Approved: January 22, 2004
Date

MINUTES OF THE HOUSE HEALTH AND HUMAN SERVICES COMMITTEE

The meeting was called to order by Chairman Jim Morrison at 1:32 p.m. on January 21, 2004, in Room 526-S of the Capitol.

All members were present except Representative McLeland, who was excused.

Committee staff present:
Dr. William Wolff, Legislative Research Department
Renae Jefferies, Office of Revisor of Statutes
Gary Deeter, Secretary

Conferees appearing before the committee:
Dr. Gianfranco Pezzino, State Epidemiologist, Kansas Department of Health and Environment
Gary Haulmark, Market Intelligence Analyst/Government, Cerner Corporation
Jeff James, HealthSentry Engineering Manager, Cerner Corporation
Tiffany Wilkinson, Assistant Division Manager, Communicable Disease Prevention and Public Health Preparedness, Kansas City (Missouri) Health Department
Sally Finney, Executive Director, Kansas Public Health Association

Others attending:
See Attached List.

Representative Wilson recognized several of his constituents from Pittsburg.

For purposes of hearing **HB 2513**, Representatives Storm and Neighbor shared responsibilities for chairing the meeting. Chairperson Neighbor opened the hearing on **HB 2513.**

Dr. Gianfranco Pezzino, State Epidemiologist, Kansas Department of Health and Environment (KDHE), reviewed electronic reporting systems, saying that a lack of standards has hindered most public health electronic systems. (Attachment 1) He noted that KDHE in 1999 developed one of the first web-based, secure reporting systems in the nation. Dubbed HAWK, the system allows local health departments to report diseases and other health information directly into a central database hosted by KDHE.

Regarding **HB 2513**, he said that HAWK presently does much that the bill proposes. While he supports most of the criteria and concepts promoted in the bill, he believes the bill is unnecessary.

Answering questions, Dr. Pezzino said he would vote against this bill. He noted that some facets of the bill would inhibit the flexibility of the agency in the future. He explained that HAWK can be accessed only by local health departments, although other health-care entities sometimes report information through their local health departments. He said that state law requires strict privacy regarding health information with the exception of child abuse, and encryption, firewalls and token passwords are used to protect the integrity of the information. He stated that a separate system collects general health information. He replied that HAWK is continually adding new features, such as electronic transfer of data, bypassing

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manual data entry. He reported that laboratory-confirmed diseases or unusual diseases are most thoroughly reported; some common diseases such as influenza are less likely to be 100%-reported. A member noted that implementation of **HB 2513** carries a fiscal note of $300,000; Dr. Pezzino estimated that updating HAWK would cost between $50,000 and $100,000. Representative Sharp noted that KDHE was cited by Post Audit as vulnerable to computer attacks. Dr. Pezzino said those weaknesses have now been addressed, and the weaknesses did not involve HAWK. He noted that 11,000 records are added to HAWK each year. He said that statutory requirements allow health-care providers to report information either to the state agency or to their local health departments. Representative Sharp expressed concern that health-care information is being under-reported. Dr. Pezzino stated that, while most of the nine criteria are helpful, that the 7th criterion is unacceptable.

Gary Haulmark, Market Intelligence Analyst, Cerner Corporation, spoke in support of the bill, which, he said, would establish a near-real-time automated electronic disease-reporting system in Kansas. (Attachment 2) He cited the Kansas City (Missouri) Health Department data which show that, after implementing an electronic reporting system, the volume of data increased dramatically.

Jeff James, HealthSentry Engineering Manager, Cerner Corporation, outlined the development of a health-care-data reporting system in Kansas City, Missouri, and the State of Missouri. (Attachment 3) He said the system, by automating data collection, significantly reduces manual work; by developing a standardized nomenclature, a variously named disease is captured under one term, and all data are reported almost immediately.

Tiffany Wilkinson, Assistant Division Manager, Communicable Disease Prevention and Public Health Preparedness, Kansas City (Missouri) Health Department, provided some examples of how the Cerner system collects health-care and disease data and organizes it to be easily manipulated for various reports.

Sally Finney, Executive Director, Kansas Public Health Association, spoke as a proponent of the bill. (Attachment 4) She stated that the public health community supports the concept of reporting health-care data in a timely, secure and accurate manner, likewise expressing concern that the proposed legislation not hamper KDHE in their function as repository of health-care data.

The Chair reminded committee members of Attachment 5, written testimony by Robin Harrold, Chief Operating Officer of the Shawnee Mission Medical Center.

Further questions from members were fielded by conferees. Dr. Pezzino replied that HAWK is not doing all the items listed in **HB 2513**. He agreed that electronic reporting is the key element in expanding a reporting system, but expressed concern that Cerner's system as proprietary and exclusive may limit its usefulness.

The Chair closed the meeting after announcing that the hearing on **HB 2513** will continue tomorrow (Thursday) at 1:30 p.m.

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HOUSE HEALTH AND HUMAN SERVICES COMMITTEE
GUEST LIST

DATE: JANUARY 21 2004

NAME	REPRESENTING
Heather Grace	Dumron & Associates
DEBORAH STERN	KS. HOSP. ASSOC.
Megan Dunn	Heih Law Firm
CHRISTINE GIEBER	FEDERICO CONSULTING
Mack Smith	KS Mortuary Arts Board
Mary Hillebrandt	Conlee Consulting
Carol Woolbright	SEK Education Center - Pittsburg Chamber
Ron Liebman	Kansas Health Institute
Heidi Whitesearver	KU MPH student, KPHA
Chip Wheeler	Assn of Osteopathic Med.
Gwendolyn Cargnel	American Cancer Society
Chris Collins	KMS
Anissa Lathim	Pittsburg Area Chamber of Commerce
Stephen Wade	Pittsburg Morning Sun
JEFF ELLIOTT	PITTSBURG AREA CHAMBER

Testimony on HB 2513
Establishing a Real-Time Electronic Communicable Disease and Bioterrorism Reporting System
to
The House Health and Human Services Committee
by Gianfranco Pezzino, M.D. MPH
State Epidemiologist
Kansas Department of Health and Environment

January 21, 2004

Thank you for the opportunity to testify on HB 2513 dealing with electronic disease reporting systems. My name is Gianfranco Pezzino. I am the State Epidemiologist in the Kansas Department of Health and Environment.

The Kansas Department of Health and Environment (KDHE) considers electronic disease reporting one of the essential tools to assure early detection of public health threats and establishment of appropriate disease control measures. For several years, KDHE has been one of the leading state public health agencies in the country to promote the concept of one integrated electronic disease surveillance system for public health. In 1999, KDHE was one of the first three states to implement a Web-based, secure electronic disease reporting system. This system, named HAWK, is still in use, and allows local health departments to enter information on cases of reportable diseases directly into the central database hosted by KDHE. That information is then immediately available to state epidemiologists for review of individual cases and aggregate analyses.

One of the main obstacles towards better integration of electronic health information is the lack of universally accepted standards for recording, storing, and transmitting records. In 1999 and 2000, the federal Center for Disease Control and Prevention (CDC) published design and technical specifications for a National Electronic Disease Surveillance System (NEDSS). This was a milestone for many public health informatics officers, because it spelled out for the first time what standards should be used in the design and implementation of electronic disease reporting systems. Staff from KDHE were active participants in the process of defining these national standards, through direct participation in national working groups and the publication of national guidance documents. The experience acquired through the implementation of HAWK helped shape those standards for other states.

The terrorism events that occurred at the end of 2001 made public health surveillance a much more visible issue. Early recognition of unusual health-related events is now seen not only as a public health, but as a national security priority. New, innovative approaches

Attachment 1
HHS 1-21-04

to disease surveillance have been proposed. For example, monitoring the sale of medications, the reasons for emergency room visits, or the orders for laboratory tests have been proposed as means to complement traditional disease reporting methods. While some of these concepts are intriguing, their real-life effectiveness in early detection of important public health threats remains is still being evaluated. There are several projects around the country (usually in large metropolitan areas) that are piloting some of these new techniques. KDHE is monitoring these projects very closely and will adjust its activities based on the knowledge acquired through these projects.

HB 2513 requires the secretary of health and environment to establish an electronic communicable disease reporting system that meets nine criteria, listed in section 1(b). KDHE has had an electronic disease reporting system for several years, and is continuously expanding and strengthening its functions. In particular, importation of records from other systems (such as laboratory information systems and hospitals) is an extremely important feature that is being implemented. KDHE supports the criteria described in this bill. KDHE also believes that legislation is not necessary for the achievement of the goals outlined in this bill.

This concludes my testimony and I will now stand for questions.

Testimony For the Kansas House Health and Human Services Committee

Madame Chair,

My name is Gary Haulmark and I work for Cerner Corporation, we are located in North Kansas City and have over 5,000 associates worldwide. Approximately 1,000 of our associates live in the State of Kansas. It is an honor and privilege for us to appear before you today in favor of this legislation.

As a citizen of Kansas I applaud the sponsors of the bill for seeing the need and benefit of a near real-time automated and electronic disease reporting system here in Kansas. We believe Cerner can help. After the terrorist attack of 9-11, Cerner developed product or as we say solution called HealthSentry. This solution can automatically alert state officials whenever patients test positive for deadly diseases that are considered potential bioterrorist weapons, such as anthrax or the plague. The system will also quickly identify outbreaks of infectious diseases, from food borne illnesses to influenza.

Below are some benefits of HealthSentry:

- Connects public health to health providers by providing near real-time electronic communicable disease reporting and assists in the identification of potential outbreaks or bioterrorism events
- Allows for importing data into existing systems and reduces much of the required manual data entry
? Shortens outbreak detection/identification cycle dramatically by improving the timeliness of communicable disease reports
- Increases the volume of reporting and reduces under-reporting of many diseases
- Improves the quality of data collected by increasing the completeness of required fields
- Provides automatic alerting to key individuals and agencies for critical events (i.e. identification of potential bioterrorism agents)
- Provides detailed reports for trend analysis
- Provides de-identified laboratory orders information to assist in earlier detection of potential outbreaks or bioterrorism events
- Can provide reports simultaneously to numerous, authorized jurisdictions
- Provides aggregate reports back to contributing providers/hospitals

Since 9-11, the Federal government through Homeland Security and various other agencies has provided grants to the states worth billions of dollars to identify, defend against and prepare for a potential terrorist event. Since March 1 of 2003, $4.4 billion has bee available. The Centers for Disease Control (CDC) has and is providing Health Alert Network (HAN) funding to all 50 states as part of an effort to create a nationwide, integrated information and communications system.

Attachment 2
HHS 1-21-04

Last year the State of Missouri purchased HealthSentry with a CDC grant. The City of Kansas City, Missouri has had HealthSentry up and running for more than a year now and they are seeing great results. In a one year period the city has seen infectious disease reports shoot up. They have also found that the system reports lab results that doctors and hospitals often fail to manually report.

A study conducted by the KCMO Health Dept. and published by a CDC journal, found some interesting results from the Kansas City Metropolitan Area Initiative. The study looked the first 200 days of the initiative and found data was received more quickly than with conventional reporting methods and that the data was more complete in all demographic fields. The results showed that electronic reporting of disease can offer substantial benefits to public health.

Below are the risks to Kansas's citizens without a near real-time automated and electronic communicable disease reporting system, as called for in this legislation. Thank you again for the opportunity to be here today.

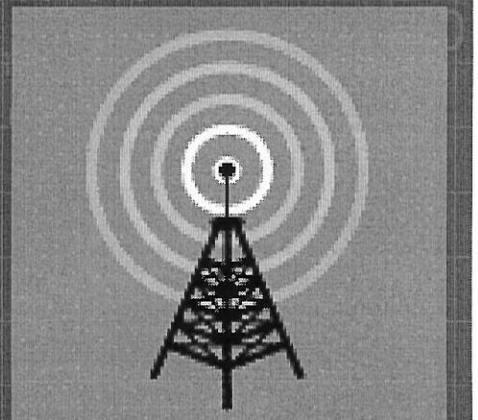
- Reliance on manual reporting and data entry can take valuable resources away from other communicable disease response or prevention activities
- Less timely and incomplete reports can lead to delayed detection of outbreaks or potential bioterrorism events
- Unreported or delayed reporting of disease can lead to increased risk for further spread and subsequent outbreaks
- Without automated alerts, disease reporting of critical or significant events relies solely on manual processes

Attachment 3
HHS 1-21-04

CERNER®

Presentation for

Kansas House Health and Human Services Committee



January 21, 2004

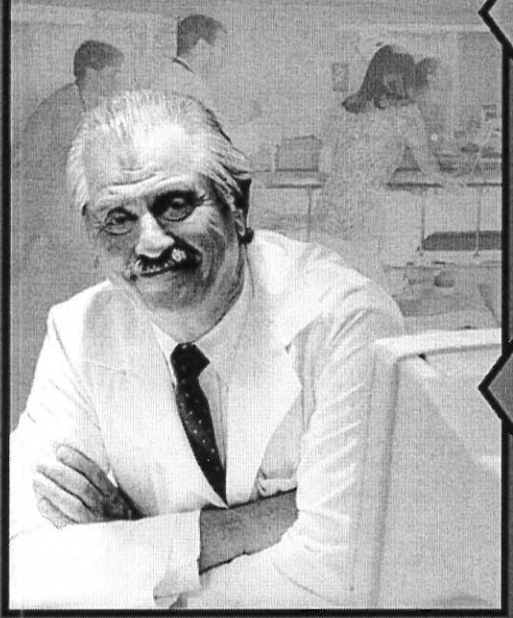
The 'Surveillance' Challenge

Pharmacies

EDs

Providers

Labs



With Paper-based System

Lack of Communication

Delayed Action

Unchecked Disease

With Health Care IT

Bridge the Gap

State

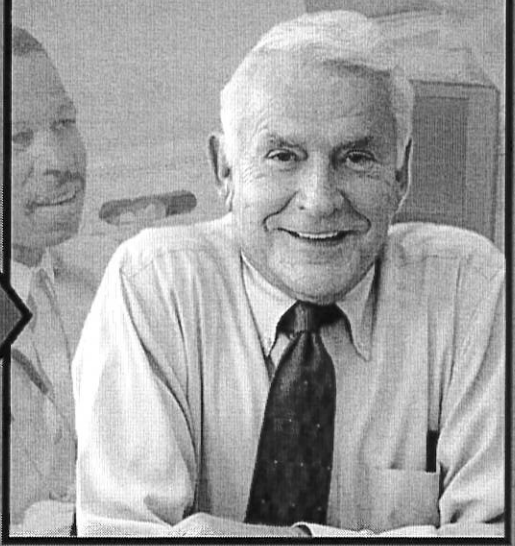
Administrators

Public Health

CDC

Physicians

Consumers



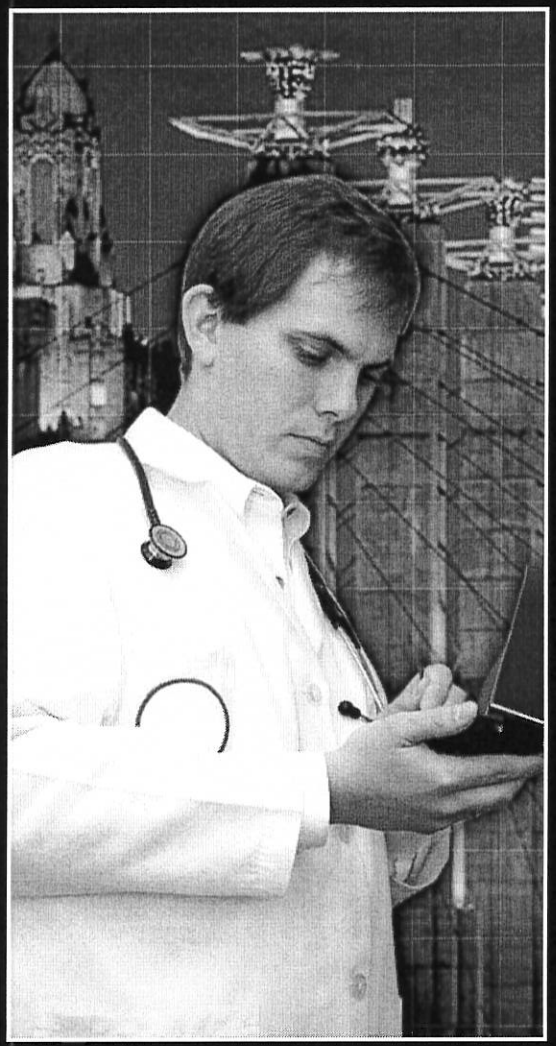
HealthSentry – Implementation

- **Collaborative project: Kansas City, Mo. Health Department (KCHD), State of Missouri, State of Kansas, Local healthcare organizations/Cerner clients, and Cerner**

- **GOAL: Improve timeliness, completeness and accuracy of reportable disease information received by KCHD**

- **Consists of:**
  - Auto collection of Demographics, Lab Requests, and Lab Results from 22 hospitals and reference labs
  - Expert System Alerts and reports provided to Depts of Health and Participating Lab
    - *Detailed reports, graphs, integrated with Geo Info System*

HealthSentry – Statistics

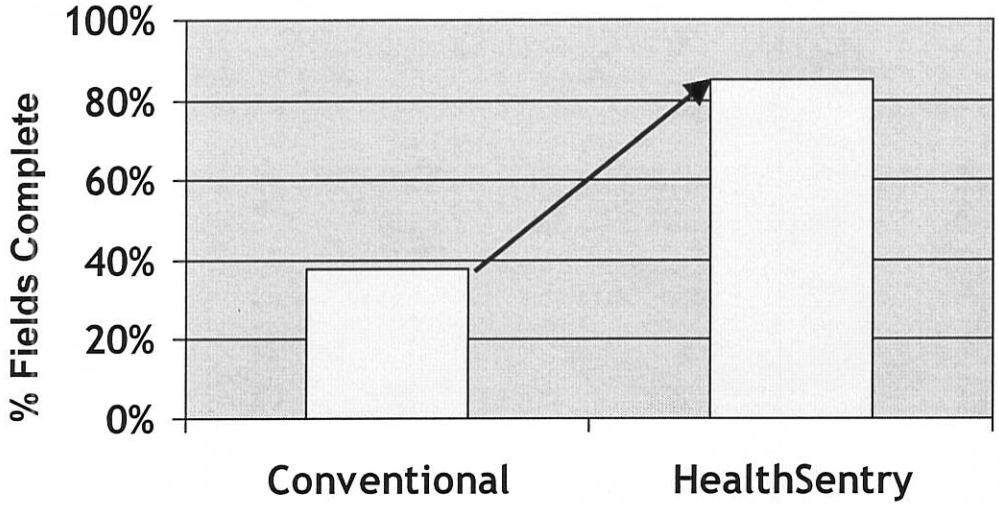


- 22 organizations in KC
- 659 days of data (Mar. 25-Jan.13)
- 3,409,391 total encounters
- 1,380,667 total persons
- 721,323 final isolates found
- 12,276 reportable isolates found

3-4

HealthSentry – Proven Results

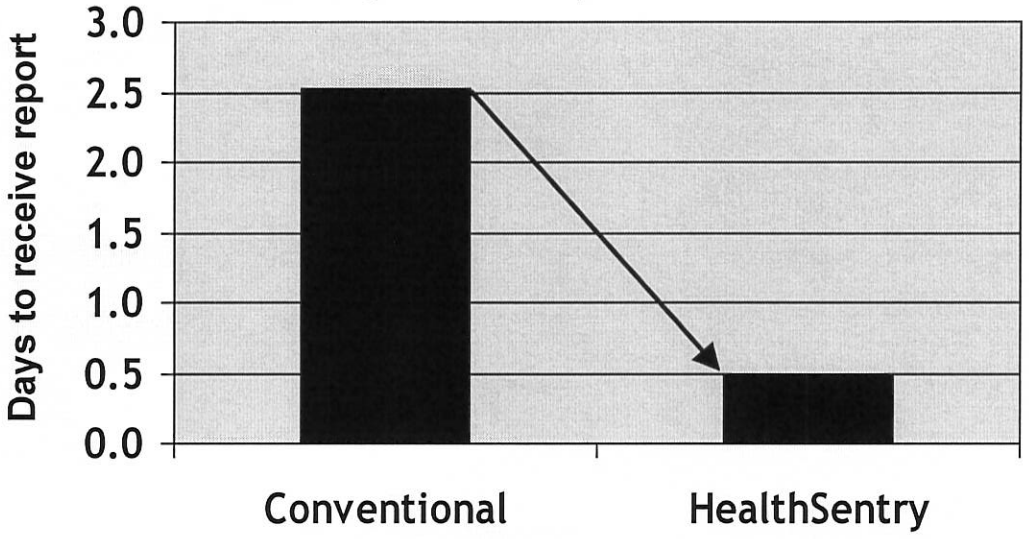
DATA COMPLETENESS



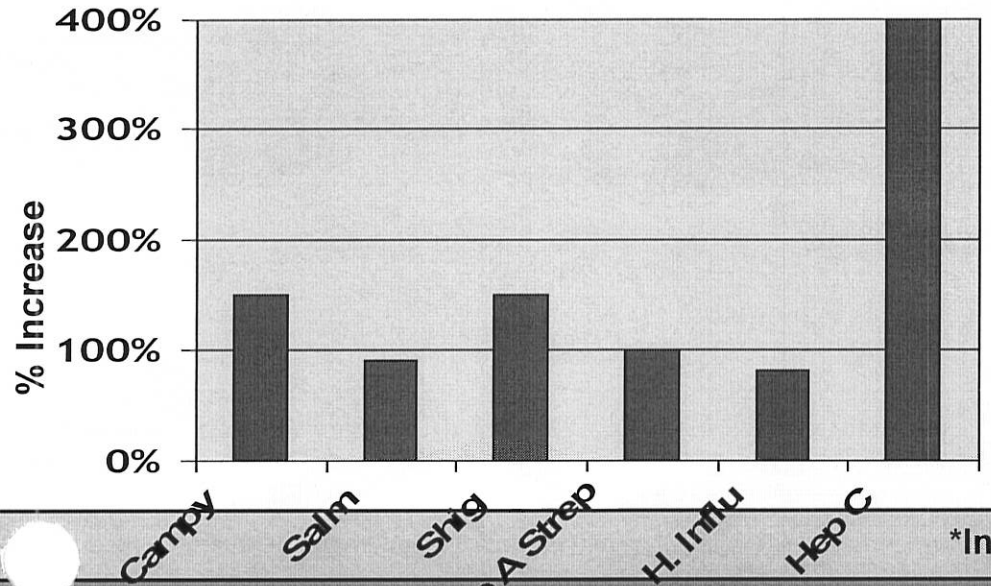
Reportable cases (non-STD): March-Sept 2002
*Average over 6 key data fields

TIMELINESS

*Average over all reportables



UNDER-REPORTING



*Increased overall reporting by 96%

HealthSentry – Published Results
CERNER

EMERGING INFECTIOUS DISEASES
A Peer-Reviewed Journal Tracking and Analyzing Disease Trends

RESEARCH

3-6

Multijurisdictional Approach to Biosurveillance, Kansas City

Mark A. Hoffman,* Tiffany H. Wilkinson,† Aaron Bush,* Wayne Myers,* Ron G. Griffin,† Gerald L. Hoff,† and Rex Archer†

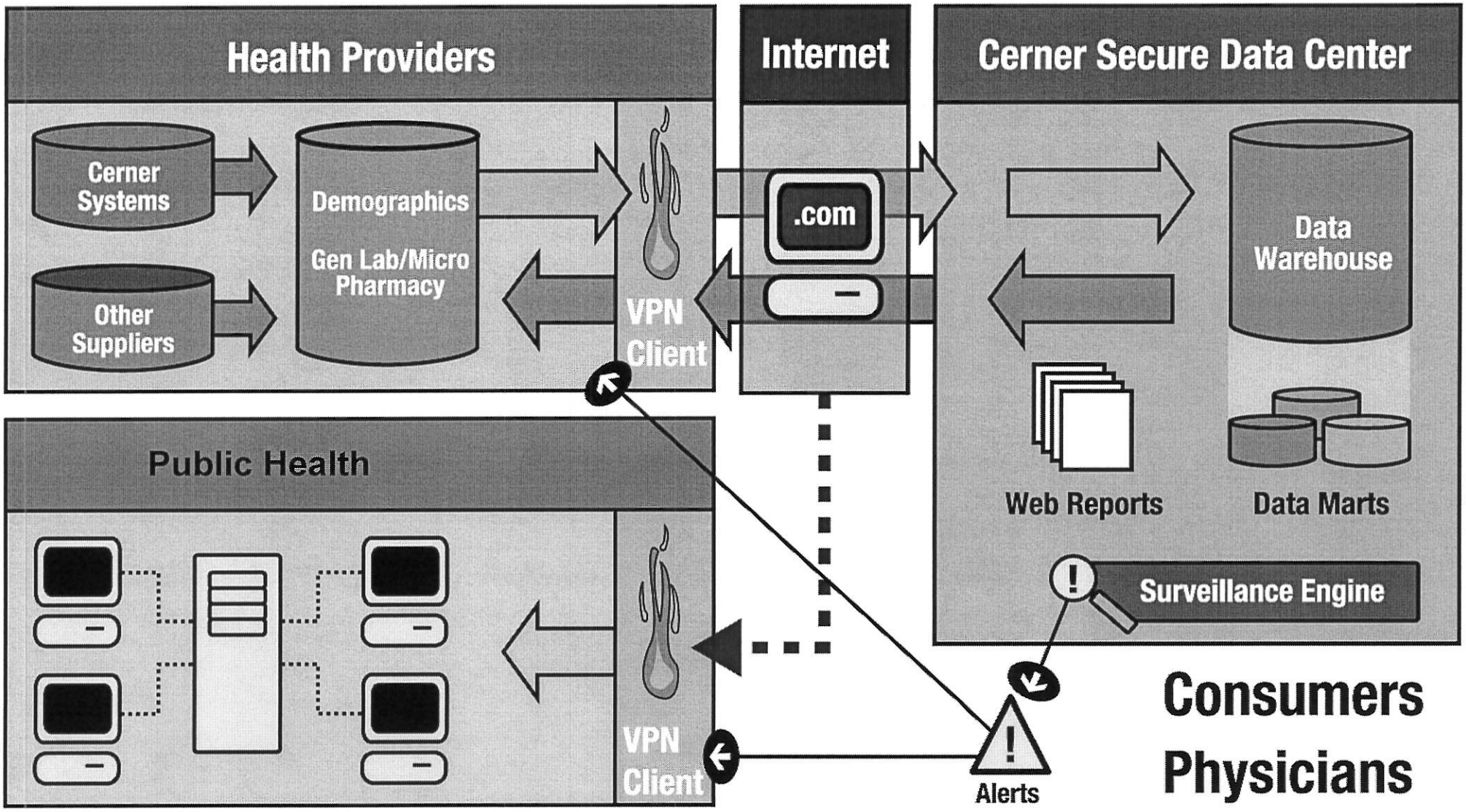
An electronic reporting system for a network of 22 laboratories was implemented in Kansas City, Missouri, with an independent organization acting as a data clearinghouse between the reporting laboratories and public health departments. The system ran in tandem with conventional reporting methods. Laboratory test orders and results were aggregated and mapped to a common nomenclature. Reports were delivered through a secure Internet connection to the Kansas City Health Department (KCHD); during the first 200 days of operation, 359 qualified results were delivered electronically to KCHD. Data were received more quickly than they were with conventional reporting methods: notification of chlamydia cases arrived 2 days earlier, invasive group A streptococcal disease cases arrived 2.3 days sooner, and salmonellosis cases arrived 2.7 days sooner. Data were more complete for all demographic fields, including address, age, sex, race, and date of birth. Two hundred fourteen cases reported electronically were not received by conventional means.

(4). Underreporting is a major concern with traditional disease surveillance strategies (5); even cases of severe diseases sometimes go unreported (6). In addition, substantial variability exists in the completeness of the information sent to public health; initial reports often include only the test result and the patient name. They lack demographic details that are useful to public health officials, requiring them to perform followup calls to get the additional information (7). These delays and inconsistencies may impair the ability of public health officials to detect or respond to a bioterrorist event. One solution to these deficiencies is to use an electronic system to report disease to public health authorities.

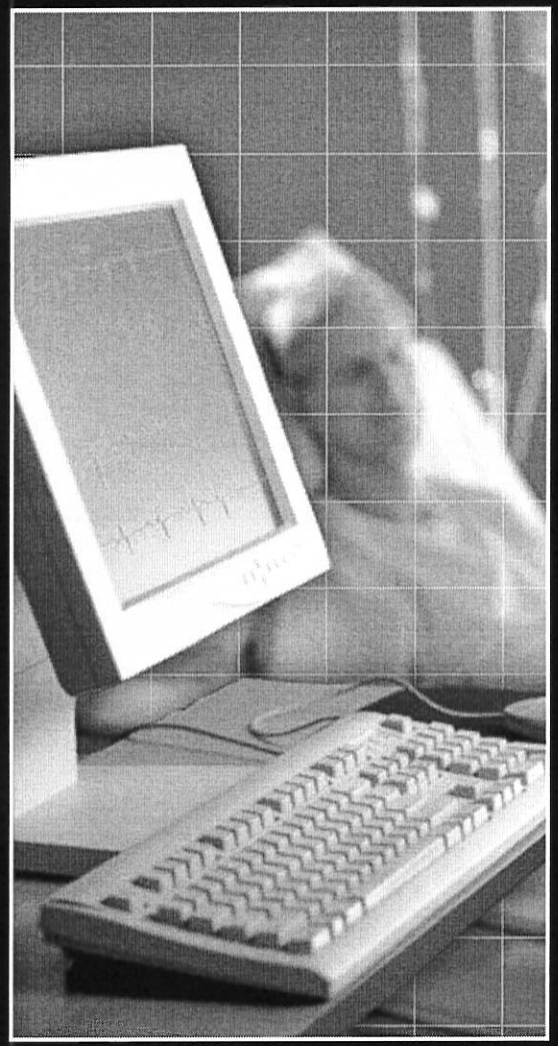
Three approaches to electronic disease reporting are feasible. The first approach (Figure 1A) requires each healthcare provider to standardize clinical results (i.e., by using the Systematized Nomenclature of Medicine

Innovation You Can Trust
CERNER

Leveraging Existing Architecture



Privacy and Security



- **HealthSentry complies with HIPAA Privacy and Security policies and procedures**
  - HIPAA explicitly exempts use of identifiable information for Public Health purposes
- **Data encrypted at provider site**
- **Data securely transferred to Cerner via SSH**
- **Data "blinded" at point of entry, allowing view of aggregate data**
- **Data encrypted the entire time at Cerner**

3-8

Actual KC Reports

CERNER

Isolate Overview

HealthSentry

Drill

Final Reports | Positive Isolate - High Confidence | 2002

Completed Month	Isolate Category	Result Type Desc	Distinct Encounters w/ Isolate
Mar	Chlamydia trach.	Final Reports	9
Mar	Giardia	Final Reports	1
		Final Reports	10
		Final Reports	1
		Final Reports	2
		Final Reports	1
		Final Reports	13

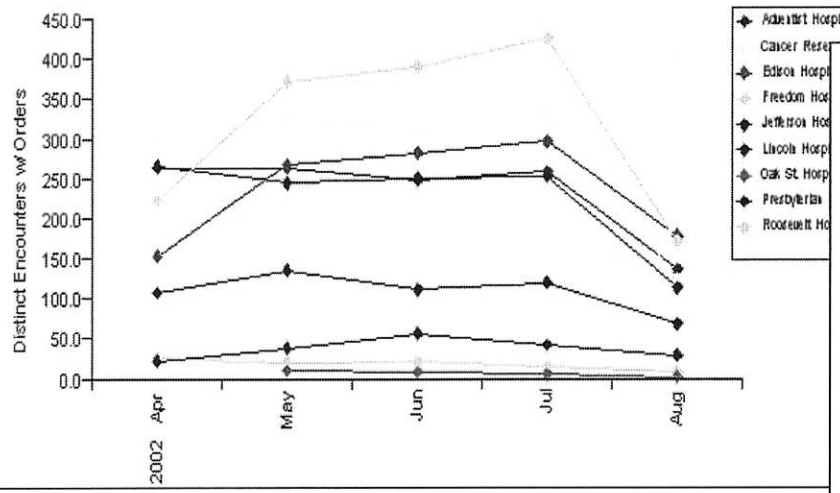
Monthly Orders by Facility Report

HealthSentry

Year Selected:2002

Months Selected: Apr; Aug; Jul; Jun; May

Order Selected:Blood Culture



Daily Isolate Report

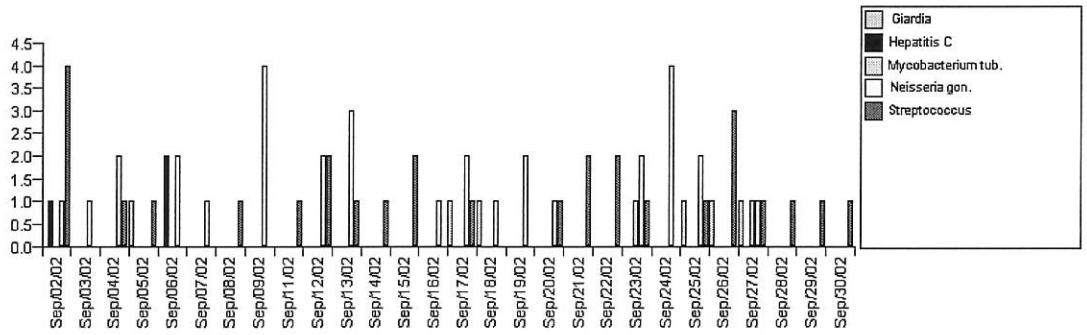
HealthSentry

Result Type Selected: Final Reports

Months Selected:Sep

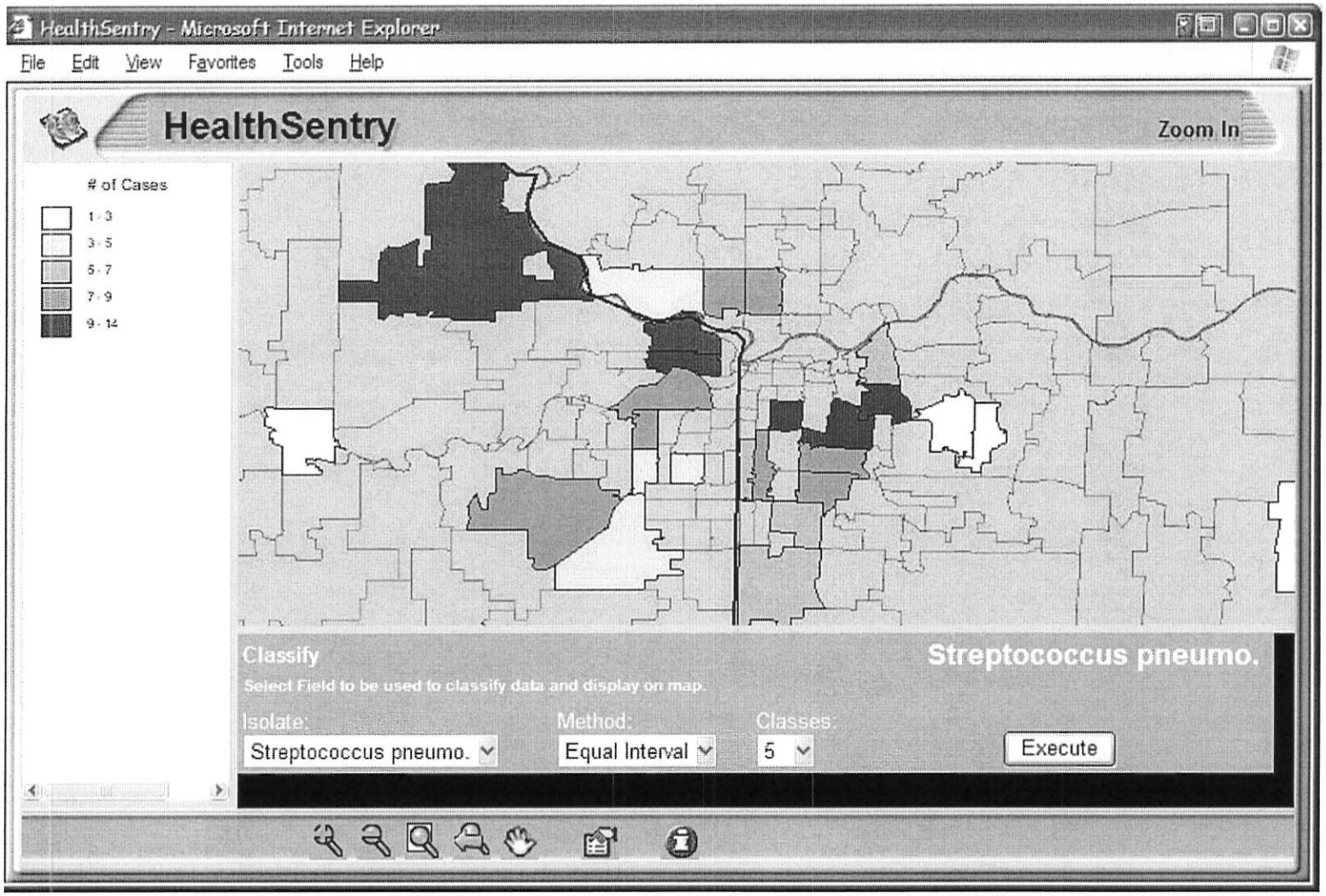
All Results: Positive Isolate - High Confidence

Isolate Category(s) Selected: Giardia; Hepatitis C; Mycobacterium tub.; Neisseria gon.; Streptococcus

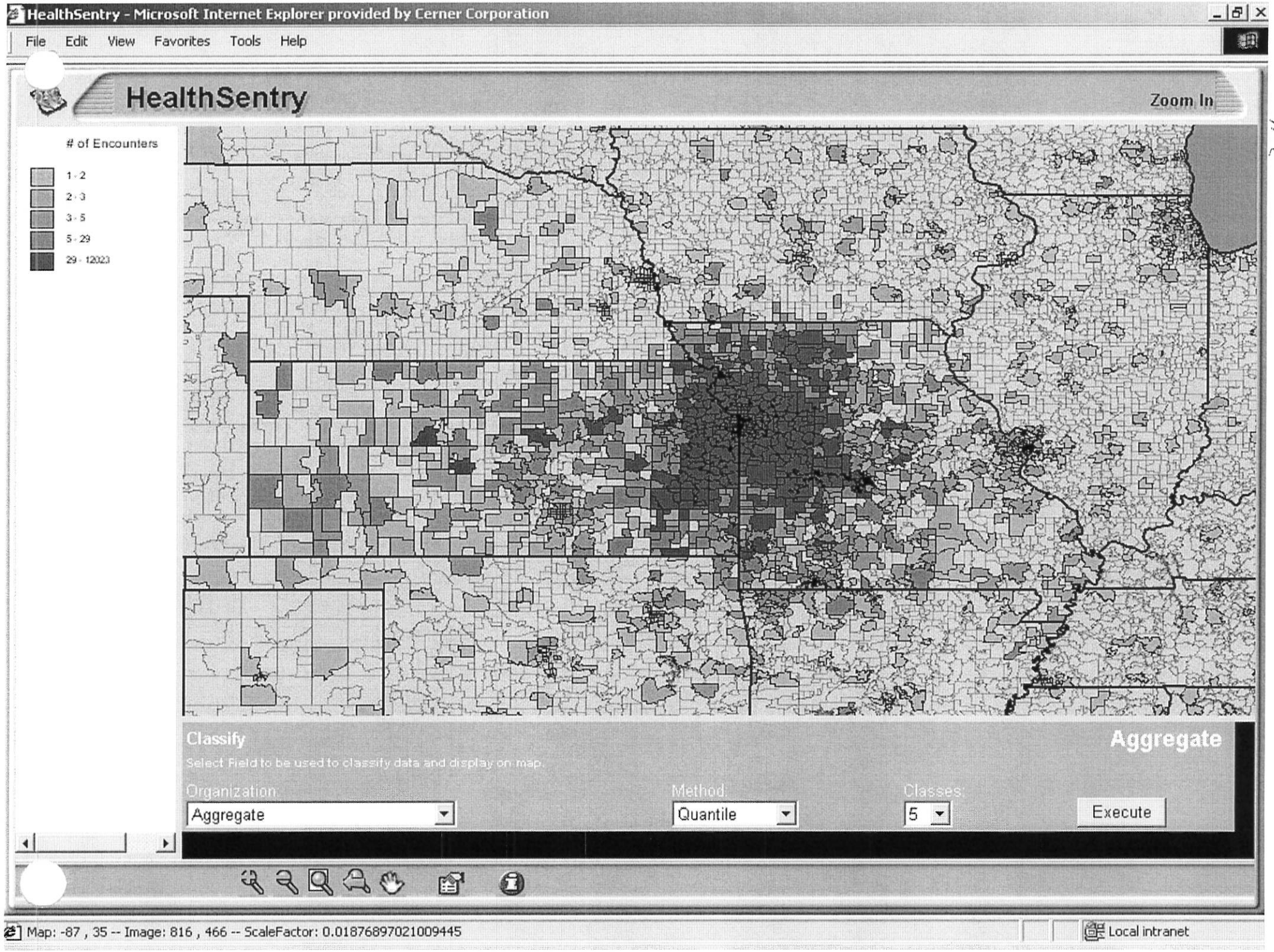


Completed Dt	Isolate Category	Distinct Encounters w/ Isolate
Sep/02/02	Hepatitis C	1
Sep/02/02	Neisseria gon.	1
Sep/02/02	Streptococcus	4
Sep/03/02	Neisseria gon.	1
Sep/04/02	Neisseria gon.	2

Geographic Information System



- Zoom in/out
- Drop down menu to select pathogen
- Control aggregation layers
- Display ZIP code demographics


HealthSentry - Microsoft Internet Explorer provided by Cerner Corporation
File Edit View Favorites Tools Help
HealthSentry
Zoom In
# of Encounters
1 - 2
2 - 3
3 - 5
5 - 29
29 - 12023
Classify
Aggregate
Select Field to be used to classify data and display on map.
Organization:
Aggregate
Method:
Quantile
Classes:
5
Execute
Map: -87 , 35 -- Image: 816 , 466 -- ScaleFactor: 0.01876897021009445
Local intranet

3-11

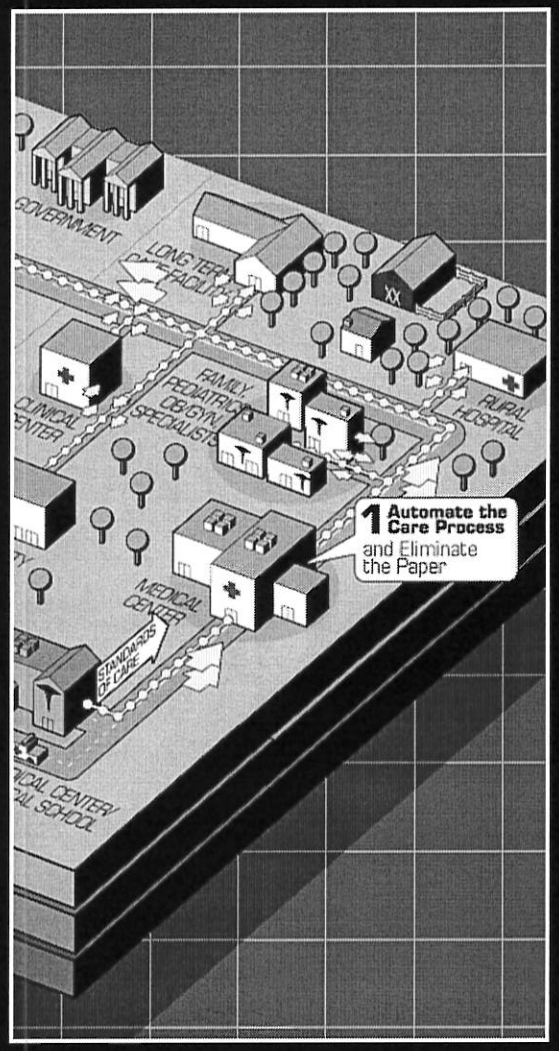
State of Kansas Status

3-12

Risks to Kansas citizens without the benefits of *HealthSentry*™

- Reliance on manual reporting and data entry can take valuable resources away from other communicable disease response or prevention activities
- Less timely and incomplete reports can lead to delayed detection of outbreaks or potential bioterrorism events
- Unreported or delayed reporting of disease can lead to increased risk for further spread and subsequent outbreaks
- Without automated alerts, disease reporting of critical or significant events relies solely on manual processes

State of Kansas Benefits



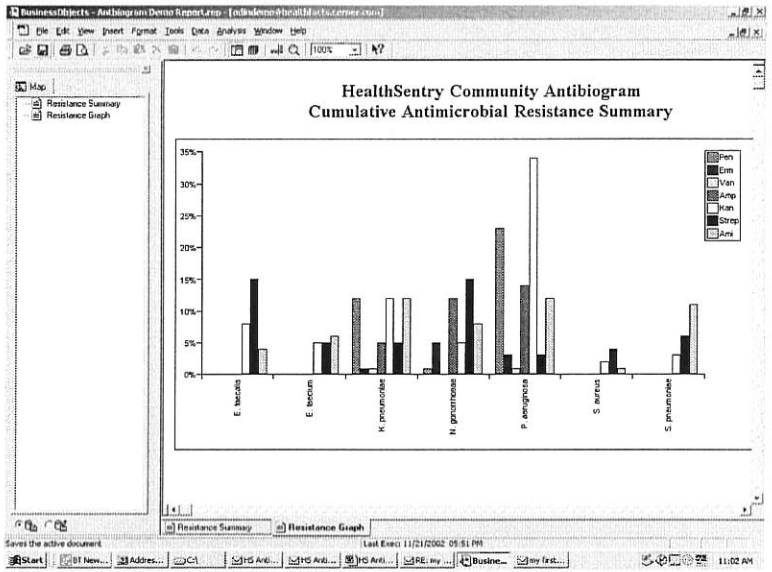
- **Increase health and safety of patients and area residents**
- **Better view into the health of the community**
- **Auto alerting of critical pathogens**
- **Pathogen prevalence and trend analysis**
- **Automated collection and preparation of required reports to Public Health**
  - Enable regulatory compliance
  - Drive-out costs
- **Positive public relations, part of "Network"**

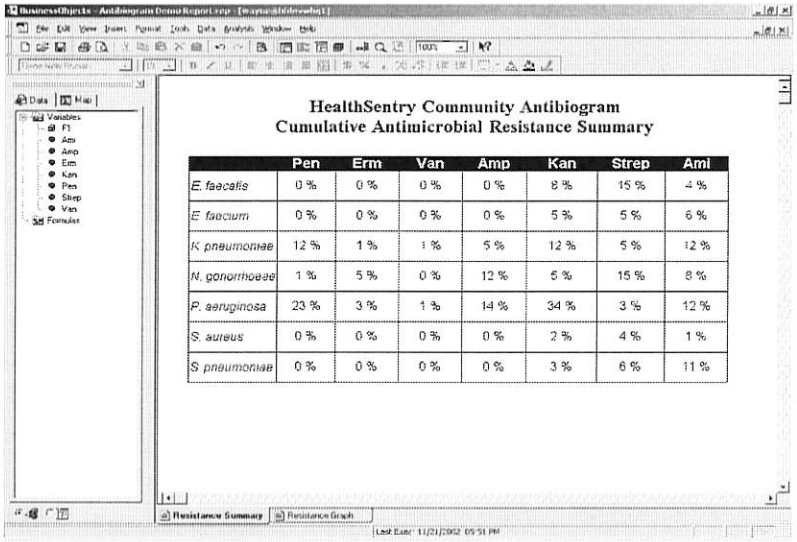
Future Directions

- **Antibiotic resistance profiling – rolling out currently**
- **Symptom / syndrome information – alpha underway**
- Medication orders (inpatient, OTC)
- Alerts/Information delivered to members of community - consumers
- Veterinary data/tracking
- Non-clinical data sources
  - Sensors
  - Water

HealthSentry's Community Antibiogram

- Current data on the antibiotic resistance in a community enables appropriate antibiotic prescribing
  - Cost Savings
  - Improved Patient Care
- Detects changes in susceptibility of an organism population over time
  - Acts as a first alert to emerging resistance patterns
- Serves as a centralized repository for epidemiological research and further analyses of the data



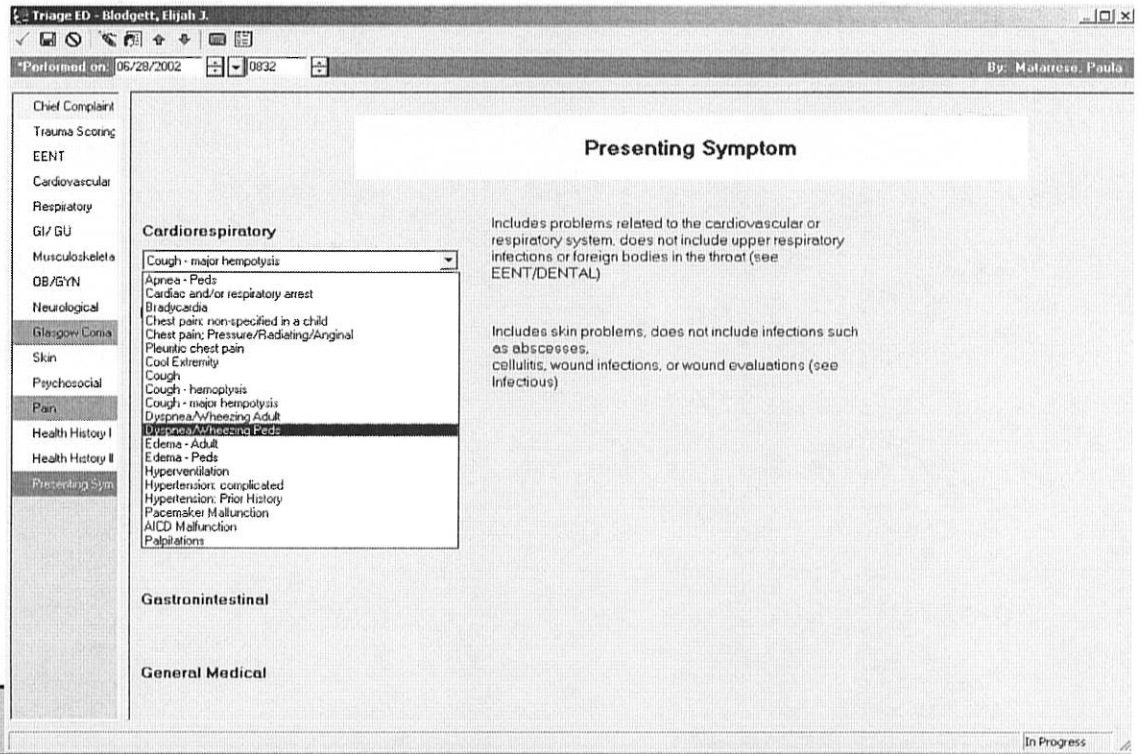


	Pen	Erm	Van	Amp	Kan	Strep	Ami
E. faecalis	0 %	0 %	0 %	0 %	8 %	15 %	4 %
E. faecium	0 %	0 %	0 %	0 %	5 %	5 %	6 %
K. pneumoniae	12 %	1 %	1 %	5 %	12 %	5 %	12 %
N. gonorrhoeae	1 %	5 %	0 %	12 %	5 %	15 %	8 %
P. aeruginosa	23 %	3 %	1 %	14 %	34 %	3 %	12 %
S. aureus	0 %	0 %	0 %	0 %	2 %	4 %	1 %
S. pneumoniae	0 %	0 %	0 %	0 %	3 %	6 %	11 %

FirstSentry: Symptom Surveillance

3-16

- First contact ED data
  - Earlier detection, Earlier Intervention
- Many implemented system to collect data after 9/11 - Web and other manual collection methods experienced declining participation in months following implementation
- The KEY is **AUTOMATED** data collection
  - Through ED clinical system
  - Through an EMR



KANSAS PUBLIC HEALTH ASSOCIATION, INC.

Kansas Public Health Association, Inc.
Affiliated with the American Public Health Association
215 S.E. 8th Avenue
Topeka, Kansas 66603-3906
Phone: 785-233-3103 fax: 785-233-3439
E-mail: kpha@networksplus.net
Web Site: http://kpha.bluestep.net

Testimony Presented to the
House Committee on Health and Human Services
by Sally Finney, CAE, M.Ed., Executive Director
on January 21, 2004

Chairman Morrison and members of the committee, I appreciate the opportunity to appear before you today on behalf of the Kansas Public Health Association to discuss our position on HB 2513.

HB 2513 speaks to the importance of timely and accurate disease reporting. Data about disease and injury are essential to the public health system's ability to respond appropriately. Such information is useful, not only in developing programs but also in evaluating them.

HB 2513 also recognizes the increasing role of technology in data collection. The Kansas Public Health Association supports the intent of HB 2513.

The Kansas Department of Health and Environment is currently engaged in activities aimed at improving disease reporting to the agency. While legislation can support those efforts, there is always the possibility it could unintentionally hinder them. We ask that as you keep this in mind as you consider this particular legislation.

Thank you.

Attachment 4
HHS 1-21-04

SHAWNEE MISSION
MEDICAL CENTER℠

January 15, 2004

To Whom It May Concern:

It is my pleasure to speak on behalf of Cerner Corporation's HealthSentry. It was hard to believe at first, but this initiative has truly been "free" to our organization and with the reduction in paperwork that our staff formerly completed, our staff can be more productive.

There are many times that we decide to invest in technology for the benefit of patients and our community, but this was one time when we were able to contribute to the health of our community at no cost to the hospital. The tracking tool can extract information from the existing infrastructure without any additional technical work or cost.

This reporting program operates automatically and is monitored and maintained through connections to Cerner's data center. A data file containing lab information is sent once a day through a secure network to Cerner, and there is an encryption process in place to protect the identity of patients.

Within a day, public health officials can access this collective information and if needed, begin work to protect our community. We are pleased to cooperate in this initiative and I would recommend the expansion of this program to other parts of the state and country.

My compliments go to Cerner Corporation for taking the initiative to develop this system that ultimately could save lives. If you have any questions, please feel free to contact me at (913) 676-2884.

Sincerely,

Robin Rollins Harrold

Robin Rollins Harrold
Senior Vice President and Chief Operating Officer

T (913) 676-2000
F (913) 676-7792

9100 W. 74th Street
Shawnee Mission, KS 66204
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A Seventh-day Adventist Community Service

Attachment 3
HHS 1-21-04