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Family to Family Health Information Center Overview of Health Information Technology in Massachusetts

December 1, 2010

- Introduction to Health IT in Massachusetts

- Massachusetts Health IT Goals and Strategies

- Health Information Exchange

- Regional Extension Center

- Implications for Care Delivery

- Meaningful Use and Care Coordination

Overview of Health Information Technology in Massachusetts

INTRODUCTION TO HEALTH IT IN MASSACHUSETTS

Definition of Health IT

- Area of Information Technology involving the design, development, creation, use and maintenance of information systems for the healthcare industry.

- Automated and interoperable healthcare information systems are expected to lower costs, improve efficiency and reduce error, while also providing better consumer care and service.

- The electronic health record (EHR) is the central component of the health IT infrastructure. It is the individual's official, digital health record that is shared among multiple facilities and agencies.

- Other essential elements of the Health IT infrastructure are:
  - Electronic medical record (EMR), which is an individual's health record within a healthcare provider's facility
  - Personal health record (PHR), which is an individual's self-maintained health record
  - Regional Health Information Organization (RHIO), which oversees communications among the other elements and unifies them geographically

From SearchHealthIT.com

MeHI Established with Vision of EHR and Health Information Exchange (HIE) Adoption by 2015

- Massachusetts eHealth Institute (MeHI) established within the Massachusetts Technology Collaborative through Chapter 305 of the Acts of 2008

- **Mission:** Promote implementation of Electronic Health Records in all provider settings as part of an interoperable Health Information Exchange

- Developed Health Information Technology Strategic Plan in April 2010 as roadmap for the future

- Use of Implementation & Optimization Organizations to assist in the execution of the plan through community engagement, technology selection, project management, training, etc.

- Health IT efforts in Commonwealth support healthcare reform

- Build upon and leverage current capabilities in both public and private sectors

ARRA and HITECH

Through the Office of the National Coordinator (ONC) for Health Information Technology, provides direct assistance support to underwrite the cost of an Electronic Health Record (EHR) system implementation for eligible providers.

Massachusetts Chapter 305

MeHI became the state designated Regional Extension Center (REC) for the Commonwealth, with a mission to promote implementation of Electronic Health Records in all provider settings, by January 2015, as part of an interoperable Health Information Exchange

Chapter 305 of the Acts of 2008
AN ACT TO PROMOTE COST CONTAINMENT, TRANSPARENCY AND EFFICIENCY IN THE DELIVERY OF QUALITY HEALTH CARE.

11/28/2010

Funding

- HITECH Act provides financial incentives for providers to install EHRs and demonstrate Meaningful Use – commencing 2011

- Regional Extension Centers to support implementation of electronic health record systems in physician offices: funded for **$13.4M** for Massachusetts (MeHI) for two years with additional **$1M** in years three and four

- Statewide HIE with collaborative governance and sustainable funding model: funded for **$10.6M**

- Massachusetts Broadband Institute – Network infrastructure for Western Massachusetts: funded for **$71M**

MeHI and Medicaid Collaboration

MeHI and Medicaid (MassHealth) are currently collaborating to ensure the objectives of each entity are in alignment, which includes the following:

- State Health IT Strategic Plan and Chapter 305 objectives are tightly aligned with CMS Medicaid Health IT incentives.

- Medicaid Health IT funding is provided towards achieving the adoption and meaningful use goals of Chapter 305 and HITECH.

- Advance the adoption and meaningful use of Health IT, which is critical for the support of the statewide, all payer Patient-Centered Medical Home initiative.

- Align MeHI's focus of Implementation and Optimization Organization (IOO) support for healthcare Providers with the Commonwealth's commitment to support and enhance primary care, and encourage rapid adoption of Health IT by MassHealth providers.

Overview of Health Information Technology in Massachusetts

MASSACHUSETTS HEALTH IT GOALS AND STRATEGIES

1. Improve access to comprehensive, coordinated, person-focused health care through widespread provider adoption and meaningful use of certified EHRs.

2. Demonstrably improve the quality and safety of health care across all providers through Health IT that enables better coordinated care, provides useful evidence-based decision support applications, and can report data elements to support quality measurement.

3. Slow the growth of health care spending through efficiencies realized from the use of Health IT.

4. Improve the health of the Commonwealth's population through public health programs, research and quality improvement efforts, enabled through an efficient, reliable and secure health information exchange processes.

Health Information Exchange Guiding Principles

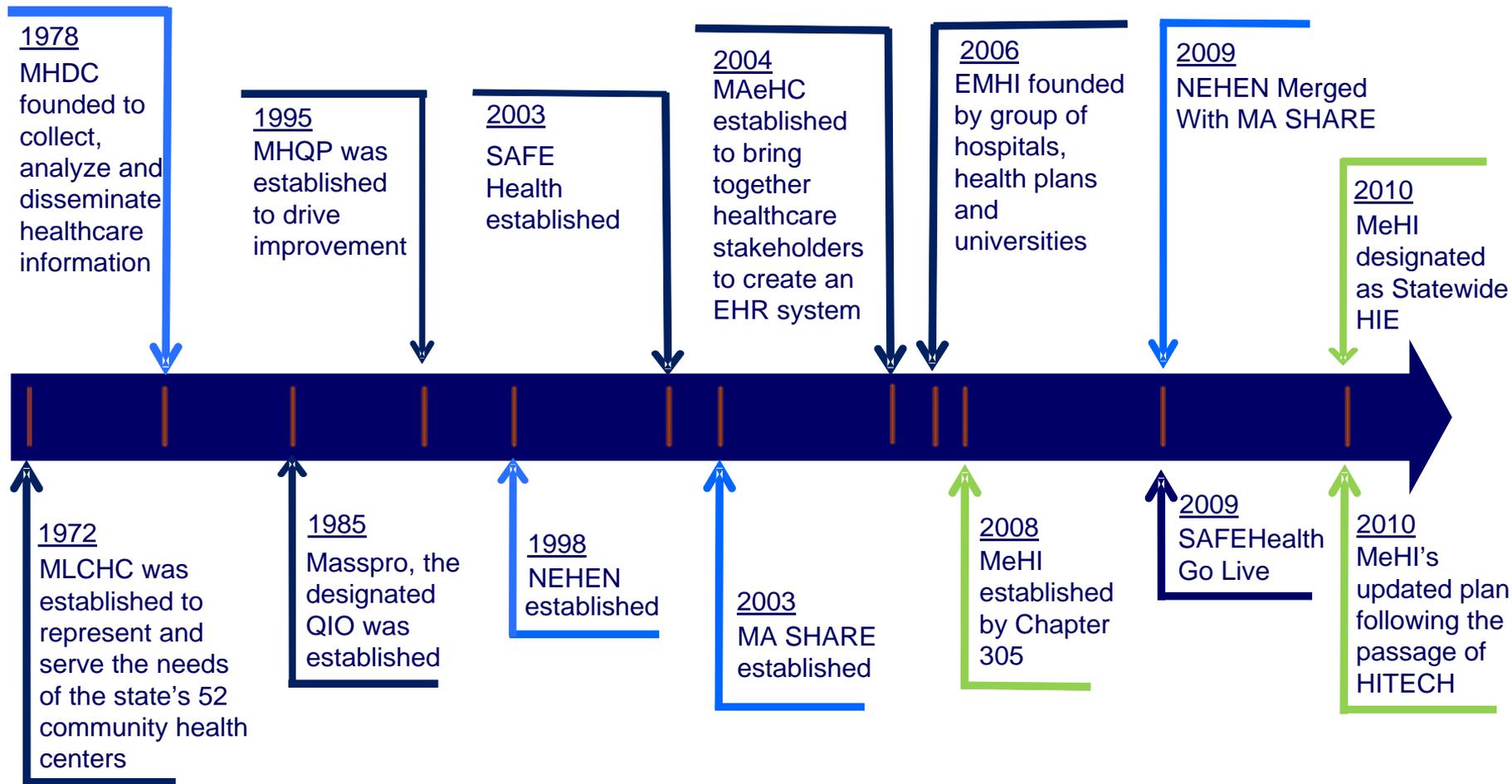|	
Strategy 1:	Establish Multi-Stakeholder Governance
Strategy 2:	Establish a Privacy Framework to Guide the Development of a Secure Health IT Environment.
Strategy 3:	Implement Interoperable Health Records in all Clinical Settings and Assure They Are Used to Optimize Care.
Strategy 4:	Develop and Implement a Statewide Health Information Exchange (HIE) Infrastructure to Support Care Coordination, Patient Engagement and Population Health.
Strategy 5:	Create a Local Workforce to Support Health IT Related Initiatives.
Strategy 6:	Monitor Success.

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HEALTH INFORMATION EXCHANGE

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History of HIE in Massachusetts

The key drivers of success in current Massachusetts HIE activities include a high level of collaboration and coordination among entities, the willingness of the private sector to fund these activities, and the depth and breadth of HIE expertise within the state.

1978
MHDC founded to collect, analyze and disseminate healthcare information

1995
MHQP was established to drive improvement

2003
SAFE Health established

2004
MAeHC established to bring together healthcare stakeholders to create an EHR system

2006
EMHI founded by group of hospitals, health plans and universities

2009
NEHEN Merged With MA SHARE

2010
MeHI designated as Statewide HIE

1972
MLCHC was established to represent and serve the needs of the state's 52 community health centers

1985
Masspro, the designated QIO was established

1998
NEHEN established

2003
MA SHARE established

2008
MeHI established by Chapter 305

2009
SAFEHealth Go Live

2010
MeHI's updated plan following the passage of HITECH

- The future of HIE for Massachusetts includes services, such as advanced patient-centric and population health-focused services that meet the broader needs of Massachusetts' citizens.

- With an HIE that enables and facilitates the exchange of clinical and administrative data, a patient's care will be better coordinated, and their providers and insurance company will be able to make better, more informed and faster decisions about care.

To meet federal and state requirements (including Chapter 305) AND support health care reform initiatives, the HIE technical architecture must support the following:

Principles of the Federal Privacy Framework	The degree of anticipated patient control must be consistent with state and federal policy and will be key in selecting technical approaches for HIE; e.g., patient consent applied universally vs. patient control by provider/ geography/ provider group/ other.
Public Health Reporting	Current pilots have successfully automated electronic reporting directly from EHRs but additional investment is required to scale the solution to small office providers.
Reporting for Quality and other initiatives	The HIE must facilitate routing of appropriate data to appropriate reporting tools and support the possible linkage to registries in the future.
Bi-directional Data Exchange	Ultimately, HIE participants (including patients) must be able to contribute data, allowing others to retrieve data from the HIE (with consent applied). Potentially create a portal capability for those who are close to retirement, etc. and choose not to invest in full fledged EHR functionality before 2015.
Exchange of standardized Clinical Data Summaries	To provide clinicians with actionable data at the point of care (integrated with provider EHRs), the HIE must adopt and use, and support the standards needed to exchange of summary data, including the CCD, among various clinical settings.
Financial Sustainability	Given federal funds will not support the entire HIE infrastructure, the HIE must provide value to stakeholders willing to support it financially.

Health Information Exchange Guiding Principles

Patient-Centric	The HIE will enable better longitudinal, cross-organizational care for every individual in Massachusetts and provide access to and use of health information for those individuals.
Adoptability	The HIE will conform to all applicable state and federal laws, standards, policies and regulations
Adaptability	The HIE will be able to be modified and expanded to integrate new components, services, interfaces and features, as needed to accommodate more users, systems or networks
Maintainability	The standards and requirements for participating in the HIE will be as simple as possible to allow greater participation throughout the community
Systems Integration	HIE adapters and connection mechanisms will be defined and developed for all HIE participants
Extensibility and Scalability	HIE functionality will be added or updated with minimum impact to existing functions and ensure that the infrastructure is scalable
Data Aggregation	Information will be collected, transmitted and aggregated in standard, secure formats

- Residents will have the ability to share medical records with their caregivers through HIE.

- To protect consumers' health related information from unauthorized access, appropriate processes will be in place.

- The Commonwealth's privacy and security framework will focus on the following key areas:
  - Compliance with and development and coordination of policies and standards
  - Policy to respond to and mitigate breaches of information, quickly and transparently
  - Development of secure Health Information Exchange Technology
  - Process for Certification
  - Consent Management

- The Nationwide Health Information Network (NHIN) is a collection of standards, protocols, legal agreements, specifications and services that enable the secure exchange of health information over the internet.

- NHIN is a key component of the nationwide health information technology strategy and will provide a common platform for health information exchange across diverse entities, within communities and across the country.

- As a critical part of the national health IT agenda, it will enable health information to follow the consumer, be available for clinical decision making, and support appropriate use of health care information beyond direct patient care, so as to improve public health.

http://statehieresources.org/the-toolkit/nationwide-health-information-network/nhin-overview/

Inter-state Collaboration Critical for HIE

- Massachusetts helped form a New England coalition, whose focus was to collaborate on issues pertinent to eHealth activity in this region, including state agencies, quasi-public agencies, non-profits and other organizations. The following states are part of this coalition:

Connecticut	Rhode Island
Maine	Vermont
Massachusetts	New York
New Hampshire	

- Monthly meetings to share best practices, work jointly on pertinent issues and optimize relevant health IT opportunities.

- Initial opportunities for collaboration have been identified including the following:
  - Support care coordination pilots between states, leveraging NHIN Direct transactions for quick wins
  - Develop necessary interfaces and touch points and address overlaps in the development of the various Health Information Exchange systems in region
  - Privacy policy harmonization and common Consent Model
  - Sharing of best practices and lessons learned in various state-wide deployments of EHR and HIE

Overview of Health Information Technology in Massachusetts

REGIONAL EXTENSION CENTER

What is a Regional Extension Center?

- Primary purpose is to provide federally subsidized direct support to the preferred priority primary care providers (PPPCP)

- Team of experienced local Health IT professionals with intimate knowledge of the Massachusetts medical community

- Part of a national network of select organizations designated to assist providers with adopting certified EHRs and achieving Meaningful Use

- Supported through ARRA/HITECH stimulus funding made available through the Office of the National Coordinator for Health Information Technology: **$13.4M** for Massachusetts

- Goal of funding: to support 100,000 clinical providers nationwide by year 2014

Why the Regional Extension Center is Here

- Our health care system is undergoing a transformation
  - Primary care is the cornerstone
  - Using EHRs benefits all patients and providers
  - EHRs are here and change is coming

- EHR adoption has challenges and clear benefits
  - Know more about patients
  - Make better clinical decisions

- Help is available *now*
  - Regional Extension Centers
  - CMS and other incentives

- Those who adopt now will be in a better position to benefit
  - Keep patients engaged and loyal
  - Attract and retain new providers and sustain business
  - Maximize payments and minimize hassle

Helping Providers Implement Electronic Health Records and Achieve Meaningful Use

MeHI REC Service Area

Total Practicing Physicians: 20,000

Total PCPs: 7800

Total Priority PCPs: 6700

Total Priority PCPs Served by REC - 2500

Non Priority Providers committed - 800

11 Critical Access Hospitals

Total Population 6,497,697*

Total Patients served 3,750,000**

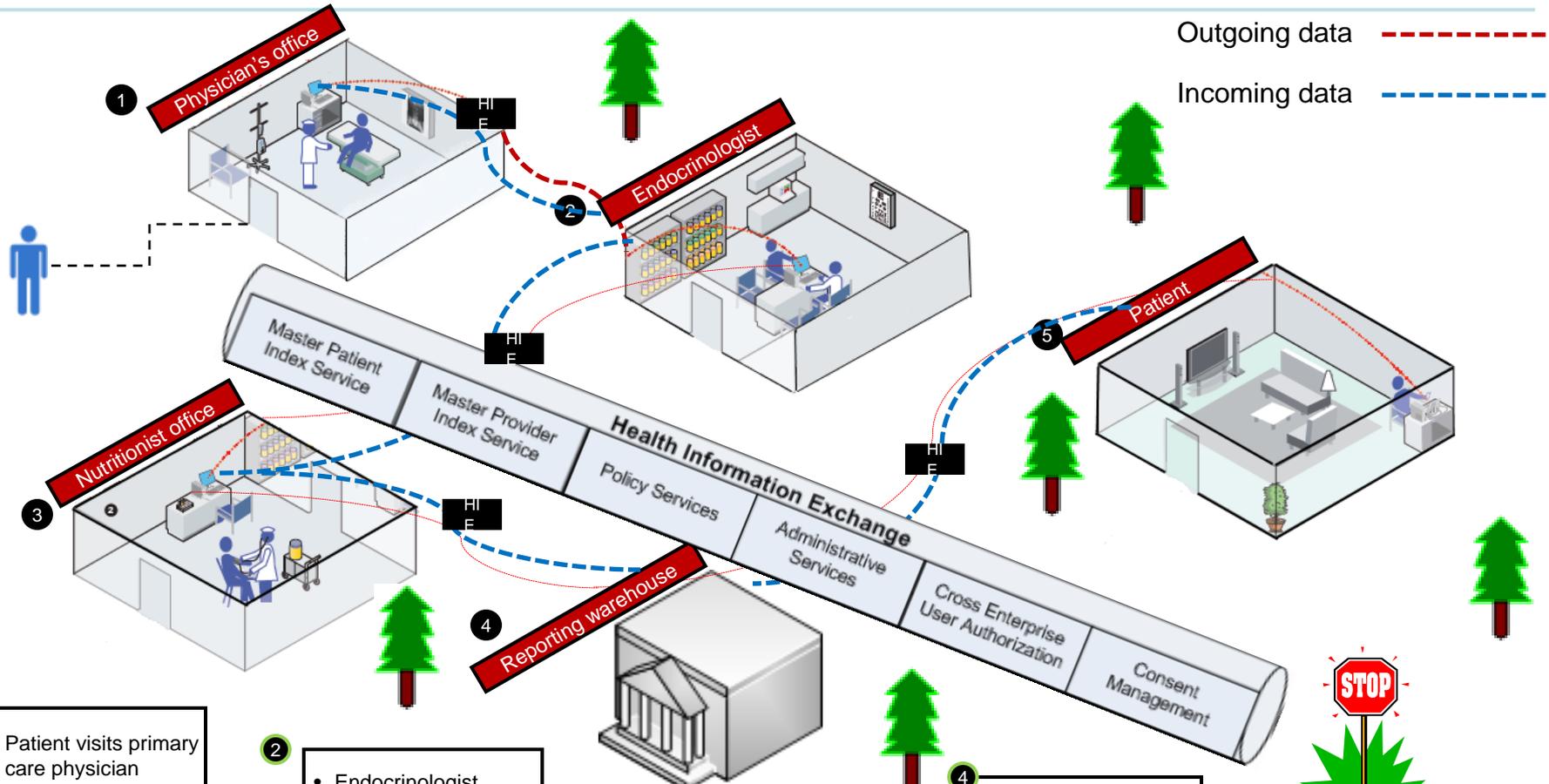97% Population Insured

*Population as of 2008

**Patients served calculated at estimated 1,500 patients per Priority PCP

Overview of Health Information Technology in Massachusetts

IMPLICATIONS FOR CARE COORDINATION

- Engage in true care coordination and care delivery for defined group of individuals

- Have solid data infrastructure and sufficient interoperability to provide the necessary information for care assessment, coordination and management

- Use formal decision making capabilities including quality management and performance oversight

Diabetes Patient Encounter Use-Case Example

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Outgoing data – – – – – – –
Incoming data – – – – – – –

1 Physician's office

2 Endocrinologist

5 Patient

HIE

Master Patient Index Service

Master Provider Index Service

Health Information Exchange

Policy Services

3 Nutritionist office

4 Reporting warehouse

Administrative Services

Cross Enterprise User Authorization

Consent Management

STOP

1
- Patient visits primary care physician
- Provider diagnosis patient with poorly controlled Diabetes Mellitus Type 2
- Provider refers patient to endocrinologists and nutritionist

2
- Endocrinologist reviews medication and past medical history
- Endocrinologist imports Continuity of Care Document (CCD) into local Electronic Health Record

3
- Nutritionist reviews history in HIE
- Documents plan, which is transmitted to HIE for other caregivers to see

4
- Reportable data from patient encounters are identified and routed to quality reporting warehouse/ disease registry
- Providers access disease registry

5
Patient accesses Personal Health Record which provides summary of each visit

Overview of Health Information Technology in Massachusetts

MEANINGFUL USE

Meaningful Use

Stage 3
2015
Improved
Outcomes

Stage 2
2013
Advanced
Clinical
Processes

Stage 1
2011
Data Capture
and Sharing

Phased-in series of improved clinical data capture supporting more rigorous and robust quality measurements and improvements

Source: Connecting for Health, Markle Foundation "Achieving the Health IT Objectives of the American Recovery and Reinvestment Act" April 2009

Electronic capturing of health information in a coded format

- Use health information to track key clinical conditions and communicate that information for care coordination purposes

- Consistent with other provisions of Medicare and Medicaid law, implement clinical decision support tools to facilitate disease and medication management

- Report clinical quality measures and public health information

Expand upon Stage 1 criteria to encourage the use of health IT for continuous quality improvement at the point of care and the exchange of information in the most structured format possible

- Electronic transmission of orders entered using computerized provider order entry (CPOE)

- Electronic transmission of diagnostic test results

- May consider applying the criteria more broadly to both the inpatient and outpatient hospital settings

Promote improvements in quality, safety and efficiency focusing on

- Decision support for national high priority conditions

- Patient access to self management tools

- Access to comprehensive patient data

- Improving population health

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