

# Innovations in Health Information Exchange

*Moving Beyond Science Fairs  
to Sustainable Value*

MICHAEL MATTHEWS  
MEDVIRGINIA

# “Worms In A Micro-Wave!”

**FAIL**

the hypothesis worm affect its being baked microwave?

**CONCLUSION**  
Based the data the experiment

**TITLE**  
WORMS IN A MICRO-WAVE!

**PROCEDURE**

- Supplies (paper towel, washroom, worms, & microwave & camera)
- Then, put the worms in the microwave, set the microwave for 2 minutes
- Let the worms sit until they get so hot they burst!
- Take worms out when done. Take pictures & count.

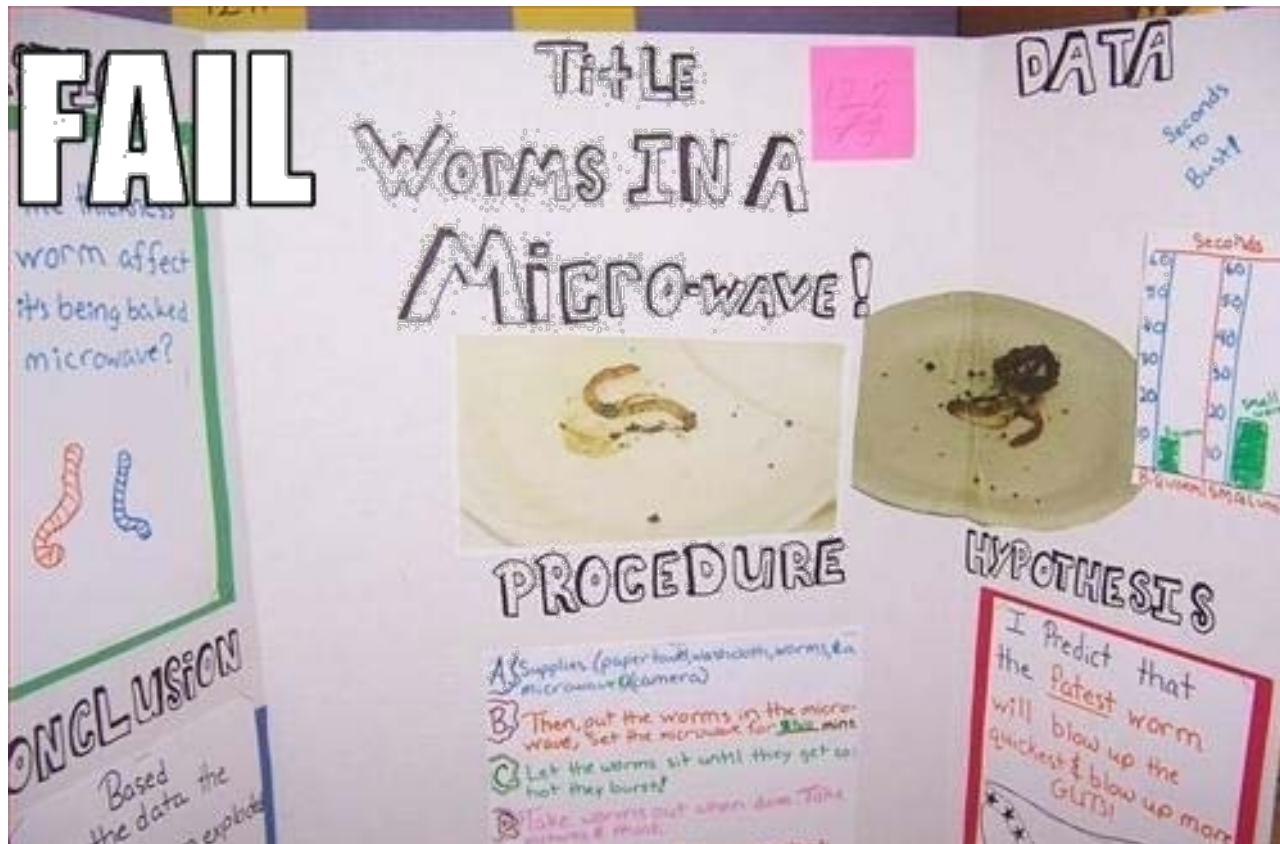
**DATA**

Seconds to Burst!

Worm	Seconds to Burst
1st worm	10
2nd worm	20

**HYPOTHESIS**

I Predict that the fatest worm will blow up the quickest & blow up more GUTS!



Hypothesis:

*I Predict that the Fatest worm will blow up the quickest & blow up more GUTS!*

# Commonwealth of Virginia

The Best States For Business

**#1 Virginia**

09.15.06, 6:00 PM ET

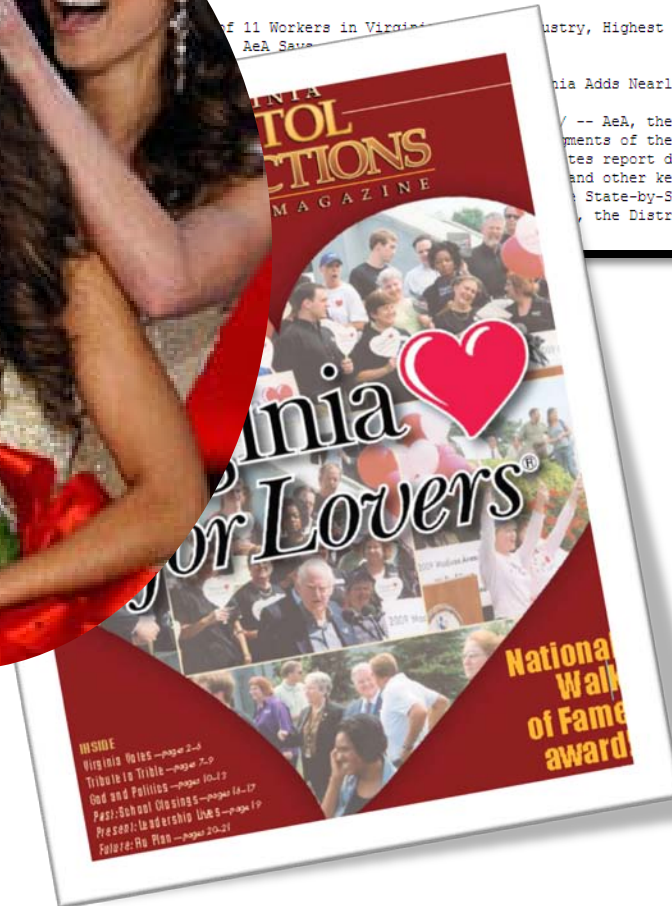


1 of Out of 11 Workers in Virginia in Tech Industry, Highest Concentration in the...

of 11 Workers in Virginia in Tech Industry, Highest Concentration in  
AeA Says

nia Adds Nearly 10,000 Jobs

-- AeA, the nation's largest  
ments of the high-tech  
tes report detailing national  
and other key economic  
State-by-State Overview of  
the District of Columbia,



INSIDE  
Virginia Rules —page 2-4  
Tribute to Tribble —page 7-9  
God and Politics —page 10-12  
Past: School Closings —page 14-17  
Present: Leadership Lives —page 19  
Future: The Plan —page 20-21

National  
Walk  
of Fame  
award

# Leadership in Health IT

- First HIE in production on NHIN
- CTO of U.S. – Aneesh Chopra
- VLER 1b – Hampton Roads
- Workforce training grant
- One of 15 Stage 7 HIMSS
- HIMSS Chapter Advocate of the Year
- Chair of the NHIN Coordinating Committee
- Strategic and Operations Plans for State-level HIE
- VA-HIT REC



# The Road to Success.... is always under construction.

*Lily Tomlin*

- CHINs
- RHIOs
- Enterprise-wide HIE
- Nationwide health information network
  - Prototype architecture
  - Trial implementations
  - Limited production
  - Direct
- ARRA / HITECH
  - State HIE
  - REC
  - Meaningful use
  - Beacon Communities
  - SSA
  - Training grants



# Pillars of Innovation

- *Technological*
  - *Clinical*
    - *Trust*
      - *Governance*
        - *Scaling*
          - *Sustainability*



# Technological Innovation

## President's Strategy for American Innovation Health Innovation an Opportunity for Growth and Efficiency

**Health IT applications innovation that drive lower cost, higher quality, improved satisfaction**

### Catalyze Breakthroughs for National Priorities

- Unleash a clean energy revolution
- Support advanced vehicle technology
- Drive breakthroughs in health IT
- Address scientific "grand challenges"

### Promote Competitive Markets that Spur Productive Entrepreneurship

- Promote American exports
- Support open capital markets that allocate resources to the most promising ideas
- Encourage high-growth and innovation-based entrepreneurship
- Improve public sector innovation and support community innovation

### Invest in the Building Blocks of American Innovation

- Restore American leadership in fundamental research
- Educate the next generation with 21<sup>st</sup> century knowledge and skills; create a world-class workforce
- Build a leading physical infrastructure
- Develop an advanced information technology ecosystem



# Clinical Innovation

## Safety Net Providers

- Clinical data
  - Hospital results
  - Labs
  - Medications
- Secure messaging
- Practice management
- Clinical documentation
  - Meds, allergies, problem lists, vitals
- Eligibility screening tool
- ED / Medical home program



# Trust Innovation

*Mutual trust is a shared belief that you can depend on each other to achieve a common purpose.*

- Physicians
  - Clinicians
  - Information managers
- Framework of trust
  - Agreed Upon Business, Policy and Legal Requirements
  - Enforcement and Accountability
  - Transparent Oversight
  - Identity Assurance
  - Technical Requirements

The image shows the cover of a report. At the top left is the logo of the Department of Health & Human Services, Office of the National Coordinator for Health Information Technology. The title of the report is 'HIT Policy Committee NHIN Workgroup HIE Trust Framework: Essential Components for Trust'. The date is 'April 21, 2010'. The authors are 'David Lansky, Chair' and 'Farzad Mostashari, ONC'.

# Governance Innovation



## HIT Policy Committee Governance Workgroup

Recommendations on Scope of Nationwide Health  
Information Network Governance Functions

John Lumpkin, MD, MPH, Chair  
Robert Wood Johnson Foundation

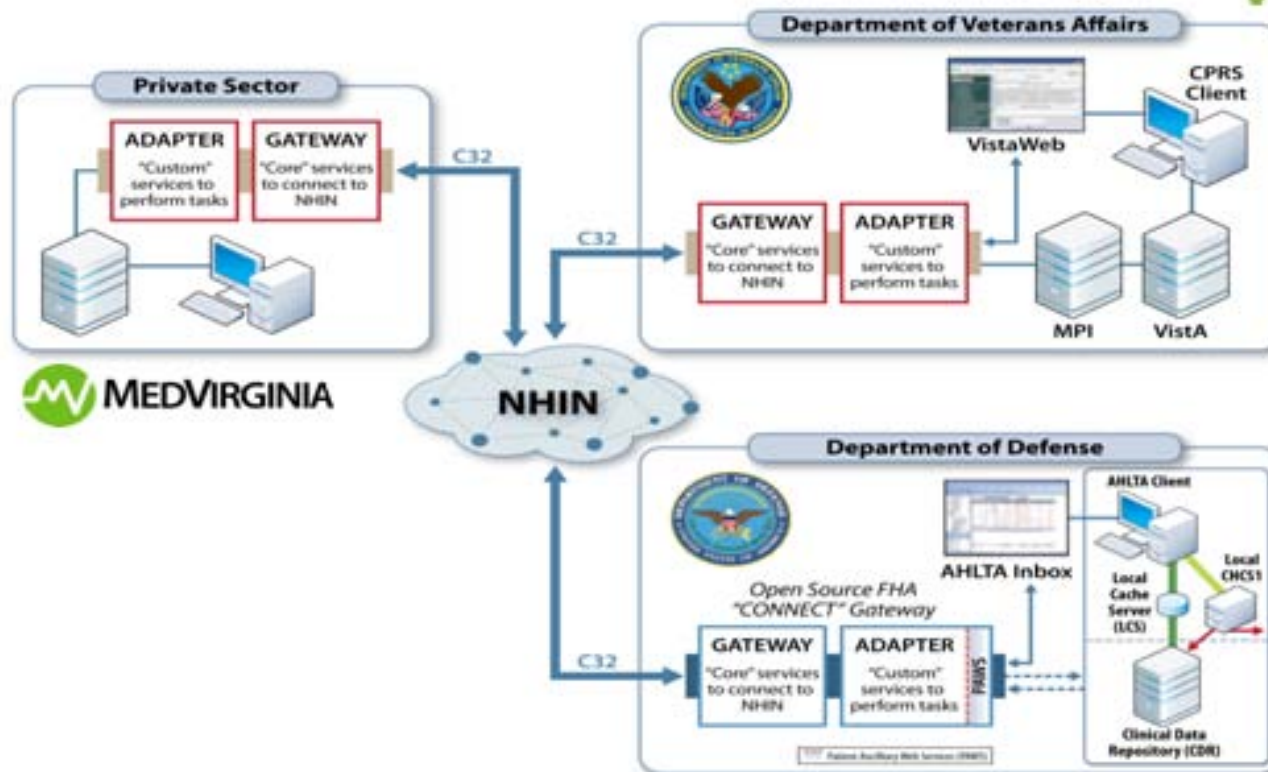
October 20, 2010

### Nine Sound Principles for NW-HIN Governance

1. Transparency and openness
2. Inclusive participation and adequate representation
3. Effectiveness and efficiency
4. Accountability
5. Federated governance and devolution
6. Clarity of mission and consistency of actions
7. Fairness and due process
8. Promote and support innovation
9. Evaluation, learning and continuous improvement

# Scaling Innovation

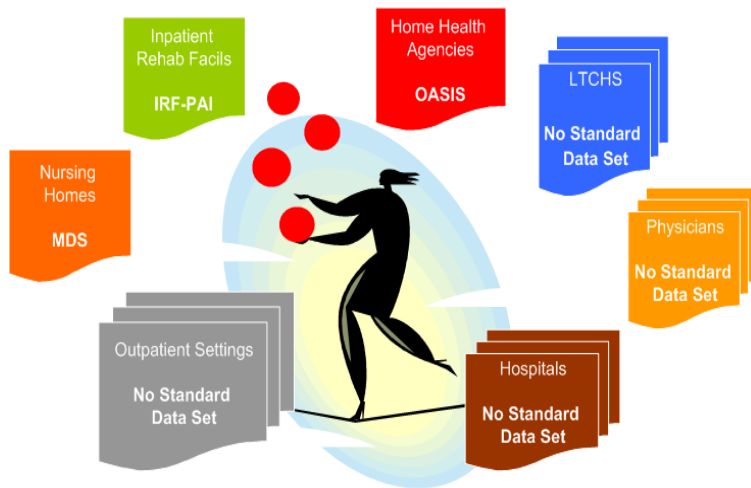
## The VLER Solution



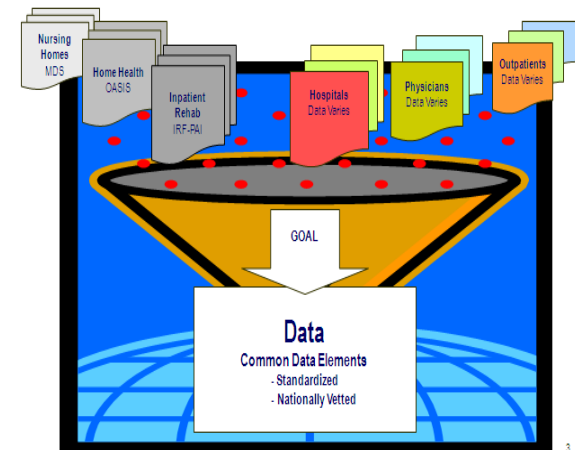
# Scaling Innovation

Goal: Simply Data Collection and Transmission

Today



Future

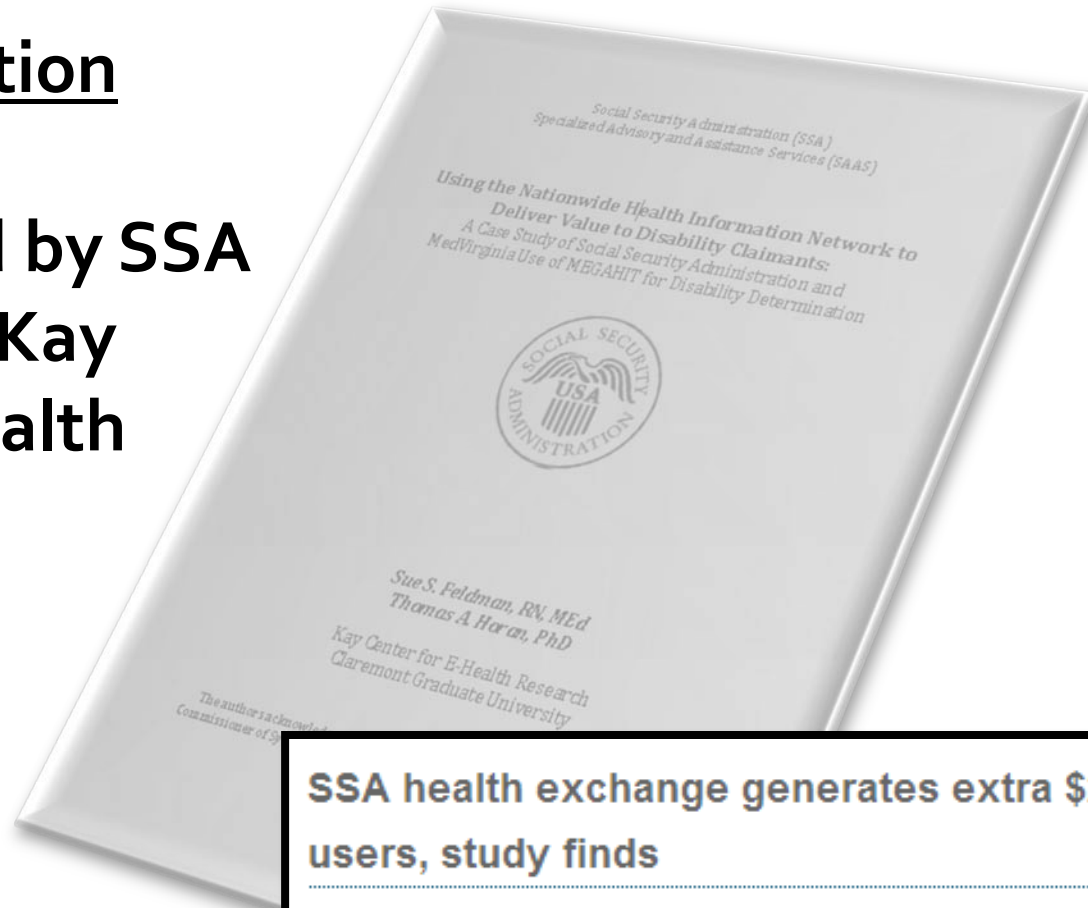




# Sustainability Innovation

## Revenue Generation

- Commissioned by SSA
- Conducted by Kay Center for eHealth Research
- Perspectives:
  - Claimant
  - Provider
  - SSA
- ROI



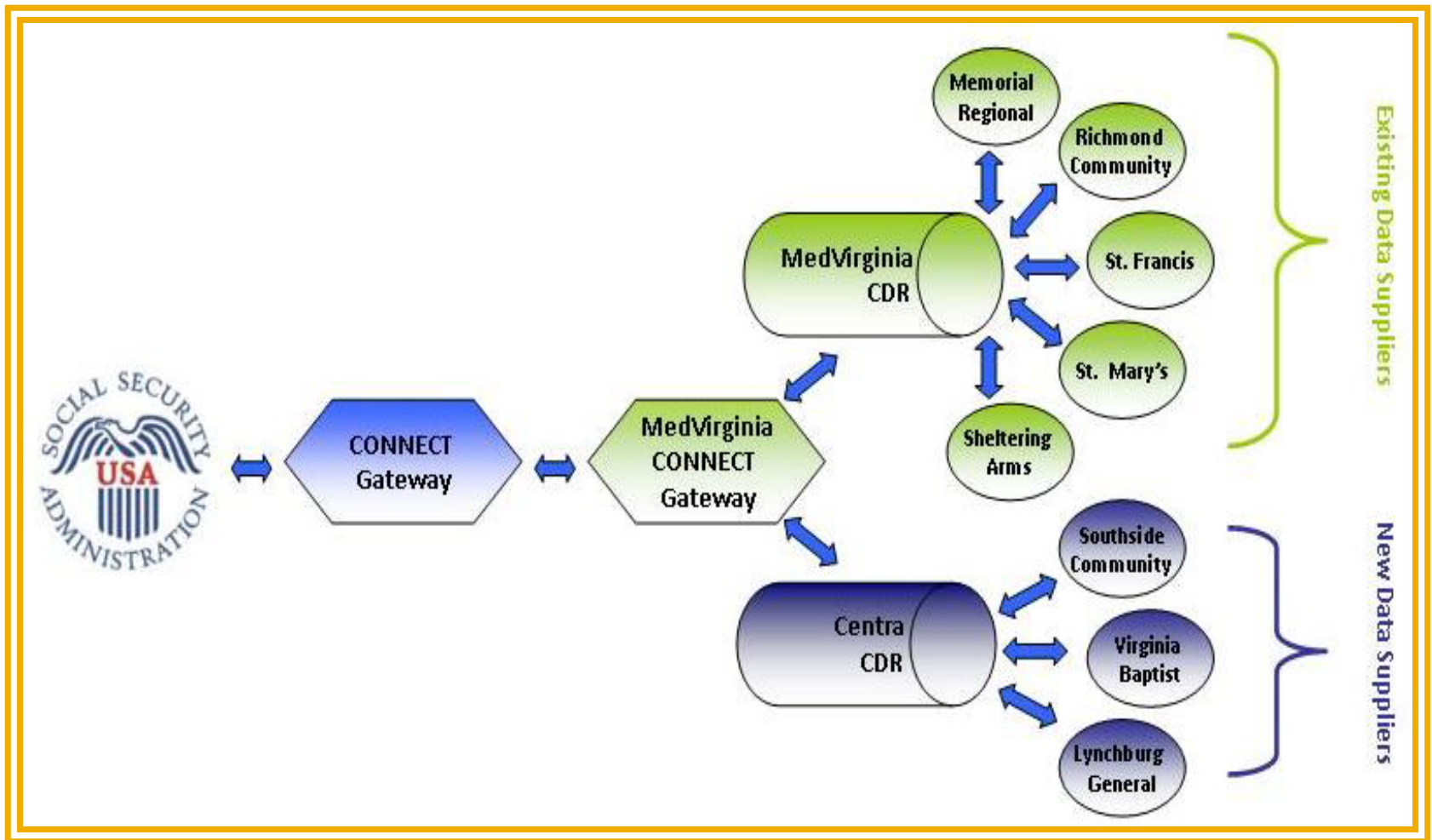
**SSA health exchange generates extra \$2M for users, study finds**

Report says providers benefit from additional revenues

By [Alice Lipowicz](#) ○ Jan 28, 2010

**Federal Computer**  
WEEK  
Strategy and business management for government leaders

# Sustainability Innovation



# Sustainability Innovation

## Risk Purchasing Group

- Partnership with MAG Mutual
- Available to CenVaNet physicians
- Commitment to use health IT and risk management programs
- Significant growth in membership
- Favorable risk experience
- 20% - 30% average savings in premiums

**HEALTHCARE Group**

**CENVANET**

THE PHYSICIAN DIVISION OF  
**RCM&D**  
HEALTHCARE GROUP

### CenVaNet MEMBERS' NEWSLETTER - FALL 2009

#### Hydromorphone - A Pervasive Threat of Error

By Carol Migonky, BSN, DABRN, CHRM, FASHPM  
Assistant Vice President  
Contact: cmigonky@rcmd.com

**In this issue...**  
Hydromorphone - A Pervasive Threat of Error  
Federal Incentives for Health IT  
October 2009  
The Hospital Health Care Market  
The New Rules in Healthcare  
US Healthcare in the 21st Century  
Healthcare in the 21st Century  
October Medical  
Professional Liability

Do you believe you know the difference between hydromorphone and morphine? Despite similarities in their generic names and classification, there are many significant differences. According to data received by the Pennsylvania Patient Safety Authority, unclear and confusing labeling and packaging as well as look-alike or sound-alike drug names significantly contribute to medication errors. Please read on to learn more about hydromorphone, as well as about some suggested safety initiatives you can put in place to prevent errors.

Hydromorphone (Dilaudid®) is one of the first semi-synthetic derivatives of morphine patented in Germany in 1921. Hydromorphone is a schedule II narcotic and a strong painkiller used to treat people with moderate to severe pain. It has become the drug of choice as a pain management medication and both considered high alert medications. Hydromorphone is a very fast-acting drug, providing relief from severe pain for up to five hours, working within minutes of being administered parenterally. Peak plasma concentrations of hydromorphone typically occur within 30 minutes to 1 hour after an oral dose.

It is reported that hydromorphone is eight times more potent than morphine, and its potential for addiction is high. Although hydromorphone addiction is dangerous, the drug is often given to patients who have already accumulated an increased tolerance to hydromorphone or other opiates.

According to the Pennsylvania Patient Safety Advisory, the most common errors involving potency is when a patient is switched from morphine to hydromorphone. Hydromorphone by any route is significantly more potent than morphine, as indicated by the following:

- **Oral** hydromorphone is approximately four times more potent than oral morphine.  
For example, 7.5 mg hydromorphone per os (PO) = 30 mg morphine PO.
- **Parenteral** hydromorphone is approximately seven times more potent than parenteral morphine.  
For example, 1.5 mg hydromorphone intravenous (IV) = 30 mg morphine IV.
- **Parenteral** hydromorphone is approximately 20 times more potent than oral morphine.  
For example, 1.5 mg hydromorphone IV = 30 mg morphine PO.

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800.682.4776

# From science fairs.... ....to sustainable value

- COVA-HIE
- Enterprise initiatives
- Provider EHR adoption
- Meaningful use
- COVA-HIE
- NHIN expansion
- NHIN Direct

2011

Let's roll....

