and Objectives</td>
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<tr>
<td>12:05</td>
<td>Announcements&lt;br&gt;OeHI Updates&lt;br&gt;State Agency, Community Partner, and SIM HIT Updates&lt;br&gt;Opportunities and Workgroup Updates</td>
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<tr>
<td>12:20</td>
<td>New Business&lt;br&gt;New Charter and Bylaws&lt;br&gt;&lt;i&gt;Mary Anne Leach, Office of eHealth Innovation&lt;/i&gt;</td>
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<tr>
<td>12:35</td>
<td>Colorado Health IT Roadmap Steering Committee&lt;br&gt;Prioritize Roadmap Initiatives&lt;br&gt;&lt;i&gt;Mary Anne Leach, Office of eHealth Innovation&lt;/i&gt;</td>
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<tr>
<td>1:10</td>
<td>Broadband Update&lt;br&gt;&lt;i&gt;Anthony Neal-Graves, Office of Broadband Executive Director&lt;/i&gt;</td>
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<tr>
<td>1:30</td>
<td>Block Chain Presentation&lt;br&gt;&lt;i&gt;Morgan Honea, CORHIO CEO&lt;/i&gt;</td>
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<tr>
<td>1:50</td>
<td>Public Comment Period</td>
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<tr>
<td>1:55</td>
<td>Closing Remarks&lt;br&gt;Open Discussion&lt;br&gt;Recap Action Items&lt;br&gt;February Agenda&lt;br&gt;Adjourn&lt;br&gt;&lt;i&gt;Michelle Mills, Chair&lt;/i&gt;</td>
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ANNOUNCEMENTS

OeHI UPDATES
- Commission Renewal/Transition
- JTC Presentation 1/26
- MPI Public Comments
- Care Coordination Survey
- Roadmap Launch Event

COMMISSION UPDATES
- State Agencies
- Community Partners

SIM UPDATES
- TBD
### ACTION ITEMS

#### FOLLOW UP ON ACTION ITEMS FROM PREVIOUS MEETING

<table>
<thead>
<tr>
<th>Action Item</th>
<th>Owner</th>
<th>Timeframe</th>
<th>Status</th>
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<tbody>
<tr>
<td>Update quorum bylaws</td>
<td>OeHI Director</td>
<td>Summer</td>
<td>In progress</td>
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<tr>
<td>Track and report federal and local legislation</td>
<td>OeHI Director/ State Health IT Coordinator</td>
<td>2017</td>
<td>Ongoing</td>
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<tr>
<td>Letter to Lab Corps and Quest</td>
<td>OeHI Director/ Govs Office/ Morgan</td>
<td>2017</td>
<td>In progress</td>
</tr>
<tr>
<td>Joint Agency Interoperability Project and ESB Update</td>
<td>State Health IT Coordinator</td>
<td>Feb 2018</td>
<td>In progress</td>
</tr>
<tr>
<td>Prioritization of initiatives</td>
<td>eHealth Commission</td>
<td>Jan 2018</td>
<td>In progress</td>
</tr>
<tr>
<td>Block Chain Presentation</td>
<td>Morgan Honea</td>
<td>Jan 2018</td>
<td>In progress</td>
</tr>
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</table>
EHEALTH COMMISSION
HEALTH IT ROADMAP

ROADMAP NEXT STEPS, CHARTER/BYLAWS,
AND INITIATIVE PRIORITIZATION

MARY ANNE LEACH,
DIRECTOR, OFFICE OF EHEALTH INNOVATION
HOW WE MOVE FORWARD

▪ Commission’s Role
  ▪ Engagement
  ▪ Accountability Oversight
  ▪ Project “Champions”
  ▪ Communication and Outreach

▪ Workgroups
  ▪ Restructured to Reflect Priorities/Initiatives
  ▪ Further Define Steps to Implementation

▪ Implementing Roadmap Initiatives
  ▪ Establish Priorities for Implementing Roadmap
  ▪ Help Govern Implementation and Value Realization
EHEALTH COMMISSION ROLE

▪ Prioritize and discuss initiatives
▪ Identify workgroups
▪ Serve in an advisory capacity
▪ Serve as “champions” for initiatives
▪ Promote initiative efficacy through realization of value and benefit
▪ Serve as an advisory SME for procurement of solutions
▪ Assist with communications to stakeholders
IMPLEMENTING ROADMAP INITIATIVES

Current Landscape of OeHI Workgroups

- State HIT Workgroup
- Innovation Workgroup
- Health IT Roadmap Planning Workgroup (sunset)
- RCCO Assessment (mid-February)
- State Innovation Model (SIM) Workgroup
NEW EHEALTH COMMISSION CHARTER

- OeHI Charter with eHealth Commission Mentioned
- Speaks to Commission’s Purpose
- Overview of Membership Requirements
- Focus on Roadmap Governance and Implementation
- Includes Voting Bylaws- refer to handout
PRIORITY BY FORCED RANK

1. Harmonize Data Sharing and HIE Exchange
2. Support Care Coordination
3. Promote and Enable Consumers Engagement
4. Ease Quality Reporting Burden
5. Integrate BH, Physical, Claims, Social, and Other Data
6. Uniquely Identify a Person
7. State Health Information and Data Governance
8. Accessible and Affordable Health IT and Info Sharing
9. Statewide Health Information Tech Architecture
10. Consent Management
11. Broadband and Virtual Care Access
12. Unique Provider ID
13. Digital Health Innovation
15. Accessible and Affordable Analytics
16. Health IT PMO

*Response Rate =75% (12/16)*, N= 16, color coded by similar weighted averages*
PRIORITY GROUPINGs BY GROUPING

High
- Harmonize Data Sharing and HIE Exchange (91%)
- Support Care Coordination (67%), (8 High, 3 Med, 1 Low)
- Broadband and Virtual Care Access (58%), (7 High/3 Med, 2 Low)
- Ease Quality Reporting Burden (50%), (6 High/6 Med)
- State Health Information and Data Governance (42%), (5 High, 5 Med, 2 Low)
- Uniquely Identify a Person (42%), (5 High, 4 Med, 3 Low)

Medium
- Statewide Health Information Tech Architecture (67%), (8 Med, 2 High, 2 Low)
- Accessible and Affordable Health IT and Info Sharing (58%), (7 Med, 3 High, 2 Low)
- Integrate BH, Physical, Claims, Social, and Other Data (50%), (6 Med, 5 High, 1 Low)
- Promote and Enable Consumers Engagement (50%), (6 Med, 5 High, 1 Low)
- Best Practices for Health Information Cyber Security (50%), (6 Med, 3 High, 3 Low)
- Digital Health Innovation (42%), (5 Med, 4 Low, 3 High)
- Unique Provider ID (42%), (5 Med, 3 High, 4 Low)

Low
- Consent Management (42%), (5 Low, 4 Med, 3 Low)
- Accessible and Affordable Analytics (42%), (5 Low, 5 Med, 2 Low)
- Health IT PMO (42%), (5 Low, 3 Med, 4 High)

*Percent of majority category listed and highlighted if >50%*
PRIORITIZATION COMMENTS

- “Identify the top five or six initiatives for deeper dives into planning, scoping, budgeting, and piloting (where appropriate); find ways to delegate and/or keep the others moving along.”

- “None of these priorities are low priorities. However, there are foundational things that must be achieved prior to moving on to other initiatives. Creating a clear vision for the future through governance, management, and architecture are critical first steps to pursuing the “how’s and what’s”.”
NEXT STEPS
BROADBAND UPDATE

ANTHONY NEAL-GRAVES,
OFFICE OF BROADBAND EXECUTIVE DIRECTOR
Colorado Broadband Office

Anthony Neal-Graves
Executive Director
Collaborate across agencies

Partner with local government and industry
What is broadband?

- Fiber
- DSL
- Microwave
- Cable
- Mobile
- TV Whitespace
- Satellite
- AirGig
Why should we care?

- Employment
- Public Safety
- Education
- Healthcare
- Business Development

Economic Enablement
Why should we care?

Infrastructure needs will continue to grow...

Autonomous Vehicles

Agriculture

Other Connected “Things”
Attributes of broadband

Available (Can you get it?)
Affordable (Can you pay for it?)
Quality (Is it fast enough?)
Reliable (Is it always there?)
Status as of January 2018

• 77% of rural households have access
• DOLA granted $18 million for regional plans and critical “middle mile” infrastructure
• DORA Broadband Fund
  – Granted $2 million for “last mile” infrastructure
  – Evaluating $9 million in additional projects
• K-12 broadband affordability success via E-rate

Increase the percentage of **rural households** with access to broadband to 85% by 2018; 100% by 2020
Priorities

• 2018 Legislative effort
• DOLA “Middle Mile” grants
  – $2.4 million for Fiscal 2018
• DORA Broadband Fund “Last Mile” grants
  – Finalize grants for Fiscal 2018
• FCC CAF II Reverse Auction
  – Up to $150M available in Colorado over 10 years
• E-Rate grant cycle outreach & support
• State Infrastructure Plan
eHealth Commission

• How can the eHealth Commission help?

• What is underway with CTN?
  – Are there telehealth policies to address?
Questions?

Contact
Email: anthony.neal-graves@state.co.us
Cell: 720-470-0269
Agenda

• What is blockchain? Just the basics, please!

• Where is blockchain in use today?

• What are some immediate healthcare applications?

• How might it disrupt healthcare?
Blockchain is an Inflection Point!!!!!!

In business, inflection points are infrequent events that result in a significant change in the current developmental course of a person, company, or even an industry.

Andy Grove, Intel’s cofounder, described a strategic inflection point as “an event that changes the way we think and act.” The competitive marketplace and a person’s place in it are dynamic and constantly evolving. In the midst of dramatic change and upheaval, one cannot always distinguish the actual turning points that delineate the “new normal.”

Other recent and future inflection points that create the opportunity for Blockchain:
• The Internet
• Globalization
• ARRA and HITECH (digitization of health records)
• ACA (insurance expansion, payment reform, cost shifting, etc.)
• Quantum Computing
What is blockchain? Just the basics, please!

“The blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value.”

*Don & Alex Tapscott, authors Blockchain Revolution (2016)*

- Distributed Network of Ledgers
- No single-point of failure
- No singular control
- Transparent
- Scalable
Someone requests a transaction.

The requested transaction is broadcast to a P2P network consisting of computers, known as nodes.

**Validation**

The network of nodes validates the transaction and the user’s status using known algorithms.

A verified transaction can involve cryptocurrency, contracts, records, or other information.

The transaction is complete.

The new block is then added to the existing blockchain, in a way that is permanent and unalterable.

Once verified, the transaction is combined with other transactions to create a new block of data for the ledger.

**cryptocurrency**

Has no intrinsic value in that it is not redeemable for another commodity such as gold.

Has no physical form and exists only in the network.

Its supply is not determined by a central bank and the network is completely decentralized.
Where is Blockchain in Use today?

• Blockchain is largely associated with Bitcoin and cryptocurrency [https://en.wikipedia.org/wiki/Bitcoin](https://en.wikipedia.org/wiki/Bitcoin);


• Banks and other financial institutions are beginning to use blockchain for document management functions such as contracts and transaction ledgers [https://www.coindesk.com/bank-america-filed-20-blockchain-patents-already/](https://www.coindesk.com/bank-america-filed-20-blockchain-patents-already/);

• In 2017, the State of Arizona began accepting document transactions with the State through blockchain [https://www.azleg.gov/legtext/53leg/1r/bills/hb2417p.pdf](https://www.azleg.gov/legtext/53leg/1r/bills/hb2417p.pdf);

• BurstIQ (10.10.10 Startup) is building out a healthcare marketplace based on their blockchain technology [https://www.burstiq.com/](https://www.burstiq.com/);

• There is an international learning group called Hyperledger that is leading the charge in terms of translating Blockchain to healthcare [https://www.hyperledger.org/](https://www.hyperledger.org/)
What are some immediate healthcare applications?

• Patient identification (general identification, familial relationships, insurance id/status, etc.)
• Medical Records (storing, distributing, disclosing, etc.)
• HIPAA Compliance (disclosure accounting and auditing, PTO relationship establishment, etc.)
• 42CFR Compliance (content, time, and provider consent)
• Attribution Methodologies
• Personal Health Records
• Interoperability
• Pharmaceutical tracking
• Research
• Etc.
How might Blockchain disrupt healthcare?

- **Disruptive innovation**, a term of art coined by Clayton Christensen, describes a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors.

- Patient empowerment through access and control of personal health data;

- Scalable and auditable mechanisms for aggregating and distributing health information;

- Disintermediating the delivery and financing of healthcare services;

- Translating health into a tangible asset for individuals and communities.
Weather Futures: A case study for blockchain in healthcare

- It’s estimated that 20% of the US economy is affected by the weather;
- *Weather* represents specific *risk* for many industries (commodities production, energy, etc.);
- Prior to the late 90’s, insurance was the primary mechanism for mitigating risk across these industries and weather was viewed as unpredictable and beyond industry control;
- In the late 90’s, enough data became available to relatively predict regional weather;
- This same data was also used apply a relative incremental value to the weather and climate;
- As a result, financial markets emerged that began trading the weather as a commodity;
- Today, a farmer in Oregon can hedge the risk of his commodity production against that of a farmer in Virginia using these secondary risk markets, powered by aggregated data and predictive analytics…
PUBLIC COMMENT
CLOSING REMARKS, FEBRUARY AGENDA, AND ADJOURN

MICHELLE MILLS, CHAIR
Call to Order
  Roll Call and Introductions, Approval of January Minutes, February Agenda and Objectives 12:00

Announcements
  OeHI Updates 12:10
  State Agency and SIM HIT Updates
  Grant Opportunities, Workgroup Updates, Announcements

New Business
  Health IT Roadmap Transition and Planning Progress 12:35

Joint Agency Interoperability (JAI) and Enterprise Service Bus (ESB) 1:05

Other topics? 1:30

Remaining Commission Comments 1:45

Public Comment Period 1:50

Closing Remarks
  Open Discussion, March Agenda, Adjourn 1:55
Suggestions for future topics welcome!