

# *HIMSS-SIIM Enterprise Imaging Community Roundtable*

*April 15, 2020*

# HIMSS-SIIM Enterprise Imaging Community

## Leadership



**Kimberley Garriott**

*Principal Consultant  
KSM Consulting*



**Christopher Roth, MD,  
MMCI, CPHIMS, CIIP**

*Vice Chair Radiology - Information Technology,  
Duke University  
Director of Imaging Informatics Strategy*



**Alexander Towbin, MD**

*Associate Chief, Clinical Operations and Informatics  
Neil D. Johnson Chair, Radiology Informatics  
Cincinnati Children's Hospital Medical Center*



**Dawn Cram, RT(R)(M), CIIP**

*Managing Partner  
The Gordian Knot Group, LLC*

# *HIMSS Most Influential Women in Health IT Congratulations Kim*

**This award recognizes influential women at all stages of their career progressions - celebrating individuals who harness the power of information and technology to transform health and healthcare, they are unique among power lists and award programs, and they are inclusive of all women of influence, no matter where they may be in the health information and technology field.**

- Kim Garriott has focused her career of more than 20 years on improving health outcomes and patient access through better data management and interoperability, specializing in clinical imaging data. As a Principal Consultant with KSM Consulting, Garriott serves as project executive for the development of a first-of-its-kind enterprise data sharing platform, governance model and activation strategy for the 29 agencies and offices within the U.S. Department of Health and Human Services. Garriott is co-founder and current co-chair of the HIMSS-SIIM Enterprise Imaging Community, a joint effort between HIMSS and the Society of Imaging Informatics in Medicine. Garriott also served as chair for the HIMSS Analytics Digital Imaging Adoption Model Global Development team. A popular speaker, Garriott presents on diverse topics including artificial intelligence, interoperability, telehealth and enterprise imaging. She seeks to help young women working in health IT hone skills for career advancement. She is also a member of Executive Women in Healthcare.



# *HIMSS-SIIM Enterprise Imaging Community*

- **Founded in 2014, the community provides an effective point of connection for clinicians and IT professionals to engage in the advancement of the enterprise imaging strategies.**
- **Community members share innovative ideas, contribute to the advocacy efforts and other thought leadership opportunities, participate in educational offerings, grow their own professional development, develop practical tools, and participate in networking opportunities.**





**Our  
White Papers  
45K Downloads**

- 1) *Technical Challenges of Enterprise Imaging*
- 2) *Workflow Challenges of Enterprise Imaging*
- 3) *The Current State and Path Forward for Enterprise Image Viewing*
- 4) *Orders- Versus Encounters-Based Image Capture: Implications Pre- and Post-Procedure Workflow, Technical and Build Capabilities, Resulting, Analytics and Revenue Capture*
- 5) *Considerations for Exchanging and Sharing Medical Images for Improved Collaboration and Patient Care*
- 6) *Enterprise Imaging Governance*
- 7) *A Foundation for Enterprise Imaging*
- 8) *10 Steps to Strategically Build & Implement Your Enterprise Imaging System*
- 9) *Interoperability and Standards-based Exchange of Medical Images*

[https://siim.org/page/himss\\_siim\\_white\\_pap](https://siim.org/page/himss_siim_white_pap)

# Agenda

- Welcome (3 min)
- Workgroup Updates:
  - **Photodocumentation (3 min)**
  - **Multimedia Interactive Content Reporting (3 min)**
  - **Medical Vocabulary Standardization Initiative (3 min)**
- Medical Vocabulary Standardization Initiative (3 min)
- **How Enterprise Imaging is Leveraged for Patient Care from a Distance (30 min)**
  - **Q&A (10 mins)**
- Upcoming Activities/Events (3 min)



# *Photo Documentation*

- **Purpose: to provide a forum for discussion of the clinical and technical challenges and opportunities associated with photodocumentation.**
  - Integration with other industry efforts to ensure convergence of our efforts.
  - Goal: two whitepapers
    - Clinical focused on HIPAA, Privacy and Sensitive Photos
    - Technical addressing security of photographs and photograph acquisition devices.



**Cheryl Petersilge MD, MBA**  
Founder & CEO  
Vidagos Advisors



# Photograph Access – V4.March 42

Who sets access type	Access* Provider	Access* Patient	Access* Proxy	Sharing	Use Case (discussion purpose only)	Access Type
Default	All	All	All	All	General use	Open
Default	None	None	None	None	Forensic & evidentiary photos; research	Sequestered
Default	None (break the glass – request permission)	None	None	None	Forensic & evidentiary photos; research	Sequestered
Provider	Based on provider type	All	Per patient	Per clinical needs, pt preference, ROI policies	Genitalia	Limited access
Provider	All	None	None	As above	Gruesome photographs	Patient restricted
Patient	All	None	Per patient **	As above	Gruesome photographs	Patient restricted

\*Via universal viewer

\*\*Viewer warning or opt in



# *Multimedia Interactive Content Reporting*

**Purpose:** to provide a multidisciplinary forum for discussion of the clinical, political and technical challenges and opportunities associated with Multimedia interactive content reporting.

**Goal: Author a white paper and IHE Profile**

- Status quo workflows, acquisition, storage, management, reporting
- Long/short term goals such as universal image access
- Challenges to reach above goals (e.g. interoperability)

[https://siim.org/page/himss\\_wg\\_multimedia\\_interactive](https://siim.org/page/himss_wg_multimedia_interactive)



**Les Folio**, DO, MPH, FAOCR, FSABI  
National Institutes of Health  
Clinical Center

# *Data Standards Evaluation*

- **Purpose: to analyze existing standards for nomenclature related to body part and anatomic region, for purposes of multidisciplinary relativity and systems interoperability delivered internally and externally across healthcare organizations.**
  - Goal 1: Identify needed characteristics and criteria
  - Goal 2: Develop evaluation model
  - Goal 3: Evaluate existing ontologies
  - Goal 4: Educate



**Dawn Cram, RT(R)(M), CIIP**  
Managing Partner,  
The Gordian Knot Group, LLC  
Healthcare IT Advisory Services

# *SIIM Medical Anatomy Labeling Summit Postponed*

**Alexander Towbin, MD**  
Cincinnati Children's Hospital

**Summit Purpose:** to collectively work towards selecting a preexisting body part ontology to use in enterprise imaging

- Help to unlock the power of Enterprise Imaging
- Allow vendors to create multidisciplinary solutions that efficiently present relevant data to physicians, nurses, and other health care providers



# Questions?

# How Enterprise Imaging is Leveraged for Patient Care from a Distance

**Moderator:**

**Dawn Cram**, RT(R)(M), CIIP  
Managing Partner,  
The Gordian Knot Group, LLC  
Healthcare IT Advisory Services





**Alexander Towbin, MD**

*Associate Chief, Clinical Operations and Informatics  
Neil D. Johnson Chair, Radiology Informatics  
Cincinnati Children's Hospital Medical Center*



**Anil Parwani, , MD, PhD, MBA**

*Professor of Pathology and Biomedical Informatics  
Vice-Chair of Anatomic Pathology  
Director of Pathology Informatics  
Director, Digital Pathology Shared Resources  
Wexner Medical Center - Department of Pathology*



**Toby C. Cornish, MD, PhD**

*Medical Director of Pathology Informatics  
Medical Director of the LIS, UCHHealth  
Associate Professor of Pathology  
University of Colorado School of Medicine*



**Christopher Roth, MD, MMCI, CPHIMS, CIIP**

*Vice Chair Radiology - Information Technology, Duke University  
Director of Imaging Informatics Strategy*



**Veronica Rotemberg, MD, PhD**

*Dermatologist  
Memorial Sloan Kettering Cancer Center*

HIMSS-SIIM ENTERPRISE IMAGING COMMUNITY ROUNDTABLE





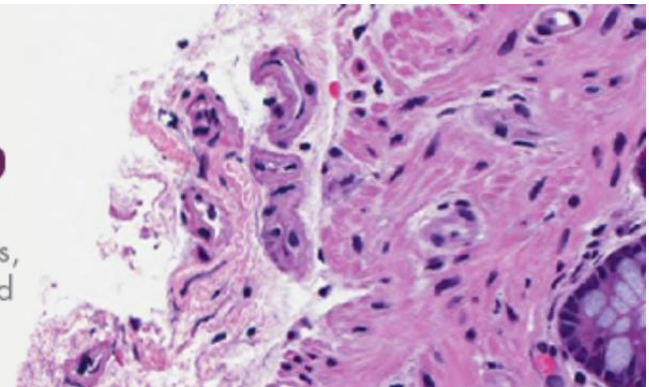
# Digital Pathology

“A dynamic, image-based environment that enables the acquisition, management and interpretation of pathology information generated from a **digitized glass slide**. Often used interchangeably with ‘Virtual Microscopy.’”



## WHAT IS THE DIGITAL PATHOLOGY ASSOCIATION?

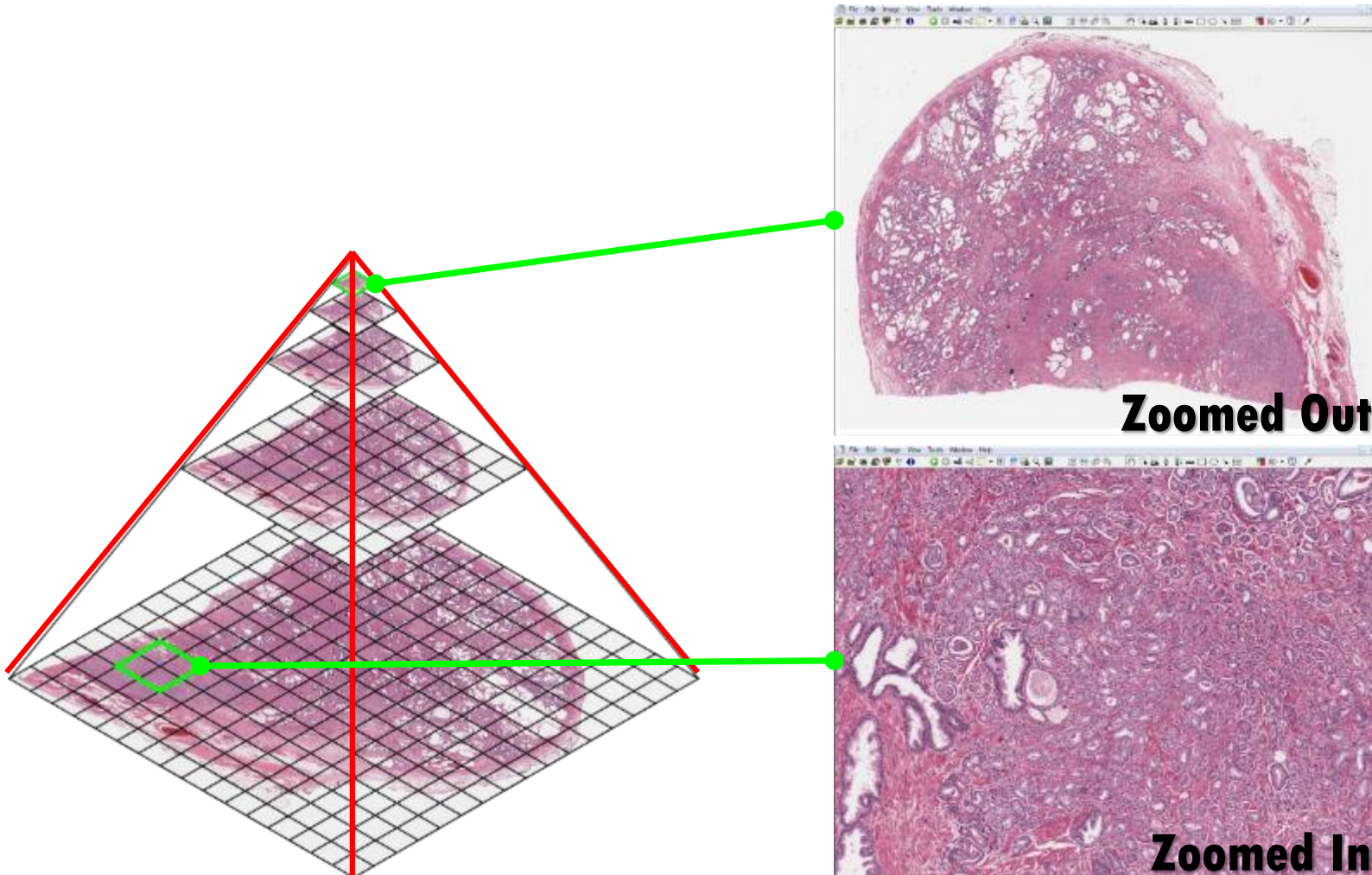
The DPA is a nonprofit organization comprised of pathologists, scientists, technologists and industry representatives dedicated to advancing the field of digital pathology.



Definition from: [https://digitalpathologyassociation.org/glossary-of-terms\\_1](https://digitalpathologyassociation.org/glossary-of-terms_1) (accessed January 2020), Images from: <https://digitapathologyassociation.org> (Accessed January 2020)



# Whole Slide Imaging (WSI)



**Recreates the glass slide as a virtual image object**

**A “pyramid” with a thumbnail on top and high resolution on the bottom**

# FDA allows marketing of first whole slide imaging system for digital pathology

 SHARE

 TWEET

 LINKEDIN

 PIN IT

 EMAIL

 PRINT

For Immediate  
Release

April 12, 2017

Release

The U.S. Food and Drug Administration today permitted marketing of the Philips IntelliSite Pathology Solution (PIPS), the first whole slide imaging (WSI) system that allows for review and interpretation of digital surgical pathology slides prepared from biopsied tissue. This is the first time the FDA has permitted the marketing of a WSI system for these purposes.

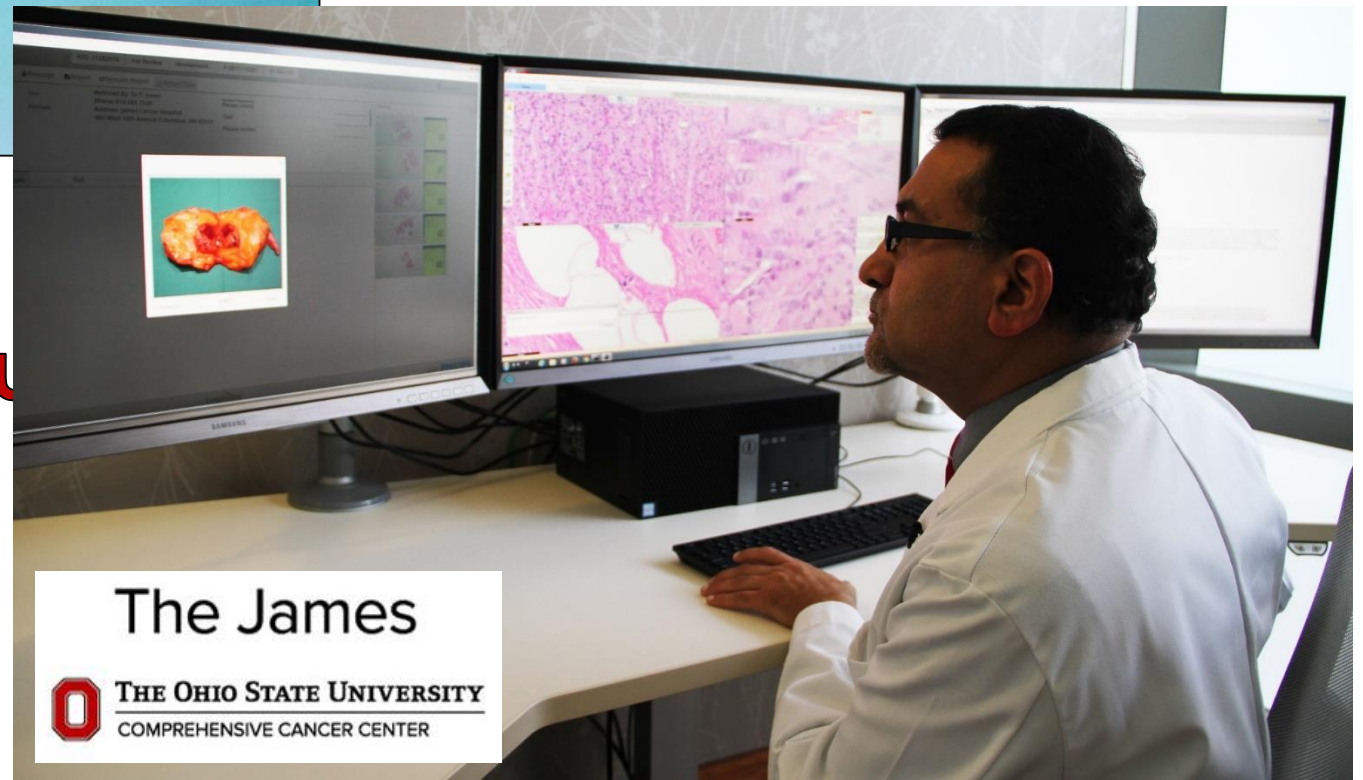
# PRIMARY DIAGNOSIS

GO LIVE MARCH 1<sup>st</sup> 2018 – First case – Benign Prostate Biopsy



Anil Parwani

**First digital case signed out in the United States**



The James



THE OHIO STATE UNIVERSITY  
COMPREHENSIVE CANCER CENTER

# “Hybrid” slide scanners: Multiple objectives



- A full set of objectives is required for “hybrid” slides scanners
- Hybrid slide scanners can be used for both static whole slide imaging and for robotic live telepathology





RECYCLE



OLYMPUS EX45  
SERIAL NO. 123456789  
DATE OF PURCHASE 12/15/2018

OLYMPUS EX45



**Alexander Towbin, MD**

*Associate Chief, Clinical Operations and Informatics  
Neil D. Johnson Chair, Radiology Informatics  
Cincinnati Children's Hospital Medical Center*



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*Dermatologist  
Memorial Sloan Kettering Cancer Center*



# Point of Care Ultrasound: COVID Response

April 15<sup>th</sup> 2020



DukeHealth

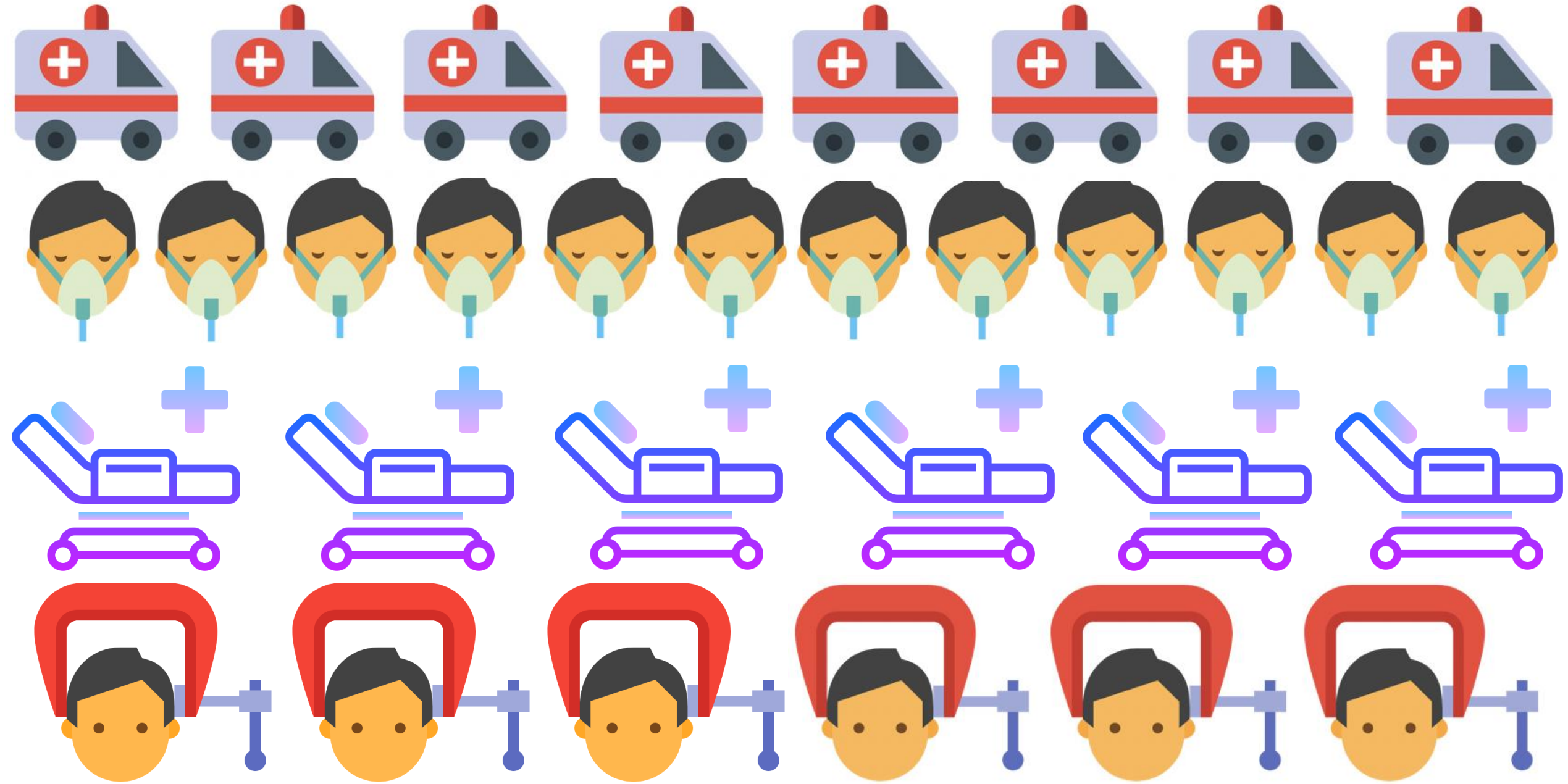


**Christopher J. Roth** @ChrisRothMD · Mar 28

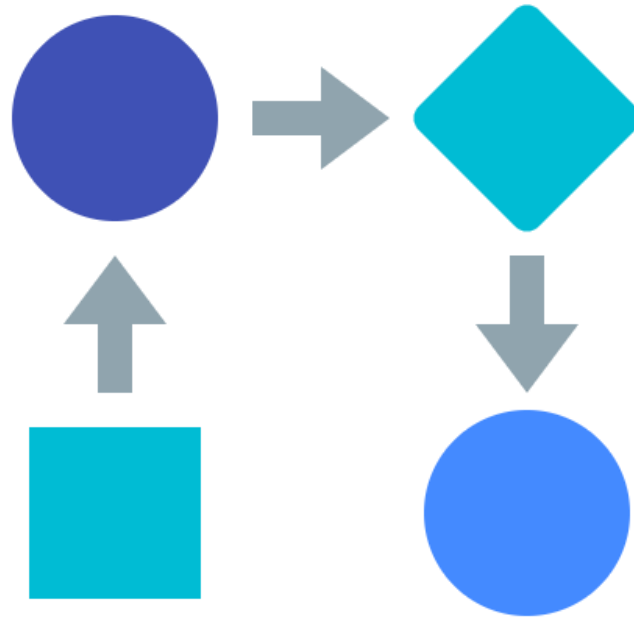
Me, yesterday: "The last time I have seen [#leadership](#) focus and collaborate this well was when we put in [#Epic](#) [#EHR](#) in 2013. I don't like associating Epic with a viral [#pandemic](#), but it is the truth." [#HealthcareHeroes](#) 🍊👍



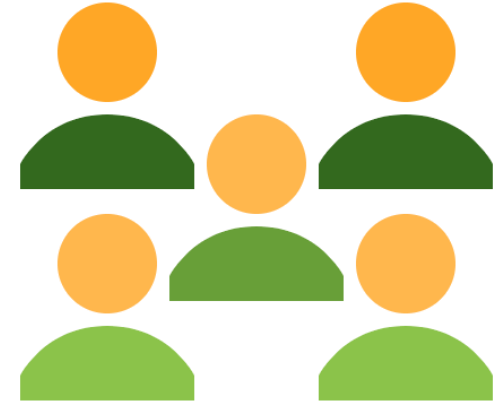
# How To Support The ED and ICUs?



# What We Had



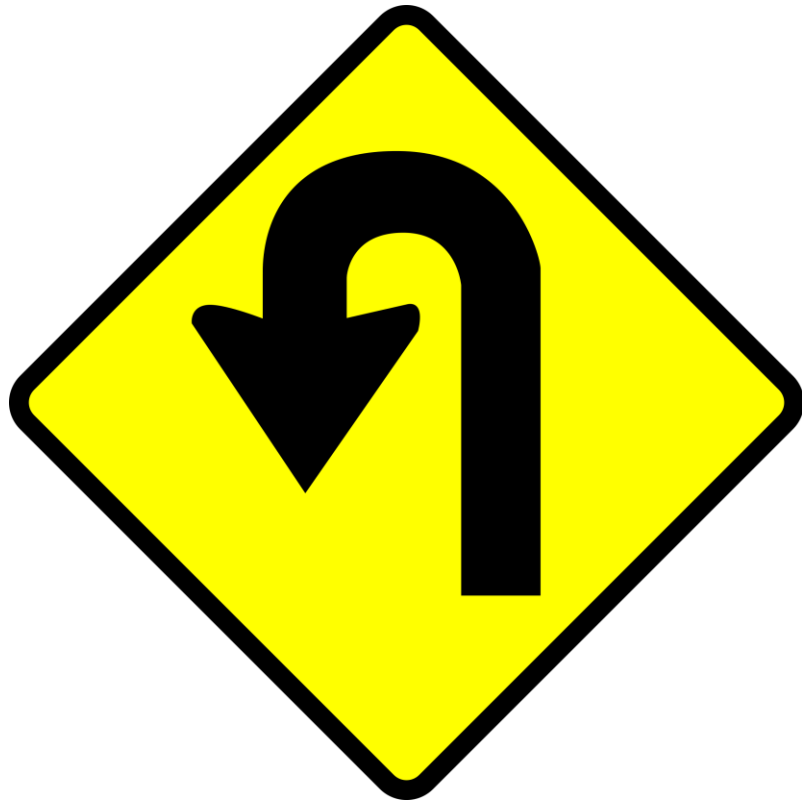
# What We Didn't Have



# Encounter Based Point of Care US



Clinical (3 Hospitals; 18 MD “Owners”)	Information Tech. Teams	Administrative
Every ED “pod”	Information Security	Legal
Every ICU	Interfaces	Procurement
Every Vascular Access service	Clinical Engineering	Governances
Every Periop	Field Services	Command Center
Critical Overflow	Imaging Physics	Finance
Spares	EHR Imaging	
	Image Management	
	Applications	



## Orders- Versus Encounters-Based Image Capture: Implications Pre- and Post-Procedure Workflow, Technical and Build Capabilities, Resulting, Analytics and Revenue Capture: HIMSS-SIIM Collaborative White Paper

[Dawn Cram](#) [Christopher J. Roth](#) & [Alexander J. Towbin](#)

[Journal of Digital Imaging](#) **29**, 559–566(2016) | [Cite this article](#)

**5333** Accesses | **8** Citations | **23** Altmetric | [Metrics](#)

### Abstract

The decision to implement an orders-based versus an encounters-based imaging workflow poses various implications to image capture and storage. The impacts include workflows before and after an imaging procedure, electronic health record build, technical infrastructure, analytics, resulting, and revenue. Orders-based workflows tend to favor some imaging specialties while others require an encounters-based approach. The intent of this HIMSS-SIIM white paper is to offer lessons learned from early adopting institutions to physician champions and informatics leadership developing strategic planning and operational rollouts for specialties capturing clinical multimedia.

# Lessons Learned



## *HIMSS & SIIM Staff Liaisons*



**Tammy Kwiatkoski, MBA**  
Director, Clinical Informatics  
HIMSS  
tkwiatkoski@himss.org



**Trisha Pongco, CAHIMS**  
Program Manager, Clinical Informatics  
HIMSS  
tpongco@himss.org



**Cheryl Carey, MBA, CAE**  
Executive Director  
SIIM  
ccarey@siim.org



**Nikki Medina**  
Director of Education  
SIIM  
nmedina@siim.org



# *HIMSS-SIIM Questionnaire on Terminology*

- **ACTION:** Participate in this short survey to shape recommendations to industry and clinical care bodies on how body part and anatomic region is encoded in imaging data and supported in the systems you use for clinical care.
- **GOAL:** Analyze the anonymous input, and existing standards, to prepare recommendations that will be published.
- **LINK:** will be sent to all registrants.





# *Upcoming Events*

- **Monthly eNewsletter**
- **Monthly Workgroup Meetings**
- **HIMSS-SIIM Enterprise Imaging Community In-Person Meetup**
  - SIIM | June 24-26, 2020 | Austin, TX
  - RSNA | November 29 – December 4, 2020 | Chicago, IL
  - HIMSS | March 1– March 5, 2021 | Las Vegas, NV
- **Next HIMSS-SIIM Enterprise Imaging Community Virtual Roundtable**
  - July 15, 2020 |



# *Meet the 2020 HIMSS Most Influential Women in Health IT*

- **Complimentary Virtual Event | April 23, 2020, 11:00am CT**

Get inspired by the recipients of the HIMSS's Most Influential Women in Health IT Award. This panel of distinguished women will share their journeys of transformational change and innovation in the health sector. They have shown that one can be influential at any career stage and across the healthcare trajectory, from care delivery, to informatics, to business.

**Geeta Nayyar, MD, Chief Medical Officer, Greenway Health**

**Eva Karp, DHA, MBA, RN-BC, FACHE, Sr. VP, Chief Clinical and Patient Safety Officer, Cerner Corporation**

**Iris P. Frye, MS, MBA, CPHIMS, Founder and Chief Innovator, Parity Health Information and Technology**

**Kim Garriott, Principal Consultant, KSM Consulting**

**Lucie Ide, MD, PhD, Founder & Chief Health Innovator, Rimidi Inc.**

**Tressa Springmann, SVP & CIO, Lifebridge Health**

**Denise Hines, DHA, PMP, FHIMSS, Chief Americas Officer, HIMSS**

<https://www.himsslearn.org/meet-2020-most-influential-women-health-it>

Thank you.