# **Health Data for Purpose:**

Building & Modernizing a Public Utility of Health Data Infrastructure

HIE IMAGE ENABLEMENT





# **About Velatura**

Multifaceted Firm Advancing Digital Health Strategies for Interoperability

# **Health Information Exchange Network**

National HIE network of connected HIEs, providers, payors and other health care stakeholders.

### **Health Data Utility Services**

Cross-sector data sharing services and use cases that demonstrate an efficient digital health infrastructure for counties, states, regions.

## **Technology Service Provider**

Expansive suite of technology platforms, solutions, products and tools that support a robust set of use cases that demonstrate innovation in interoperability.

### **Professional Services Contractor**

Consulting and advisory services are designed to strengthen strategic, sustainability, operational and governance goals of health interoperability stakeholders.

# **Public/Private Interoperability**

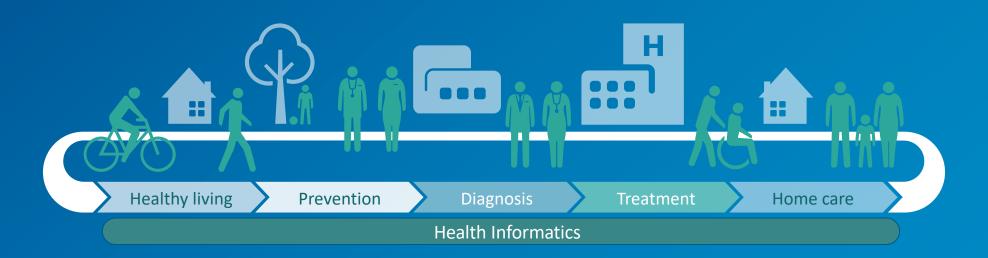
Nationwide health information network focused on rationalizing interstate data exchange at national scale through public and private stakeholders that advance emerging use cases in support of urgent public health needs and federal interoperability goals (TEFCA). National ADT notifications system designed to support public health, patient care coordination, person identity, and architected to increase the volume and quality of ADT messages available to public and private participants in support of a more rationalized and scalable infrastructure across the country.

# **Research & Development**

Interoperability Institute provides software technology research and development services to the interoperability community at large. Uniquely positioned as a health information technology innovation incubator that specializes in applied research, software development, informatics, data science, artificial intelligence, machine learning, natural language processing, and solution enablement.



# By seamlessly connecting care across the health continuum, we aim to improve outcomes



innovation #you



At Philips, we strive to make the world healthier and more sustainable through meaningful innovation

Our goal is to improve the lives of

# 2.5 billion people a year by 2030

# Our partnership



Collaborating to implement an image exchange infrastructure across the Velatura HIE network



- Engaging stakeholders Optimizing existing investments Expanding Health Data Utilities
  - Improving clinical workflows Innovating for the future •

# Expansion of HIEs into Health Data Utilities



HIEs that serve as a Health Data Utility enable advancements in high quality patient care, cost savings and efficiencies by providing critical, reliable and secure solutions for the interchange of any digital health information within the health care ecosystem.

HDUs will provide meaningful services, transformations and advancements offered by the foundation HIEs have built and now evolved to serve as a tool to achieve superior public health outcomes and use health information as a key component to transform healthcare.





# A robust Health Data Infrastructure drives:

### **Equitable Care**



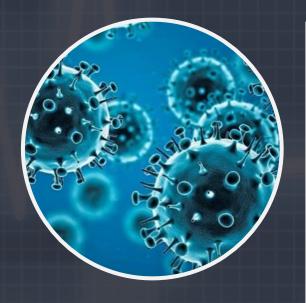
All patients deserve access to high quality comprehensive care, driven by care providers who have the information they need at their fingertips.

### **Positive Health Outcomes**



Access to a wholistic view on patient medical history leads to better informed diagnosis, care planning, and care collaboration during patient transfers and complex cases

### **Disaster Preparedness**



Displaced populations and emergency patient transfers require data to move in real time, giving care providers information they need at the point of care

### Innovation



Data to drive insights for healthcare innovation at scale.

Collaboration between leading healthcare institutions, centered around patient care

# HIE Image Enablement





# A solution that

brings together imaging data from all providers within a regional, state, or multi-state network to support crossenterprise clinical imaging workflows



# HDU Core Components That Advance Image Exchange



Health Data Utility Core Functions

**Data Connector and Hub:** a single community connection to bridge and connect all health care providers, payors, stakeholders and other HIEs. Serves as an unbiased community data trustee of health information.

**Data Aggregator:** Provides a comprehensive electronic patient record across multiple data sources. Aggregates the data collected from the disparate data sources and generates data output and payloads that are meaningful and relevant to health care stakeholders and policy makers.

**Patient Identity:** single source of truth in patient identity

Data Outputs: dashboards, data visualization, reports, analysis, payload of data sets, analytics, quality enhancement recommendations, real-time information at point of care for improved clinical decision making





# How we partner with HIEs



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# **Collaborate on funding strategies**

Philips team works strategically in each market to help HIEs and their stakeholders secure State and Federal grant support

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# **Engagement with Provider Organizations**

Philips serves over 5,000 hospitals in the US – and we position HIEs as a critical element of their Enterprise Imaging strategies

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# **Innovative Technology**

Integrates into existing infrastructure to provide seamless clinical and IT workflows

# Benefits to HIE partnership





Leverage existing BAA and data governance agreements



Retain the same infrastructure and UX providers are already familiar with



Combines dynamics of group purchasing and potential subsidies

Pre-existing Partnerships

Seamless Clinical and IT Workflows

Sustainable Capital Allocation



# Ambulatory care example use cases



# Access to Priors for Diagnosis Process

Access to all comparison studies enables more conclusive interpretation, leading to more definitive care.



# **Care Collaboration**

When multiple physicians are required to develop and manage a care plan. Very common in pediatrics, oncology and tumor boards



# **Specialist Referrals**

Provides specialists access to studies for telehealth follow up visits and data sharing with local hospitals. Remote access saves patient's time, money and inconvenience and provides for more efficient use of specialist's time.

# Emergent care example use cases











### **ED Transfers**

Emergency
department transfers
patient to another
location, where images
are needed

### **Stroke Intervention**

Local hospital shares studies with stroke center for treatment guidance and prepares stroke team if patient transfer is required

### **Trauma Intervention**

Local hospital shares studies with trauma center for treatment guidance and prepares trauma team if patient transfer is required

# **Aortic aneurism**

Confirm diagnosis with outside imaging specialist. If definitive care is not available at the current location, studies are sent ahead of patient to to mobilize care team

# **Disaster Response**

Access to prior images and reports at overflow sites and field hospitals during natural disasters and viral outbreaks

# Delivering on the Quadruple Aim





# Improved patient experience

Less time onsite, reduction in radiation exposure, seamless care journey, not responsible for managing data



# Improved staff experience

Greater access to relevant patient history, with less administrative burden



### **Better health outcomes**

Assists first-time-right diagnosis, and management of incidental findings.
Supports remote data access for communities facing health disparities and in response to national disasters



## Lower cost of care

Eliminate CDs, reduce clinical workflow inefficiencies, reduce costs of repeat procedures



# How does HIE Image Enablement work?



Central registry of available studies



Patient matching based on eMPI



Discovery via HIE portal or PACS



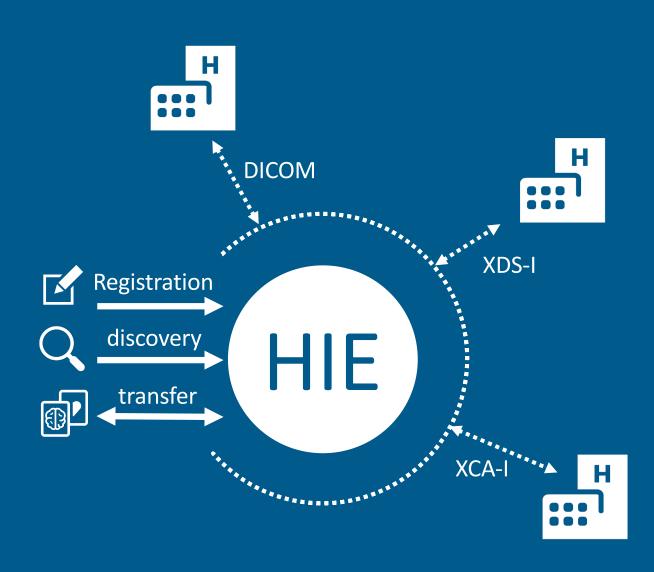
Diagnostic Image transfer to local PACS



Various standardized connection options



No duplication of image storage



# Estimated Cost of Duplicate Imaging Claims

8,200,000

Kentucky population

\$0.96

Average cost of duplicate imaging per patient, per year \*

\$7.87M

Estimated annual cost of duplicate imaging in the Kentucky healthcare ecosystem









# Examples of our partnership

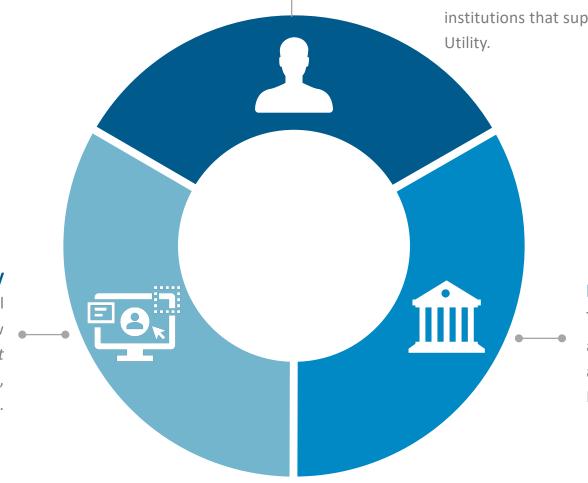


### **Stakeholder engagement**

Velatura and Philips engaged our shared customers in MO, MI and WI to build a consortium of leading healthcare institutions that support *image enablement* as a Health Data Utility.

### **Innovative technology**

Velatura and Philips completed technical diligence to confirm a seamless workflow integration of the *image enablement* solution into the existing Velatura UX, document registry, ACRS and eMPI.



### **Funding strategy**

This June, MO HealthNet awarded a state budget appropriation to match a 90/10 MMIS grant for *image enablement*.









QUESTIONS