

# **Building Florida's Health Information Network**

**February 13, 2008** 

## I. Executive Summary

Information technology (IT) has transformed the financial, retail, and telecommunications industries by enabling greater efficiency, better quality, and more consumer choice. The potential benefits of IT have yet to be fully realized in the U.S. health care sector. Widespread adoption of IT in the health care sector, such as interoperable electronic medical records, holds the promise of improving patient safety and reducing the cost of healthcare by preventing unnecessary procedures.

The state of Florida has taken a leading role in the national movement toward creating interoperable health information exchanges. Over the course of the previous three years, the state has invested \$5.5 million in a grants program to establish regional health information organizations (RHIOs) as the basis for a statewide health information exchange (HIE) known as the Florida Health Information Network (FHIN). In addition, Governor Jeb Bush created the Governor's Health Information Infrastructure Advisory Board in May 2004 to advise the Agency for Health Care Administration as it develops a strategy to develop a Florida health information infrastructure.<sup>2</sup> The Board produced a whitepaper, "Florida Health Information Network, Architectural Considerations for State Infrastructure", which outlines their vision for the FHIN.<sup>3</sup>

The role of a RHIO is to work at the local level to bring together healthcare providers in the community for the purpose of sharing healthcare data and integrating their different computer systems into a health care data network that can exchange medical records among all participants. There is no single model for a RHIO to follow. Most RHIOs vary in their size, member organizations, amount and nature of data collected and shared, and delivery method. One of the major challenges facing RHIOs across the nation is the ability to maintain sustainable funding. The first phase of development for RHIOs is usually provided by grant funding. However, the second phase of development generally involves maintaining and improving systems, requiring some type of sustainable funding.

The intended purpose of the FHIN is to connect the RHIOs and serve as an advisory body to help manage the growth and operation of the entire network. Despite the state's investment through the FHIN grants program, the Legislature has not created the FHIN;

<sup>6</sup> *Id*.

<sup>&</sup>lt;sup>1</sup> Castro, Daniel, "Improving Health Care: Why a Dose of IT May Be Just What the Doctor Ordered," The Information Technology and Innovation Foundation (October 2007).

<sup>&</sup>lt;sup>2</sup> Executive Order Number 04-93 (2004), available at <a href="http://www.fdhc.state.fl.us/dhit/Board/executive\_order.pdf">http://www.fdhc.state.fl.us/dhit/Board/executive\_order.pdf</a>. (visited December 17, 2007).

<sup>&</sup>lt;sup>3</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007.

<sup>4</sup> *Id.* at iv.

<sup>&</sup>lt;sup>5</sup> E-HIM Work Group on Patient Identification in RHIOs. "Surveying the RHIO Landscape: A Description of Current RHIO Models, with a Focus on Patient Identification." *Journal of AHIMA 77*, no.1 (January 2006): 64A-D. <a href="http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1\_028980.hcsp?dDocName=bok1\_028980">http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1\_028980.hcsp?dDocName=bok1\_028980</a> (visited December 19, 2007).

consequently, the RHIOs are developing locally in the absence of guiding principles from a statewide perspective.

During the same time period, other states and the federal government have initiated efforts to create health information exchanges. Based on a review of these efforts and the efforts within Florida, there are three prominent options that the Legislature may consider to foster the development of a statewide HIE.

One option available to the state is to build and operate the Florida Health Information Network (FHIN) as outlined in the Governor's Health Information Infrastructure Advisory Board's (GHIIAB) published white paper. This model relies heavily on the participation of regional health information organizations (RHIOs) to provide the body of data necessary to exchange over the internet-based, statewide network. Also a key feature of this model is the creation of a not-for-profit corporation to oversee the creation of the FHIN. The state has the option of either directing the Agency for Health Care Administration (agency) to build the technical elements of the FHIN or directing the corporation to contract with vendors to build the technical elements of the FHIN. With this model, the state maintains ownership of the technology and is responsible for the technical and oversight functions of the network. The total budget for the first fiscal year, as outlined in the GHIIAB's white paper, is \$9,400,000.

A second option is to direct the agency to issue an invitation to negotiate (ITN) to explore the different models the statewide network could adopt to maximize the state's investment before building the network. This option differs slightly from the FHIN model discussed above in that the state has the ability to pursue ideas that may not have been previously considered--ideas for a statewide network model that will provide the best value to the state. With this option, the state maintains ownership of the technology and is responsible for oversight of the operation. The funding portion of this model is similar to the FHIN model. The vendor chosen through the ITN process is paid by the agency to complete the deliverables outlined in the contract.

A third option is to continue funding the development of RHIOs through the grants program administered by the agency and to create an incentive program to encourage physician adoption of electronic medical records (EMR). This option avoids a substantial up-front investment, while continuing to incubate the development of RHIOs and encourage the adoption of EMR systems by physicians—both of which are the most basic and essential elements of a statewide infrastructure. As discussed later in this project, many states across the nation are choosing this measured, deliberate approach to achieving statewide health information exchange.

If the state of Florida is dedicated to pursuing a statewide health information exchange, whether this year or in the future, one common element across all three options that must be established is an advisory body. An advisory body at the state level will provide the guidance that is necessary to protect the state's best interest. Currently,

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<sup>&</sup>lt;sup>7</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007.

each RHIO in Florida, which acts as the governing body in its respective region, is developing to best serve the population within its region. There is no statutorily created statewide advisory body to bring together these multiple interests for the benefit of the state and the state's financial investment.

#### II. <u>Definitions</u>

Currently, there are multiple competing definitions surrounding key health care IT terms, with terms often used interchangeably. For purposes of this project, the following terms and definitions will be utilized:

- <u>Interoperable</u>: the ability of different information technology systems and software applications to communicate, to exchange data accurately, effectively, and consistently, and to use the information that has been exchanged.<sup>8</sup>
- <u>Electronic Medical Record</u>: a record of a person's medical treatment that is created by a licensed health care provider and that is stored in an interoperable and accessible digital format.
- <u>Electronic Health Record</u>: a record of a person's health information, collected over a period of time, generated by one or more encounters in any care delivery setting.
- <u>Personal Health Record</u>: an Internet-based set of tools that allow individuals to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it.<sup>9</sup>
- <u>Health Information Exchange</u>: an electronic system used to acquire, process, and transmit electronic medical records, which can be shared in real-time among authorized health care providers, health care facilities, health insurers, and other recipients as authorized by law, to facilitate provision of health care services.
- Regional Health Information Organization: a neutral organization with a defined governance structure which is composed of and facilitates collaboration among its stakeholders in a given medical trading area, community, or region through secure electronic health information exchange to advance the effective and efficient delivery of healthcare for individuals and communities. The geographic footprint of a RHIO can range from a local community to a large multi-state region.

#### **III. Health Information Exchange**

#### A. Federal Efforts

On April 27, 2004, President George W. Bush issued an Executive Order<sup>10</sup> in order to encourage the development of a nationwide interoperable health information technology

<sup>&</sup>lt;sup>8</sup> The National Alliance for Health Information Technology, "What is interoperability?" <a href="http://www.nahit.org/cms/index.php?option=com\_content&task=view&id=186&Itemid=195">http://www.nahit.org/cms/index.php?option=com\_content&task=view&id=186&Itemid=195</a> (visited January 21, 2008).

The Markle Foundation, <a href="http://www.connectingforhealth.org/resources/final\_phwg\_report1.pdf">http://www.connectingforhealth.org/resources/final\_phwg\_report1.pdf</a> (visited January 21, 2008).

infrastructure. The Executive Order directed the Secretary of Health and Human Services to establish within the Office of the Secretary the position of National Health Information Technology Coordinator. The Office of the National Coordinator (ONC) is tasked with developing, maintaining, and implementing a strategic plan to guide the nationwide implementation of interoperable health information technology in both the public and private health care sectors in order to reduce medical errors, improve quality, and produce greater value for health care expenditures.

In 2004 President Bush also set the goal for most Americans to have access to an interoperable electronic medical record by the year 2014. In order to accomplish this goal, the United States Department of Health and Human Services (HHS) created a "Strategic Framework", 11 which outlines the vision and goals of HHS' health information technology initiative. The plan of action consists of four sequential main goals; each goal is supported by three major strategies. The four goals are diagramed in Figure 1.12

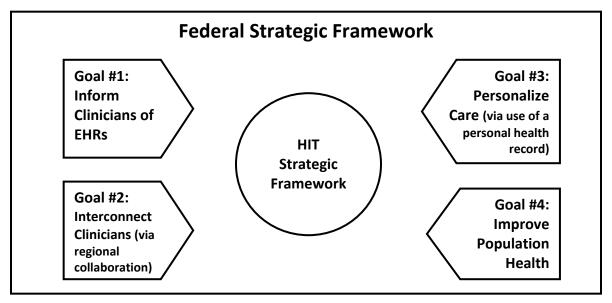


Figure 1

The federal government has taken an active role in ensuring the necessary steps are taken to achieve the outlined goals. The ONC awarded multiple contracts in 2005 to entities conducting work in the field of health information technology (HIT). Project goals included:

 Identifying interoperability standards (such as to facilitate the exchange of patient health data, through a contract with the Healthcare Information Technology Standards Panel (HITSP);

<sup>&</sup>lt;sup>10</sup> Executive Order: Incentives for the Use of Health Information Technology and Establishing the Position of the National Health Information Technology Coordinator (visited December 4, 2007) <a href="http://www.whitehouse.gov/news/releases/2004/04/20040427-4.html">http://www.whitehouse.gov/news/releases/2004/04/20040427-4.html</a>

U.S. Department of Health and Human Services, "Summary of Strategic Framework," (visited December 13, 2007)
 www.hhs.gov/healthit/framework.html
 Id

- Defining a certification process for health IT products, through a contract with the Certification Commission for Healthcare Information Technology (CCHIT); and
- Designing and evaluating standards-based prototype architectures for the Nationwide Health Information Network (NHIN).

State and federal governments are both actively working to set technical interoperability standards, though for different purposes. Technical interoperability standards are important to state governments to enable the multiple participating entities to connect to each other, whether through a statewide HIE or other means. The federal government is pursuing technical interoperability standards to enable states to communicate with each other through the NHIN. Both state and federal government technical standards are equally important to overall HIE and should complement each other.

The federal government has also created a program aimed at increasing the adoption of electronic health records (EHR) among physician practices. The five-year project, which will begin in the spring of 2008, will provide annual bonuses to physician groups using nationally certified EHR systems to meet clinically qualified measures. During the five year project, it is estimated that 3.6 million consumers will be directly affected as their primary care physician adopts certified EHRs in their practices. <sup>13</sup>

#### B. Efforts In Other States

States across the nation have recognized the potential benefit of HIT and many are moving forward with HIT efforts. However, states differ in their vision of incorporating HIT into their healthcare system and the roadmap to achieve their vision. Smaller states are better positioned to participate in statewide health information exchange (HIE), due to the fact that they have smaller, centrally-located populations and fewer healthcare stakeholders to coordinate, while larger states tend to have a greater number of stakeholders and a larger, more diverse population. Regional health information organizations (RHIOs) across states are many and varied, with minimal inter-RHIO connection. Many states have multiple RHIOs, but their participants, organization, structure, and activities are as varied as the communities they represent.

The state plays a variety of roles in statewide HIE projects across the nation, which include: the main cross-stakeholder facilitator, a primary driver of the project, a funding resource, and a data resource. Some states have partnered in creating a legal entity, such as a 501(c)(3) to implement a roadmap to statewide HIE; while others have formed a steering committee, advisory council or task force to continue to research the process by which statewide interoperability should be achieved. One commonality across states is the presence of a statewide advisory body to oversee the process by which a state

<sup>&</sup>lt;sup>13</sup> U.S. Department of Health and Human Services, "HHS Announces Project to Help 3.6 Million Consumers Reap Benefits of Electronic Health Records," October 30, 2007.

<sup>&</sup>lt;sup>14</sup> Avalere Health, "Evolution of State Health Information Exchange, A Study of Vision, Strategy, and Progress, as prepared for the Agency for Healthcare Research and Quality," AHRQ Publication No. 06-0057, January 2006, 5. <sup>15</sup> *Id.* 

<sup>&</sup>lt;sup>16</sup> Avalere Health, "Evolution of State Health Information Exchange, A Study of Vision, Strategy, and Progress, as prepared for the Agency for Healthcare Research and Quality," AHRQ Publication No. 06-0057, January 2006, 7.

reaches interoperability. Figure 2 illustrates the varied level of HIE adoption across the nation.<sup>17</sup>

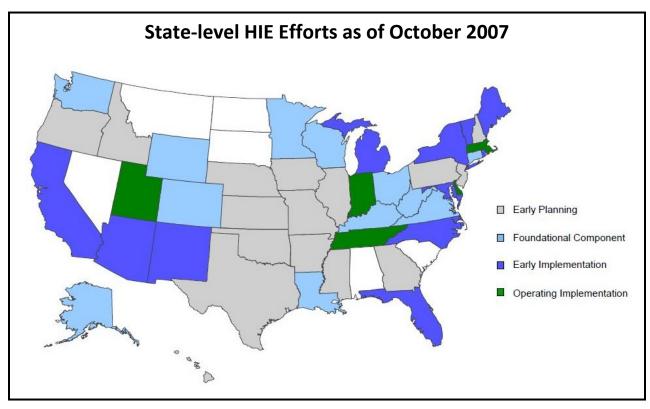


Figure 2

For example, the state of Georgia has formed an advisory board to advise the Department of Community Health in establishing a statewide strategy that will enable health information to be available across the full continuum of care. <sup>18</sup> Georgia also administers a grants program to foster health information exchange, which awarded \$853,088 in grants in 2007. <sup>19</sup> The state of Minnesota has formed a public-private collaborative to enhance the statewide HIE infrastructure, which is scheduled to go live in early 2008. <sup>20</sup> Minnesota also operates an EHR adoption grant program aimed at supporting the adoption and use of EHRs by healthcare providers in rural and underserved areas of the state. <sup>21</sup>

<sup>&</sup>lt;sup>17</sup> American Health Information Management Association's Foundation of Research and Education, "Building Sustainable Health Information Exchange: Roles for State Level Public-Private Partnerships," State-Level HIE Consensus Project, Consensus Conference, November 5-6, 2007, 15.

<sup>&</sup>lt;sup>18</sup> Executive Order of Georgia Governor Sonny Perdue, October 17, 2006.

<sup>&</sup>lt;sup>19</sup> Press release, Georgia Department of Community Health, "Four Georgia Health Partnerships Receive \$853,088 in Grants," November 5, 2007.

<sup>&</sup>lt;sup>20</sup> Press release, Minnesota Office of the Governor, "Minnesota Health Information Exchange to be among largest 'e-initiatives' in the nation." September 10, 2007.

<sup>&#</sup>x27;e-initiatives' in the nation," September 10, 2007.

21 Minnesota Department of Health, "Minnesota e-Health Initiative Funding Opportunities," <a href="http://www.health.state.mn.us/e-health/funding.html">http://www.health.state.mn.us/e-health/funding.html</a> (visited January 5, 2008).

The state of Kentucky's roadmap to statewide HIE is very similar to the previously proposed Florida Health Information Network. The state approved the creation of the Kentucky e-Health Corporation which is an independent public-private entity responsible for managing the development and operations of the statewide Kentucky e-Health Network currently under development.

According to the e-Health Initiative, the top sources of upfront funding in the United States for health information exchange initiatives in 2007 were hospitals (53%), federal government grants and contracts (44%), state government grants and contracts (43%), private payers (32%), and philanthropic sources (31%).<sup>22</sup>

#### C. Florida Efforts

In Florida, the development of a statewide HIE began on May 4, 2004, when Governor Jeb Bush created the Governor's Health Information Infrastructure Advisory Board (Board) by executive order. <sup>23</sup> The executive order required the Board to "advise and support the Agency for Health Care Administration as it develops and implements a strategy for the adoption and use of electronic health records and creates a plan to promote the development and implementation of a Florida health information infrastructure." In addition, the 2004 Affordable Health Care for Floridians Act complemented the executive order by directing the agency to "develop and implement a strategy for the adoption and use of electronic health records."<sup>24</sup>

The board issued an interim report to Governor Bush in 2005 that called for, among other recommendations, the immediate development of the Florida Health Information Network (FHIN) in order to encourage the adoption of electronic health records. The vision for the FHIN is outlined in the board's white paper, "Florida Health Information Network, Architectural Considerations for State Infrastructure". The model outlined by the board relies heavily on the RHIO as the vehicle for statewide HIE. The FHIN will act as the conductor of health information among healthcare providers and can be described as having two main components: regional HIE, through RHIOs, and a statewide infrastructure that will connect the RHIOs to enable statewide HIE. The report also recognized two main obstacles facing the development of the FHIN: the low number of healthcare providers who have adopted electronic health record systems, and the lack of an infrastructure to share health information effectively.

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<sup>&</sup>lt;sup>22</sup> e-Health Initiative, "Fourth Annual Survey of Health Information Exchange at the State, Regional, and Community Levels," December 19, 2007, <a href="http://www.ehealthinitiative.org/2007HIESurvey/Financing.asp">http://www.ehealthinitiative.org/2007HIESurvey/Financing.asp</a> (visited January 5, 2008).

<sup>&</sup>lt;sup>23</sup> Executive Order Number 04-93 (2004), available at <a href="http://www.fdhc.state.fl.us/dhit/Board/executive\_order.pdf">http://www.fdhc.state.fl.us/dhit/Board/executive\_order.pdf</a>. (visited December 17, 2007).

<sup>&</sup>lt;sup>24</sup> Chapter 2004-297, L.O.F., s. 408.062(5), F.S.

<sup>&</sup>lt;sup>25</sup> Governor's Health Information Infrastructure Advisory Board, "First Interim Report to Governor Jeb Bush," <a href="http://ahca.myflorida.com/dhit/Board/interim rept gov.pdf">http://ahca.myflorida.com/dhit/Board/interim rept gov.pdf</a> (visited December 17, 2007).

<sup>&</sup>lt;sup>26</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure" Version 6.2 April 19, 2007

Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007.

Plorida Health Policy Center, "Florida's Health Information Network: What will it cost to develop?," February 2007, <a href="http://www.floridahealthpolicycenter.org/research/pdfs/FHIN%20brief.pdf">http://www.floridahealthpolicycenter.org/research/pdfs/FHIN%20brief.pdf</a> (visited December 19, 2007).

Over the course of three years, the board and the agency worked together to implement recommendations related to advancing the adoption and utilization of EHRs and establishing RHIOs and locally-based HIE.<sup>28</sup> The board published its final report to Governor Charlie Crist on July 6, 2007.<sup>29</sup> The report said that the foundation for a statewide network is in place and recommended the following actions to Governor Crist to implement the FHIN:

- Promote and support the continuing development of the state's local health information exchanges.
- Establish a new advisory board as soon as possible to guide the direction and development of the FHIN.
- Require action on specific steps to assist in developing the network from Florida Medicaid, the Department of Health, and the Department of Management Services, and possibly other state agencies.
- Insist on a "bias in favor of action" on this initiative by members of the administration, placing an emphasis on data exchange operations over the occasional government tendency to conduct further studies before taking substantive action.

The board was not extended by Executive Order and ceased to operate on June 30, 2007. In January 2008, agency Secretary Andrew Agwunobi appointed a 14-member Health Information Exchange Coordinating Committee. The committee is organized "to advise and support the agency in developing and implementing a strategy to establish a privacy-protected, secure and integrated statewide network for the exchange of electronic health records among authorized physicians." <sup>30</sup>

#### FHIN Grants Program

In 2006, the Legislature authorized the agency to administer a grants program to advance the development of a health information network. <sup>31</sup> According to the agency, grants are currently awarded in three categories: <sup>32</sup>

- Assessment and planning grants Support engaging appropriate healthcare stakeholders to develop a strategic plan for health information exchange in their communities.
- Operations and evaluation grants Support projects that demonstrate health information exchange among two or more competing provider organizations.

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<sup>&</sup>lt;sup>28</sup> Florida Center for Health Information and Policy Analysis, "Privacy and Security Solutions for Interoperable Health Information Exchange, Florida Implementation and Impact Report," December 3, 2007, 4.

<sup>&</sup>lt;sup>29</sup> Governor's Health Information Infrastructure Advisory Board, "Final Report of the Governor's Health Information Infrastructure Advisory Board," July 6, 2007, <a href="http://ahca.myflorida.com/dhit/Board/Brdmtg63007.pdf">http://ahca.myflorida.com/dhit/Board/Brdmtg63007.pdf</a> (visited December 19, 2007).

<sup>&</sup>lt;sup>30</sup> Agency for Health Care Administration, <a href="http://ahca.myflorida.com/dhit/Governance/HIECCIndex.shtml">http://ahca.myflorida.com/dhit/Governance/HIECCIndex.shtml</a> (visited January 21, 2008).

<sup>&</sup>lt;sup>31</sup> Section 408.05(4)(b), F.S.

<sup>&</sup>lt;sup>32</sup> Agency for Health Care Administration, "FY 2007-2008 Grants Program Requirements," http://ahca.myflorida.com/dhit/FHINgrantsProgram/FGPSched0708.pdf (visited January 21, 2008).

 <u>Training and technical assistance grants</u> - Support practitioner training and technical assistance activities designed to increase physician and dentist use of electronic health record systems.

From Fiscal Year 2005-2006 through Fiscal Year 2007-2008, a total of \$5.5 million has been appropriated by the legislature to fund the grants program.

About half of the RHIOs that have received state grants are operational in exchanging data within their region, but on a very limited basis. The scope of the exchange and number of users participating in the exchange is still relatively small. The remaining RHIOs that have received state grants are pre-operational and continuing to develop and test various elements of their HIE. Figure 3 depicts the location of the RHIOs that received a FHIN grant in Fiscal Year 2005-2006 through Fiscal Year 2007-2008, in addition to one independent RHIO which has not received funding.

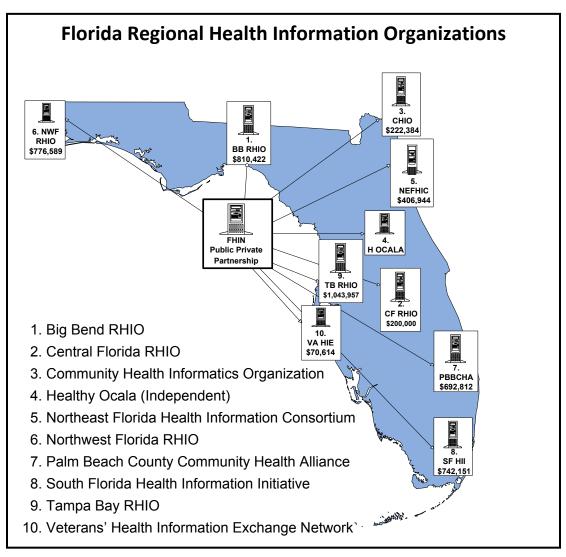


Figure 3

# Potential Models for Statewide Health Information Exchange

There are several structural and funding options for creating a statewide health information exchange. The degree of state involvement in the HIE can vary with each model. A number of states are moving forward in parallel with federal efforts to develop and implement policies and plans that promote HIT and HIE.<sup>33</sup> As of December 19, 2007, 30 different pieces of legislation passed in 19 different states focusing on building the capacity for HIT.<sup>34</sup> Many states have passed legislation that applies to HIE on a statewide basis. They differ in their approach--some authorize a statewide entity to facilitate the development of a statewide system, while others focus on the need to set technical standards.

Fifty-seven bills were proposed in 2007 which authorize the establishment of a committee, taskforce, commission or working group.<sup>35</sup> The goals of these groups vary by state--some are directed to create a specific long-range plan for statewide HIE, while others are tasked with developing recommendations for financial incentives for EHR adoption.<sup>36</sup> Eighty-two bills were proposed in 2007 which include direct funding appropriations and/or loan programs or tax credits for the purchasing of various HIT tools.<sup>37</sup>

The rate of EHR adoption amongst physicians across the nation is low, although exact figures vary depending on the individual survey's definition of EHR. Consequently, some argue that the body of clinical data to be shared over a statewide network is too low to consider building the infrastructure at the present time. However, there are valuable data sets in electronic form available today that could be integrated into a single report and made available to authorized providers through a statewide network. As physician adoption of EHR systems increases, additional information could be added to the statewide network. The data sources available in electronic format include:<sup>38</sup>

- Claims form filed by providers with payors, which may include claims information such as: patient name, treating and referring physician, dates of service, diagnoses, and treatment procedures performed.
- Medication prescriptions stored by the pharmacy benefit managers.
- Test results maintained by laboratories.

For purposes of this project, three options for Florida government involvement in a statewide HIE are considered and discussed below.

<sup>35</sup> *Id*.

<sup>&</sup>lt;sup>33</sup> eHealth Initiative, "Fourth Annual Survey of Health Information Exchange at the State, Regional and Community Levels," December 19, 2007,

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>37</sup> T.1

<sup>&</sup>lt;sup>38</sup> Governor's Health Information Infrastructure Advisory Board, "First Interim Report to Governor Jeb Bush," <a href="http://ahca.myflorida.com/dhit/Board/interim\_rept\_gov.pdf">http://ahca.myflorida.com/dhit/Board/interim\_rept\_gov.pdf</a> (visited December 21, 2007).

## Florida Health Information Network (FHIN) Model

The FHIN model has been debated in Florida in recent years. The Governor's Health Information Infrastructure Advisory Board (GHIIAB) outlined the need for the FHIN in their published white paper <sup>39</sup> and legislation has been filed that would create the FHIN corporation to oversee the creation of the statewide network. <sup>40</sup> In its first year of operation, the FHIN would develop its organizational structure and build the physical components of the statewide network. In its second year, the FHIN would begin connecting RHIOs and exchanging health data. <sup>41</sup>

The technical model for FHIN is outlined in a white paper published by the GHIIAB. The FHIN model relies heavily on the participation of regional health information organizations (RHIOs) to accomplish statewide HIE. The state has the option of directing the agency to build the technical elements of the FHIN or directing the corporation to contract with vendors to build the technical elements of the FHIN. Either way, the state is still responsible for the oversight of the technical functions of the FHIN and maintains ownership of all elements of the FHIN. The FHIN would:

- Serve as an Internet-based, statewide network that will integrate communications and data transfer among local health information networks and RHIOs.<sup>43</sup> No patient records are stored by the FHIN. The server sends a data request to all connected databases in the network to pull together pertinent records on a patient and send them to the requesting healthcare provider.<sup>44</sup>
- Utilize a state-level server which will maintain an Enterprise Master Patient Index of all patients receiving medical care and operate a Record Locator Service that will use the listing of patient identifiers contained in the EMPI to query health care providers in each RHIO in order to collect the appropriate patient records.<sup>45</sup>
- Authenticate users and RHIOs to determine if they are authorized to access patient records via the FHIN.<sup>46</sup>
- Function as the major portal for integrating state agency health care datasets, such as the State Health Online Tracking System (SHOTS) immunization data from the Department of Health and Medicaid data from the Agency for Health Care Administration (agency).<sup>47</sup>

<sup>&</sup>lt;sup>39</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007.

<sup>&</sup>lt;sup>40</sup> See HB 1409, 2006, <a href="http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42">http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42</a> and HB 1121, 2007, <a href="http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=36128&SessionId=54">http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42</a> and HB 1121, 2007, <a href="http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=36128&SessionId=54">http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42</a>

<sup>&</sup>lt;sup>41</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007, 47.

<sup>&</sup>lt;sup>42</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007.

<sup>43</sup> *Id.* at 4.

<sup>&</sup>lt;sup>44</sup> *Id.* at 7.

<sup>&</sup>lt;sup>45</sup> *Id.* at 5.

<sup>&</sup>lt;sup>46</sup> *Id.* at 6.

<sup>&</sup>lt;sup>47</sup> *Id.* at 6.

The GHIIAB also outlined the need for the state to create an independent, not-for-profit organization to oversee the creation of the FHIN with management by an uncompensated, appointed board of directors. <sup>48</sup> The potential roles of the FHIN corporation are outlined in legislation filed in 2006<sup>49</sup> and 2007<sup>50</sup> and include:

- Setting technical standards for RHIOs where networks need to employ identical technical specifications to connect to FHIN.
- Implementing a marketing program to promote widespread use of the network.
- Developing and implementing specific programs or strategies that address the creation, development, and expansion of RHIOs and the recruitment of participants in the network.
- Developing an annual budget that includes funding from public and private entities, including user fees.
- Developing and enforcing privacy and security standards for participation in the network.
- Recommending reform of state law to reduce barriers to participation in the network.

The GHIIAB's white paper outlined the operational budget for the FHIN's operations and administration, core functions, core services provided to participating RHIOs, and communication and training. The budget for the first fiscal year is higher than the budget for the later years due to start-up costs, which may be one-time expenses. Regardless of whether the FHIN is built by the state or built by contracted vendors, the budget would be approximately the same. The total budget for the first fiscal year is \$9,400,000.

In the FHIN's business plan,<sup>53</sup> it is assumed that the RHIO is the customer and will purchase technology and business services from the FHIN. The business plan accounts for state funding for the first three years of operation.

# Agency-Issued Invitation to Negotiate (ITN)

A second option the state could pursue to create a statewide HIE is to direct the agency to issue an invitation to negotiate (ITN).<sup>54</sup> An ITN offers the state the ability to explore what each respondent proposes before determining what the statewide HIE

<sup>&</sup>lt;sup>48</sup> *Id.* at 42.

<sup>&</sup>lt;sup>49</sup> See HB 1409, 2006, <a href="http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42">http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42</a>

<sup>&</sup>lt;sup>50</sup> See HB 1121, 2007, http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=36128&SessionId=54

<sup>&</sup>lt;sup>51</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007, 5.

<sup>&</sup>lt;sup>52</sup> Telephone interview with Christopher Sullivan, Agency for Health Care Administration, December 21, 2007.

<sup>&</sup>lt;sup>53</sup> Florida Center for Health Information and Policy Analysis, "Florida Health Information Network Business Plan, Version 1," March 2007.

<sup>&</sup>lt;sup>54</sup> See s. 287.012(17), F.S., "Invitation to negotiate means a written solicitation for competitive sealed replies to select one or more vendors with which to commence negotiations for the procurement of commodities or contractual services. The invitation to negotiate is used when the agency determines that negotiations may be necessary for the state to receive the best value. A written solicitation includes a solicitation that is electronically posted."

infrastructure will look like. The outcome of the negotiation process may be a model that looks like the proposed FHIN, but the model may take a different shape. It is possible for new technical models to emerge as technology advances and information sharing capabilities mature.<sup>55</sup> Therefore, the advantage to the agency issuing an ITN is that the state could receive the most up-to-date statewide model options from vendors.

The ITN should request proposals that address both the physical infrastructure of the network and also the day-to-day operational structure of the network. The vendor may also be tasked with seeking additional funding for the project.

With this option, the state appropriates money to the agency for the contract. The funding portion of this model is similar to the FHIN model discussed above. The vendor chosen by the agency in the ITN process is paid by the agency to complete the deliverables outlined in the contract. However, the state maintains ownership of the technology and is responsible for oversight of the operation.

# Funding of the FHIN Grants Program and an EMR Adoption Loan Program

A third option the state may consider to create a statewide HIE is to continue funding the development of RHIOs through the grants program administered by the agency and to create an incentive program to encourage physician adoption of EMRs. This option allows the building of a statewide HIE from a grassroots level, beginning with the most basic and essential infrastructure -- an EMR system for physicians. By providing funding to local entities, the base level of HIE is strengthened. While allowing RHIOs to become financially and socially viable and encouraging the adoption of EMRs at the physician level will not produce statewide HIE immediately, it could be considered a measured, deliberate method of achieving the same goal. Also, this option avoids an enormous up-front investment by the state and allows for technology to evolve further, as it does so rapidly in the healthcare arena, before the state chooses a statewide solution.

This option would consist of the following elements:

- FHIN Grants Program

  The language in current statute directing the agency to administer a grants program is broad and lacks specified deliverables required of the grantees. <sup>56</sup> To strengthen the grants program, specific criteria for grant applications should be added into statute, with an emphasis on the ability of the local exchange to demonstrate interoperability and HIE. Limiting the number of years an entity is
  - demonstrate interoperability and HIE. Limiting the number of years an entity is eligible to receive a state grant will encourage the grantee to maximize grant dollars and build a sustainable business model.
- Physician EMR Adoption Loan Program

<sup>55</sup> National Governor's Association Center for Best Practices, "Request for Proposals, An Examination of Financing, Accountability, and Oversight Models to Sustain Electronic Health Information Exchange," Version 12.20.07, 3. <sup>56</sup> See s. 408.05(4)(b), F.S.

Many single and small practice physician offices cite cost as a key barrier to adoption of an EMR system. The state should offer a no-interest loan to physicians to purchase hardware, software, subscription services and training necessary to implement an EMR system in their office. The loan program would recycle the appropriated money by funding new loans as initial loans are repaid. This program encourages HIE at the very base level- the physician who creates the EMR for his or her patient.<sup>57</sup>

# Statewide HIE Advisory Council

A statewide HIE advisory council is beneficial to the advancing of a statewide HIE initiative. The council serves as a body to provide leadership for the development and implementation of the future HIE infrastructure. Duties may include researching privacy and security standards for HIE, identifying barriers to participation in an HIE, recommending incentive programs to encourage participation in HIE, and creating a long-range plan that identifies options for achieving statewide HIE. Absent the physical infrastructure for HIE, an advisory council should remain in place to ensure the state remains focused on the goal of statewide HIE.

If the state of Florida is dedicated to pursuing a statewide health information exchange, whether this year or in the future, one common element across all three options that must be established is a statutorily-created advisory body. An advisory body at the state level will do what is necessary to protect the state's best interest. Currently, each RHIO in Florida is developing to best serve the population within its region. There is no statutorily created statewide advisory body to bring together these multiple interests for the benefit of the state and the state's financial investment. It is essential that a state level advisory body work to ensure the state's developing RHIOs are able to exchange data when the state is ready to participate in a statewide health information exchange.

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<sup>&</sup>lt;sup>57</sup> The state of Minnesota currently operates a similar program entitled the "Minnesota Interconnected Electronic Health Record Grant Program." See s. 144.3345, Minnesota Statutes 2006,

http://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT\_CHAP\_SEC&year=2006&section=144.3345.

States such as Georgia (see <a href="http://dch.georgia.gov/00/channel\_title/0,2094,31446711\_74254445,00.html">http://dch.georgia.gov/00/channel\_title/0,2094,31446711\_74254445,00.html</a>), Kansas (see <a href="http://www.governor.ks.gov/news/NewsRelease/2007/nr-07-0207a.htm">http://www.governor.ks.gov/news/NewsRelease/2007/nr-07-0207a.htm</a>), and Michigan (see <a href="http://www.michigan.gov/mdch/0,1607,7-132-2946">http://www.michigan.gov/mdch/0,1607,7-132-2946</a> 44257----,00.html), have a statewide HIE Advisory Council.

# **Appendix A: Federal Efforts**

# The American Health Information Community

In order to further the President's initiative, on September 13, 2005, Secretary Michael Leavitt, United States Department of Health and Human Services, created the American Health Information Community (AHIC). The AHIC is chartered with two primary goals:

- Recommend to the Secretary specific actions to achieve a common interoperability framework for health information technology; and
- Serve as a forum for participation for a broad range of stakeholders to provide input on achieving widespread adoption of interoperable health information technology.

The AHIC has identified four initial areas with potential for early advancement:

- Consumer Empowerment Make available a consumer-directed and secure electronic record of health care registration information and a medication history for patients.
- Chronic Care Allow the widespread use of secure messaging, as appropriate, as a means of communication between doctors and patients about care delivery.
- Biosurveillance Enable the transfer of standardized and anonymized health data from the point of health care delivery to authorized public health agencies within 24 hours of its collection.
- Electronic Health Records Create an electronic health record that includes laboratory results and interpretations, that is standardized, widely available and secure.

The federal Office of the National Coordinator for Health Information Technology (ONC) awarded multiple contracts in 2005 to entities conducting work in the field of HIT. The contracts totaled \$36.1 million, which accounted for the majority of the ONC's budget. <sup>59</sup> Each entity was required to submit a report to the AHIC detailing the findings of their work. Project goals included: identifying interoperability standards to facilitate the exchange of patient health data, through a contract with the Healthcare Information Technology Standards Panel (HITSP); defining a certification process for health IT products, through a contract with The Certification Commission for Healthcare Information Technology (CCHIT); and designing and evaluating standards-based prototype architectures for the Nationwide Health Information Network (NHIN), through contracts awarded by the ONC. Figure 4 displays the relationship between the multiple contracts awarded by the ONC and the AHIC. <sup>60</sup>

<sup>60</sup> Healthcare Interoperability Standards Panel, "HITSP Interoperability Specifications: Electronic Health Records Laboratory Results Reporting HITSP/IS-01, Biosurveillance HITSP/IS-02, Consumer Empowerment HITSP/IS-03, Version 1.0, Executive Overview," October 20, 2006, page 5.

<sup>&</sup>lt;sup>59</sup> The National Alliance for Health Information Technology, "Revisiting the Health IT Strategic Framework," (published April 10, 2006, visited December 13, 2007) http://www.nahit.org/cms/index.php?option=com\_content&task=view&id=212&Itemid=171.

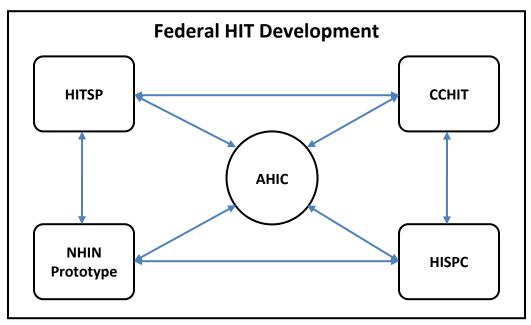


Figure 4

The AHIC charter also provides that the AHIC will develop and advance recommendations to the Secretary on a private-sector health information community initiative that will succeed the AHIC. The AHIC successor will be an independent and sustainable public-private partnership that brings together the best attributes and resources of public and private entities. This new public-private partnership will develop a unified approach to realize an effective, interoperable nationwide health information system that improves the quality, safety, and efficiency of health care in the United States. The AHIC successor will be designed, established, and ready for operation by spring 2008. The process and schedule for designing and establishing the new entity is described in the "AHIC Successor White Paper". <sup>61</sup>

# The Healthcare Information Technology Standards Panel (HITSP)

Due to the complexity of the healthcare market and the number of stakeholders involved, many have recommended that the federal government take a leading role in harmonizing and setting standards in the field of health information technology. The ONC awarded a contract to the American National Standards Institute (ANSI) to assemble the Healthcare Information Technology Standards Panel (HITSP). The HITSP is tasked to harmonize standards across the use cases identified by the AHIC so that the vendors can build to the standards in their commercial products and so that the Certification Commission for Healthcare Information Technology (CCHIT) can certify that resulting products actually meet the standards and are interoperable. HITSP's membership is comprised of health care providers, academic medical centers, medical

<sup>62</sup> The MITRE Corporation, "ONC- NIH Analysis Report to the National Institutes of Health, National Center for Research Resources," March 2006, 10.

<sup>&</sup>lt;sup>61</sup> U.S. Department of Health and Human Services, "American Health Information Community Successor, White Paper," (August 6, 2007).

associations, vendors, and Standards Development Organizations (SDOs). As of September 26, 2007, HITSP reported 292 participants on its membership roster. <sup>63</sup> Under the terms of the RFP, the HITSP was required to create a minimum six year sustainable business model, which extends beyond the scope of the initial three year federal contract. The panel is more of an administrative body than a decision-making body. The consensus-driven approach is a two-edged sword--the standards may take a long time to evolve, but when they are approved, they should be acceptable to, and implementable by, major vendors in the health informatics market. <sup>64</sup>

## The Certification Commission for Healthcare Information Technology (CCHIT)

The Certification Commission for Healthcare Information Technology (CCHIT) was formed in July 2004 by the American Health Information Management Association (AHIMA), Healthcare Information and Management Systems Society (HIMSS), and The National Alliance for Health Information Technology (Alliance). The organization is a non-profit, independent organization; the founding associations provided start-up funding and staff resources. In the field of electronic health records (EHRs)<sup>65</sup>, there are hundreds of products on the market, but no widely accepted criteria for evaluating the product's capabilities. This is one barrier physicians often cite to EHR system adoption. CCHIT was awarded a federal contract in October 2005 to develop, create prototypes for, and evaluate the certification criteria and inspection process for EHR systems. 66 Rather than set standards, CCHIT is an independent third party that develops criteria based on commonly available standards. CCHIT relies on HITSP to harmonize those standards as part of their contract with HHS. As standards are set, CCHIT's goal is to measure and verify fulfillment of those standards by certifying the vendor's compliance. The 21 member Board of CCHIT oversees and approves the development of certification criteria as proposed by the Commission's workgroups and staff. In 2006, CCHIT released a list of EHR products certified against the 2006 Ambulatory EHR Criteria. In 2007, CCHIT updated the Ambulatory EHR Criteria and also added Inpatient EHR Criteria. The 2007 Inpatient EHR Criteria are tailored for most acute care, inpatient settings. A list of CCHIT certified EHR products can be found on CCHIT's website at www.cchit.org.

# The Nationwide Health Information Network (NHIN)

A key element in the vision and plan to make health information technology interoperable is the Nationwide Health Information Network (NHIN). The ONC is advancing the NHIN as a "network of networks", built out of state and regional health

<sup>63</sup> American National Standards Institute, "List of HITSP Participants," (visited December 14, 2007) <a href="http://publicaa.ansi.org/sites/apdl/Documents/Forms/AllItems.aspx">http://publicaa.ansi.org/sites/apdl/Documents/Forms/AllItems.aspx</a> (follow "Standards Activities" hyperlink; then follow "List of HITSP orgs as of 9.26.07" hyperlink)

<sup>&</sup>lt;sup>64</sup> The MITRE Corporation, "ONC- NIH Analysis Report to the National Institutes of Health, National Center for Research Resources," March 2006, 10.

<sup>&</sup>lt;sup>65</sup> The Healthcare Information Management Systems Society defines *electronic health record* as, "a longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting." <sup>66</sup> http://www.cchit.org/about/faq/general.asp (visited December 14, 2007).

information exchanges (HIEs)<sup>67</sup> and other networks so as to support the exchange of health information by connecting these networks and the systems they, in turn, connect.<sup>68</sup> The NHIN is not designed to be a national database filled with consumers' personal health records. Instead, the NHIN will use shared architecture (services, standards, and requirements), processes, and procedures to interconnect health information exchanges and the users they support.<sup>69</sup>

It is anticipated that there will be four general categories of stakeholders who will participate in the NHIN:<sup>70</sup>

- 1. Care delivery organizations that use electronic health records.
- 2. Consumer organizations that operate personal health records and other consumer applications.
- 3. Health information exchanges, which are multi-stakeholder entities that enable the movement of health-related data within state, regional, or non-jurisdictional participant groups.
- 4. Specialized participants, which are organizations that operate for specific purposes including, but not limited to, secondary users of data such as public health, research, and quality assessment.

There are several ways that healthcare providers and consumers will be able to access information via the NHIN. A healthcare provider may use the EHR system in their practice to access the local HIE. The local HIE will then utilize the NHIN to exchange the EHR or PHR<sup>71</sup> information received from the healthcare provider with specified HIEs across the nation. If the healthcare provider does not have an EHR system, the information may still be exchanged if the local HIE offers a Web portal. Similarly, a healthcare consumer may be able to access the NHIN through use of a PHR. A connection to the NHIN is made if the PHR is connected to an HIE and that HIE is connected to the NHIN.

Due to the complexity of creating the NHIN, ONC awarded four grants in November 2005 totaling \$18.6 million to consortia led by Accenture, Computer Science Corporation (CSC), Northrop Grumman, and International Business Machines (IBM). The contract directed each grantee to develop a prototype architecture for the NHIN and demonstrate that architecture by interconnecting three communities that consisted of real health care organizations.

<sup>&</sup>lt;sup>67</sup> The eHealth Initiative defines *health information exchange* as, "the mobilization of healthcare information electronically across organizations within a region or community."

<sup>&</sup>lt;sup>68</sup> U.S. Department of Health and Human Services, "Nationwide Health Information Network (NHIN): Background," <a href="https://www.hhs.gov/healthit/healthnetwork/background/">www.hhs.gov/healthit/healthnetwork/background/</a> (visited December 14, 2007).

<sup>&</sup>lt;sup>69</sup> "Summary of the NHIN Prototype Architecture Contracts", Engagement: 221630040 (U.S. Department of Health and Human Services, Office of the National Coordinator), May 31, 2007, 2. <sup>70</sup> *Id.* at 3.

<sup>&</sup>lt;sup>71</sup> The Markle Foundation defines *personal health record* as, "an Internet-based set of tools that allows people to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it."

The contractors all envisioned the NHIN as compilation of multiple HIEs working in concert to create the NHIN. Each contractor identified specific functions that must be provided by the HIEs participating in the NHIN, including:<sup>72</sup>

- Supporting secure operation in all activities related to the NHIN.
- Protecting the confidentiality of personally identifiable health information as it is used by those who participate in the NHIN.
- Reconciling patient and provider identities without creating national indices of patients.
- Providing a local registry which may be used, when authorizations permit, to find health information about patients.
- Supporting the transfer of information from one provider or care delivery organization to another in support of collaborative care.
- Supporting secondary uses of data while protecting the identity of patients to the degree required by law and public policy.

On October 5, 2007, HHS announced the award of contracts to nine HIEs totaling \$22.5 million. The purpose of the contracts is to begin trial implementations of the NHIN which will lay the groundwork for future functions and participants. The project is called the "NHIN Cooperative" and will include tests to demonstrate the exchange of private and secure health information. The contracts end in September 2008 and results will be shared through public forums and other public events. Awardees include the following organizations, representing broad-based state and regional health information exchanges:<sup>73</sup>

- CareSpark Tricities region of Eastern Tennessee and Southwestern Virginia
- Delaware Health Information Network Delaware
- Indiana University Indianapolis metroplex
- Long Beach Network for Health Long Beach and Los Angeles, California
- Lovelace Clinic Foundation New Mexico
- MedVirginia Central Virginia
- New York eHealth Collaborative New York
- North Carolina Healthcare Information and Communications Alliance, Inc NC
- West Virginia Health Information Network West Virginia

# The Health Information Security Privacy Collaboration (HISPC)

The Health Insurance Portability and Accountability Act (HIPAA) established baseline health care privacy requirements for protected health information and established security requirements for electronic protected health information.<sup>74</sup> However, many

<sup>&</sup>lt;sup>72</sup> "Summary of the NHIN Prototype Architecture Contracts", Engagement: 221630040 (U.S. Department of Health and Human Services, Office of the National Coordinator), May 31, 2007, 5.

<sup>&</sup>lt;sup>73</sup> U.S. Department of Health and Human Services, "HHS Awards Contracts for Trial Implementations of the Nationwide Health Information Network," October 5, 2007.

<sup>&</sup>lt;sup>74</sup> The MITRE Corporation, "ONC- NIH Analysis Report to the National Institutes of Health, National Center for Research Resources," March 2006, 11.

states vary on their application of HIPAA -- some have not adopted policies stronger than HIPAA, while some have adopted policies that are stronger than HIPAA. The inconsistency in the way in which HIPAA is interpreted and applied and the differences between state privacy laws and HIPAA have caused great concern amongst those interested in a nationwide HIE.

RTI, Inc. (RTI), a private, nonprofit corporation, was awarded a contract from HHS in 2005 totaling \$11.5 million. The purpose of the project was to asses variations in organization-level business practices, policies, and state laws that affect HIE and to identify and propose practical ways to reduce the variation to those "good" practices that will permit interoperability while preserving the necessary privacy and security requirements set by the local community.<sup>75</sup> RTI sub-contracted with 34 states and territories to complete the project. The state of Florida was among the sub-contract recipients.

The state teams were required to convene steering committees comprised of both public and private leaders and work groups with specific charges through which all research and recommendations would be made.

The project enabled states to engage stakeholders on a local level to identify the barriers to electronic health information exchange specific to their location. The final report issued by RTI in June of 2007, "Assessment of Variation and Analysis of Solutions", outlines issues that state project teams all identified as possibly affecting a private and secure nationwide HIE along with possible solutions to the identified challenges, both at the state and national levels.

Among the challenges identified were: differing interpretations and applications of HIPAA privacy rule requirements, misunderstandings and differing applications of the HIPAA security rule, trust in the security of health information exchange, fragmented and conflicting state laws relating to privacy and security of health information exchange, and disclosure of personal health information. Among the solutions to the challenges identified by the participating states were: creation of uniform state policy as it relates to the interpretation and application of the HIPAA rules, consolidation of state statutes related to health information exchange, creation of national standards for a master patient index or record locater to accurately match records to the appropriate patient, and education of consumers and healthcare professionals about federal and state privacy law.<sup>76</sup>

#### The Department of Veterans Affairs and the Department of Defense

The United States Department of Veterans Affairs (VA) and the United States Department of Defense (DOD) collectively reach millions of active armed forces personnel, veterans, and their families. The goal of the partnership they have formed is

<sup>76</sup> *Id.* at ES-5 through ES-8.

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<sup>&</sup>lt;sup>75</sup> Dimitropoulos, Linda L., "Privacy and Security Solutions for Interoperable Health Information Exchange, Assessment of Variation and Analysis of Solutions," June 30, 2007, 2-1.

to share electronic health data to ensure health care providers have the information they need to provide quality care to DOD/VA beneficiaries across their continuum of care.

The Veterans Health Administration's (VHA) electronic health record system, My HealtheVet (MHV), allows patients to refill prescriptions online, and provides access to health information, links to Federal and VA benefits and resources, and the patient's Personal Health Journal. The VHA continues to add capabilities to MHV to empower consumers to take a more active role in managing their health and health care. In 1996, the Chief Information Office introduced the Veterans Health Information Systems and Technology Architecture (VISTA) which supports the day-to-day operations at local VA healthcare facilities. VISTA incorporates all of the benefits of the Decentralized Hospital Computer Program, which was developed in the early 1980s, and serves as a new, open system, client-server based environment that takes full advantage of commercial solutions, including those provided by Internet technologies.

The DOD's electronic health record system, AHLTA, is used by thousands of military medical providers and digitally captures nearly 300,000 outpatient visits every week. DoD's goal is to provide each patient with an electronic medical record that is constantly updated from the point of injury or care on the battlefield to discharge from military clinics and hospitals in the United States. These records would be completely transferable electronically to the Veterans Health Administration as part of the Joint Patient Electronic Health Record.<sup>80</sup>

President Bush signed the fiscal 2008 Defense Appropriations Bill in November 2007, which includes a provision requiring the VA and DOD to develop and implement a fully interoperable EHR system by September 30, 2009.<sup>81</sup>

In his October 24, 2007 appearance before the United States House Committee on Veterans' Affairs, Dr. Gerald M. Cross, the Principal Deputy Under Secretary of Health at the Department of Veterans Affairs, described the current data sharing relationship between the VA and the DOD:

Today, the VA and the DOD are sharing electronic health data bidirectionally to support the care of shared patients. . . For the first time, DOD medical data captured electronically in the theater of operations are now viewable in text format to any VA provider treating these wounded warriors. We accomplished this in September of 2007 by leveraging an existing bidirectional data exchange. Subsequently, we are implementing a plan that will permit us to share unprecedented amounts of the

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<sup>&</sup>lt;sup>77</sup> U.S. Department of Health and Human Services, "Health Information Technology Initiatives," <a href="http://www.hhs.gov/healthit/initiatives/">http://www.hhs.gov/healthit/initiatives/</a> (visited December 17, 2007).

<sup>&</sup>lt;sup>78</sup> U.S. Department of Veterans Affairs, "Vista Monograph Home," <a href="http://www.va.gov/vista\_monograph/">http://www.va.gov/vista\_monograph/</a> (visited December 17, 2007).

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>&</sup>lt;sup>80</sup> U.S. Department of Health and Human Services, "Health Information Technology Initiatives", http://www.hhs.gov/healthit/initiatives/ (visited December 17, 2007).

http://www.hhs.gov/healthit/initiatives/ (visited December 17, 2007).

81 Monegain, Bernie, DoD Touts Progress on Interoperability with Veterans Affairs, Healthcare IT News, December 28, 2007, http://www.healthcareitnews.com/story.cms?id=8337 (visited January 2, 2008).

available inpatient electronic data from DOD. Currently, VA providers are able to view electronic discharge summaries, emergency department notes, and other narrative documents captured during inpatient encounters at 13 major DOD facilities that use the Essentris Clinical Information System. . . In addition to sharing available electronic documentation, DOD is sending digital radiology images and scanned inpatient paper records that do not originate in electronic format. These capabilities are in place between the key military treatment facilities that receive these patients in the continental United States, (Walter Reed, Bethesda, and Brooke Army Medical Center), and VA polytrauma centers located in Tampa, Richmond, Minneapolis, and Palo Alto. . . Today, VA continues to receive all clinically relevant data that are available in DOD's legacy system, the Composite Health Information System (CHCS), on service members separated from active military service. These data are viewable through our shared Federal Health Information Exchange repository by VA clinicians and disability claims staff using VA health and administrative information systems. To date, DOD has transferred electronic health data on over 4 million unique separated service members to VA. Of these individuals, VA has provided care or benefits to the more than 2 million veterans who have sought care or benefits from VA. The data transferred for viewing includes outpatient pharmacy data, allergy information, laboratory results, consults, admission, disposition and transfer information, medical diagnostic coding data, and military pre- and postdeployment health assessment and reassessment data on separated and demobilized National Guard and Reserve members. . . VA and DOD are leveraging our bidirectional exchanges to expand the types of data shared and to share all essential information by October 2008. By December of this year, our providers will have access to viewable encounter notes, problem lists, and procedures from DOD's modern system, AHLTA. By June 2008, we will add vital signs and by October 2008 enterprise wide capability to view scanned documents, such as paper inpatient records. . . By the fourth quarter of 2008, VA and DOD will deploy our computable laboratory capability to support automatic decision support using electronic laboratory result data transferred bidirectionally.

#### Medicare Electronic Health Records Demonstration Project

The federal government has created a program aimed at increasing the adoption of EHRs among physician practices. The goal of the project is to broaden the adoption and implementation of EHRs and to transform the way medicine is practiced and delivered. The program also has the potential to produce savings for the Medicare program over time due to reduced medical errors and improvement in the quality of care for consumers.

On October 30, 2007, the United States Department of Health and Human Services (HHS) directed the Centers for Medicare and Medicaid Services (CMS) to conduct a five year demonstration project that will encourage small-to-medium sized physician practices to adopt EHR. Financial incentives, in the form of bonuses, will be provided to physician groups using certified EHR systems to meet clinical quality measures. The

project is scheduled to begin in the spring of 2008 and up to 1,200 physician practices may participate.

Participating physician practices are required to put in place a Certification Commission for Healthcare Information Technology (CCHIT) certified EHR by the end of the second year. As noted previously, CCHIT is the HHS recognized certification body for EHRs and their networks.<sup>82</sup> As part of the demonstration, the physician practices must utilize the EHR to perform certain minimum core functions, such as clinical documentation, ordering prescriptions, ordering lab tests, and recording lab tests. These core functions have the potential to positively impact the process by which a patient is treated.

Payments made to participating practices during the first year will be based on the functions of the EHR systems that are used to manage the care of patients. Higher payments will be made to practices utilizing more sophisticated EHR functionalities. This information will be determined by a practice's score on the Office Systems Survey (OSS), which CMS will administer each year to determine the level of EHR implementation at the practice level, as well as the specific EHR functions utilized to support the delivery of care. Increased incentive payments will be made to participating practices that receive higher scores on the OSS.

The demonstration project's second year of payments will be made to physician practices using EHR systems and reporting clinical quality measures. Increased payments will be based on EHR functionalities utilized by the practice. Payments made during years three through five of the demonstration project's operation will be based on performance on the designated clinical quality measures, with an added bonus each year based on the degree to which the practice has used the EHR to change and improve the way it operates.83

During the five year project, it is estimated that 3.6 million consumers will be directly affected as their primary care physician adopts certified EHRs in their practices. 84 In order to increase the effectiveness of the project, CMS is encouraging private insurers to offer similar incentives to those in the current demonstration project for EHR adoption.

<sup>83</sup> U.S. Department of Health and Human Services, "Electronic Health Records Demonstration-Summary," www.cms.hhs.gov/DemoProjectEvalRpts/downloads/EHR\_Summary.pdf.

84 U.S. Department of Health and Human Services, "HHS Announces Project to Help 3.6 Million Consumers Reap

<sup>82</sup> http://www.cchit.org/about/index.asp (visited December 31, 2007)

Benefits of Electronic Health Records," October 30, 2007.

# **Appendix B: Efforts in Other States**

An overview of HIT activity at the state level is provided below, detailing the source of authority for the activity; funding sources; and specifications of the project.<sup>85</sup>

# Georgia Health Information Technology and Transparency (HITT) Advisory Board

Governor Sonny Perdue created the Georgia HITT Advisory Board via an Executive Order<sup>86</sup> on October 17, 2006 to advise the Georgia Department of Community Health (DCH) in establishing a statewide strategy for health information exchange. The Board is comprised of 12 members and 16 ad hoc experts appointed by the Commissioner of DCH. The Commissioner of the DCH awarded \$853,088 in health information exchange grants to four entities in November 2007. Grants are awarded based on recommendations from the HITT Advisory Board. The awardees will match the grant funds provided. The focus of the grant awards is development of health information exchange, electronic prescribing, and/or adoption of electronic medical records across Georgia. The 2006 Executive Order outlines tasks for the Board, which include:

- Provide leadership for a coordinated effort across the state to achieve health information exchange.
- Encourage the use of electronic health records that recognize interoperability standards as identified by the U.S. Department of Health and Human Services.
- Promote the security and privacy of health information.
- Conform with nationally recognized interoperability standards for exchanging health information.
- Promote marketplace transparency within the healthcare industry through the development of information to the consumer of healthcare regarding the cost and quality of healthcare.

# **Indiana Health Informatics Corporation (IHIC)**

Authorized in 2007 by SB 551,<sup>88</sup> the IHIC is comprised of a seven member board and is organized as a body politic and corporate and tasked with specific activities, which include:

- Define the vision for a statewide health information exchange system.
- Prepare a plan to create a statewide health information system.
- Encourage, facilitate, and assist in the development of the statewide health information exchange system.
- Evaluate, analyze, and report on Indiana's progress toward implementing the system.

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<sup>&</sup>lt;sup>85</sup> National Association of State Chief Information Officers, "Profiles of Progress II, State Health IT Initiatives," September 2007.

<sup>&</sup>lt;sup>86</sup> Executive Order of Georgia Governor Sonny Perdue, October 17, 2006.

<sup>&</sup>lt;sup>87</sup> Press release, Georgia Department of Community Health, "Four Georgia Health Partnerships Receive \$853,088 in Grants," November 5, 2007.

<sup>88</sup> http://www.in.gov/apps/lsa/session/billwatch/billinfo?year=2007&session=1&request=getBill&docno=551 (visited December 31, 2007).

 Develop programs and initiatives to promote and advance the exchange of health information.

The Indiana Health Informatics Fund was created in 2007 and will contain all appropriations made by the General Assembly to the corporation and all funding received from the private sector. No appropriation has been made by the General Assembly to date.

Also in Indiana, the Indiana Health Information Exchange (IHIE) is one of the state's more successful regional health information organizations (RHIO). Created by the Regenstrief Institute and developed over the past 30 years, the IHIE utilizes a centrally managed model where patient data is replicated to a centralized database and access rights are managed by custom-developed software. IHIE offers a clinical messaging service, DOCS4DOCS®, which is a web-based service that electronically delivers test results and other clinical information. This program replaces traditional delivery methods such as courier, postal and fax. In July 2007, IHIE announced that the DOCS4DOCS® service is able to deliver clinical results directly into the EHR system of community physicians, in addition to the web-based service.

## Kentucky e-Health Network (KeHN) Board and Corporation

The KeHN Board was authorized in 2005 by SB 2<sup>89</sup> and operates a 23 member board, including 7 core members, 8 at-large members, and 8 ex-officio members. The KeHN Board is tasked specific activities, which include:

- Review models for an electronic health network.
- Choose an electronic health network model to be implemented in Kentucky.
- Submit a description of the model chosen to the Legislative Research Commission.
- Oversee the operations and development of the KeHN.

The e-Prescribing Partnerships in Kentucky (ePPIK) Grant Program seeks to offset the costs that healthcare providers incur when purchasing health information technology necessary to implement e-prescribing. The program also encourages the formation of community partnerships amongst health care entities. In 2008, the state will provide up to \$90,000 in grant funding to each entity. A total of \$300,000 of the available funding comes from the Foundation for a Healthy Kentucky and the Hal Roger's Grant Program. <sup>90</sup>

In September 2007, the KeHN Board approved the creation of the Kentucky e-Health Corporation which operates as a non-profit corporation to implement, develop and operate a Kentucky health information network. Board members are appointed by the KeHN Board. The corporation is responsible for the implementation of the Kentucky Health Information Partnership (KHIP). KHIP is the first phase of the vision to develop a statewide e-Health Network. The project's goal is to develop a common web portal for

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<sup>89</sup> http://www.lrc.ky.gov/record/05rs/SB2.htm (visited December 31, 2007).

<sup>&</sup>lt;sup>90</sup> Kentucky e-Health Network, <a href="http://ehealth.ky.gov/initiatives/">http://ehealth.ky.gov/initiatives/</a>, (visited December 17, 2007).

provider-payor communications that will contain both a clinical site based on claims data and an administrative site for handling common administrative tasks electronically. 91

Governor Fletcher has requested \$5,575,000 for e-Health in FY 2009 and \$11,725,000 in FY 2010. The funds will be used for operations and programs of the KeHN Board, the creation and operation of the e-health infrastructure, and e-health grant funding.

The state of Kentucky's roadmap to statewide HIE is very similar to the previously proposed Florida Health Information Network. The state approved the creation of the Kentucky e-Health Corporation which is responsible for managing the development and operations of the statewide Kentucky e-Health Network currently under development. The Kentucky state agency request to their Legislature to support HIE activities is \$5.5 million in Fiscal Year 2009-2010 and \$11.7 million in Fiscal Year 2010-2011.

## Minnesota Health Information Exchange (MHIE)

The legislature of the state of Minnesota has required all hospitals and health care providers to have an interoperable electronic health records system in place by January 1, 2015. The Commissioner of Health and the e-Health Initiative Advisory Committee are tasked with creating a statewide plan to reach this goal. The Advisory Committee is comprised of 26 members who represent various public and private stakeholders.

As a result of the e-Health Initiative Advisory Committee's plan, MHIE was formed in September 2007 as a nonprofit corporation by founding partners: Allina Hospitals & Clinics, Blue Cross and Blue Shield of Minnesota, HealthPartners, Medica, and the state of Minnesota. The exchange is funded by start-up money from its founding organizations and by subscriber fees. Scheduled to go live in early 2008, the MHIE will allow for a secure interchange of clinical information among provider and payor. Initial services will include: medication history, lab orders, and test results. Future services may include: radiology reports, Minnesota Department of Health disease surveillance reporting, and electronic prescriptions. Patient consent is required before access is granted to clinical information.

The Interconnected Electronic Health Record Grant Program is administered by the Minnesota Department of Health Office of Rural Health & Primary Care to support the adoption and use of electronic health records by healthcare providers in rural and medically underserved areas. Funding available for the program in 2007 was \$3.5 million and \$1.3 million was available in 2006. Recipients are required to provide a one-to-three match of their awarded grant dollars.

<sup>&</sup>lt;sup>91</sup> Kentucky e-Health Network, <a href="http://ehealth.ky.gov/initiatives">http://ehealth.ky.gov/initiatives</a>.

<sup>&</sup>lt;sup>92</sup>Kentucky e-Health Network, <a href="http://ehealth.ky.gov/NR/rdonlyres/FCC7B7BF-FF78-445D-BCA6-44ED252E2985/0/BudgetRequestTalkingPointsrev1.doc">http://ehealth.ky.gov/NR/rdonlyres/FCC7B7BF-FF78-445D-BCA6-44ED252E2985/0/BudgetRequestTalkingPointsrev1.doc</a> (visited January 7, 2008).

<sup>93 62</sup>J.495, Minnesota Statutes, 2007

<sup>&</sup>lt;sup>94</sup> Press release, Minnesota Office of the Governor, "Minnesota Health Information Exchange to be among largest 'e-initiatives' in the nation." September 10, 2007.

<sup>&#</sup>x27;e-initiatives' in the nation," September 10, 2007.

95 Minnesota Department of Health, "Minnesota e-Health Initiative Funding Opportunities," <a href="http://www.health.state.mn.us/e-health/funding.html">http://www.health.state.mn.us/e-health/funding.html</a> (visited January 5, 2008).

The Electronic Health Record System Revolving Loan Program is administered by the Minnesota Department of Health Office of Rural Health & Primary Care to assist in financing the installation or support of interoperable health record systems. The program makes six-year, no interest loans available on a first-come, first-served basis to eligible applicants, which may include community clinics, rural hospitals, physician clinics in towns with populations under 50,000, and nursing facilities. Funding available for the program in 2007 was \$3.15 million.

## **Utah Health Information Network (UHIN)**

The UHIN has been in operation since 1993 as a not-for-profit corporation and currently serves all the hospitals, ambulatory surgery centers, national laboratories, and approximately 90% of the medical providers in Utah. He medical providers in Utah of Membership in the UHIN is comprised of approximately 17 Utah healthcare providers, insurers, and other interested parties, including state government. The UHIN operates as a consensus-based coalition. Participating healthcare providers pay an annual membership fee and payors pay a per transaction fee. He medical providers pay an annual membership fee and payors pay a per transaction fee.

The common goal of the UHIN membership is to reduce healthcare administrative costs through the use of electronic data interchange (EDI). EDI means that all the parties exchange data in a standard format using standard codes, which are adopted by the UHIN Standards Committee. 98 UHIN operates as a centralized network that does not store files. The network allows a secure delivery of healthcare data in a consistent format amongst authorized providers.

UHINet is the Internet portal used by UHIN members to send and receive HIPAA-compliant transactions. Subscribers are connected with all Utah domiciled payers as well as an additional 450 national payers through UHINet.<sup>99</sup> All data sent or received is encrypted.

<sup>&</sup>lt;sup>96</sup> Utah Health Information Network, "About UHIN", www.uhin.com/about/index.htm (visited December 17, 2007).

<sup>&</sup>lt;sup>97</sup> Governor's Health Information Infrastructure Advisory Board, "Florida Health Information Network, Architectural Considerations for State Infrastructure," Version 6.2, April 19, 2007, 18.

<sup>&</sup>lt;sup>99</sup> National Association of State Chief Information Officers, "Profiles of Progress II, State Health IT Initiatives," September 2007, 49.

# **Appendix C: Florida Efforts**

## Florida Health Information Network (FHIN)

Specific technical functions of the proposed FHIN are described in the board's white paper and are diagramed in Figure 5. 100 In summary, the FHIN's functions include:

- Facilitate communications and data queries among RHIOs.
  - Serve as the central communication link in the state for HIE and be responsible for providing access for authorized users to clinical data stored in databases across the state.
  - Maintain an Enterprise Master Patient Index (EMPI).
  - Operate a record locator service that will use the listing of patient identifiers contained in the EMPI to guery healthcare providers in each RHIO or HIN in order to collect the appropriate patient records.
- Take the lead in specifying technical standards.
  - Act as the state's lead authority in establishing and maintaining technical standards among the RHIOs and health information networks.
  - Specify standards for authenticating users to determine if they are authorized to access patient records, and to authorize RHIOs that wish to connect to the FHIN.
- Provide a portal for other databases.
  - o Function as the major portal for integrating state agency healthcare datasets and make them available to authorized users.
  - Provide access to state agency datasets that are already available electronically (i.e.: The State Health Online Tracking System, SHOTS, immunization data from the Department of Health; Medicaid data from the agency; data from the federal DOD and VA).

<sup>100</sup> Florida Health Policy Center, "Florida's Health Information Network: What will it cost to develop?," February 2007, http://www.floridahealthpolicycenter.org/research/pdfs/FHIN%20brief.pdf (visited December 19, 2007).

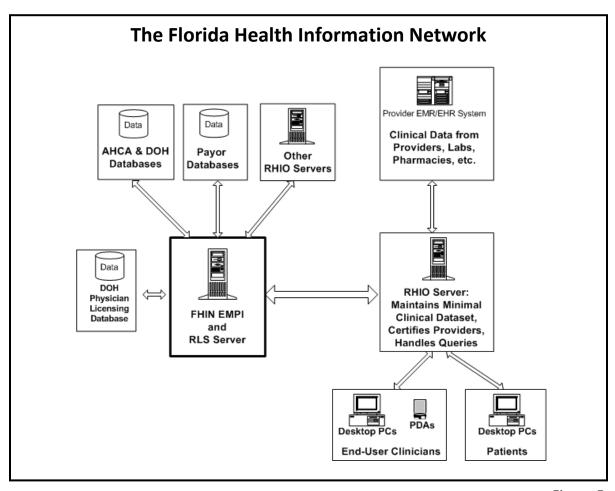


Figure 5

Legislation was filed in 2006<sup>101</sup> by Rep. Holly Benson and Sen. Mike Haridopolos to create the "Florida Health Information Network, Inc." as a not-for-profit corporation to develop the statewide health information network. The proposed corporation would be managed by an uncompensated board of directors. The 2006 legislation passed unanimously by the House, but died in a Senate committee. In 2007, similar legislation 102 was filed by Rep. Denise Grimsley and Sen. Jeff Atwater. Again, the legislation passed unanimously in the House, but died in a Senate committee.

#### **FHIN Grants Program**

The grants program provides support to health-related institutions and organizations that seek assistance to plan, deploy, and evaluate interoperable health information exchange projects in clinical settings. 103 Organizations eligible for funding include:

<sup>101</sup> CS/HB 1409, 2006, http://www.mvfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=33643&SessionId=42 (visited December 19, 2007).

<sup>102</sup> CS/HB 1121, 2007, http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=36128&SessionId=54 (visited December 19, 2007).

103 Florida Agency for Health Care Administration, "FHIN Grants Program Requirements 2007-2008,"

http://ahca.myflorida.com/dhit/FHINgrantsProgram/FGPSched0708.pdf (visited December 17, 2007).

- Florida-based non-profit organizations and institutions.
- Public and private institutions such as universities, colleges, hospitals, community health centers, and laboratories.
- Units of state and local governments.
- Public health departments.
- Professional medical associations.
- Faith-based or community-based organizations.

All funding is awarded in the form of a 50/50 matching grant, which means 50% of the project must be funded by the grant recipient in the form of cash or donated materials and services with a specific cash value. From Fiscal Year 2005-2006 through Fiscal Year 2006-2007, the state's investment of \$3.5 million in grant contracts was matched by \$6.7 million from local investors, which is more than the required 50% match. All grant applications were evaluated by the board and the board forwarded its recommendations to the Secretary of the agency. However, the board expired in July of 2007 and will no longer review FHIN grant applications. The Secretary makes the final decision regarding ranking and levels of funding for projects.

The agency received a non-recurring appropriation of \$1.5 million in Fiscal Year 2005-06 to fund the program and awarded nine grants. These included five assessment and planning grants, three operations and evaluation grants and one training and technical assistance grant. <sup>105</sup> In Fiscal Year 2006-07, the Legislature appropriated \$2 million to the agency to fund the FHIN grants program and the agency awarded six grants, all of which were operations and evaluation grants. <sup>106</sup> In Fiscal Year 2007-08, the Legislature appropriated \$2 million to the agency to fund the FHIN grants program and the agency awarded nine grants. These included one assessment and planning grant, seven operations and evaluation grants, and one training and technical assistance grant. <sup>107</sup>

# Florida's Regional Health Information Organizations

The agency funded nine RHIOs in Fiscal Year 2007-2008. Figure 4 depicts the location of the RHIOs that received a FHIN grant in Fiscal Year 2005-2006 through Fiscal Year 2007-2008, in addition to one independent RHIO which has not received funding. An outline of Fiscal Year 2007-2008 funded project's specifications and current activities follows.

<sup>&</sup>lt;sup>104</sup> Governor's Health Information Infrastructure Advisory Board, "Final Report of the Governor's Health Information Infrastructure Advisory Board," July 6, 2007, <a href="http://ahca.myflorida.com/dhit/Board/Brdmtg63007.pdf">http://ahca.myflorida.com/dhit/Board/Brdmtg63007.pdf</a> (visited December 19, 2007).

<sup>&</sup>lt;sup>105</sup> Florida Agency for Health Care Administration,

http://ahca.myflorida.com/dhit/FHINgrantsProgram/0506FHINgrantsProposals.shtml (visited December 17, 2007). Florida Agency for Health Care Administration,

http://ahca.myflorida.com/dhit/FHINgrantsProgram/0607FHINgrantProposals.shtml (visited December 17, 2007). Florida Agency for Health Care Administration,

http://ahca.myflorida.com/dhit/FHINgrantsProgram/0708FHINgrantProposals.shtml (visited December 17, 2007).

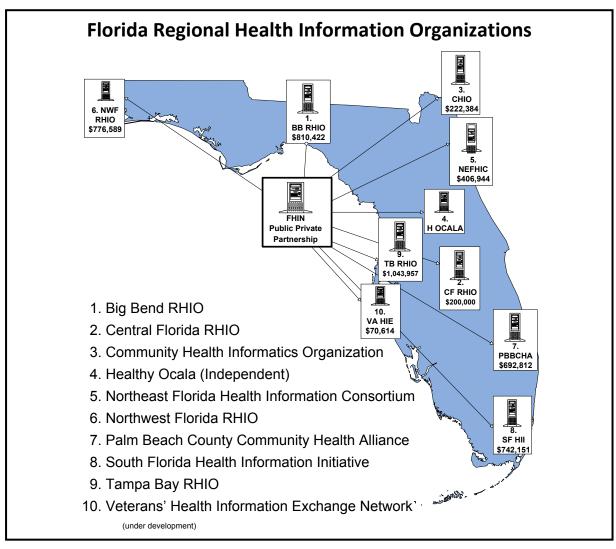


Figure 6

# The Big Bend Regional Healthcare Information Organization (BBRHIO)

BBRHIO received operations grants in Fiscal Year 2005-2006 for \$246,850, Fiscal Year 2006-2007 for \$313,822, and Fiscal Year 2007-2008 for \$249,750. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$810,422.

BBRHIO utilizes a hybrid architecture<sup>109</sup> that supports both centralized and federated data sharing.<sup>110</sup> The organization developed a pilot regional health information network (RHIN) that connects test data sources from two competing healthcare providers

<sup>108</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>109</sup> Hybrid- A hybrid model combines both federated and central repositories. Typically large hospitals would use a federated HIE model while small health care providers would tie into a central repository.

<sup>&</sup>lt;sup>110</sup> Agency for Health Care Administration, "Florida Health Information Network Grants Program, Grantee Background Information," April 2007, 1.

(Tallahassee Memorial Healthcare and Capital Regional Medical Center) making the data accessible via a secure RHIN web portal. 111 BBRHIO is working to establish standardized patient intake forms that will be available via a secure browser interface for patients to pre-populate and maintain their personal information resulting in a PHR.

BBRHIO received a Rural Health Care Pilot Program grant from the Federal Communications Commission in November 2007 for a three-year \$9.6 million project to construct a one gigabits per second fiber optic network that will link approximately nine rural hospitals in eight counties to the existing Florida LambdaRail backbone, and extending to community health centers and clinics through broadband wireless. 112

## **Central Florida Regional Health Information Organization (CFRHIO)**

CFRHIO received a planning grant in Fiscal Year 2005-2006 for \$108,864 and an operations grant in Fiscal Year 2007-2008 for \$200,000. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$308,864. 113

CFRHIO plans to implement an operational health information network throughout Orange, Seminole, Osceola, Polk, Brevard, Lake and Volusia counties which will utilize a federated model for sharing of clinical information. Those accessing patient data will make use of a web browser-based software application. 114

Phase I of the project aims to connect Orlando Regional Healthcare (7 hospitals). Florida Hospital (7 hospitals), Cognoscenti Health Institute (8 centers), Physician Associates of Florida (70 physicians/12 clinics), Orange Blossom Family Health Center, Primary Care Access Network (9 safety net clinics for the uninsured), and the University of Florida Informatics Research Laboratory.

# **Northeast Florida Health Information Consortium (NEFHIC)**

NEFHIC received an operations grant in Fiscal Year 2007-2008 for \$406,944. 115

The NEFHIC is comprised of the Duval County Health Department (DCHD), JaxCare Inc., the Northeast Florida Regional Health Organization (NEFRHO), and the Duval County Medical Society. The DCHD will support JaxCare efforts to expand a central repository for hospital and safety net electronic health information, and NEFRO efforts

<sup>&</sup>lt;sup>112</sup> Press release from the Federal Communications Commission, "Rural Health Care Pilot Program Applicants," November 19, 2007, http://hraunfoss.fcc.gov/edocs\_public/attachmatch/DOC-278260A2.pdf (visited December 20,

<sup>&</sup>lt;sup>113</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>114</sup> Agency for Health Care Administration, "Florida Health Information Network Grants Program, Grantee Background Information," April 2007, 19.

<sup>&</sup>lt;sup>115</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

to provide health professionals with access to hospital and ambulatory electronic health information for the clients they serve. 116

Jacksonville Health Information Network (JHIN), a program of JaxCare, is an existing HIE that provides authorized users with web access to health information on 98,386 patients from data provided by six competing hospitals, the University of Florida Jacksonville physicians' network, Duval County Health Department, both Federally Qualified Health Centers, and the JaxCare Health Flex plan. In Fiscal Year 2007-2008, the JHIN will add Medicaid patient records to its data repository. NEFRHO plans to pilot a federated data sharing system within the community by working with JaxCare in the single sign-on opportunity for access to the JHIN Continuity of Care Records. 118

The NEFHIC technical model integrates technologies that support two distinct groups of health care providers and their patients: (1) those who care for the Medicaid and uninsured populations; and (2) those who care for patients with commercial insurance and Medicare. JaxCare operates the JHIN for the first group through a data repository system that collects patient data from various healthcare providers, and for the latter group NEFRHO will provide authorized hospital health care practitioners with single sign-on access to EMRs maintained, in a view-only format, by hospital facilities. The NEFRHO model will include accessing data from payors through a contract with Availity, a joint venture between Blue Cross Blue Shield of Florida and Humana.

# The Northwest Florida Regional Health Information Organization (NWFL-RHIO)

NWFL-RHIO received a planning grant in Fiscal Year 2005-2006 for \$150,000 and operations grants in Fiscal Year 2006-2007 for \$330,339 and Fiscal Year 2007-2008 for \$296,250. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$776,589.

The organization focuses on the adults who are uninsured, indigent, and not eligible for public assistance whose healthcare needs are normally met by accessing the charity care (safety net) system in Escambia County, with plans to spread into Santa Rosa County. Escambia County healthcare providers who participate in the NWFL-RHIO include: West Florida Hospital (HCA), Sacred Heart Hospital (Ascension), Baptist Hospital (Baptist Health Care), Lakeview Center (mental health), Escambia Community Clinic, Escambia Dental Cooperative, Health and Hope Clinic, St. Joseph Medical Clinic, Circle Community Clinic, and Escambia County Health Department. 122 As of

<sup>&</sup>lt;sup>116</sup> Agency for Health Care Administration, "Florida Health Information Network Grants Program, Grantee Background Information," April 2007, 22.

<sup>&</sup>lt;sup>117</sup> *Id.* 23.

<sup>118</sup> *Id*.

<sup>&</sup>lt;sup>119</sup> *Id.* 24.

 $<sup>^{120}</sup>$  Id

<sup>&</sup>lt;sup>121</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>122</sup> Northwest Florida RHIO FHIN Grant Project Presentation to AHCA and GHIIAB, "Building the EscaRosa Health Information Network," June 11, 2007,

ahca.myflorida.com/dhit/FHINgrantsProgram/Presentations/NWFRHIO06112007.pdf (visited December 20, 2007).

January 2008, the following providers in Santa Rosa County are scheduled to participate in the NWFL-RHIO: Escambia Community Clinic- Santa Rosa, Santa Rosa County Health Department, Lakeview Center- Avalon, Jay Hospital, Good Samaritan Clinic, Santa Rosa Medical Center, and Gulf Breeze Hospital. 123

Escambia County providers exchange data daily through a centralized model of HIE. Data is centralized in a repository maintained by Data Futures. 124 Integration of two ASP systems with the community messaging system enable authorized participants to view and exchange patient data. NWFL-RHIO back-loads data from EHR data of participating hospital and federally qualified health centers into the current system. This process allows patient information documented before the RHIO became active to be added to the patient's EMR. 126

NWFL-RHIO adopted an "opt-in" policy, requiring patients to sign a consent form before their data is exchanged. Without a consent form, only the physician who entered the data may view it. 127

# Palm Beach County Community Health Alliance (Alliance)

The Alliance received a planning grant in Fiscal Year 2005-2006 for \$250,000 and operations grants in Fiscal Year 2006-2007 for \$242,812 and Fiscal Year 2007-2008 for \$200,000. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$692,812. The Alliance also received a training grant in conjunction with the Florida Association of RHIOs in Fiscal Year 2007-2008 for \$44,900 to educate consumers and physicians of the potential benefits of HIE. 128

The Alliance is a collaboration of thirty-three public and private entities working to create a more seamless system of health and mental health care for uninsured, Medicaid, and other patients among all safety net health and mental health providers in Palm Beach County. 129 The Alliance is developing a shared EHR system, called All-Care, built through electronic interfaces to existing clinical and administrative data systems. The system is scheduled to be fully operational in 2009 and will house health care data in a repository for residents of the county from all county hospitals, free clinics, health department programs, mental health centers, and other partners. 130

<sup>&</sup>lt;sup>124</sup> Telephone interview with Christine Isham, Project Director for NWFL-RHIO (December 20, 2007).

<sup>&</sup>lt;sup>125</sup> Escambia Health Information Network, "FHIN Grantee Quarterly Progress Report, submitted to AHCA," April

<sup>&</sup>lt;sup>126</sup> Telephone interview with Christine Isham, Project Director for NWFL-RHIO (December 20, 2007).

<sup>&</sup>lt;sup>128</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>129</sup> Palm Beach County Community Health Alliance, "2007-2008 Training and Technical Assistance Project Proposal", http://ahca.myflorida.com/dhit/FHINgrantsProgram/ProposalCat3PBCCHA0708.pdf (visited December

<sup>&</sup>lt;sup>130</sup> Palm Beach County Community Health Alliance presentation to the Florida House of Representatives Health Quality Committee, December 11, 2007, 3.

The Alliance selected the Veterans Health Information Systems and Technology Architecture (VistA) program, a nationally implemented EMR software program developed by the federal Veteran's Administration, to provide free clinics in Palm Beach County with the ability to enter patient data into an EMR that will connect to the All-Care system. The Alliance adopted an "opt-in" policy, requiring patients to sign a consent form before their data is loaded into the repository.

Glades General Hospital is serving as the pilot hospital site for All-Care system testing. The Alliance has set a target of bringing Glades Hospital to live transmission of data into All-Care within the first quarter of 2008. 133

# South Florida Health Information Initiative, Inc. (SFHII)

SFHII received a planning grant in Fiscal Year 2005-2006 for \$127,924 and operations grants in Fiscal Year 2006-2007 for \$329,303 and Fiscal Year 2007-2008 for \$284,618. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$742,151.

SFHII envisions serving Broward, Miami-Dade, and Monroe counties. SFHII launched the Community Health Information Exchange (CHIE) in June 2007. Initial participants in the CHIE include Mercy Hospital and Health Choice Network and its South Florida federally qualified health centers. The operational CHIE currently includes eight total data sources and 35,464 patients. The medical providers associated with the two participating entities have access to the CHIE's web portal. Thirty additional providers who are representatives of the Florida Academy of Family Physicians, AvMed Health Plans, and Blue Cross Blue Shield of Florida also have access to the CHIE and provide feedback on how to incorporate the web portal into their daily work flow. 137

As additional funding becomes available, SFHII will integrate Jackson Health System into the CHIE. Negotiations are also underway with Broward Health System to enter the CHIE. SFHII hosted the "2<sup>nd</sup> Annual Health Information Exchange Summit" in November 2007, which featured speakers such as Newt Gingrich.

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<sup>&</sup>lt;sup>131</sup> *Id.* at 4

Palm Beach County Community Health Alliance "AllCare October/November 2007 Project Progress Report for the Agency for Health Care Administration," 2.
 133 Id

<sup>&</sup>lt;sup>134</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>135</sup> South Florida Health Information Initiative, "FHIN Grants Program, November Monthly Report," December 3, 2007, 4.

South Florida Health Information Initiative presentation to Governor's Health Information Infrastructure
 Advisory Board, "Community Health Information Exchange: Operationalizing the Vision," June 11, 2007.
 South Florida Health Information Initiative, "FHIN Grants Program, Second Quarterly Report, January 1, 2

<sup>&</sup>lt;sup>137</sup> South Florida Health Information Initiative, "FHIN Grants Program, Second Quarterly Report, January 1, 2007 – March 31, 2007," 4.

<sup>&</sup>lt;sup>138</sup> South Florida Health Information Initiative presentation to the Florida House of Representatives Health Quality Committee, December 11, 2007, 4.

# Tampa Bay Regional Health Information Organization (TBRHIO)

TBRHIO received operations grants in Fiscal Year 2005-2006 for \$467,000, Fiscal Year 2006-2007 for \$330,339, and Fiscal Year 2007-2008 for \$246,618. Grant funding for Fiscal Year 2005-2006 through Fiscal Year 2007-2008 totals \$1,043,957. 139

TBRHIO utilizes a centralized model. All providers send data into the RHIO depository. TBRHIO serves to improve the health status of and reduce costs associated with the project's target populations of Medicaid patients diagnosed with adult diabetes, pediatric asthma, and prostate cancer. 141

Current data exchange provides core patient discharge information from Tampa General, All Children's Hospital, and the H. Lee Moffitt Cancer Research Institute combined with information from area pharmacies. Information is displayed to the physician and patient via a website and hand-held devices. All medication histories for Medicaid patients are available to authorized physicians in the Tampa Bay area through Gold Standard. 143

TBRHIO is developing the implementation strategy to link hospital discharge summaries with EMRs of the 400+ member University of South Florida Physician's Group. Three provider facilities are authorized to use the network as of April 2007. In Fiscal Year 2007-2008, the RHIO aims to double the number of authorized hospitals and/or facilities. The provider facilities are authorized to use the number of authorized hospitals and/or facilities.

# The Florida Department of Veterans' Affairs (FDVA)

FDVA received a planning grant in Fiscal Year 2007-2008 for \$70,614.

FDVA and the U.S. Department of Veterans Affairs have agreed to collaborate on the assessment and planning phase of the development and implementation of a continuity of care record (CCR) at the FDVA. Implementation of a CCR will facilitate the exchange of patient demographic and clinical data with a variety of health care providers. The FDVA plans to implement this program at the six nursing homes operated by the FDVA. Currently, their project team is in the preliminary planning stage.

<sup>&</sup>lt;sup>139</sup> Agency for Health Care Administration, "FHIN Grants Program Funding- FY 2005-2008".

<sup>&</sup>lt;sup>140</sup> Agency for Health Care Administration, "Florida Health Information Network Grants Program, Grantee Background Information," April 2007, 15.

Tampa Bay Partnership website, <a href="http://www.tampabay.org/subpage.asp?navid=7&id=130">http://www.tampabay.org/subpage.asp?navid=7&id=130</a> (visited December 20, 2007).

<sup>&</sup>lt;sup>142</sup> *Id*.

<sup>&</sup>lt;sup>143</sup> Agency for Health Care Administration, "Florida Health Information Network Grants Program, Grantee Background Information," April 2007, 14.
<sup>144</sup> Id.

<sup>&</sup>lt;sup>145</sup> *Id*.

## Florida Medicaid EHR Pilot Program

In May 2006, the agency signed a contract with Electronic Data Systems (EDS) to develop a new Medicaid computer system and serve as the State's fiscal agent for five years beginning March 1, 2008. The \$308 million contract was awarded for the design, development, and implementation of an upgraded Medicaid system. A portion of the contract calls for an initiative known as Florida interChange. The initiative seeks to create an EHR for each Medicaid recipient, but will first be run as a pilot program in Leon County from November 2007 through February 2008. EDS has worked with the Big Bend RHIO to ensure compatibility with the local HIE.

Medicaid patient medical information is currently collected based on the diagnostic and procedural codes entered from claims data and filed electronically with the state's Medicaid Management Information System. The information in this file serves as the foundation for an EHR, which will be viewable by authorized Medicaid physicians and medical staff and may contain current health records, lab results, and x-rays. The EHR will be based on medical claims data from the last six to nine months. Florida Medicaid sent letters to over 300 Medicaid providers in Leon County asking them to participate in the pilot program. Those who participate will receive access to an Internet site through an assigned password. Since the system is web-based there is no need for physicians to purchase special hardware or software to participate.

EDS and Florida Medicaid will evaluate the pilot program with plans to go statewide with EHRs for all Medicaid recipients. They also plan to eventually provide access to EHRs to Medicaid patients and caregivers through a patient web-portal. 152

<sup>&</sup>lt;sup>146</sup> Agency for Health Care Administration, Florida Medicaid Program, "Florida Medicaid Management Information System/Decision Support System Implementation," <a href="http://mymedicaid-florida.com/providerreadiness/default.aspx">http://mymedicaid-florida.com/providerreadiness/default.aspx</a> (visited December 19, 2007).

<sup>&</sup>lt;sup>147</sup> Ferris, Nancy, "Florida Launches EHR Project for Medicaid Recipients," Government Health IT, November 26, 2007, <a href="http://www.govhealthit.com/online/news/350132-1.html">http://www.govhealthit.com/online/news/350132-1.html</a> (visited December 19, 2007).

<sup>&</sup>lt;sup>149</sup> Hansen, Dave, "Florida Begins Electronic Health Record Pilot Program for Medicaid Recipients," American Medical News, December 17, 2007, <a href="http://www.ama-assn.org/amednews/2007/12/17/gvsc1217.htm">http://www.ama-assn.org/amednews/2007/12/17/gvsc1217.htm</a> (visited December 19, 2007).

<sup>&</sup>lt;sup>150</sup> *Id*.

<sup>&</sup>lt;sup>151</sup> *Id*.

<sup>&</sup>lt;sup>152</sup> *Id*.