

**HIE and HIV: Leverage of Information for Increasing Opportunities for Care and Support**

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**Overview**

- Brief review of objectives around Health Information Exchange
- Brief description of SPNS Information Technology Networks of Care Initiative
- Two specific project
  - LaPHIE
  - RHIP
- Summary and Lessons Learned

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**Policy Environment**

- Major investments in Health Information Technology
- Government issued a 2004 report on strategic directions for health information technology.
  - Four key goals

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### Goal 1

- Inform Clinical Practice
  - Develop collection points for electronic health information
  - This aim includes creation of electronic medical records (EMR)

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### Goal 2

- Interconnect Providers
  - Make patient health information portable
  - Information would move between different points of care

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### Goal 3

- Personalizing Care
  - Encouraging patients to take an active role in their care
  - Could include patient portals to EMR; educational health databases; etc.

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## Goal 4

- Improving Population Health
  - Ensure that health information is communicated to public health agencies
  - Includes mandatory reporting; sending group-level information to agencies like HRSA

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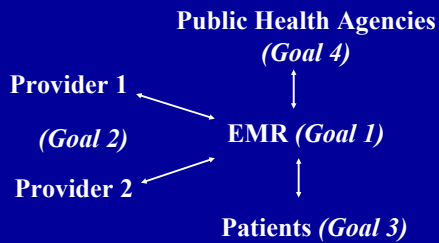
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## The Four Goals Combined



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## The Four Goals Combined

- Goal 1: Technology to create repositories for electronic medical information
- Goals 2-4: Technology to permit Health Information Exchange (HIE)

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## SPNS Initiative

- SPNS Health Information Technology Networks of Care Initiative
- Develop and evaluate HIE systems that link providers, public health agencies, and/or patients

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## SPNS Initiative

- Six demonstration sites
  - Louisiana State University Health Sciences Center, New Orleans, LA
  - Duke University, Durham, NC
  - Bronx-Lebanon Hospital Center, New York, NY
  - City of Paterson, NJ, Ryan White Division
  - New York-Presbyterian Hospital, New York, NY
  - St. Mary Medical Center Foundation, Long Beach, CA
- Cross-site evaluation center
  - Center for AIDS Prevention Studies, University of California, San Francisco

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## SPNS Initiative

- Demonstration sites have spent the last year setting up their HIE systems.
- Will now discuss two of these projects to provide a feel for the types of challenges involved.

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## Louisiana Public Health Information Exchange

### LaPHIE

A collaborative project of the  
Louisiana State University  
Health Care Services Division

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### LaPHIE Partners

Louisiana State University Health Care Services  
Division

- LA's public hospital system
- network of 7 facilities

Louisiana Office of Public Health

- LA's public health authority
- RW Part B grantee (HIV/AIDS Program)

Louisiana Public Health Institute

- LaPHIE governance -a neutral convener role

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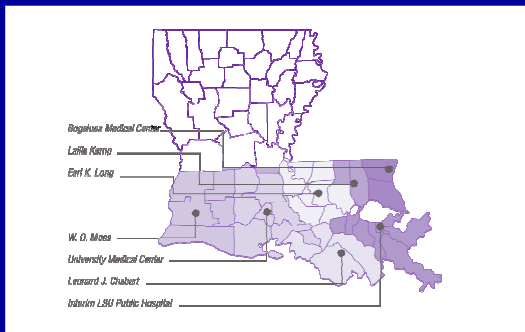
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### LSU Public Hospitals



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## LaPHIE Purpose

- To develop for health care providers and public health practitioners who share in the care of persons at risk for HIV/AIDS, syphilis and tuberculosis, standardized disease control protocols and a health information exchange infrastructure to support the timely and coordinated diagnosis, treatment and prevention of these targeted conditions.

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Intervention: A network that facilitates more timely intervention for PLWH via electronic reporting of new cases and sharing of information on PLWH considered “out of care”.

Value: It is hypothesized that electronic messaging will increase opportunities for intervention resulting in reduction of morbidity, mortality and transmission.

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## Targeted “Out of Care” Populations

- 1) infected persons unaware of status
- 2) infected persons aware of status, but not in care
- 3) exposed children

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## Rationale

LA leads the nation in several of communicable conditions.

- 1<sup>st</sup> in syphilis
- 6<sup>th</sup> in HIV/AIDS
- 10<sup>th</sup> in TB

High proportion of those with HIV have never accessed care or have fallen out of care. Each year LA OPH estimates unmet need around 50% - persons with no primary care visit in a 12 month period

Traditional public health practices and resources are insufficient to adequately reach populations of those hardest to reach.

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## Planning Questions answered by the partners

- What were the work flows involved in diagnosis, contact, treatment, and follow up of HIV?
- What were the failure points that contributed to missed opportunities for intervention?
- How could processes be re-engineered to reduce failure points?
- Can HIT be used to address system needs and reduce information failures?

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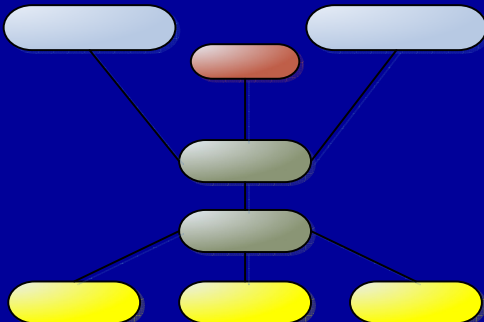
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## Network Partners and Governance Structure



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### Challenges

- Defining and prioritizing target populations
- Data ownership and access
- Competing demands and priorities at partnering agencies
- Philosophical positions on non traditional use of PH information
- Lack of full understanding of State legislation on sharing of information among partners

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### Challenges

- Ethical discussion and decisions on balancing individual rights to privacy and right to health information/health care and the public good
  - *Just because we have the ability to leverage information in this way, "should we" in order to improve individual and population health and control the epidemic?*

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### Key Learning Points from LaPHIE

- Importance of the role of a 3<sup>rd</sup> party, non-provider, neutral convener
- Value of shared vision and decision making across the governing structure even if it "slows down" the process
- Significance of "Invisible infrastructure"
- IT is the "easy part!"

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## Regional Health Information Integration Project

A Regional Exchange in the Winston-Salem Area of North Carolina

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## Community problem

- HIV care delivery system fragmented with centrally located medical care being provided at a great geographic distance from community based ancillary care services such as Case Management. Difficulty coordinating care delivery across these geographic regions.

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## Project Goal

- Development of an HIV specific Regional Health Information Exchange (RHIO), whose goal is to exchange clinical and administrative data throughout the network to:
  - Improve health outcomes
  - Improve coordinated health planning
  - Streamline administrative and management requirements of the network
  - Integrate care delivery across a large rural area of central North Carolina

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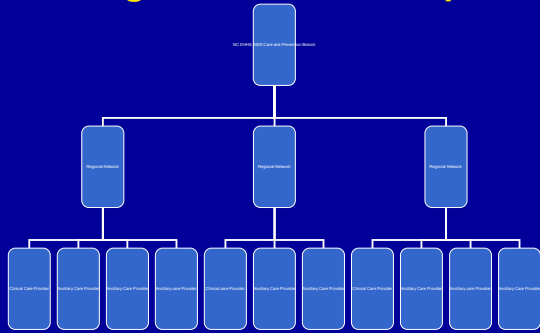
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## Original Model Concept



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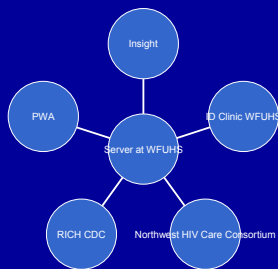
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## Model Description



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## Community Partners

- Wake Forest University Health Sciences
- Positive Wellness Alliance
- Insight Human Services
- RICH, CDC
- Northwest HIV Care Consortium

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## Governance Structure

- RHIO Board
- Decision Making
- Membership Selection Process
- Protocol Development
- Invisible Infrastructure
- Regional Health Planning

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## Data Issues

- Selection of Data Elements
- Data Ownership
- Access Rights
- Legal/ Ethical Issues

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## Critical Questions from RHIP

- What needs to be in place in terms of an already existent network of care for an HIE to succeed
- How does a network determine those most important data elements to exchange for greatest network benefit
- What role can an HIE have in continuing care through a period of system instability

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**Lessons from the Field:  
Being Successful with HIE**

- What makes it more likely that the development of an electronic information exchange will be successful?

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**HIE:  
Being Successful**

- Developing the right system for the right goal
  - Every HIE is different
    - Every system requires a set of costs to achieve a set of desired outcomes
    - “Success” is achieving those outcomes within an acceptable level of cost

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**HIE:  
Being Successful**

- People are key
  - IT infrastructure is the easy part
  - System users need a common vision for why the HIE system exists
- Data elements
  - The HIE system must exchange the most useful information for its users

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**HIE:  
Being Successful**

- Plan for sustainability
  - Network partners change, providers change, leadership changes
  - Must have in place governance structures, funding, and support to ensure that the HIE system continues and adapts to changing world

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**THANK YOU!!!**

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