New Hampshire Health Information Organization

Healthcare Information and Management Systems Society

October 9th 2015

Agenda

Who is NHHIO

What does NHHIO do

Who uses NHHIO

What is next for NHHIO

What opportunities exist today for NHHIO

How do I join NHHIO

New Hampshire Health Information Exchange Plan

Strategic and Operational Plan for Exchange of Health Information in the State of New Hampshire

Version 5
August 31, 2010

Strategic and Operational Plan for Exchange of Health Information in New Hampshire   1

- ➢ **June 2010 created multi-stakeholder groups**

- ➢ **The plan is the result of collaborative planning among over 80 stakeholders**

- ➢ **380 stakeholder comments were addressed in the current version**

- ➢ **Approved by ONC September 2010**

- ➢ **Board of Directors selected in 2011**

CHAPTER 332-I
MEDICAL RECORDS, PATIENT INFORMATION, AND THE HEALTH INFORMATION ORGANIZATION CORPORATION
332-I:7 Corporation Established

The corporation is hereby deemed to be a public instrumentality... and shall be deemed and held to be the performance of essential health information organization functions which shall, among other things, promote the general health of the citizens of the state of New Hampshire. The corporation shall be the state's designated provider of health information exchange services.

New Hampshire Health Information Organization

NHHIO Board of Directors

Board Member	Representation	Board Member	Representation
Mary Beth Eldredge **IT Director** **Dartmouth Hitchcock**	⭐ NHHIO Chair, Board Member at Large Hospitals	**David Briden,** **CIO Exeter Hospital**	NH Hospital Association, Large Hospitals
Deb Mullen **Concord VNA**	⭐ NHHIO Vice Chair, Homecare Association	**Patricia Witthaus** **IT Director** **Valley Regional Hospital**	NH Hospital Association, Critical Access Hospitals
Kirsten Platte **CHAN**	⭐ NHHIO Secretary, Bi-State Primary Care Association	**Dr. Richard Lafleur,** **Anthem BC/BS**	Board Member at Large, Health Plans
Carol LaCross **CFO - Retired**	⭐ NHHIO Treasurer, Volunteer & Consultant	**Michael Lehrman,** **Catholic Charities**	Board Member at Large, Skilled Nursing Providers and NH Health Care Assoc.
William Baggeroer **NH DHHS Office of the** **Commissioner**	⭐ Board Member at Large, NH DHHS, Office of the Commissioner	**Lorraine Nichols** **IT Consultant**	Board Member at Large,
Dr. Daniel Waszkowski **Derry Medical Center**	NH Medical Society	**David Querusio ,** **Harvard Pilgrim Healthcare**	Board Member at Large, Health Plans
Charles J. Fanaras, RPh **Retail Pharmacy**	Pharmacy Board	**Dr. Christine Rosenwasser** **Dartmouth Hitchcock** **Pediatrics**	Board Member at Large, Physicians
Vacant	Board Member at Large	**Mark Guptill** **Community Partners**	NH Community Behavioral Health Association
Vacant	Board Member at Large		

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NHHIO Statutory Constraints

Who can use?

- "Only a **health care provider or a business associate** of a health care provider or a patient or patient's legal representative may transmit the patient's protected health information through the health information organization"

What can they do?

- "Only a health care provider, for purposes of **treatment, care coordination, or quality assurance**, or a patient or a patient's legal representative with respect to the patient's protected health information, may have access to protected health information transmitted through the health information organization"

What can NHHIO do?

- "health information organization may **retain patient demographics**, including patient name, address, date of birth, gender, medical record numbers, and location of medical records, which shall be used solely to ensure consistent patient identification between health care providers and enable electronic query for patient health information. The health information organization shall otherwise act solely as a conduit for such electronic exchange and **shall neither access nor retain, in a database or otherwise, the clinical content of any medical record**"

NHHIO Service Lines

A low cost, high value, secure, end-to-end, clinical messaging service

A statewide Provider Directory to support Care Coordination

A secure network option for small and less well-resourced providers across the care continuum

A ready resource to help New Hampshire providers figure out health IT

Secure Internet-based Direct Communications

Direct Project specifies a simple, secure, scalable, standards-based way for participants to send encrypted health information directly to known, trusted recipients over the Internet.

- **Simple.** Connects healthcare stakeholders through universal addressing using simple push of health information.

- **Secure**. Users can easily verify messages are complete and not tampered with in travel.

- **Scalable**. Enables Internet scale with no need for central network authority or centralized data repository.

- **Standards-based.** Built on common Internet standards for secure e-mail communication.

Message Formats and Transport Protocols

Providing summaries of care, and the ability for patients to view, download and transmit their medical information requires data to be sent using Direct.

Consolidated Clinical Document Architecture (CCDA) care summaries must contain at least problem lists, medications, and medication allergies.

SMTP-S/MIME (required for Office of the National Coordinator (ONC) certification)
- ➢ Sends CCDA as an email attachment
- ➢ Provides ability for text component in the message

XDR-SOAP (optional of ONC certification)
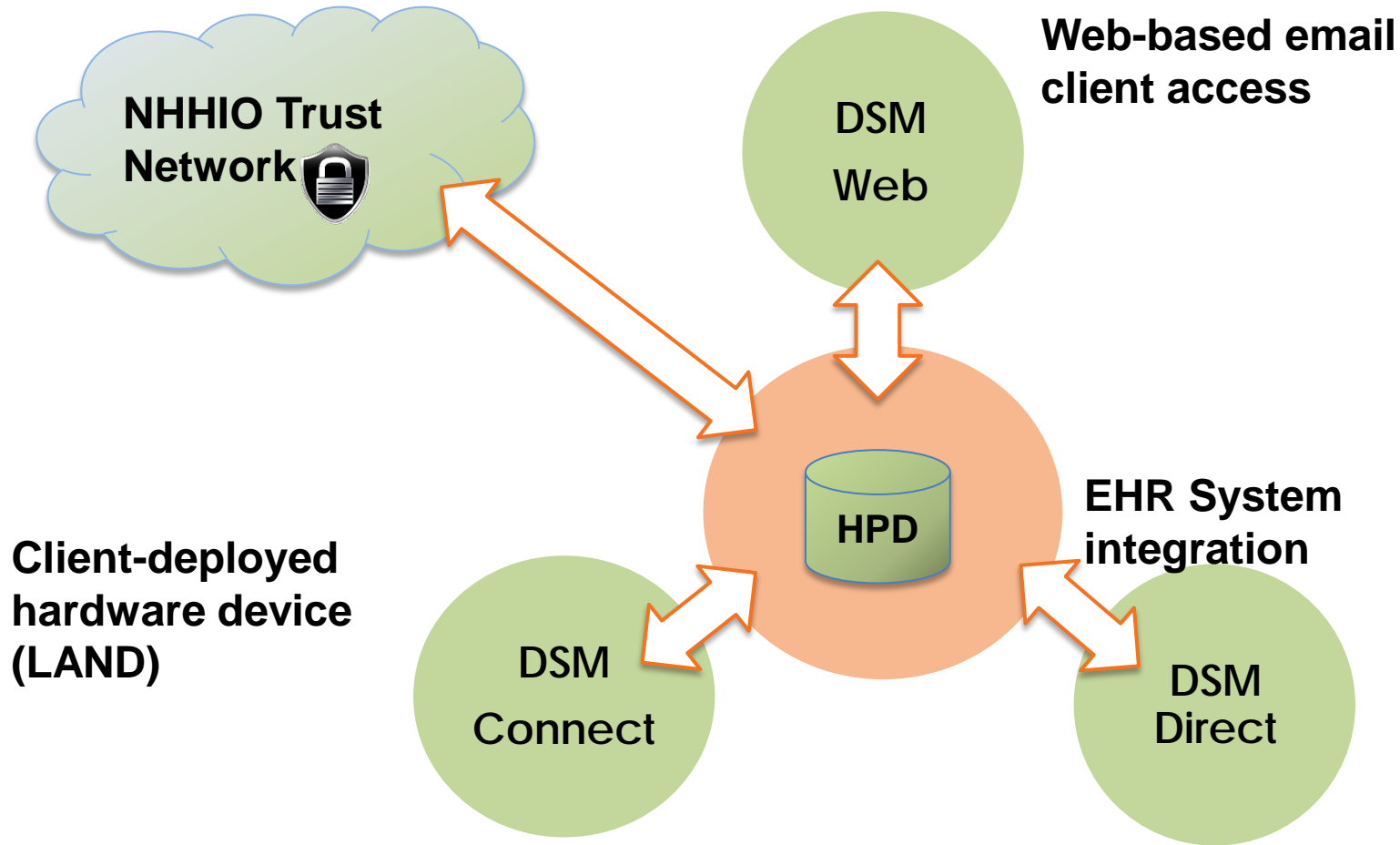- ➢ Directly sends CCDA to recipient with text component

Like any email product, both require a secure network to transport:
- ➢ **Health Information Service Provider (HISP)**

Direct Secure Messaging (DSM) Options

NHHIO Trust Network

DSM Web

Web-based email client access

HPD

EHR System integration

Client-deployed hardware device (LAND)

DSM Connect

DSM Direct

Healthcare Provider Directory

The Healthcare Provider Directory (HPD) is a searchable directory of individual and organizational healthcare providers

- *Individual Provider* **– A person who provides healthcare services, such as a physician, nurse practitioner, physician assistant or nurse**

- *Organizational Provider* **– An organization that provides or supports healthcare services such as hospitals, health centers, or practices**

NHHIO aggregates information from all participating HISP vendors

Current Primary Use Cases
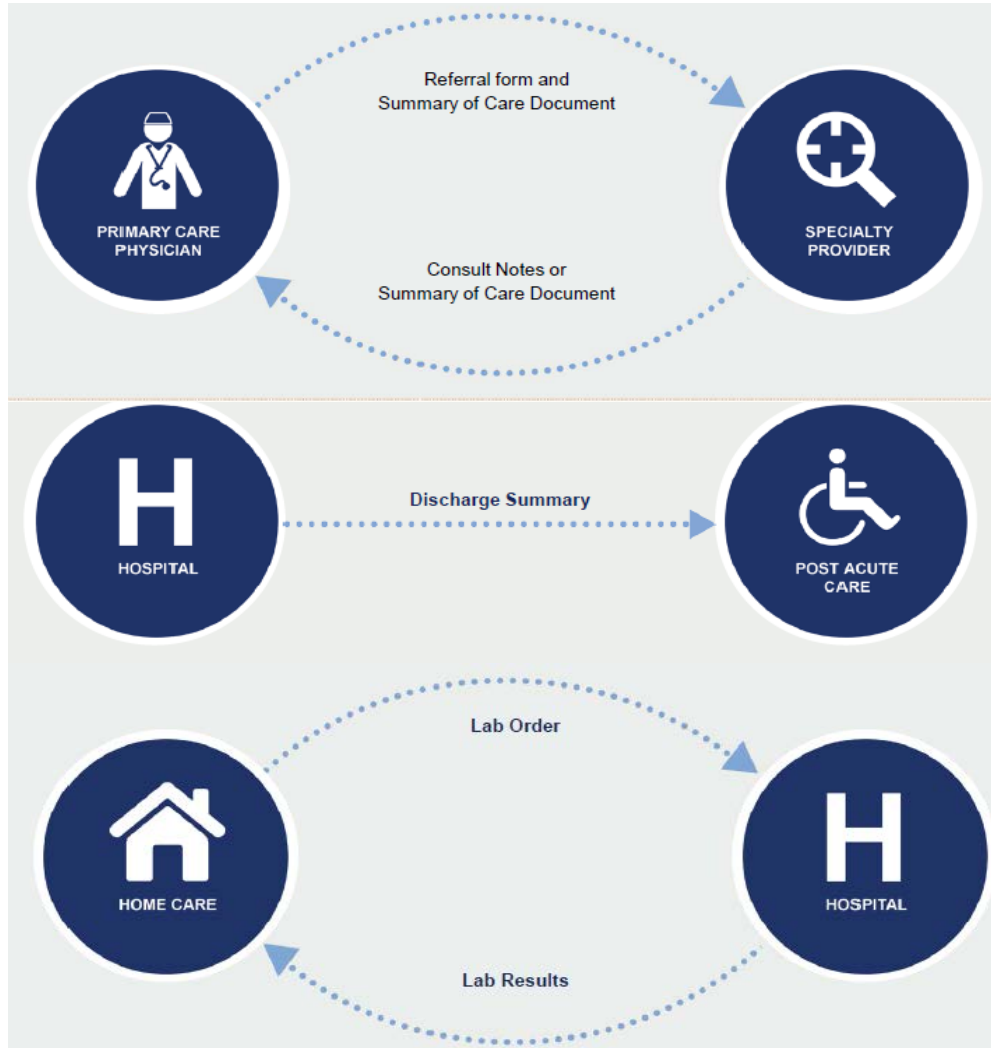
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Customers and Stakeholders

Hospitals
Catholic Medical Center
Cheshire Medical Center
Concord Hospital
Dartmouth-Hitchcock Medical Center
Elliot Hospital
Exeter Hospital, Inc
Exeter Hospital, Inc. - Core Physicians
Exeter Hospital Outpatient Rehab
Frisbie Memorial Hospital
Memorial Hospital
New Hampshire Hospital
Southern New Hampshire Medical Center
St. Joseph Hospital

Public Health
NH Department of Public Health
NH Cancer Registry

Payers
Anthem Blue Cross Blue Shield
Harvard Pilgrim Health Care

Federally Qualified Health Centers (FQHC)
Ammonoosuc Community Health Services
Community Access Health Network (CHAN)
Families First of the Greater Seacoast (CHAN)
Goodwin Community Health Center (CHAN)
Health First Family Care Center (CHAN)
Lamprey Health Care (CHAN)
Manchester Community Health Center (CHAN)
Coos County Family Health Services
Mid-State Health Center

Critical Access Hospitals
Androscoggin Valley Hospital
Cottage Hospital
Huggins Hospital
Memorial Hospital
Monadnock Community Hospital
New London Hospital
Speare Memorial Hospital
Valley Regional Hospital
Weeks Medical Center

Physicians (Private/Independent)
Access Sports Medicine
Atlantic Digestive Specialists (formerly Gastroenterology, PA)
Bower, George MD (Internal Medicine)
Dermatology & Skin Health
Derry Medical Center
Dover Womens Health
Harbour Women's Health
Lifelong Care of New London
Madden, Jennifer MD (Family Medicine)
My Friends Gynecologist, LLC
New Creation Healing Center
Northeast ENT and Allergy Corp.
New Hampshire Orthopaedic Center
Pain Care
Partners for Women's Health
Pembroke Wellness Center
Saco River Medical Group
Salmon Falls Family Healthcare
Seacoast Dermatology, PLLC
Wright & Associates Family Healthcare, PLLC

Customers and Stakeholders

Visiting Nurse Associations	Long-Term/Post Acute Care Facilities
Central New Hampshire VNA & Hospice	Genesis Healthcare
Concord Regional VNA (formerly Rochester VNA)	Applewood Rehabilitation Center
Connecticut Valley Home Care	Bedford Hills Center
Cornerstone VNA	Clipper Harbor
Home Health & Hospice Care	Colonial Hill Center
Home Health Hospice & Community Services	Country Village Center
Lake Sunapee VNA & Hospice	Crestwood Center
Northwoods Home Health & Hospice	Elm Wood Center at Claremont
Rockingham VNA	Elms Center, The
Visiting Nurse Home Care & Hospice of Carroll County	Exeter Center
VNA of Franklin	Harris Hill Center
VNA & Hospice for Vermont & New Hampshire	Hillsboro House
	Keene Center
	Laconia Rehabilitation Center

Behavioral Health Centers	
Center for Life Management	Lafayette Center
Developmental Services of Strafford County	Langdon Place of Dover
Greater Nashua Mental Health Center	Lebanon Center
Mental Health Center of Greater Manchester	Mineral Springs Center
Monadnock Family Services	Oceanside Skilled Nursing & Rehabilitation Center
New Hampshire Hospital	Pheasant Wood Center
Northern Human Services	Pleasant View Center
Seacoast Mental Health Center	Ridgewood Center
West Central Behavioral Health	Westwood Center
	Wolfeboro Bay Center
	Hanover Hill Health Center

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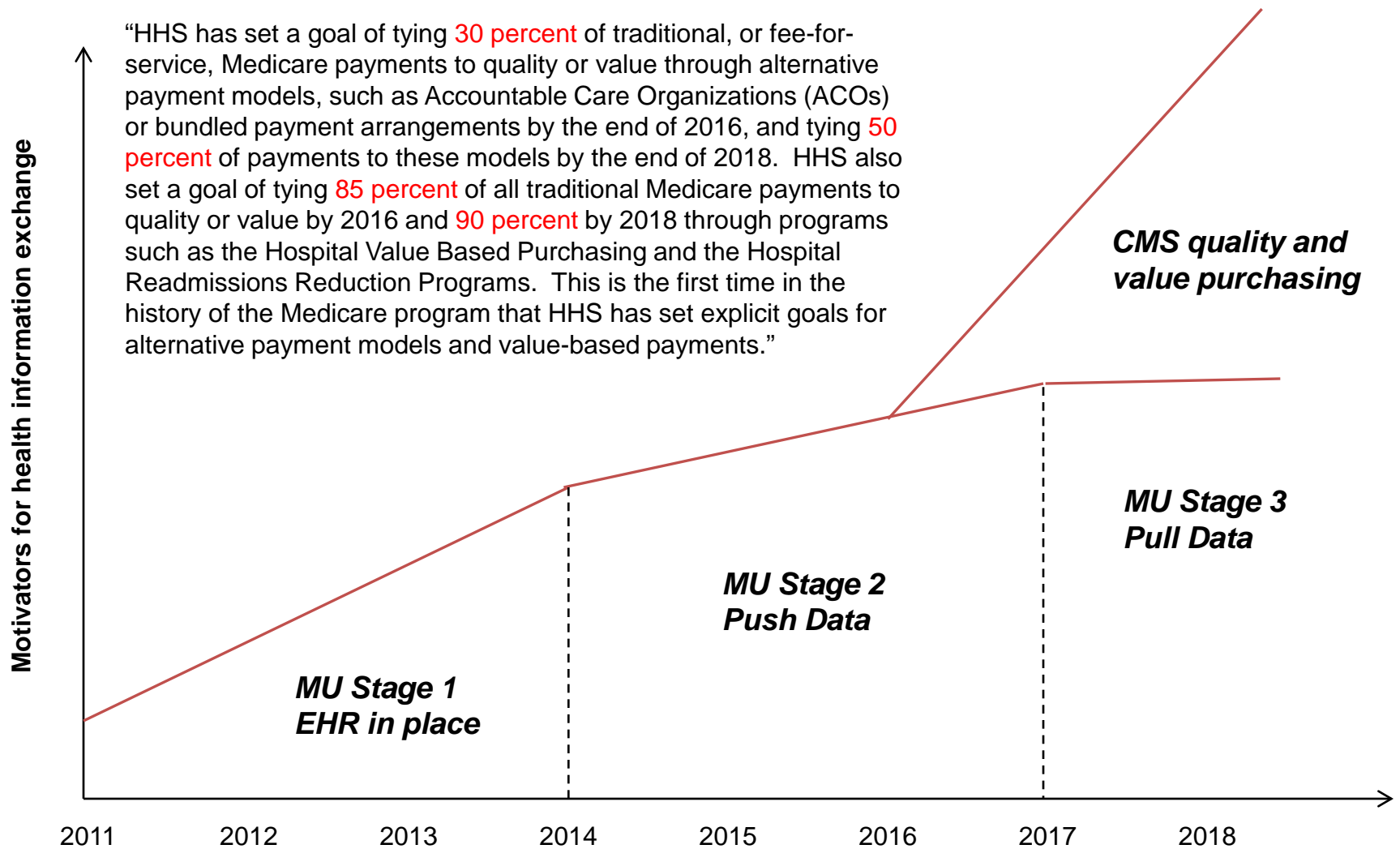
How do I join NHHIO

Four National Trends Driving Health Information Exchange

1. **HITECH: The Meaningful Use Program**

2. **Changes in commercial and government health care payment models**

3. **Evolution in the health information technology industry**

4. **Changes in patient and physician expectations and behavior**

As MU Ramps Down, New Business Models will Ramp Up

"HHS has set a goal of tying 30 percent of traditional, or fee-for-service, Medicare payments to quality or value through alternative payment models, such as Accountable Care Organizations (ACOs) or bundled payment arrangements by the end of 2016, and tying 50 percent of payments to these models by the end of 2018. HHS also set a goal of tying 85 percent of all traditional Medicare payments to quality or value by 2016 and 90 percent by 2018 through programs such as the Hospital Value Based Purchasing and the Hospital Readmissions Reduction Programs. This is the first time in the history of the Medicare program that HHS has set explicit goals for alternative payment models and value-based payments."

Motivators for health information exchange

CMS quality and value purchasing

MU Stage 3 Pull Data

MU Stage 2 Push Data

MU Stage 1 EHR in place

2011 2012 2013 2014 2015 2016 2017 2018

Meaningful Use Stage 3 Could Give Boost to NHHIO Services

Patient engagement incentives

- 80% of patients can access record through VDT or an ONC-certified API
- 25% of patient do access record through VDT or an ONC-certified API
- Must incorporate data from patients or their non-clinical settings (ie, home health) from 15% of patients

→ *NHHIO can be single source to many "non-clinical" settings such as home health and physical therapists*

HIE incentives

- Send CCD electronic summary for 50% of transitions of care or referrals (not restricted to Direct protocol)
- Receive and incorporate electronic summary for 40% of transitions of care or referrals (not restricted to Direct protocol)
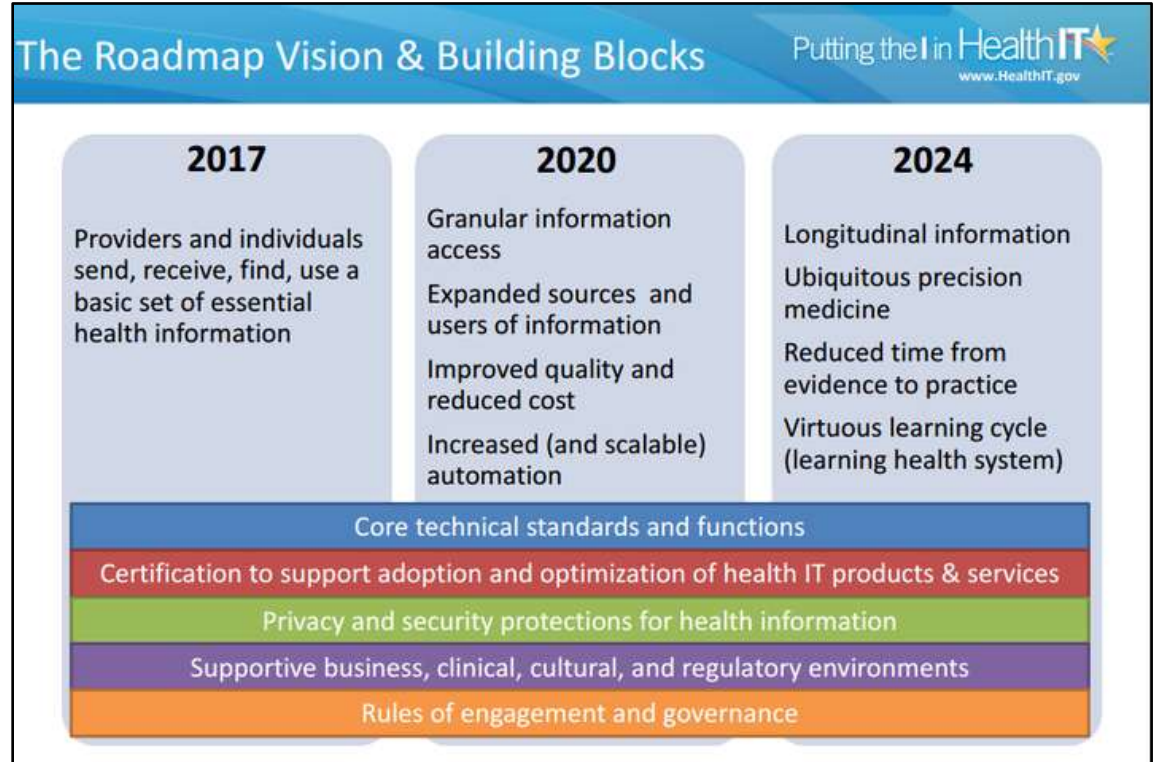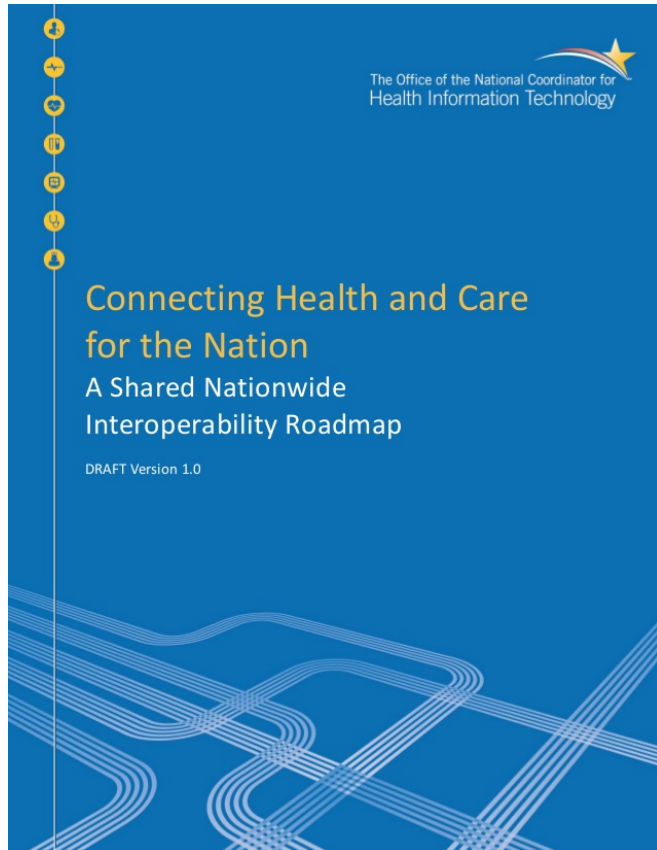- Perform reconciliation on 80% of transitions of care or referrals for meds, med allergies, and problems

→ *Greater demand for secure messaging services*

→ *Greater demand for secure messaging services; greater demand for RLS services*

Nationwide Interoperability Road Map

Connecting Health and Care for the Nation
A Shared Nationwide Interoperability Roadmap
DRAFT Version 1.0

The Office of the National Coordinator for Health Information Technology

The Roadmap Vision & Building Blocks — Putting the I in Health IT — www.HealthIT.gov

2017
Providers and individuals send, receive, find, use a basic set of essential health information

2020
Granular information access

Expanded sources and users of information

Improved quality and reduced cost

Increased (and scalable) automation

2024
Longitudinal information

Ubiquitous precision medicine

Reduced time from evidence to practice

Virtuous learning cycle (learning health system)

Core technical standards and functions

Certification to support adoption and optimization of health IT products & services

Privacy and security protections for health information

Supportive business, clinical, cultural, and regulatory environments

Rules of engagement and governance

ONC Roadmap: Principles of Interoperability

As HIE Matures, it is starting to organize like other industries….
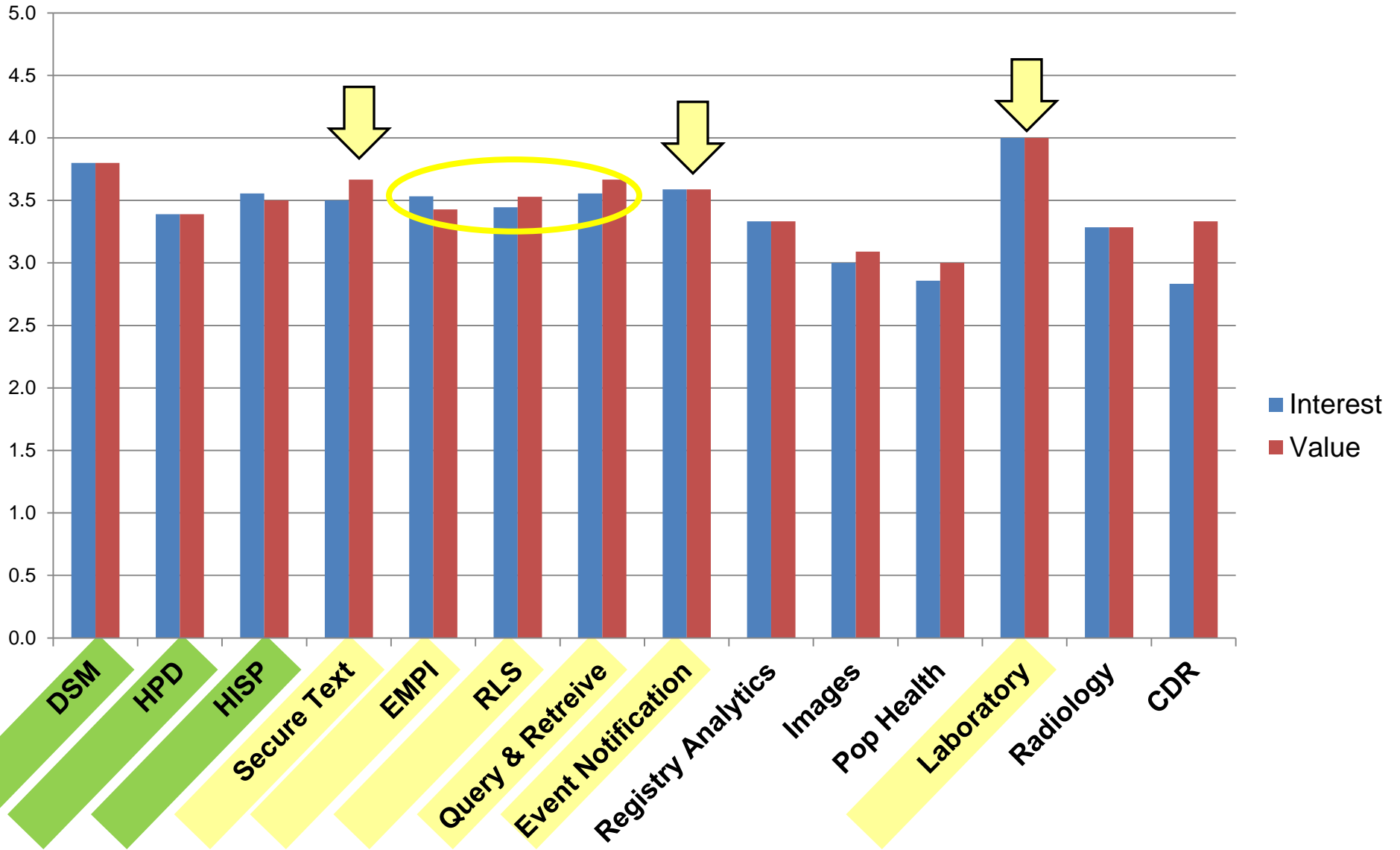
ATM Networks

HIE Networks

…and adopt standards like other industries

Growth in Open APIs

2000	2002	2003	2005	2006	2007	2008	2009	2010	2011	2016
			105 APIs	352	601	1,116	1,628	2,647	4,678	

Demand for Services

New Hampshire Health Information Organization

NHHIO Strategic Road Map

Mission: Securely connecting healthcare communities to share patient health information needed for informed care decisions.

Vision: NH's trusted resource for health information exchange, improving quality, efficiency, and patient safety, while reducing healthcare cost.

Integration | **Adoption** | **Expansion**

"Get to Green" – ensure all members are Direct enabled

Create Electronic Master Patient Index (EMPI) & Record Locator Service (RLS)

Expand marketing and outreach activities to increase membership

Explore new value added services to support community needs

Moving Health Information with Confidence

Support ticket management and integration of Direct Standards

Increase community awareness with expanded website, newsletters and media

Provide Healthcare Provider Directory (HPD) management and distribution

Facilitate user group identification and expanded board advisory groups.

New Hampshire Health Information Organization

NHHIO Tomorrow

NHHIO will include the promotion of additional vendor members who will be able to provide increased value add services to our membership and support the advancement of electronic care coordination activities. This may include, but is not limited to:

- **Patient Event Notification Services**
- **Laboratory Results and/or Repository**
- **Radiology Results and/or Image Archive**

As a statewide convener and facilitator within the healthcare community, NHHIO will look to evaluate and support the purchase of services such as Secure Provider Texting, or other services that span healthcare organizations.

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Grant Award

The New Hampshire Health Information Organization Corporation (NHHIO) has been selected to receive funding under the Advance Interoperable Health Information Technology Services cooperative agreements program.

This cooperative agreement award is issued under Funding Opportunity Announcement Number, IX-IX-15-001 and Title: **Advance Interoperable Health Information Technology Services to Support Health Information Exchange** under the authority of the American Recovery and reinvestment Act of 2009 (ARRA or Recovery Act), Subtitle B—Incentives for the Use of Health Information Technology, Section 3013, State Grants to Promote Health Information Technology.
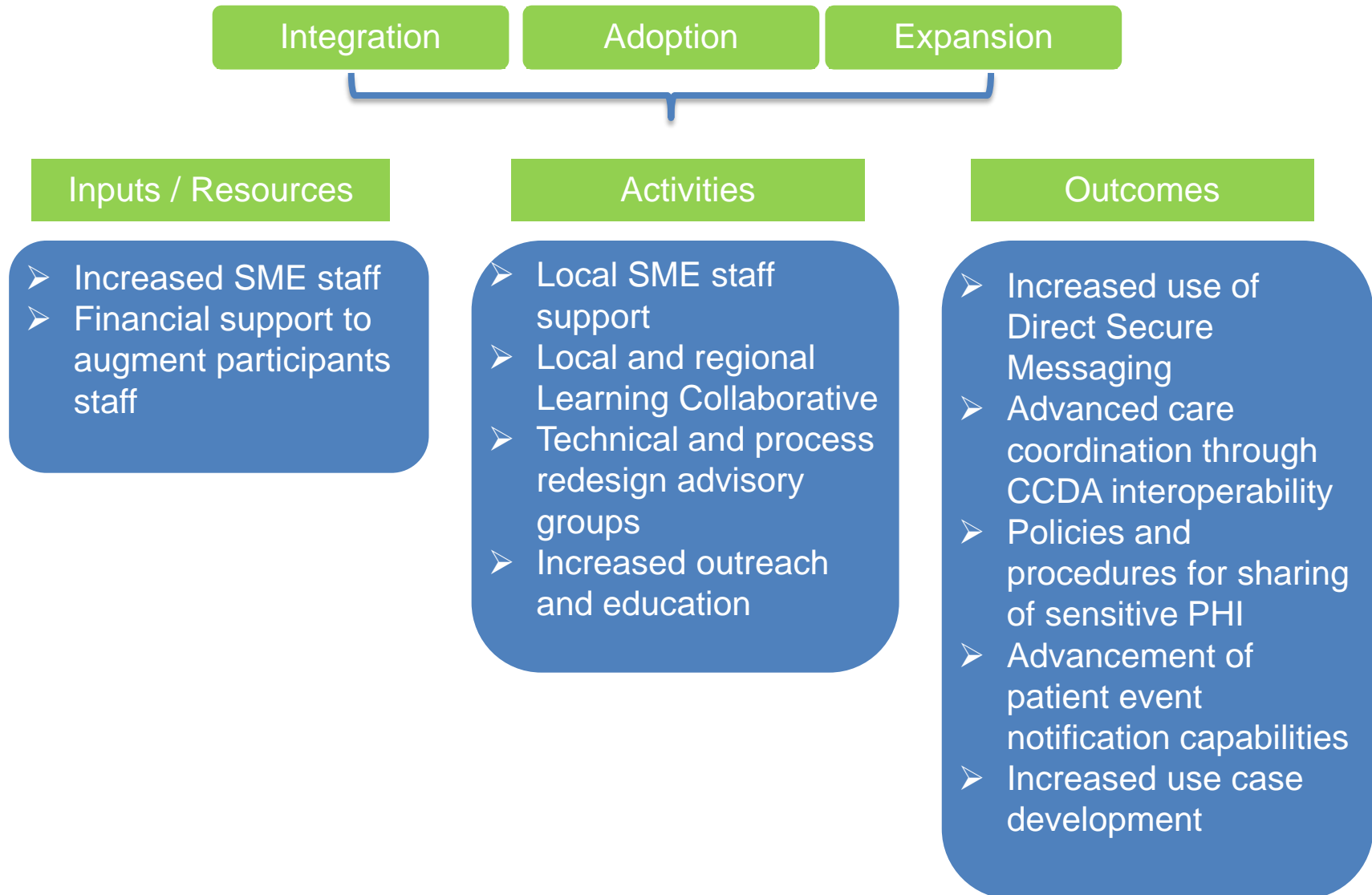
Proposed Solution

Two-pronged approach will be the most cost-effective means to rapidly accelerating Health Information Exchange (HIE) adoption among healthcare providers:

1. **Awareness, expertise, and engagement**: The NHHIO will expand education and outreach activities through the use of remote webinar training, as well as on-site local expertise, directly engaging provider and staffs at the point-of-care.

2. **Capacity-building:** HIE grants will be offered to motivated and well-prepared organizations to allow them to mobilize internal staff to collaborate with the NHHIO team to operationalize advanced electronic care coordination activities.

Best practices will be shared and disseminated through the development of a Peer Learning Network and Communities of Practice.

Primary target is one hundred fifty-eight (158) Health Centers, LTPAC, CAH and Community Mental Health Center locations.

Logic Model

Integration	Adoption	Expansion

Inputs / Resources

- Increased SME staff
- Financial support to augment participants staff

Activities

- Local SME staff support
- Local and regional Learning Collaborative
- Technical and process redesign advisory groups
- Increased outreach and education

Outcomes

- Increased use of Direct Secure Messaging
- Advanced care coordination through CCDA interoperability
- Policies and procedures for sharing of sensitive PHI
- Advancement of patient event notification capabilities
- Increased use case development

Peer Learning Network Goals

1. **Analyze workflow patterns and point-of-care activities** that support the sending and receiving of structured data elements. Specific workflow and processes to support medication reconciliation, problem list management, and the use of EHR alerts and reminders will be documented and evaluated.

2. **Identify and map business and clinical trading partners** to establish interoperability and communication road maps.

3. **Create internal process to support the state's HIE Opt-Out policy** as defined by RSA332:I, in addition to the patient consent processes to support the transmission of sensitive information. For **behavioral health providers:** Implementation of Patient Consent Management & Access Control Services (ACS) following the HL7 Implementation Guide: Data Segmentation for Privacy (DS4P).

4. **Best practice and patient education tools** will be created and supported through the NHHIO.com website secure interactive Learning Space.

Communities of Practice

Facilitated group discussions with multi-disciplinary practices and hospital organizations to address common interoperability issues:

1. **Creation of community conventions** for the standardization and routine exchange of **C-CDA** Discharge Summary documents.

2. **Interoperability between Health Information Service Provider (HISP) organizations and EHR vendors** will be analyzed and addressed through commonly-developed community norms for formatting of C-CDA documents and stylesheet templates to present human-readable Transfer of Care (TOC) summaries.

Advisory Group

Advisory Group - Health Information Management and Clinical Care Coordination

With a backdrop of lessons learned from the Communities of Practice regarding the limits of EHR functionality, HISP Interoperability barriers, and C-CDA specifications, **Health Information Mangers (HIM) and Clinical Providers** will advise the NHHIO Board and Peer Learning Networks on best practices for **efficient and effective care coordination activities**, and how to best implement critical path workflows to ensure the safety and improved health of our patient populations.

POC: Jackie Baldaro, cell: (339) 223-0888, jbaldaro@nhhio.org

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The NHHIO Resources

www.nhhio.org

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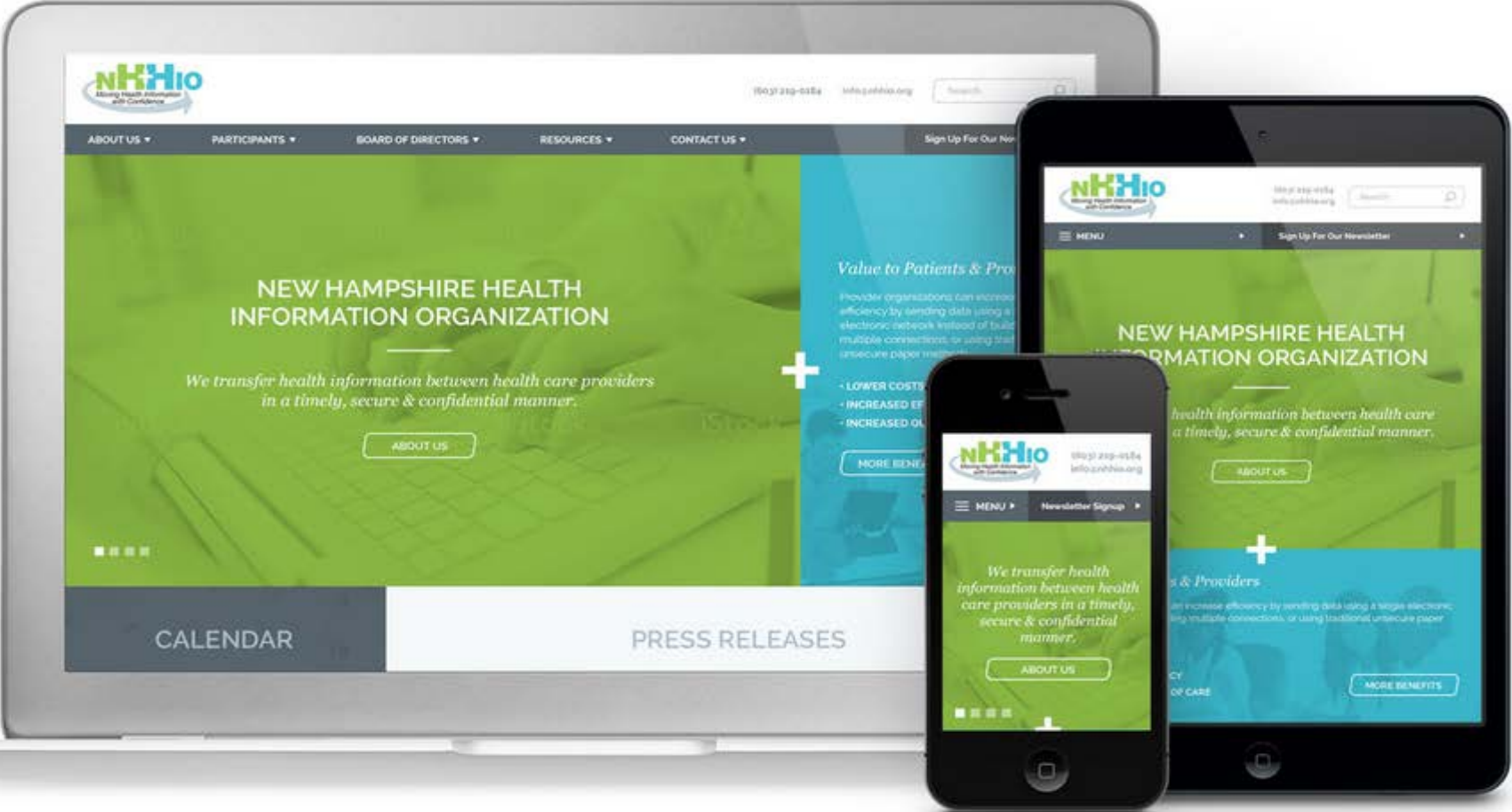
Thank You

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