What does Innovation Look like in Alaska?
AN ALASKAN PHYSICIANS’ PERSPECTIVE ON HEALTHTECH INNOVATION

SHADI BATTAH MD
THE CASE

• Alaska’s population is aging.
• Demand for services is on the rise.
• Supply of healthcare personnel is short.
• Inefficient processes.
• Cost of care is high.
THE GOAL

• The quadruple aim. The Institute of Healthcare Improvement.
• Keep Alaskans healthy and independent for as long as possible.
• Improve access to better quality care at a better cost.
• Provide an excellent experience for the patient and the clinician.
PAIN POINTS

• Interoperability.
• Access to care.
• Transitions of care.
• Throughput.
• Mental health.
• Healthcare personnel recruitment and retention.
HEALTH-TECH CAN HELP

• Leverage human resources:
  • Telemedicine services
  • Remote patient monitoring
  • EHR functionality
HEALTH-TECH CAN HELP

• Innovate:
  • Patient ownership of data
  • Blockchain
  • AI at the bedside
  • Device-embedded cloud, edge computing.
• Revenues from innovative SaaS solutions to Alaskan issues with national implications/applicability can be a huge boon to the state economy.
Innovation at Virginia Mason

Randi Anderson, M.S.
Learning, Innovation, and Simulation Center
About Virginia Mason

VISION
To be the quality leader and transform healthcare

MISSION
To improve the health and wellbeing of the patients we serve
Why be Innovative?

Because our customers demand it.

Because our payers demand it.

Because we demand it of each other.
Leveraging Technology

- Patient Engagement platform
- Telehealth
- Connecting health-based apps to our patient portal
- Embedding clinical databases into our EMR
Other forms of Innovation

Opioid management

Including patients in improvement efforts

Offering a warranty

Center of Excellence
  Ortho, Spine, Cardiac
Virginia Mason

What does Innovation Look like in Alaska?
What is Health Information Exchange (HIE)?

• Per the ONC, “Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access and securely share a patient’s vital medical information electronically—improving the speed, quality, safety and cost of patient care.”
Who Is healtheConnect Alaska?

Established by State Statute as a not for profit organization under contract to the Department of Health and Social Services (DHSS) for Health Information Exchange in Alaska

- Governed by a diverse Board with representatives from:
  - Hospitals and Nursing Homes
  - Private Medical Providers
  - Community Health Centers
  - Behavioral Health
- Federal Health Care Providers
- Alaska Tribal Health Organizations
- Health Insurers
- Healthcare Consumers
- Employers
- State of Alaska
HIE Innovation

Event Notifications
ENS Use Case - Alerts to Provider
Leverage event notification for specific panels

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<tr>
<th>Value Proposition</th>
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<td>- Reduce re-admissions by effective care coordination during transitions of care</td>
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<td>- Compliance with 5 day follow up requirement</td>
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<td>- All without swamping the Care Team with excessive, less valuable alerts</td>
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<th>Use Case</th>
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<td>- A patient is discharged from the hospital with a diagnosis of particular interest</td>
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<td>- An alert is sent to the agency ONLY for certain conditions (i.e. drug overdose)</td>
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<td>- Case Management staff receive alert to schedule follow-up care</td>
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HIE Innovation
Social Determinants of Health
What are Social Determinants of Health?

A “place-based” organizing framework, reflecting five (5) key areas of social determinants of health (SDOH), was developed by Healthy People 2020.

- Economic Stability
- Education
- Social and Community Context
- Health and Health Care
- Neighborhood and Built Environment
Why Collect Social Determinants of Health?

• Deployment of social determinants of health interventions is shown to lower costs and improve health outcomes

• Studies show how social determinants:
  • Reduce Inpatient hospital admission rates
  • Improve Lack of health literacy
  • Demonstrate that High risk individuals experience issues with food and transportation
  • Lead to a Reduction in care costs
NEW PATIENT completes new patient forms including Medical History and SDoH PRAPARE Tool.

HIE assists providers with integrating PRAPARE tool into their EHR.

CLINIC STAFF records form data in EHR database.

SDoH data is available via the HIE based on consent.

HIE maintains community resource directory centrally or links to 211 for up-to-date info.

PROVIDER if SDoH indicators are flagged, recommends follow up with Care Coordinator. Updates patient EHR with services provided, treatment plan, and referrals.

HIE automatically notifies care coordinator based on SDoH indicators.

PATIENT follows up with care coordinator at will.

CARE COORDINATOR provides referrals based on community resource list (linked directly to SDoH PRAPARE Tool). Updates patient EHR with notes and referrals.

HIE automatically sends electronic referral notification to community resource based on zip code.

PATIENT follows up with referrals at will.

REFERRED PROVIDER schedules appointment.

REFERRED PROVIDER submits non-emergency medical transportation authorization as needed.

REFERRED PROVIDER treats patient. Updates patient EHR with services provided, treatment plan, and referrals.

REFERRED PROVIDER notifies provider that patient has been seen by referred provider.

REFERRED PROVIDER utilizes HIE to see information from previous provider visit including SDoH data.

REFERRED PROVIDER schedules appointment.

REFERRED PROVIDER submits non-emergency medical transportation authorization as needed.

REFERRED PROVIDER treats patient. Updates patient EHR with services provided, treatment plan, and referrals.

REFERRED PROVIDER utilizes HIE to see information from previous provider visit including SDoH data.

Proposed SDOH Workflow
HIE Innovation

Behavioral Health Data Exchange
Importance of integrating BH

• According to a 2016 Healthcare Cost and Utilization Project report, stays with a secondary Mental and Substance Use Disorder diagnosis cost more and were longer than stays without an MSUD diagnosis. Stays for a principal MSUD accounted for 6.1 percent of all adult stays and 3.6 percent of total hospital costs ($15.3 billion), pointing to the relatively low resource intensity of MSUD care in community hospitals. On average, stays with a principal MSUD cost $7,100 with an average length of stay of 6.4 days.
Challenges with Integration

- BH Providers on outdated technology (or paper!)
- Providers uncomfortable with interpretation of federal rules on privacy
- Non-standard data set
- Ability to collect patient consent at the point of care
Behavioral Health

• healtheConnect Alaska will begin collecting data from behavioral health providers
• Data to be displayed on a special behavioral health tab in healtheHUB
• Data on this tab is subject to 42 CFR part 2 Consent
  • BH Data can only be seen if a patient has opted in OR
  • There is an emergency that requires “break the seal” access of the record
Questions?

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