

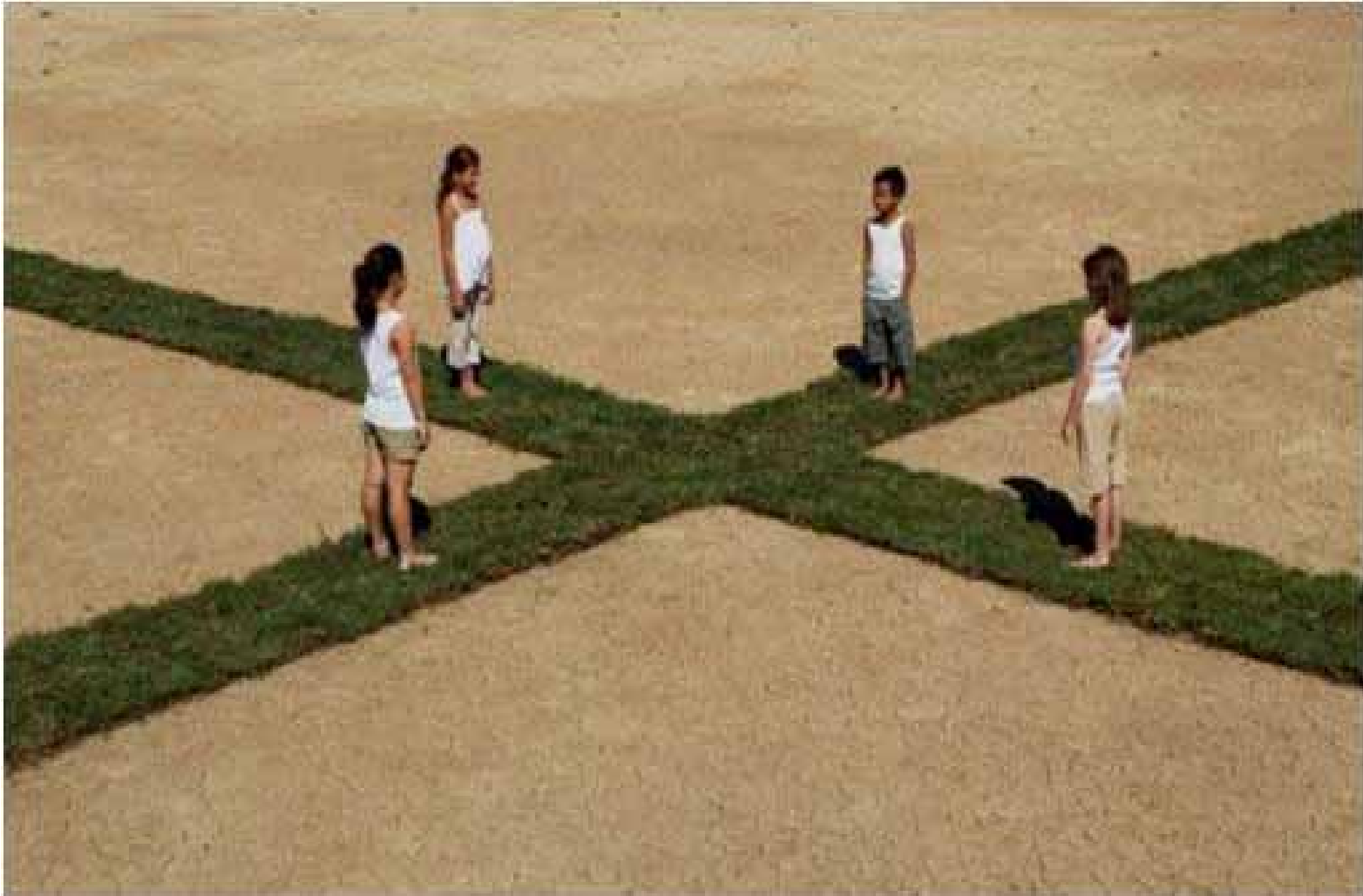
“Interoperability for Image Sharing in Telestroke”

December 9, 2008

*Presented by
Florent Saint-Clair*

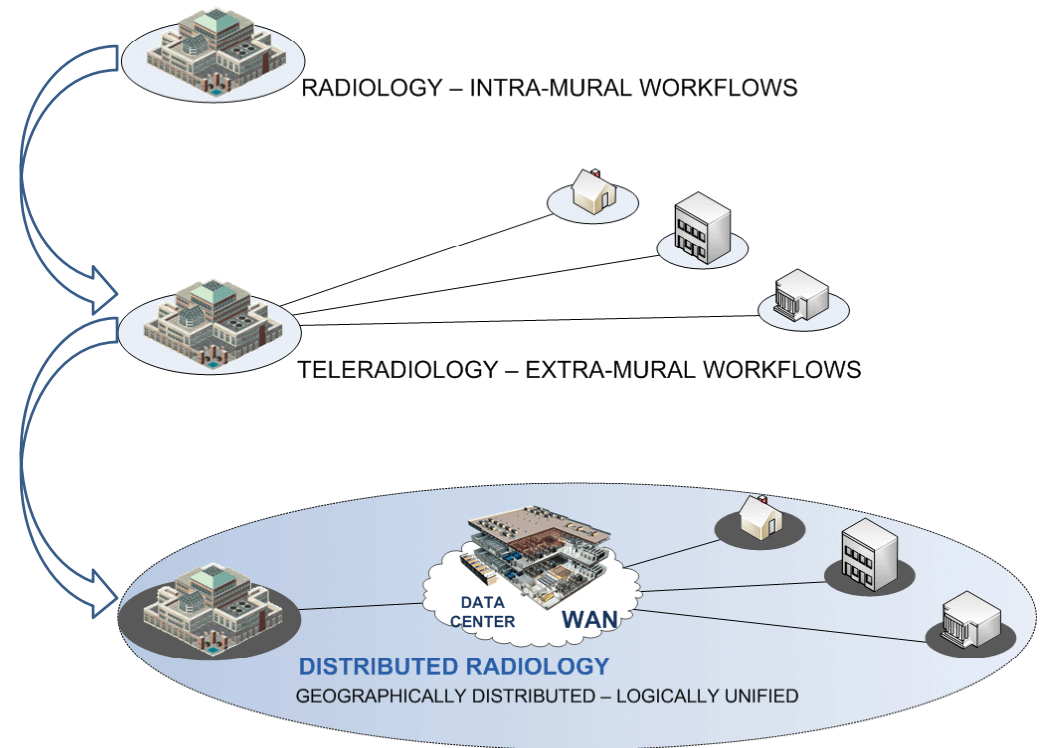


How did we get here? What are we doing?



From Teleradiology to... Radiology

- Radiology has evolved
- IT is a form of utility like water or electricity
- From wet processing to Teleradiology to Distributed Radiology
- A regionalized longitudinal view of patient records is not only desirable, ... it is POSSIBLE, DESIRABLE and SUSTAINABLE.



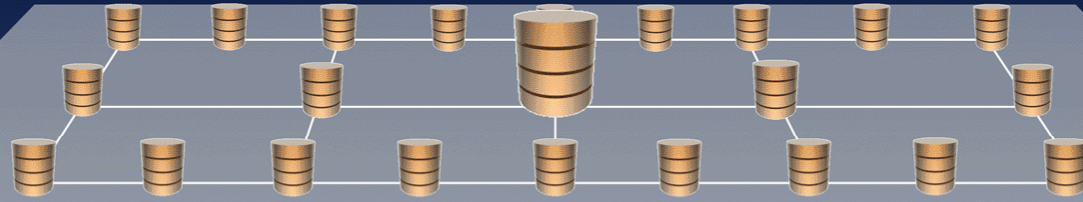
Harvard survey casts serious doubt on future of RHIOs (Dec 2007)

"... findings suggest that nationwide electronic clinical data exchange will be much harder than what many people have envisioned," said Julia Adler-Milstein, a doctoral candidate in health policy at Harvard University and the study's lead author.

"The expectation has been that we will have RHIOs throughout the country that bring together all the providers in their region and engage in comprehensive data exchange. In reality, we're seeing few established RHIOs and those that are established only have a small number of participating groups exchanging a narrow set of data."

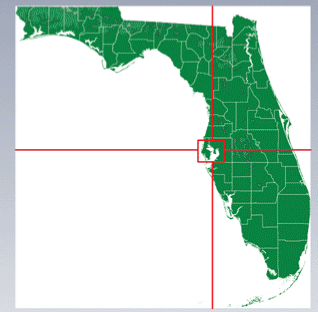
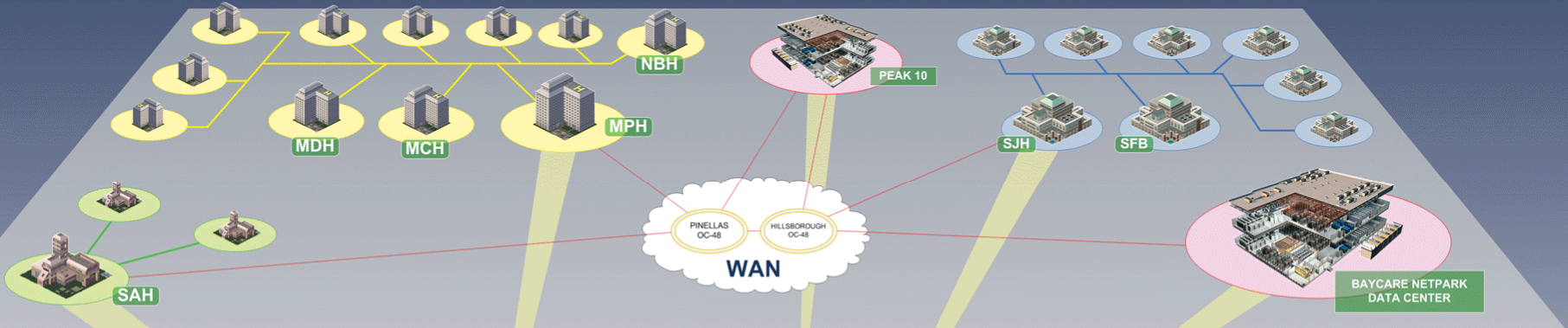
Imaging RHIOs – 7 challenges

- **Financial challenge** – RHIOs are failing financially – WHY? Grants dry up, no built-in long-term sustainability
- **Governance challenges** – who manages what?
- **Security challenge** – external AND internal
 - Medical record snooping likely becoming a felony
- **Regulatory challenge**, enforcement of HIPAA, Patient Consent
- **Technical fragmentation challenge** – heterogeneous IT environment – multiple layers of incompatible legacy solutions
- **Telecom challenge** – Inconsistent and expensive infrastructure
- We have **industry standards** to rely upon (DICOM, IHE, HL7, SNMP), yet no successful imaging RHIO, why not?
 - Embracing *disruptive technologies* cuts into profitability
 - *Lack of incentive* for vendors to collaborate among one another
 - *Lack of experience* with interoperability – need to become an interface engine



BAYCARE FEDERATED PACS DATABASE LAYER

GEOGRAPHICALLY DISTRIBUTED – LOGICALLY UNIFIED



Rosetta Stone for Medical Communications?

- At the United Nations, only 6 languages are spoken on the Assembly Floor for 189 member countries
- Anyone remember Esperanto?
- In Medicine, we have DICOM/IHE and HL7
- Each vendor publishes a DICOM Conformance Statement, each of which is an *interpretation*
- Each vendor maintains an HL7 Specification
- Not all vendors conform to the same IHE integration profiles

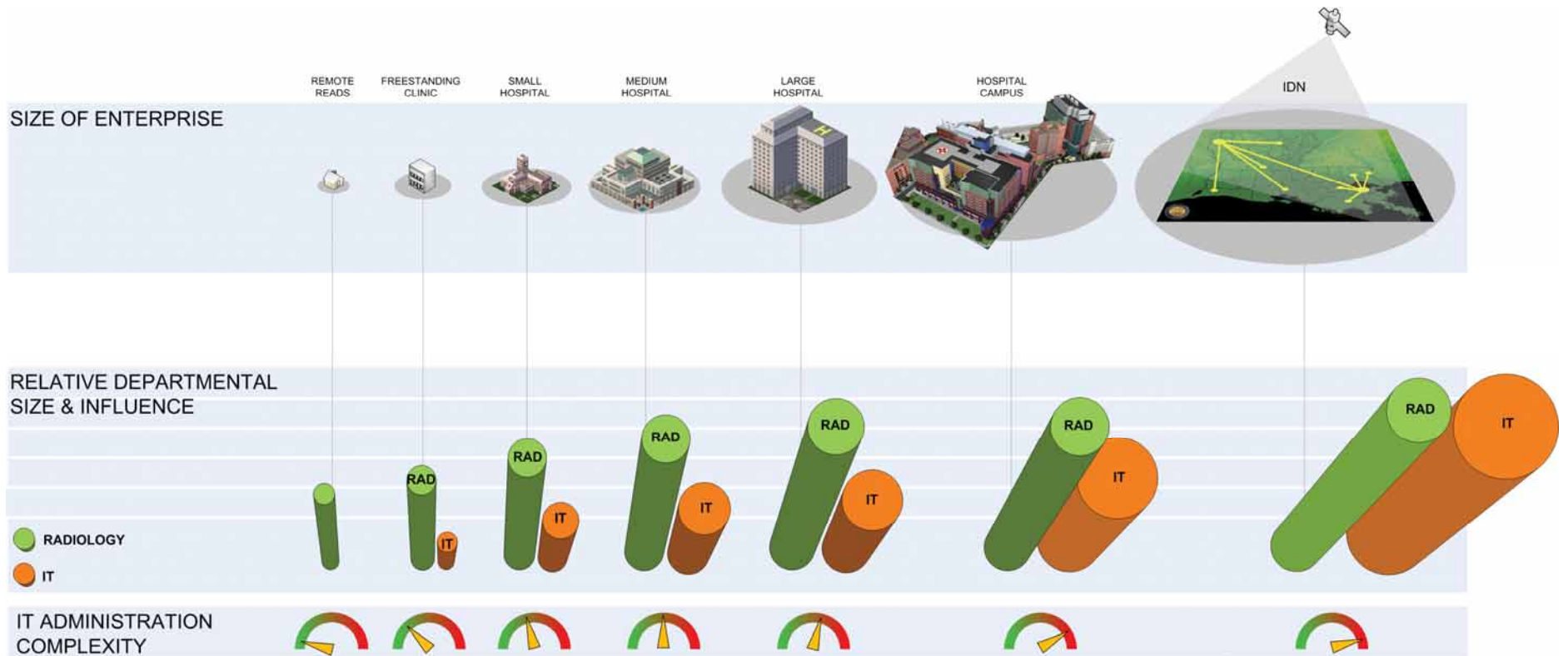
What keeps us up at night

- What keeps a physician up at night is the nagging doubt that he or she took a course of action based on having *all* the relevant data at their disposal
- What ought to keep vendors up at night is whether the technology they sell is in fact supporting the caregiver's mission.

How do we get where we need to be?

- Keep in mind Job # 1: Patient Outcomes
- Leadership and persistence in the face of criticism
- Disruptive thinking
- Public/Private Cooperation
 - Demonstrate to Government our commitment to a model of *interoperability* and *sustainability*
- Willingness on the part of technology vendors and Government to take calculated risks
- Forego short-term profits for long-term benefits

The central role of IT in Diagnostics



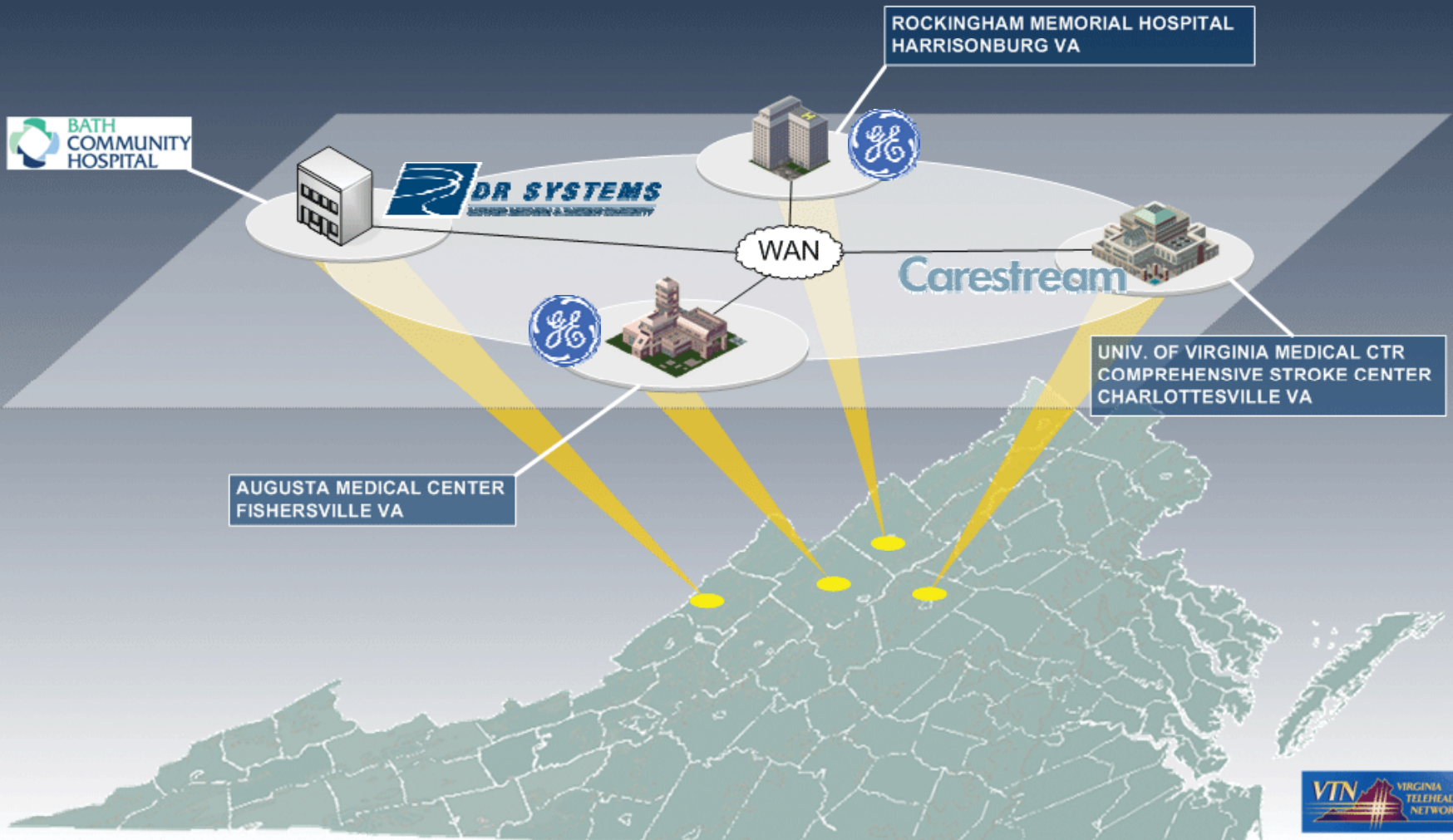
Radiology is but ONE constituent for IT

How we are achieving our goals at Bath Community Hospital

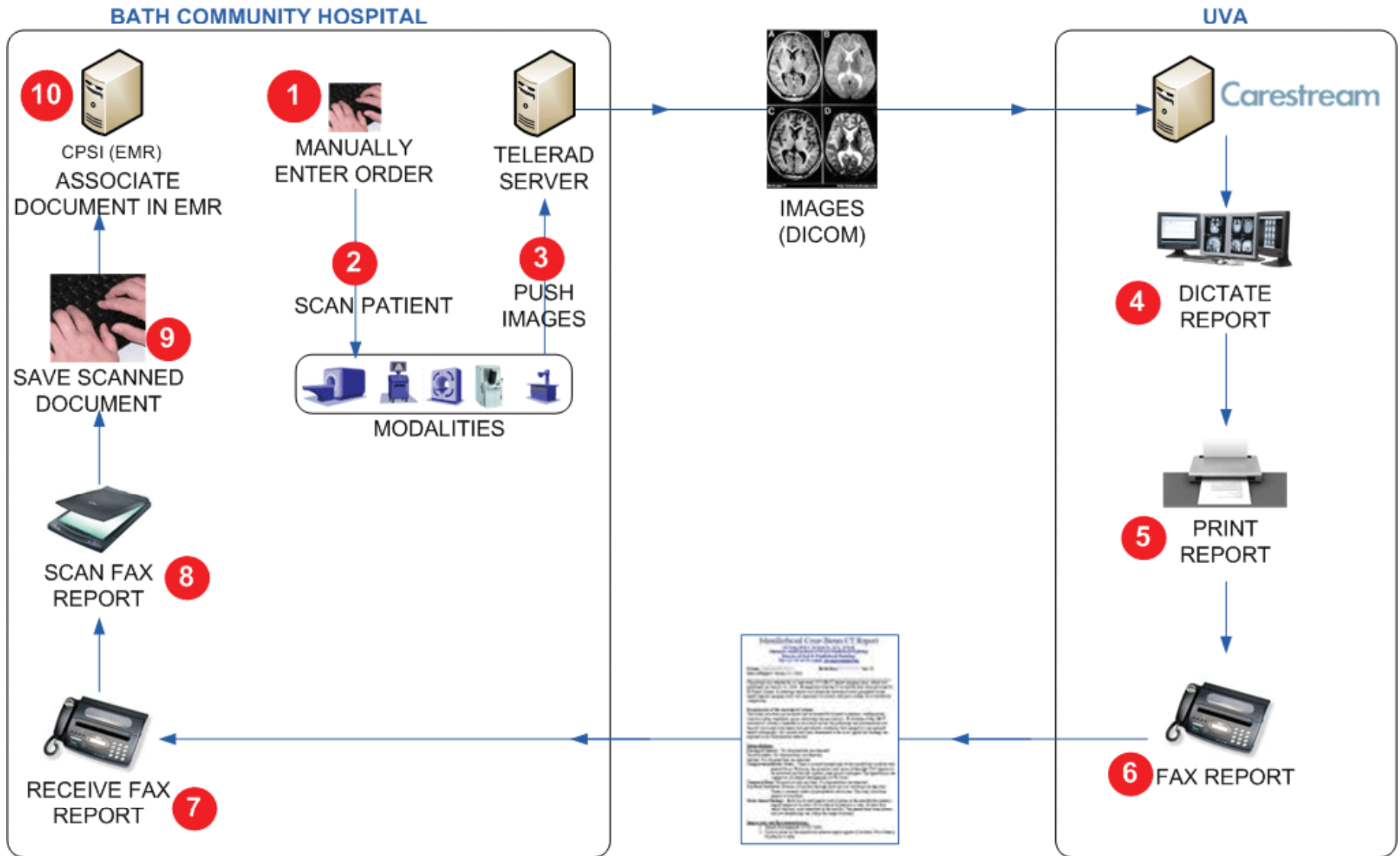
- Enabling PACS at Bath Community Hospital
- Interoperability between vendors
 - DR Systems, Carestream, GE
 - PACS to PACS integration
 - RIS to RIS integration
- Enabling fully digital workflows
 - From placing order all the way to receiving preliminary and final reports

VAST Imaging RHIO

VIRGINIA ACUTE STROKE TELEHEALTH NETWORK INITIATIVE (VAST)
PILOT PROGRAM PHASED IMPLEMENTATION



Bath Workflow - Before



In summary...

Disturb the peace

Promote Interoperability &
Cooperation among vendors

Improve Patient Outcomes
reliably, consistently, and
affordably

THANK YOU!

