

# ISM

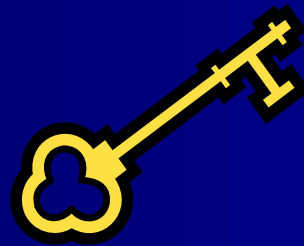
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IT Solutions Management for Human Services

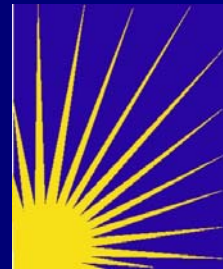
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an affiliate of the American Public Human Services Association

# Connecticut eHealth Initiatives



**Michael P. Starkowski**  
**Commissioner**

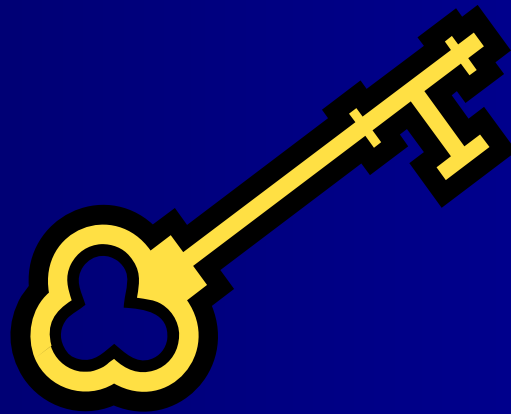


**Connecticut Department  
of Social Services**

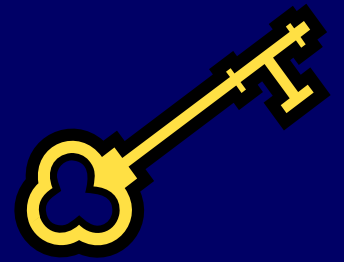
*Making a Difference*

# Today's Agenda

- ❖ eHealthConnecticut
- ❖ eHealth Record
- ❖ ePrescribing

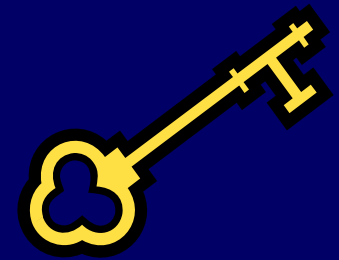


# **eHealthConnecticut Mission**



- ❖ eHealthConnecticut is the not-for-profit entity incorporated in January 2006 to create, champion and sustain a secure statewide health information exchange that will dramatically improve the safety, efficiency and quality of health care in Connecticut.

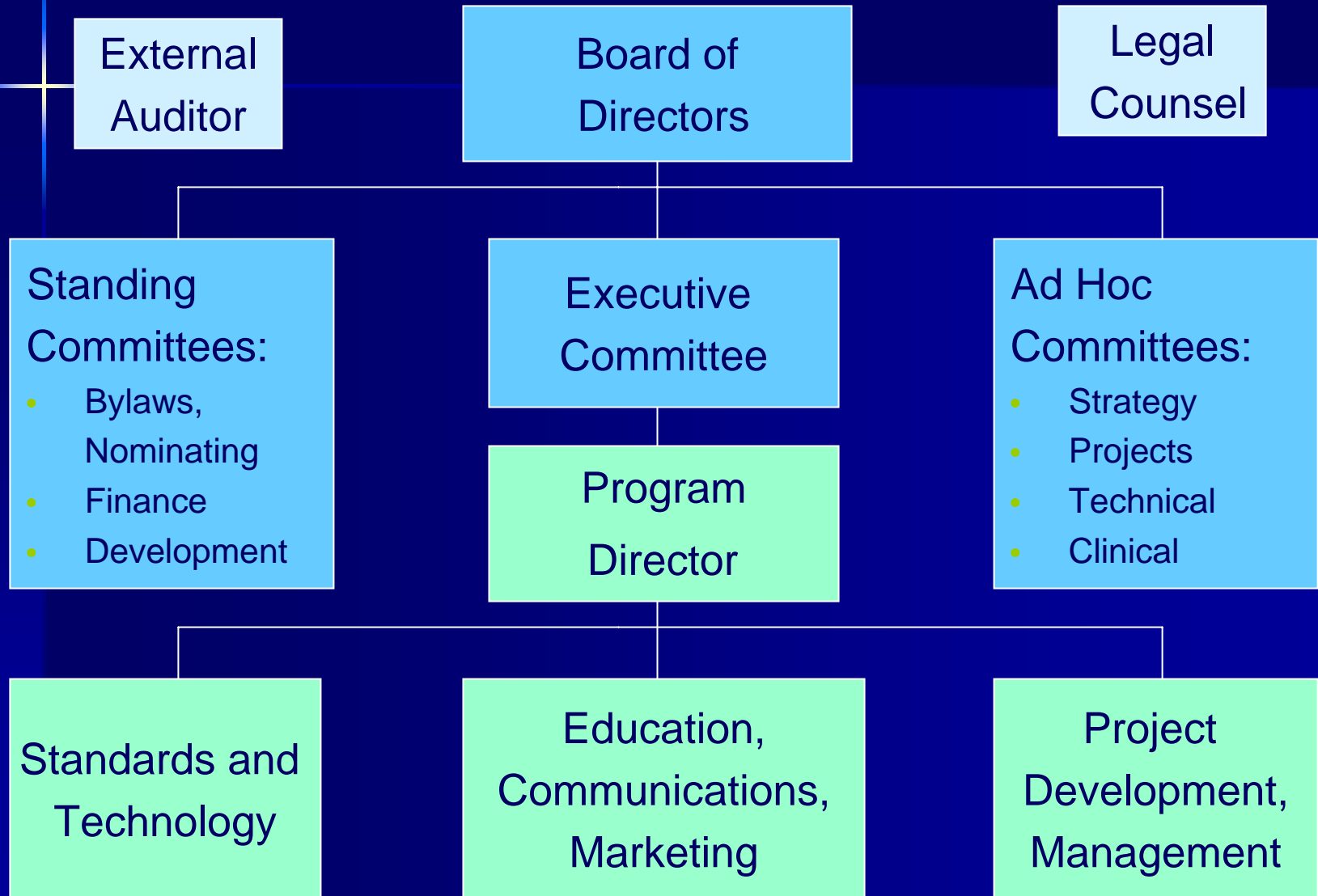
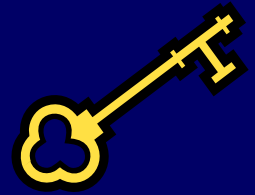
# Board of Directors



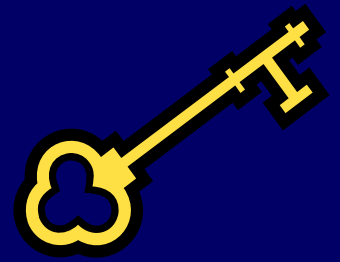
## 26 Board Members Representing a Statewide Public-Private Partnership

- 🔑 Consumers
- 🔑 Physicians
- 🔑 Pharmacists
- 🔑 Hospitals and Federally  
Qualified Health Centers
- 🔑 Clinical Service Providers
- 🔑 Employers
- 🔑 Payers
- 🔑 Academia
- 🔑 Quality Organizations
- 🔑 State Agencies
- 🔑 Ex-officio members

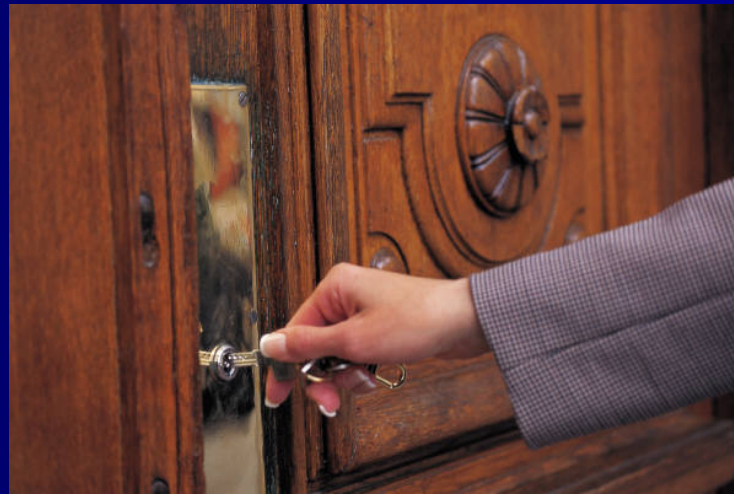
# Organization



# Imagine...

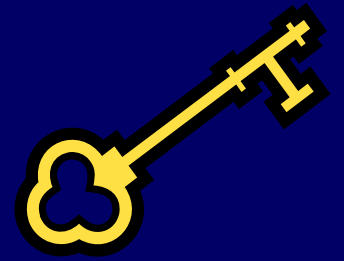


Imagine that you have a key that fits only one door...



...and behind that door is your personal, private health information.

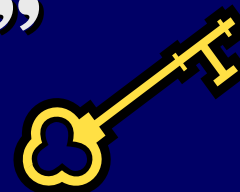
# Imagine...



That information helps you enhance your wellness or manage your chronic disease.

And if you're anywhere in Connecticut and critically ill or injured, it might even help save your life.

# Imagine...One “system” with...



Your health problems and allergic reactions

Your medications...past and present

Your blood pressure and  
blood test results over time

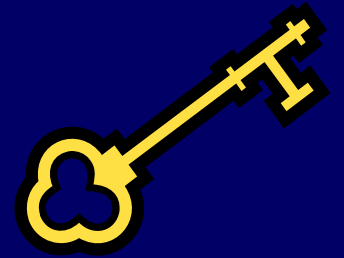
X-ray and heart  
monitoring information

Your weight over time

The places where you’ve received care  
and the providers who’ve delivered it



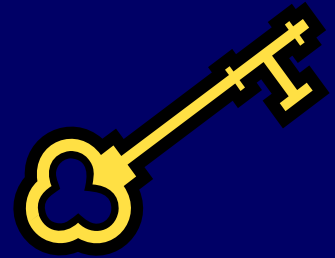
# One Statewide HIE



Today, a healthcare key would do no good because systems are fragmented and there is no single door.

But now, for the first time, we have the structure and the will to work together to build one statewide Health Information Exchange for the Public Good.

# HIE Building Blocks

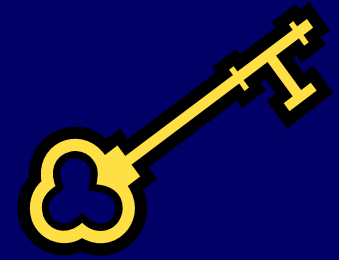


- 🔑 Privacy and Security
- 🔑 Statewide Person Registry
- 🔑 Statewide Standards
- 🔑 Electronic Highway
- 🔑 Public Trust

**OUR HIE IS NOT:** a monolithic information system

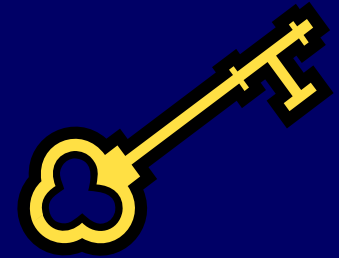
**OUR HIE IS:** a trusted information exchange

# eHealthConnecticut Strategy



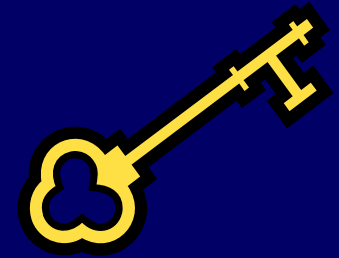
- ❖ Prepare the State for Health Information Exchange (HIE)
  - ❖ Adopt policies and standards for HIE
  - ❖ Establish a certification process for participants to comply with interoperability standards
  - ❖ Create a learning forum, educate stakeholders
  - ❖ Educate State legislators and government officials
  - ❖ Establish public/private partnership
  - ❖ Publish annual report on HIT activities
  - ❖ Establish public communications campaign

# eHealthConnecticut Strategy



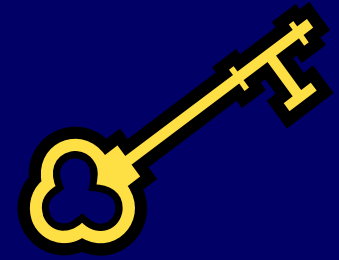
- ❖ Identify and Implement Projects that Contribute to Building the HIE
  - ❖ Identify and contract with a health information services provider to operate the HIE
  - ❖ Launch pilots by teaming with providers
  - ❖ First priority is building HIE infrastructure
  - ❖ Projects must contribute to building blocks and align with guiding principles
  - ❖ Collaboration between Private and Public sectors to identify projects and pursue funding

# Projects



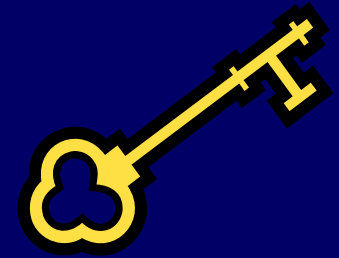
- ❖ “Value Exchange” sponsored by Connecticut health plans and physicians
  - ❖ Aggregated quality performance measures at individual physician level (diabetes, coronary artery disease, asthma, prevention, childhood therapy and testing)
  - ❖ Claims data submitted by health plans; provider performance reports produced based on all patients, regardless of payer
  - ❖ For P4P, quality improvement
  - ❖ Public reporting of value delivered
  - ❖ First project in establishing eHealth Connecticut as the state’s Value Exchange, recognized by DHHS

# Projects



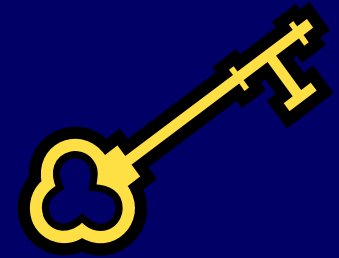
- ❖ **Greater Bridgeport HIE**
  - ❖ Greater Bridgeport Primary Care Action Group, consisting of 2 competing hospitals, 2 Federally Qualified Community Health Centers, AmeriCares, and Bridgeport Health Department plan to implement a community-wide HIE
  - ❖ Master Person Index, inter-hospital and community health center data sharing
  - ❖ Focus on increasing access, guiding patients to medical home, reducing inappropriate Emergency Department visits
  - ❖ Add outpatient lab and medication information in phase 2
- ❖ **Biosurveillance and Emergency Preparedness with CDC**
  - ❖ Biosurveillance proposal to CDC
  - ❖ 5 year collaboration with all New England States
  - ❖ Near real-time collection of clinical encounter data from ambulatory settings
  - ❖ De-identification and aggregation of data for surveillance and research
  - ❖ Stakeholders include hospitals, community health centers, physicians, independent laboratories, Connecticut Association of Health Directors, representing local health departments
  - ❖ Initial focus on greater Hartford and New Haven

# Projects



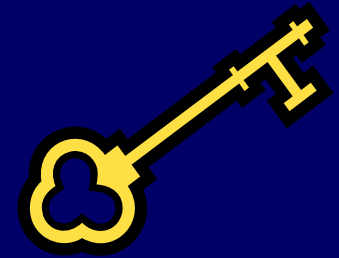
- ❖ The State of Connecticut is implementing its Mental Health Transformation program, funded by a \$13.7 million Federal grant over five years to build infrastructure to transform mental health prevention, detection and treatment processes statewide, for individuals from birth to their senior years. Fourteen State agencies are participating. Information technology applications and data sharing among these agencies have been identified as top priorities.
- ❖ Various initiatives are underway at the State Department of Information Technology (DOIT) that are focused on HIE. Public Health, the Department of Children and Families, Early Childhood Research and Policy Council, the Veteran's Home, and the agencies working on Mental Health Transformation all have need of technology solutions that can share information across system and agency boundaries for the benefit of their clients.

# Projects



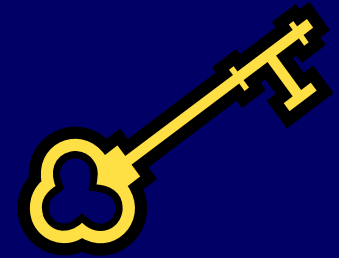
- ❖ Governor Rell's Early Childhood Research and Policy Council has identified data sharing and tracking, from a child's birth through age 8, as a required infrastructure component. A system is needed to track needs, services, service providers (workforce), outcomes and other health related data for each child over time.
- ❖ The University of Connecticut Center for Public Health and Health Policy is developing the Connecticut Health Information Network (CHIN), which uses a federated, or distributed, database architecture in a secure networked environment to aggregate person-specific data across State Agencies.

# Projects



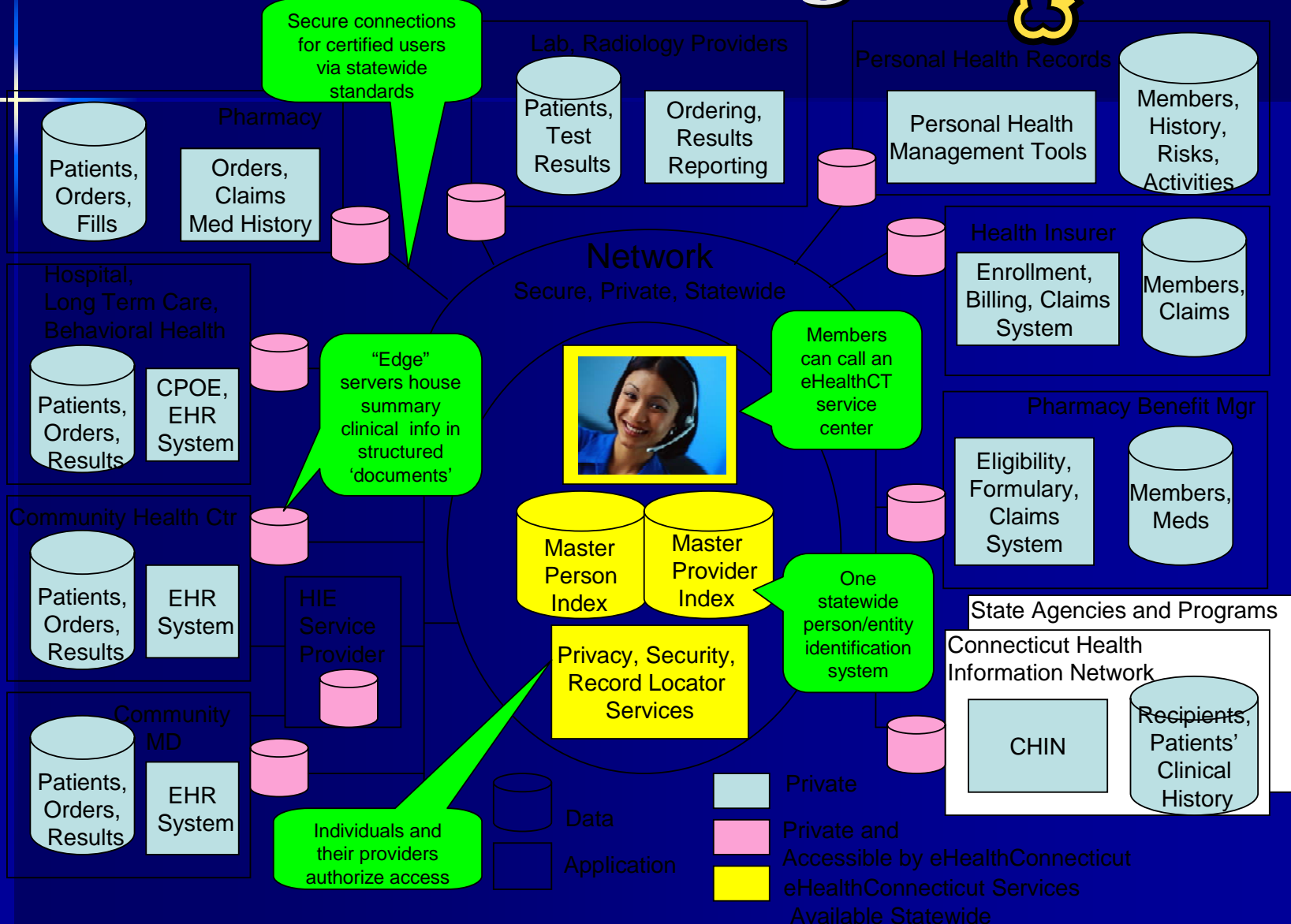
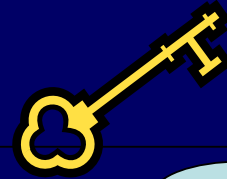
- ❖ Hartford Health Care Corporation, St. Francis Care, and The Hospital of Central Connecticut are implementing an HIE to link clinical records across four hospitals and private physicians in central Connecticut.
- ❖ Hill Health Center, Fairhaven Health Center, Yale New Haven Hospital, The Hospital of St. Raphael, and Griffin Hospital are planning a Greater New Haven HIE to enhance patient care for individuals who receive care from multiple settings.
- ❖ The Waterbury Health Access Program plans to link patient data in St. Mary's Hospital, Waterbury Hospital, physician offices, and community health centers.
- ❖ The Fairfield Business Coalition plans a project to create a data repository of healthcare quality and cost information, fed by information from employers, payers and providers.

# Projects

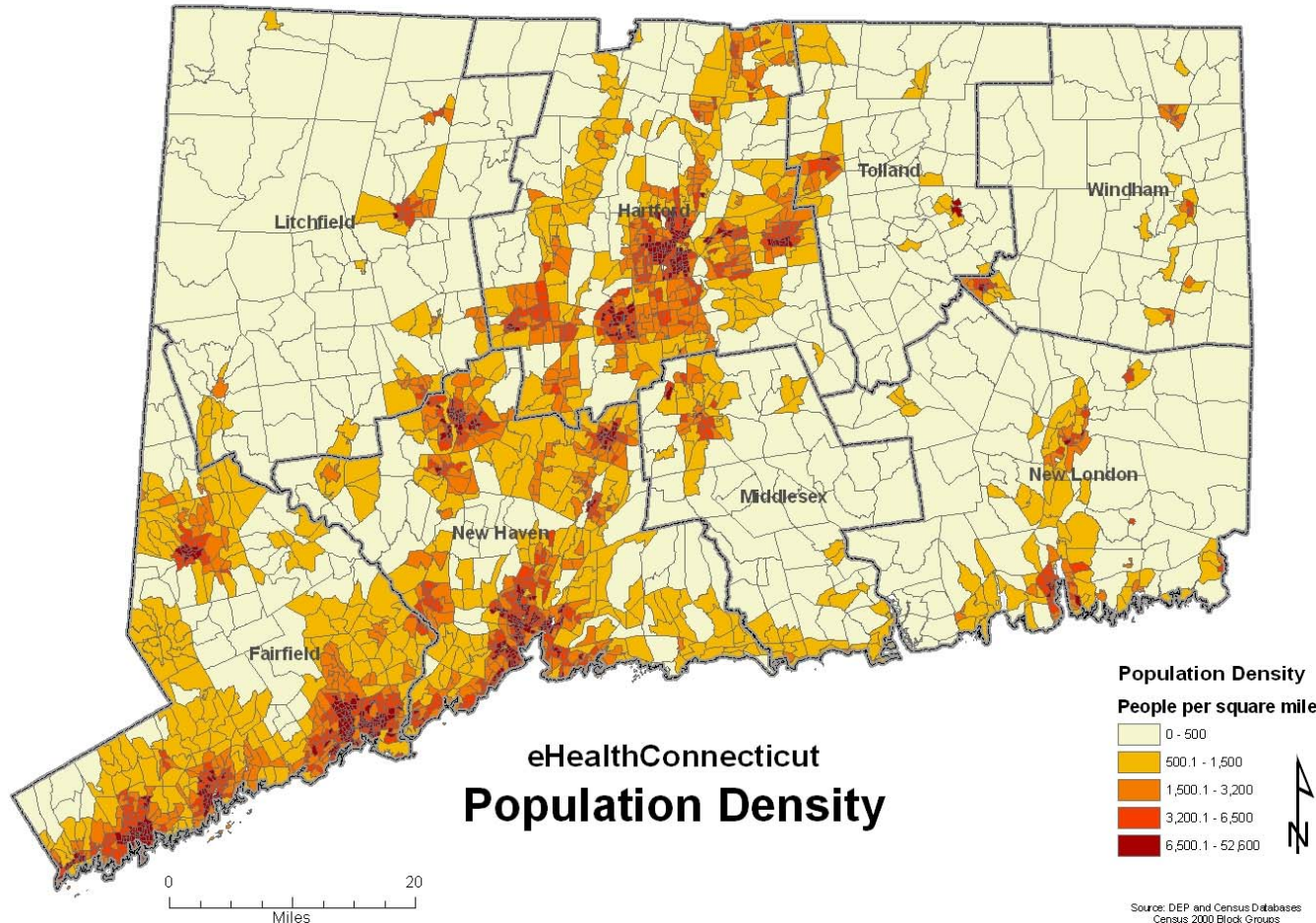
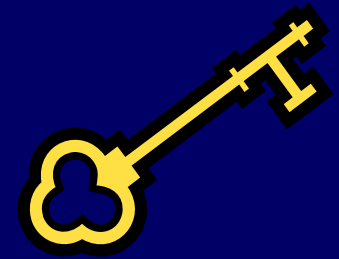


- ❖ **Thirteen Federally Qualified Health Centers (FQHC) in Connecticut, who serve 200,000 families, plan to share their clinical information with each other and with hospitals and private physicians.**
- ❖ **The Connecticut Department of Public Health is implementing a Web-based immunization registry (the Connecticut Immunization Registry and Tracking System, CIRTS) to aggregate patient-specific immunization information for sharing with authorized providers.**

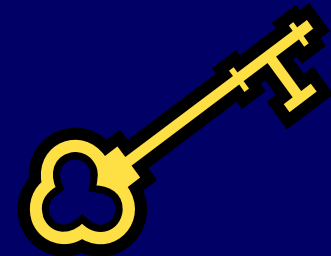
# Connecticut's Statewide Health Information Exchange



# How We Can Make it Happen

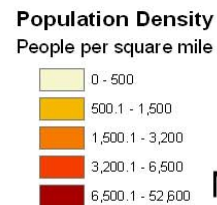
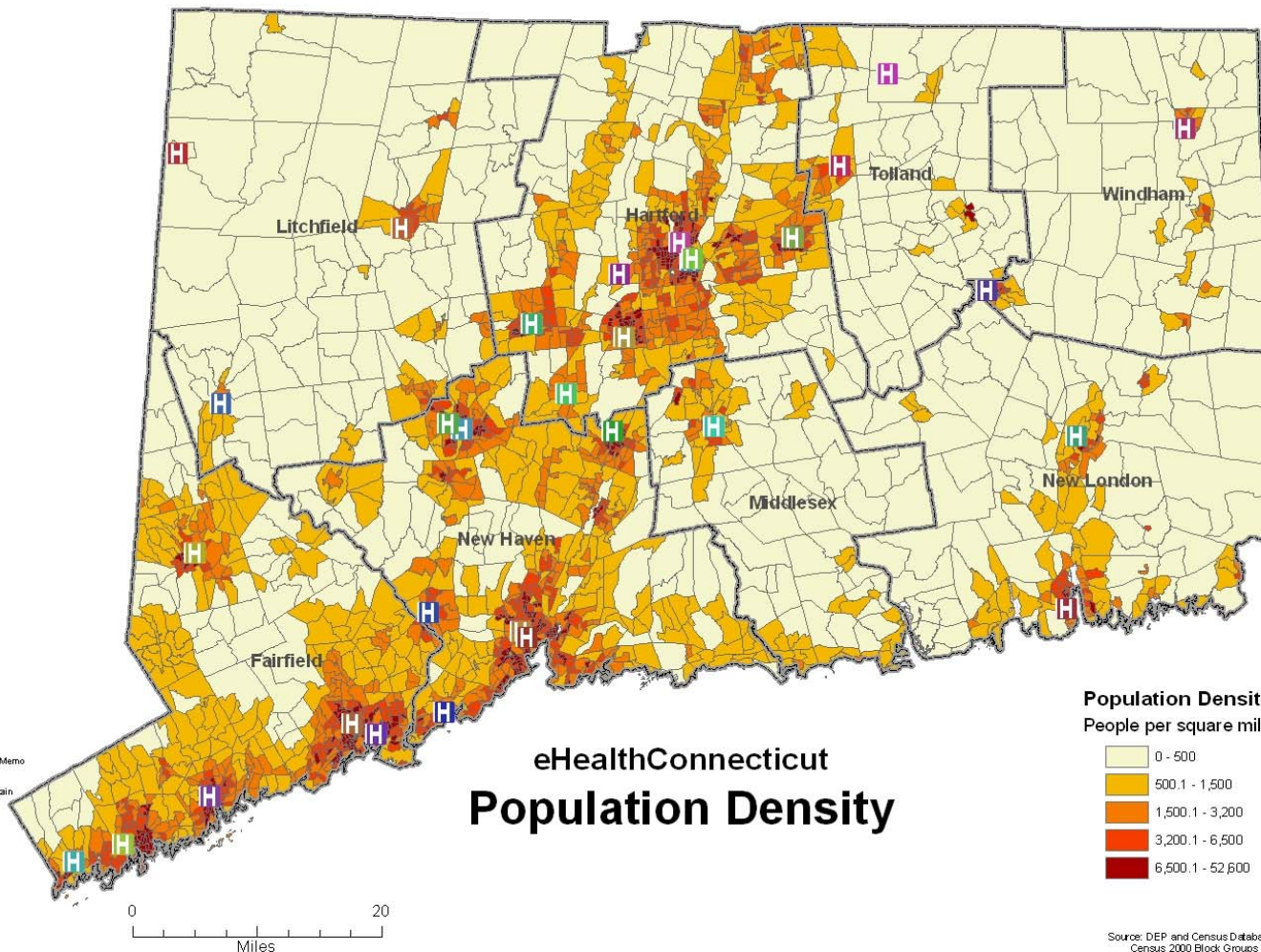


# How We Can Make it Happen



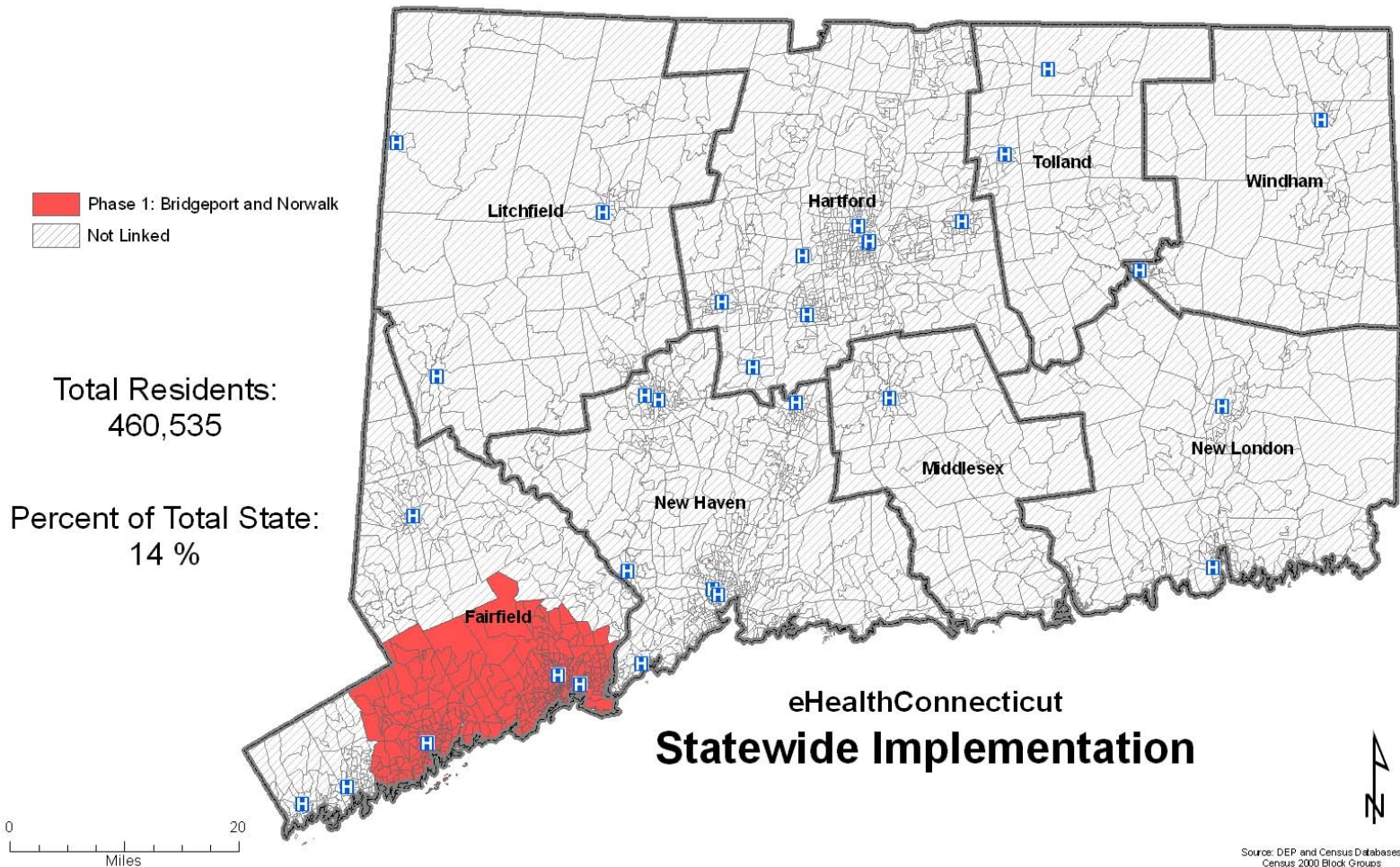
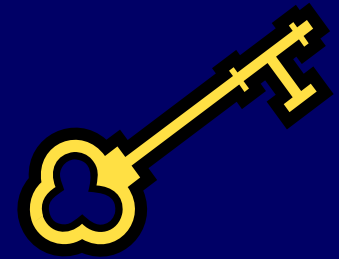
## Hospitals

-  Bridgeport Hospital
-  Bristol Hospital
-  Charlotte Hungerford Hospital
-  Connecticut Children's Medical Center
-  Danbury Hospital
-  Day Kimball Hospital
-  Greenwich Hospital
-  Griffin Hospital
-  Hartford Hospital
-  Hospital of Saint Raphael
-  Johnson Memorial Hospital
-  Lawrence & Memorial Hospital
-  Manchester Memorial Hospital
-  MidState Medical Center
-  Middlesex Hospital
-  Milford Hospital
-  New Milford Hospital
-  Norwalk Hospital
-  Rockville General Hospital
-  Saint Francis Hospital and Medical Center
-  Saint Mary's Hospital
-  Saint Vincent's Medical Center
-  Sharon Hospital
-  Stamford Hospital
-  The Hospital of Central Connecticut at Bradley Memo
-  The Hospital of Central Connecticut at New Britain
-  University of Connecticut Health Center
-  Waterbury Hospital Health Center
-  William W. Backus Hospital
-  Windham Hospital
-  Yale-New Haven Hospital

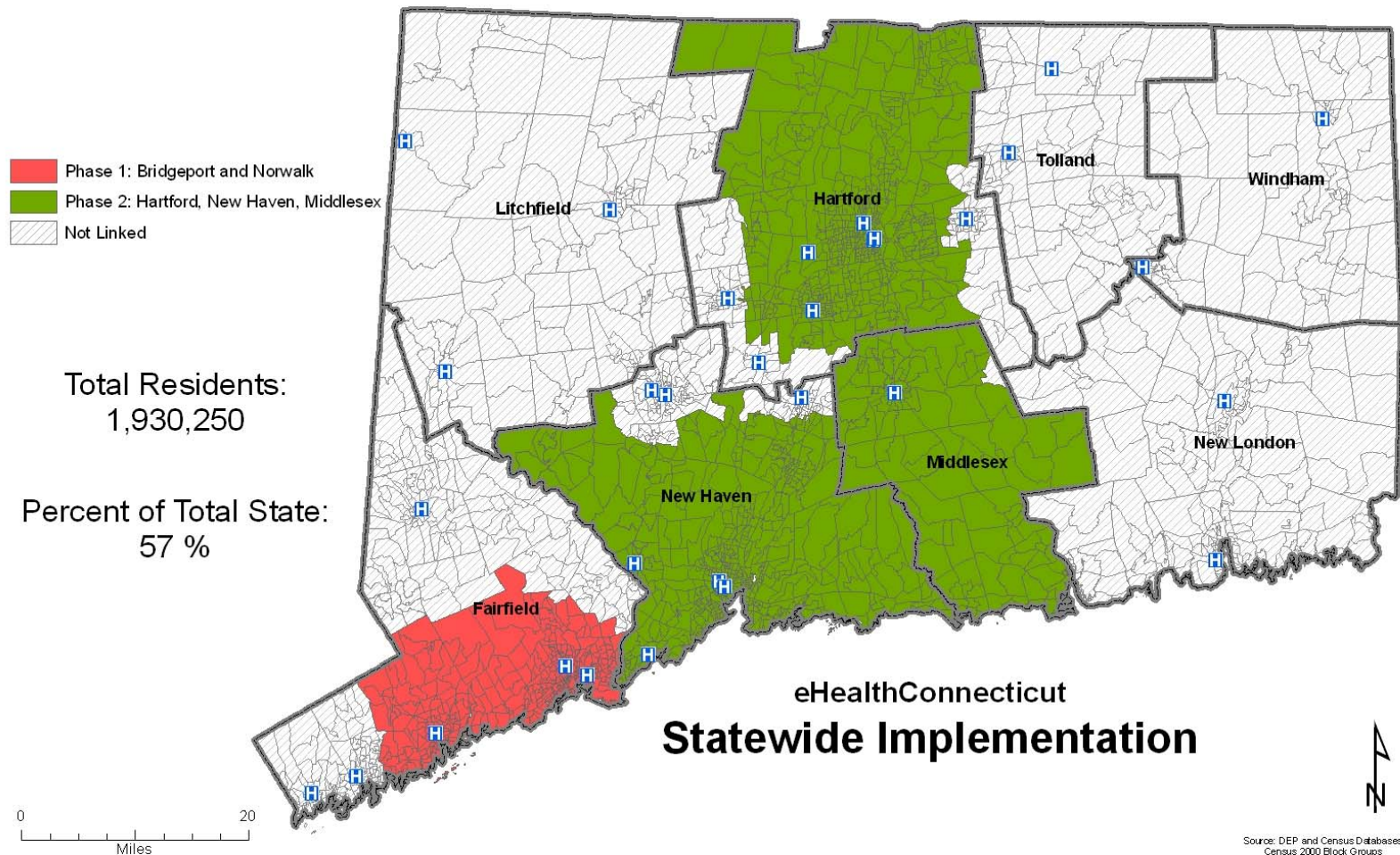
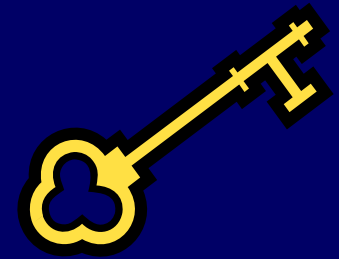


Source: DEP and Census Databases  
Census 2000 Block Groups

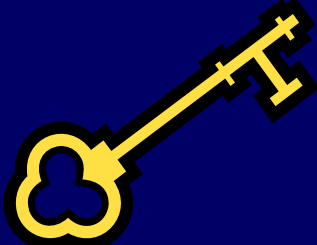
# How We Can Make it Happen



# How We Can Make it Happen



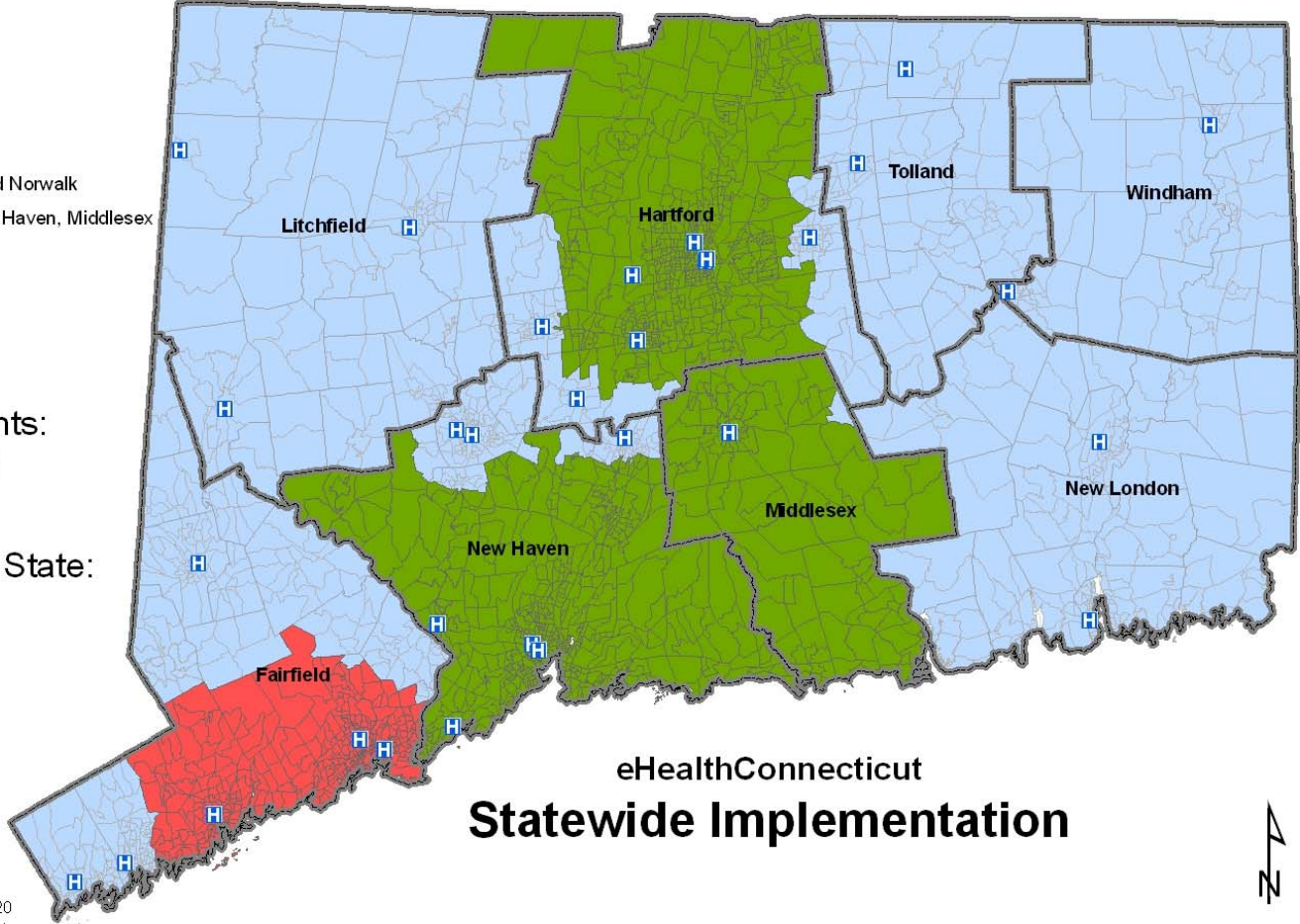
# How We Can Make it Happen



- Phase 1: Bridgeport and Norwalk
- Phase 2: Hartford, New Haven, Middlesex
- Phase 3: Entire State

Total Residents:  
3,405,565

Percent of Total State:  
100 %

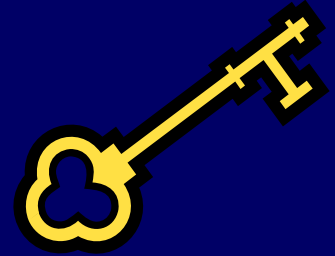


eHealthConnecticut  
Statewide Implementation



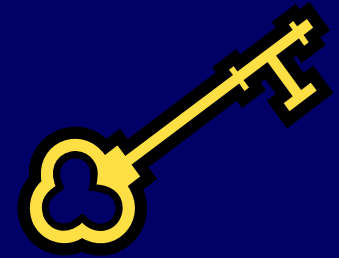
Source: DEP and Census Databases  
Census 2000 Block Groups

# Benefits for the Public Good



- 🔑 Quality and Safety
- 🔑 A consistent way to measure and report quality
- 🔑 Public health research and policy
- 🔑 Federal and Private Grant Dollars
- 🔑 Efficiencies: 1% = \$220 million

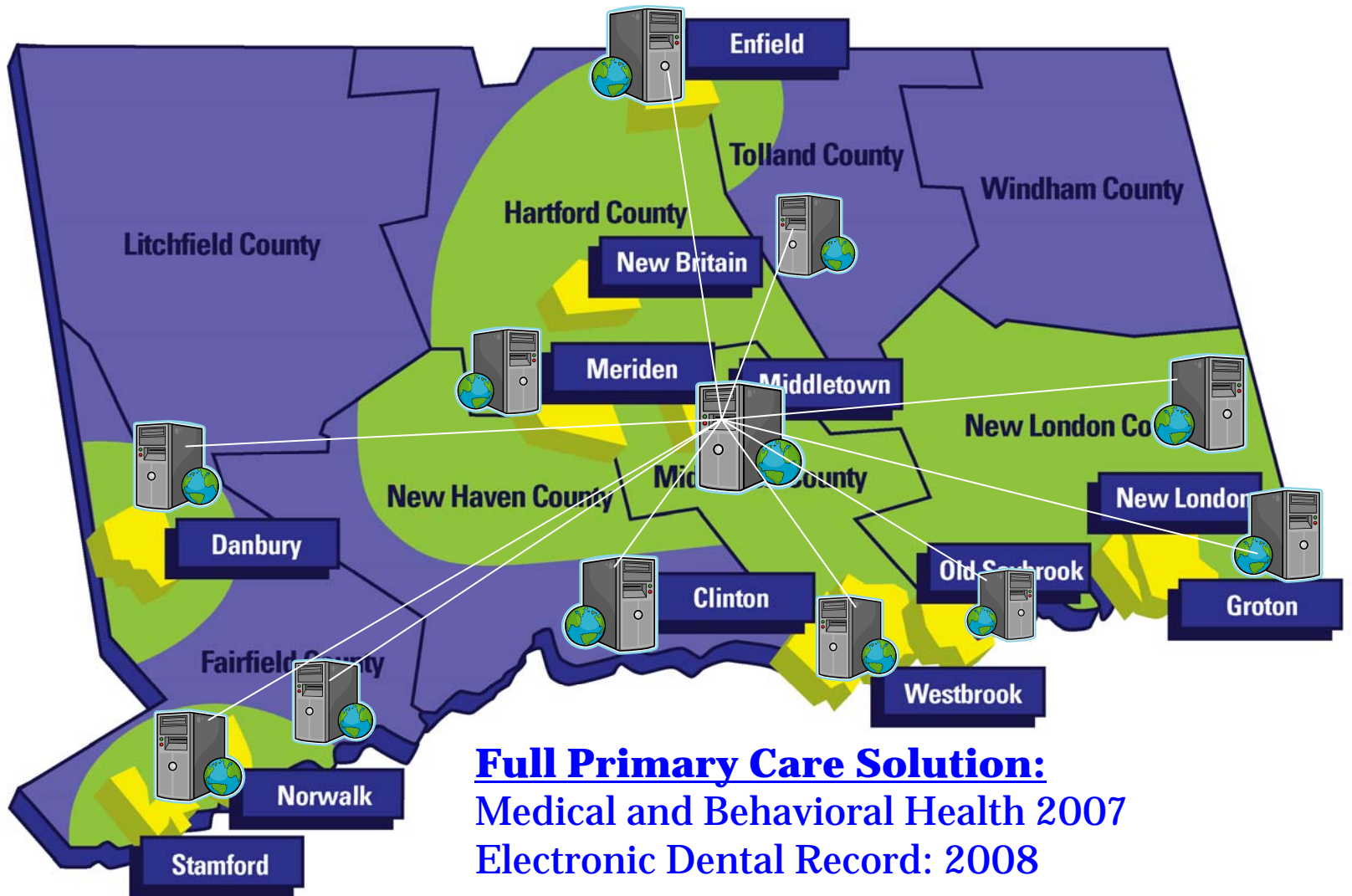
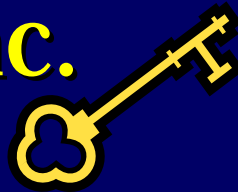
# eHealth Record



- ❖ **Community Health Center, Inc. (FQHC)** – A local success story starts to expand.
- ❖ The Middlesex county HIE is in development with the IPA, Middlesex Hospital, and **Community Health Center, Inc.**
- ❖ Middlesex Hospital, Hartford Hospital, the Middlesex IPA and other providers are implementing a linked pilot project to establish provider digital identities and private keys as a security infrastructure component for a statewide HIE.

# Community Health Center, Inc.

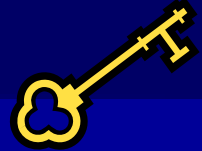
## *A Connecticut eHR Success Story*



# Community Health Center, Inc.

## Framework and timetable for successful implementation

2 years and over \$1.1 million invested



- 70,000 active patients
- Over 110 community locations
- 150,000 paper charts “on the shelves”

Rigorous review and evaluation of vendors including complete RFP

Formation of implementation plan including customization work teams and interface design

- CHC’s largest site “goes live” as beta in January 2007
- statewide roll out complete 8/07

2005-2006

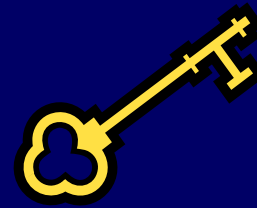
2006-2007

2007



# Community Health Center, Inc.

## Technology improves access



***Example: “Wherever you are” healthcare for the homeless program***



***Wireless Enabled Solution***

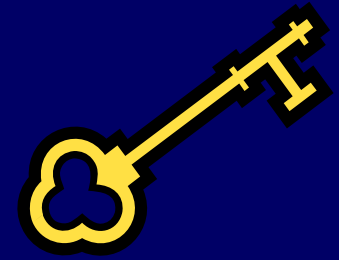


### **Bi-directional interfaces:**

- **All major pharmacies (SureScripts)**
- **Lab partner: Quest Diagnostics**
- **Practice management software**

# Community Health Center, Inc.

## Clinical Impact of eHR



### Enhanced safety and efficiency

- ❖ Improved external communication (hospitals, specialists, VNA, others)
- ❖ Timely access to data
- ❖ Safe prescribing
- ❖ Misreading of Handwritten orders, notes, RX...eliminated
- ❖ Improved office efficiency



### Decision support for clinicians at the point of care

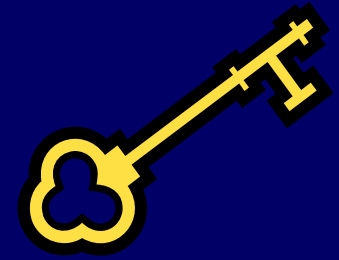
- ❖ Alerts and reminders for needed tests, vaccines, allergies, interactions
- ❖ Ready access to all labs, X-Ray results, consults, hospital notes at the point of care

### Population management

- ❖ Clinical data available on a population level to help practices manage their panel of patients
- ❖ Improved chronic disease management
- ❖ Improved practice monitoring/ quality assurance/pay for performance

# Community Health Center, Inc.

## Next Challenges

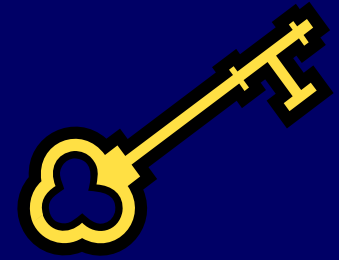


- ❖ Interface with additional hospitals, specialists, and other community providers
- ❖ Implementing a dental electronic health record
- ❖ Leveraging the power of the eHR to improve clinical outcomes
- ❖ Developing a patient portal

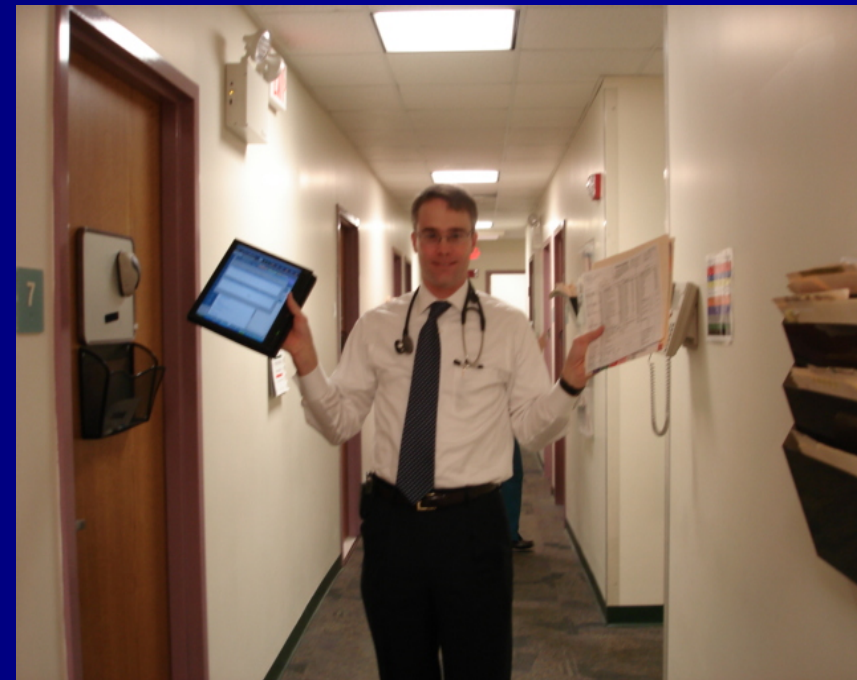


# Community Health Center, Inc.

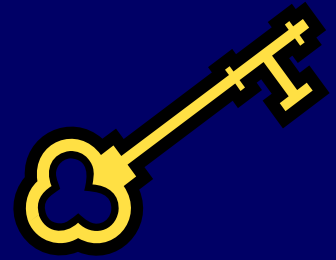
## Early Success



- ❖ DSS is participating in CHC's research trial of telephonic disease management of diabetic patients using the eHR
- ❖ Documented prevention of unnecessary hospitalization via physician 24/7 access to medical records
- ❖ Early ROI: reduction of medical records staff



# ePrescribing

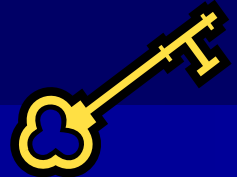


## ❖ CT Medicaid Transformation Grant

- ❖ ePrescribing initiative submitted by State Department of Social Services funded through CMS & State funds

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

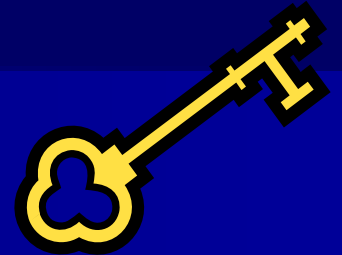


- ❖ **Application submitted October 2, 2006**
- ❖ **34 States received federal monies**
- ❖ **Connecticut was awarded \$5.5 million for a two year period**
- ❖ **\$500,000 in state matching funds have been committed to this effort**
- ❖ **Purpose is to design, build, implement and evaluate a state-wide HIE for approximately 35,000 Connecticut Medicaid beneficiaries**
- ❖ **Promote broad health care delivery system changes in Connecticut**

# **CT Medicaid Transformation Grant**

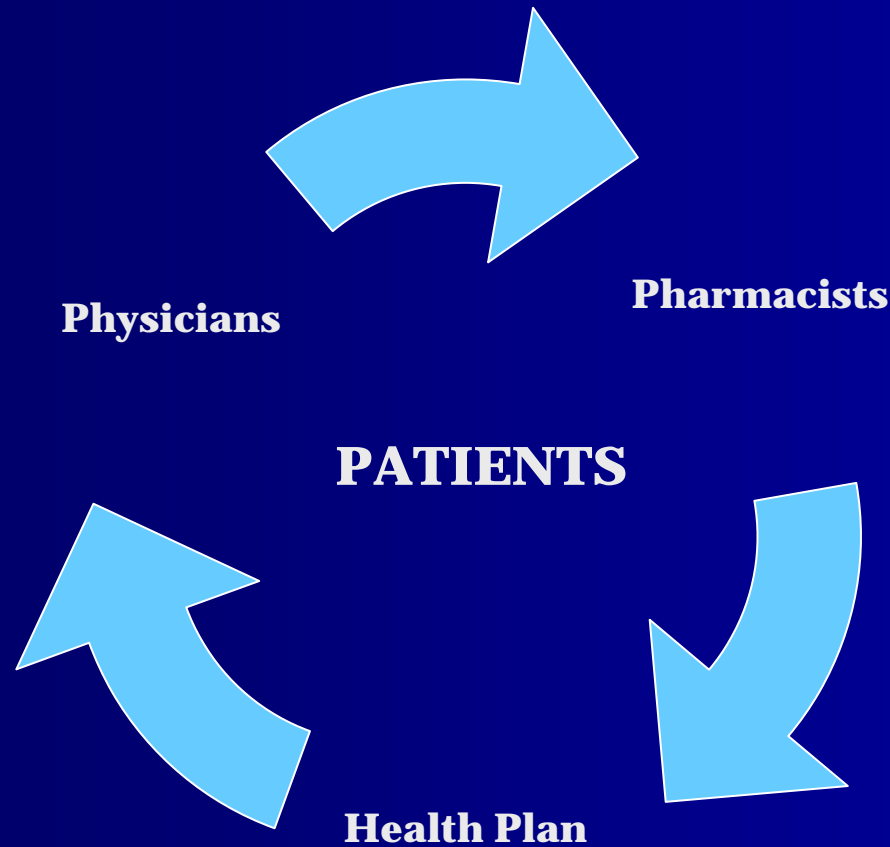
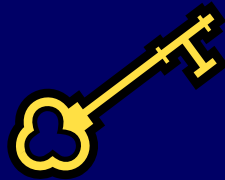
## **ePrescribing and Health Information Exchange (HIE)**

### **Why ePrescribing?**



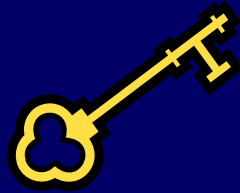
**To provide safe and effective pharmaceutical care through improved connectivity between prescribers, health plans, pharmacists and patients with the use of electronic prescribing**

# CT Medicaid Transformation Grant ePrescribing and Health Information Exchange (HIE)



# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

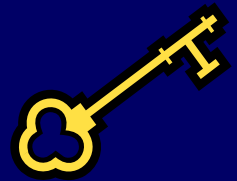


### **ePrescribing Goals:**

- ❖ **Improve clinical decisions**
- ❖ **Inform physicians of accurate patient diagnoses, current medications, formulary availability**
- ❖ **Reduce drug allergies, adverse drug events, medication errors**
- ❖ **Control costs**
- ❖ **Ensure adherence to preferred drug lists and formularies**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

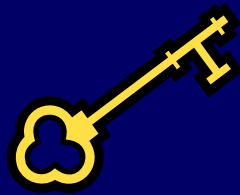


### **Goals of the project (among others):**

- ❖ **Provide consumers with capabilities to help manage their information**
- ❖ **Obtain early successes**
- ❖ **Promote change incrementally**
- ❖ **Break out project into small parts (parallel activities)**
- ❖ **Maintain contact with similar initiatives throughout the state (e.g., eHealth CT, DCP, DPH, DMHAS)**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

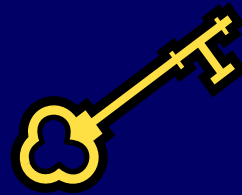


### **Goals of the project (continued):**

- ❖ **Don't reinvent what others have done already**
- ❖ **Allow health information to follow the consumer**
- ❖ **Provide critical information to clinicians at the point-of-care**
- ❖ **Customize to Connecticut needs and landscape realities**
- ❖ **Meet requirements of federal grant**
- ❖ **Constantly communicate**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

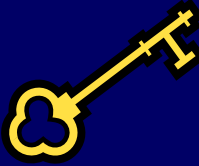


### **Implementation process:**

- ❖ **Engage a broad set of stakeholders**
- ❖ **Conduct 'brain storming' sessions**
- ❖ **Develop an initial data gathering and prioritization plan**
- ❖ **Refine technical model**
- ❖ **Identify the targeted 35,000 Medicaid beneficiaries enrolled in fee-for-service**
- ❖ **Review other state projects**
- ❖ **Survey/assess providers for readiness**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

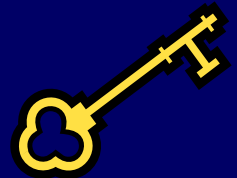


### **Implementation process (continued):**

- ❖ **Conduct RFI process and develop procurement strategies**
- ❖ **Conduct provider information and training sessions**
- ❖ **Eventually expand to include all Connecticut beneficiaries**
- ❖ **Establish and activate a patient call center**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

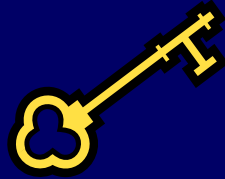


### **Health Information Exchange Goals:**

- ❖ **Develop a technology platform to share medication information across all providers (e.g., prescribers, pharmacies, hospitals, clinics, etc.)**
- ❖ **Grow to include other health data transfers from laboratories, disease registries, electronic health records**
- ❖ **Comply with HIPAA regulations and allow beneficiaries opt-out from system**
- ❖ **Long term reduction in spending**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

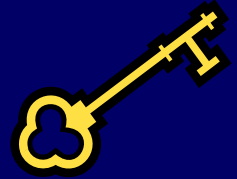


### **HIE Goals (continued):**

- ❖ **Facilitate assessment of patient compliance**
- ❖ **Improved utilization of preferred drug lists and formularies**
- ❖ **Reduced duplication of prescriptions and lab tests**
- ❖ **Decrease administration costs**
- ❖ **Perform qualitative and quantitative evaluations**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**



### **ePrescribing Tools:**

#### **Web:**

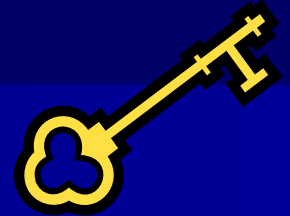
- ❖ **Patient Rx History**
- ❖ **Electronic Prescribing**
- ❖ **Universal Formulary Reference**
- ❖ **Secure Inbox**
- ❖ **Additional Reports**

#### **PDA:**

- ❖ **Patient Rx History**
- ❖ **Electronic Prescribing**
- ❖ **Universal Formulary Reference**

# **CT Medicaid Transformation Grant**

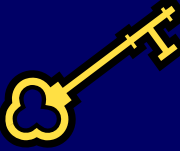
## **ePrescribing and Health Information Exchange (HIE)**



- ❖ **ePrescribing Companies have become a booming part of the market place**
- ❖ **There are numerous eVendors and Accelerators in business today promoting common standards and government support of ePrescribing**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**



### **ePrescribing Vendor Services:**

#### **❖ Prescribing capability**

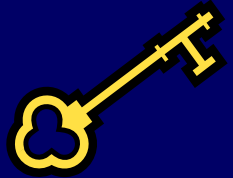
- **Transmit to pharmacy**
- **Print hard copy**
- **Print patient education materials**

#### **❖ Clinical content**

- **Drug interactions**
- **Medical resources**
- **Formulary information**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**

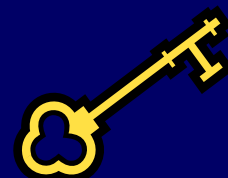


### **ePrescribing Challenges:**

- ❖ **No critical mass of either pharmacists or prescribers**
- ❖ **Lack of true connectivity (no longer a problem)**
- ❖ **Lack of state/federal regulations**
- ❖ **Patient confidentiality/authorization**
- ❖ **Vendor instability**
- ❖ **Cost to purchase and maintain**

# **CT Medicaid Transformation Grant**

## **ePrescribing and Health Information Exchange (HIE)**



### **Summary:**

- ❖ **Improves quality of care patients**
- ❖ **Decrease administrative costs for hospitals and physician offices**
- ❖ **Improve efficiencies in delivering care**
- ❖ **Decreases overall healthcare costs**

**“e” is the  to the  
future...**

**And the future is here  
today !!!**