**Why health information technology (health IT)?**

- Health IT is a key component of health reform and has the potential to enhance the *quality*, *safety*, and *efficiency* of health care. Health IT includes:
  
  - **Electronic Health Records (EHRs)** are used to collect and store relevant patient health information, including patient history, diagnoses, medications, allergies, clinician visits, and laboratory tests.
  
  - **Health Information Exchange (HIE)** allows EHR data to be securely shared among health care providers (e.g., clinics, hospitals, pharmacies, etc).

- The Iowa Legislature created the e-Health Executive Committee and Advisory Council in 2008 (HF 2539).

- The American Recovery and Reinvestment Act (ARRA) of 2009 provided $19 billion in new funding for the adoption and use of health IT. This funding will support development of statewide HIEs, provider technical assistance, and “Meaningful Use” provider incentives.

- All 50 states, and six eligible territories, have implemented or are in the process of implementing statewide HIE services.

**What’s Iowa e-Health?**

- Iowa e-Health is a multi-stakeholder collaboration to improve patient-centered care and population health through the use and exchange of electronic health information.

- The e-Health Executive Committee, Advisory Council, and workgroups are comprised of diverse stakeholders from public and private entities including *health care providers, professional associations, hospitals, government, payers, educators, researchers*, and *consumers*.

- To support the activities of the Executive Committee, Advisory Council, and the workgroups, the Iowa Department of Public Health formed the Office of Health IT.

**How is Iowa e-Health funded?**

- In March 2010, IDPH was awarded $8,375,000 of ARRA funding over four years through a cooperative agreement with the Office of the National Coordinator for Health IT (ONC) to help fund a statewide HIE.

- In addition to ONC funding, during Fiscal Year 2011, Iowa e-Health will receive $236,010 in planning funding from the Centers for Medicare and Medicaid Services and $159,753 from General Appropriations.

- A business and financial sustainability plan will be developed in 2011 to identify funding strategies needed to fully implement and sustain the statewide HIE, which will likely include private and state funding sources.
What’s the statewide health information exchange (HIE)?

- Iowa’s statewide HIE will provide the “hub” that connects different EHRs throughout the state, allowing vital patient information to flow between providers.
- The components of statewide HIE planning and implementation include:
  - **Governance**: convening stakeholders, setting direction and goals, and providing oversight to ensure accountability.
  - **Finance**: identifying and managing financial resources to achieve short and long-term sustainability.
  - **Technical Infrastructure**: implementing and managing the core infrastructure and standards to enable the electronic exchange of health information among providers.
  - **Legal and Policy**: establishing policies and trust agreements to safeguard privacy and security of electronic health information.
  - **Business and Technical Operations**: performing day-to-day activities to support Iowa e-Health operations. This includes but is not limited to: communication and outreach to providers and consumers; support for providers adopting health IT tools and adjusting to workflow changes; assessment and measurement of success; and alignment with broad health reform.
- The Office of Health IT is working closely with the following organizations to align health IT planning:
  - **Iowa Medicaid Enterprise (IME)**: IME will administer the federal Medicaid incentives available to eligible providers who adopt, implement, and meaningfully use an EHR system.
  - **Health Information Technology Regional Extension Center (HITREC)**: HITREC helps providers with EHR vendor selection, implementation and optimization, meaningful use, and workflow redesign.

What’s next?

- IDPH, with approval from the e-Health Executive Committee and Advisory Council, is drafting legislation related to Iowa e-Health for the 2011 legislative session.
- Iowa e-Health will implement a statewide HIE beginning in 2011 based on the planning activities outlined in the Iowa e-Health Strategic and Operational Plan, approved by the e-Health Executive Committee in May 2010.

More information:

Iowa Department of Public Health
Office of Health IT
ehealth@idph.state.ia.us
www.iowaeHealth.org
# Iowa e-Health Stakeholders

## e-Health Executive Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louise Billmeyer</td>
<td>Des Moines</td>
<td>Federation of Iowa Insurers / Principal Financial Group</td>
</tr>
<tr>
<td>Jane Brokel, PhD, RN</td>
<td>Riverside</td>
<td>Iowa Nurses Association / University of Iowa College of Nursing</td>
</tr>
<tr>
<td>Lee Carmen</td>
<td>Iowa City</td>
<td>University of Iowa Hospitals and Clinics</td>
</tr>
<tr>
<td>Rob Frieden</td>
<td>Davenport</td>
<td>Genesis Health System</td>
</tr>
<tr>
<td>Jim Green</td>
<td>Des Moines</td>
<td>Mercy Medical Center-Des Moines / Catholic Health Initiatives</td>
</tr>
<tr>
<td>Joy Grosser</td>
<td>Des Moines</td>
<td>Iowa Health System</td>
</tr>
<tr>
<td>Cheryll Jones, ARNP, CPNP</td>
<td>Bloomfield</td>
<td>Consumer / State Board of Health</td>
</tr>
<tr>
<td>Don Nelson, MD</td>
<td>Cedar Rapids</td>
<td>Iowa Medical Society / Physician</td>
</tr>
<tr>
<td>Joe Smith</td>
<td>Boone</td>
<td>Iowa Hospital Association Rural Hospital Representative / Boone County Hospital</td>
</tr>
</tbody>
</table>

## e-Health Advisory Council Members

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fred Bahls, MD</td>
<td>Des Moines</td>
<td>Veterans Affairs Medical Center</td>
</tr>
<tr>
<td>Ted Boesen</td>
<td>Des Moines</td>
<td>Iowa/Nebraska Primary Care Association</td>
</tr>
<tr>
<td>Michelle Bottenberg</td>
<td>Waukee</td>
<td>Iowa Pharmacy Association / Drake University</td>
</tr>
<tr>
<td>Jane Brokel, PhD, RN</td>
<td>Riverside</td>
<td>Iowa Nurses Association / University of Iowa College of Nursing</td>
</tr>
<tr>
<td>Cheryl Dahms, RN, BSN</td>
<td>Des Moines</td>
<td>Des Moines University Clinic</td>
</tr>
<tr>
<td>Kim Downs</td>
<td>West Des Moines</td>
<td>IFMC</td>
</tr>
<tr>
<td>Tom Evans, MD</td>
<td>Des Moines</td>
<td>Iowa Healthcare Collaborative</td>
</tr>
<tr>
<td>Randall Hanson, MD</td>
<td>Waukee</td>
<td>Polk County Medical Society / Physician</td>
</tr>
<tr>
<td>Leon Hofer</td>
<td>West Des Moines</td>
<td>Rural Iowa Independent Telephone Association &amp; Iowa Telephone Association</td>
</tr>
<tr>
<td>Dave Jackson</td>
<td>Des Moines</td>
<td>Federation of Iowa Insurers / Wellmark Blue Cross Blue Shield</td>
</tr>
<tr>
<td>Cheryll Jones, ARNP, CPNP</td>
<td>Bloomfield</td>
<td>Consumer / State Board of Health</td>
</tr>
<tr>
<td>Dave Lingren</td>
<td>Des Moines</td>
<td>Iowa Communications Network</td>
</tr>
<tr>
<td>Steve Mosena</td>
<td>Des Moines</td>
<td>Department of Human Services</td>
</tr>
<tr>
<td>Roy Park</td>
<td>Ankeny</td>
<td>Consumer</td>
</tr>
<tr>
<td>Dana Shaffer, DO</td>
<td>Exira</td>
<td>Iowa Osteopathic Medical Association / Des Moines University</td>
</tr>
<tr>
<td>Kristy Walker</td>
<td>Iowa City</td>
<td>University of Iowa Hospitals and Clinics</td>
</tr>
<tr>
<td>Jennifer Vermeer</td>
<td>Des Moines</td>
<td>Iowa Medicaid Enterprise</td>
</tr>
</tbody>
</table>

2010 Iowa e-Health Stakeholders
Iowa e-Health Stakeholder Organizations

Individuals from the following organizations have been involved in Iowa e-Health by serving as an Executive Committee, Advisory Council, or workgroup member.

**Provider Organizations**
- Boone County Hospital
- Broadlawns Medical Center
- Burgess Health Center
- Care Initiatives
- Des Moines University Clinic
- Genesis Health System
- Great River Medical Center
- Iowa Clinic
- Iowa Health Des Moines (Methodist, Lutheran, Blank)
- Iowa Health Physicians
- Iowa Health System
- Mercy Medical Center - Cedar Rapids
- Mercy Medical Center - Des Moines
- Mercy Medical Center - Iowa City
- Mercy Medical Center - North Iowa
- Mercy Medical Center, Catholic Health Initiatives
- Planned Parenthood of the Heartland
- Trinity Regional Medical Center
- University of Iowa Hospitals and Clinics
- Veterans Affairs Medical Center
- Wheaton Franciscan Health care

**Government**
- Iowa Attorney General’s Office
- Iowa Communications Network
- Iowa Department of Education
- Iowa Department of Human Services
- Iowa Department of Public Health
- Iowa Medicaid Enterprise
- Legislators
- State Board of Health

**Educational Institutions**
- Des Moines Area Community College
- Des Moines University (Osteopathic Medicine)
- Drake University (Pharmacy)
- Eastern Iowa Community College/Scott Community College
- Hawkeye Community College
- Indian Hills Community College
- Kirkwood Community College
- Northeast Iowa Community College
- Northwest Iowa Community College
- University of Iowa (Nursing)
- University of Iowa (Engineering)

**Professional Associations**
- American Health Information Management Association
- Iowa Collaborative Safety Net
- Iowa/Nebraska Primary Care Association
- Iowa Health Care Association
- Iowa Hospital Association
- Iowa Medical Society
- Iowa Nurses Association
- Iowa Osteopathic Medical Association
- Iowa Pharmacy Association
- Polk County Medical Society

**Payers**
- Federation of Iowa Insurers
- Iowa Medicaid Enterprise
- Principal Financial Group
- Wellmark Blue Cross and Blue Shield

**Other**
- American Health Information Management Association
- Consumers
- Davis, Brown Law Firm
- eCFirst
- Genova Technologies
- Good Samaritan Society
- HITRUST
- IFMC / Iowa Regional Extension Center
- Iowa Healthcare Collaborative
- Iowa Network Service
- Iowa Telephone Association
- Iowa Valley Continuing Education
- Rural Iowa Independent Telephone Association
**Iowa e-Health**

Iowa e-Health is a public-private collaboration dedicated to the promotion of health information technology (health IT). In January 2009, the first e-Health Executive Committee and Advisory Council convened. Under the direction of the Executive Committee and Advisory Council, several volunteer workgroups and subcommittees were established to provide subject matter expertise for components of the planning process. These include:

- Assessment
- Communication & Outreach
- Continuity of Care Document & Interoperable EHRs
- Governance and Finance
- Health IT Workforce and Education
- HIE Infrastructure and Networks
- Provider Adoption of EHRs
- Safeguard Privacy and Security

**Benefits of a statewide health information exchange**

Iowa’s statewide health information exchange (HIE) will enable the electronic exchange of health information in a secure format between authorized health care professionals and organizations. With a connection to the statewide HIE, providers will be able to share electronic health records (EHRs) with other Iowa providers, and eventually with providers across the nation through the nationwide health information network (NHIN) to provide continuity of care for their patients.

By establishing the statewide HIE infrastructure, Iowa will be more prepared to fully use health IT to improve quality of health care, assure patient safety, and increase efficiency in health care delivery.

**Without a statewide HIE...**
Each health care provider must build point-to-point connections.

**With a statewide HIE...**
Each health care provider is connected.
Timelines for health IT adoption and a statewide HIE

Development and implementation of a statewide HIE is instrumental in improving the health of Iowans. Health information exchange is also a requirement for eligible health care providers to receive Meaningful Use provider incentives available from the Centers for Medicare and Medicaid Services, beginning in 2011.

The following diagram illustrates a high-level timeline for Iowa e-Health activities and the Meaningful Use provider incentive program.

Iowa e-Health Strategic and Operational Plan

Health IT is recognized by public and private sector leaders as a key tool to support health reform across the nation. President George W. Bush's executive order in 2004, which called for every American to have an EHR by 2014, was reaffirmed in the American Recovery and Reinvestment Act (ARRA) signed by President Barack Obama on February 17, 2009. The ARRA will result in a $19 billion investment in a health IT infrastructure for the United States. This funding will support technical assistance for EHR adoption, incentives to health providers implementing and using EHRs, and infrastructure to enable HIE among health care professionals.

The 2010 Iowa e-Health Strategic and Operational Plan is a required deliverable of the State HIE Cooperative Agreement Program and will allow Iowa to access $8,375,000 of planning and implementation funds from 2010 to 2014. The ARRA funds will help Iowa e-Health begin to execute the tasks and activities described below:

Goal 1- Build awareness and trust of health IT
- Develop and implement a communication and outreach strategy
- Engage providers through outreach, assessments and focus groups
- Engage consumers through community presentations and the Consumer Interest Group
Goal 2 - Promote statewide deployment and use of electronic health records
- Support the technical assistance provided by the Iowa Health Information Technology Regional Extension Center (Iowa REC) to ONC-priority providers
- Offer technical assistance to providers not covered by ONC-funded Iowa REC services
- Assess barriers of provider adoption of EHRs, and develop ways to overcome those barriers, including: communication and outreach, Meaningful Use provider incentives, and EHR hosting options

Goal 3 - Enable the electronic exchange of health information
- Develop and implement the core components of the statewide HIE
- Enable the exchange of electronic health information between states through the Nationwide Health Information Network

Goal 4 - Enable the exchange of clinical data
- Develop and enable priority HIE services, including 1) continuity of care document (CCD), 2) electronic immunization reporting to public health and the ability to receive an immunization history from public health, 3) lab results, and 4) medication history
- Develop and enable additional HIE services as capacity and funding are available

Goal 5 - Safeguard privacy and security of electronic health information
- Identify privacy and security barriers and formulate strategies to address those barriers
- Construct the statewide HIE privacy and security framework, including but not limited to policies for patient consent; standard participation agreements; authorization, authentication, access, and auditing; and compliance with existing HIPAA regulations

Goal 6 - Advance coordination of activities across state and federal government
- Align Iowa e-Health and Iowa Medicaid Enterprise planning
- Develop a workforce plan to recruit and grow the health IT workforce and provide support to the health IT workforce through new or enhanced training and education programs (e.g., Community College Consortium, Curriculum Development Centers)
- Coordinate activities across related health IT programs, including federally-funded state based programs, federal care delivery organizations, other ARRA programs, other states, and broader health reform
Goal 7 - Establish a governance model for statewide health information exchange
- Engage in a multi-stakeholder, public and private collaboration to promote and implement health IT initiatives in Iowa
- Form a long-term governance entity to provide oversight and ensure accountability of the statewide HIE

Goal 8 - Ensure sustainable business and technical operations for health IT
- Establish the IDPH Office of Health IT to provide Iowa e-Health planning and day-to-day operations of the statewide HIE
- Contract with vendor organizations for specific Iowa e-Health needs (e.g., HIE infrastructure, communication and outreach strategy, financial sustainability plan)

Goal 9 - Secure financial resources to develop and sustain a statewide HIE
- Establish a business and financial sustainability plan for Iowa e-Health that includes: assessing the potential market value of HIE services, determining return on investment, providing financial projections necessary to develop and maintain a comprehensive budget, and identifying financing strategies appropriate for Iowa

Goal 10 - Monitor and evaluate health IT progress and outcomes
- Create and execute an on-going evaluation strategy to measure progress and outcomes of the statewide HIE, including metrics established by ONC, metrics to monitor health outcomes, and metrics to demonstrate return on investment

Environmental Scan
A thorough understanding of the health IT landscape throughout the state will help Iowa plan and implement services to support health IT adoption. Based on a 2009 Iowa Hospital Association assessment, approximately 11% of hospitals entirely use an EHR system; 74% use a combination of paper-based and EHR system, and 13% entirely use a paper-based system.

Based on a 2010 preliminary assessment of provider practices in Iowa, 46% of providers have an EHR, and 52% have a paper-based system. Barriers to EHR adoption tend to be initial and ongoing operational costs and disruption in the care setting when implementing the system. Appendix I of the Strategic and Operational Plan provides additional data available from the hospital and physician practice assessments, and Goal 10 describes additional baseline assessments that are currently underway.

In addition, an inventory of many assets and demonstrated achievements of health IT in Iowa has been compiled and will be leveraged to advance health IT and build a statewide HIE. This includes two large provider settings with Health Information Management Systems Society (HIMSS) Stage 6 EHR adoption, two large broadband networks providing network connectivity to providers throughout the state, and several examples of information exchange among providers. Additional assets and achievements are listed in Appendix H of the Strategic and Operational Plan.

View the complete Strategic and Operational Plan:
www.idph.state.ia.us/ehealth/reports.asp