

# ***Award Recipient Project Reports***

## **Lunch with the RML**

**September 27, 2012**



These projects have been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Contract No. HHS-N-276-2011-00003-C with the University of Pittsburgh-Health Sciences Library System.

*iRound: Bringing EBM to  
Family Centered Clinical  
Teaching Rounds*



Kristina M. Flathers, MLIS

Medical Librarian

September 27, 2012

**Nemours** Alfred I. duPont  
Hospital for Children

# Project Goals

- Provide access to point of care resources in real time clinical applications
  - Outfit three general pediatrics residency teams with iPads
    - Attending physician
    - Senior resident
    - Unit nursing
    - Medical Librarian
- Demonstrate collaborative effectiveness of embedded clinical librarian



# Planning

- **Partnered with IS in early stages**
  - Received support throughout process
- **Project objectives approved by high-level stakeholders**
  - CFO, VP of Medical Education, Director of Nursing Education, Chairman of the Department of Pediatrics
- **Resident teams eager for increased efficiency on rounds**
  - Current access through computer-on-wheels rife with technical glitches
- **IRB & Surveys**



# Resources Utilized

- **Medical Librarian**
  - Utilized iPad on rounds before project launched
  - Prepped iPads with apps and bookmarks, protective cases, stylus and tips
    - Citrix proxy
    - VisualDx, DynaMed
    - MD Consult, UpToDate, OvidMD
    - NLM Gateway
- **Director of Residency program given iPad**
  - Suggested additional apps and bookmarks
  - Secured attending physician's buy-in



# Implementation & Utilization

- Rolled out to one general pediatrics unit per week until all units covered
  - Continued to round with one team per week, other teams rounded without librarian in attendance
- Participant response
  - Reactions slightly mixed and unexpected
    - Nursing dropped out early due to technical issues
    - Attending physicians, residents and medical students showed marked interest in learning about resources and access
    - Pharmacists demonstrated unanticipated buy-in



# Resident Utilization



# Surprising Outcomes

- **Unexpectedly high impact on patient education**
  - Utilization of specific library resources increased by nursing and residents
    - VisualDx
    - Nursing Reference Center
    - KidsHealth (part of The Nemours Foundation)
- **Survey results vs. observations**
  - Follow-up survey had fewer respondents
  - Technical issues, but several teams reported increased efficiency in discharging patients
  - Preferred majority of clinical decision support searching be guided by embedded librarian





# Lessons Learned

- **Do not over-extend embedded librarian**
  - Base clinical coverage on current library staffing
- **Prepare appropriately for IS issues and strategically partner**
- **Was the project successful?**
  - Yes!
    - Residents and physicians have a greater awareness of library resources and ease of accessibility
    - Our profile has dramatically increased, along with utilization of our space and resources
    - We added a .75 professional medical librarian!





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[www.rmu.edu](http://www.rmu.edu)

# Advancing Technology in Nursing Education: Integrating iPads into Clinical Practice and Patient Education

*Bruce A. Johnston, MLS*

*Susan E. Hoolahan, MSN, RN, NEA-BC*

*Valerie M. Howard, EdD, RN*



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## Collaborative Partners

- Robert Morris University Library
- Robert Morris University School of Nursing and Health Sciences (NURS 4020)
- University of Pittsburgh Medical Center (UPMC) Passavant Hospital Nursing Department - Intensive Care Unit (ICU)



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## Grant- Funded Acquisitions

- 10 iPad 2 (WiFi, 32 GB) tablet devices
- 10 cases/display stands
- 10 sets Skyscape e-books (course requirement)
  - 2012 Lippincott's Nursing Drug Guide
  - Nurses Manual of Laboratory & Diagnostic Tests
  - Taber's Cyclopedic Medical Dictionary-21<sup>st</sup> edition
  - Diseases & Disorders: Nursing Therapeutics Manual



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## Grant-funded Acquisitions

- 50 clear thin disposable screen protectors
- 12 copies iPad User Manual
- 10 sets assorted commercial “apps” (iTunes store)
- 1 HP Office Jet Pro 8600 wireless color printer



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## RMU Library / UPMC “Apps” Loaded

- Blackboard (Course Management System)
- EBSCOhost – CINAHL with full text database
- Dynamed
- PubMed (National Library of Medicine)
- MedlinePlus
- Robert Morris University Veteran’s “app” (campus information/calendar of events)
- UPMC Patient Education A-Z Resources Webpage



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## Additional Commercial “Apps” Loaded

- ✓ Web MD for iPad
- ✓ Medscape
- ✓ Lab Values for iPad
- ✓ MediMath Medical Calculator
- ✓ Body Mass Index Calculator
- ✓ Medical Acronyms & Abbreviation Dictionary
- ✓ Gray’s Anatomy Premium
- ✓ NCLEX RN Practice Exams (2012)
- ✓ ICD-9 for iPad
- ✓ Nursing Essentials for iPad
- ✓ Centers of Disease Control (CDC) app
- ✓ Medical News Resource



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## Additional Skyscape E-books on Selected iPads

- ❖ *Health Assessment Through the Life Span (6)*
- ❖ *Clinical Companion for Medical Surgical Nursing (3)*
- ❖ *Psychosocial Nursing for General Patient Care (6)*
- ❖ *Clinical Companion for Medical Surgical Nursing: Patient-Centered Collaborative Care (3)*
- ❖ *OB Peds Women's Health Notes: Nurse's Clinical Pocket Guide (3)*





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## Grant Implementation - Phase 1 December 2011 – February 2012

- Partnered with RMU Apple consultant to obtain iPad hardware.
- Evaluated and selected initial set of apps to load on devices.
- Developed RMU Library policies and procedures for iPad circulation, including lending agreements, OPAC item record creation, and appropriate usage policies.
- Convened meeting among collaborating partners to address:
  - implementation timeframes
  - infection control ramifications
  - network security issues
  - HIPAA compliance
  - enforcement of UPMC and RMU technology use policies



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## Grant Implementation - Phase 2

### March – April, 2012

- 6 RMU nursing students, 2 RMU faculty, and 2 UPMC Passavant nurses received iPad devices.
- IRB approval from RMU and UPMC/PITT to conduct post-experience surveys.
- Devices upgraded with additional software.
- At conclusion of course, 17-item Vovici surveys conducted and analyzed from all participants.

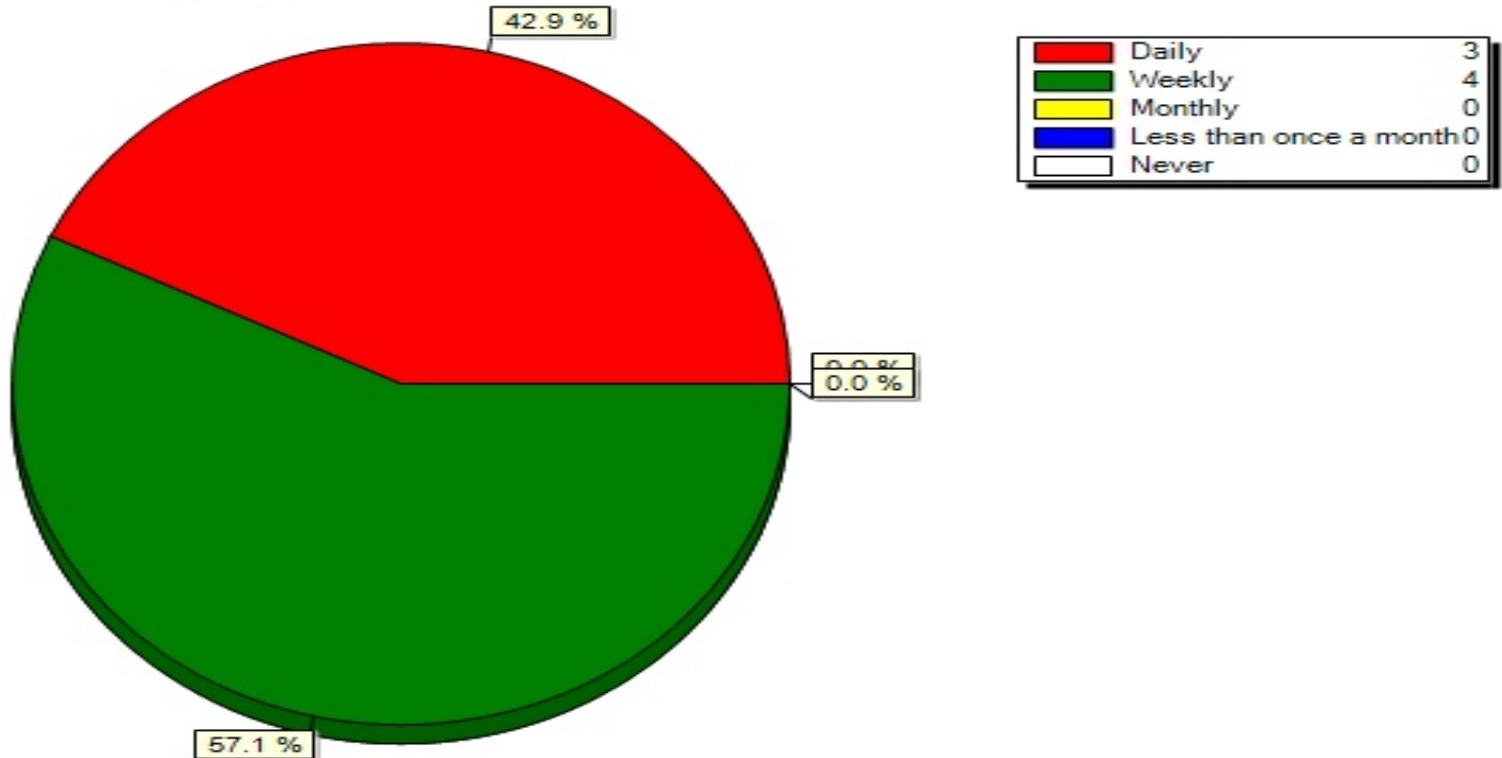


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## Assessment Results

Please indicate the frequency of your use of the iPad2



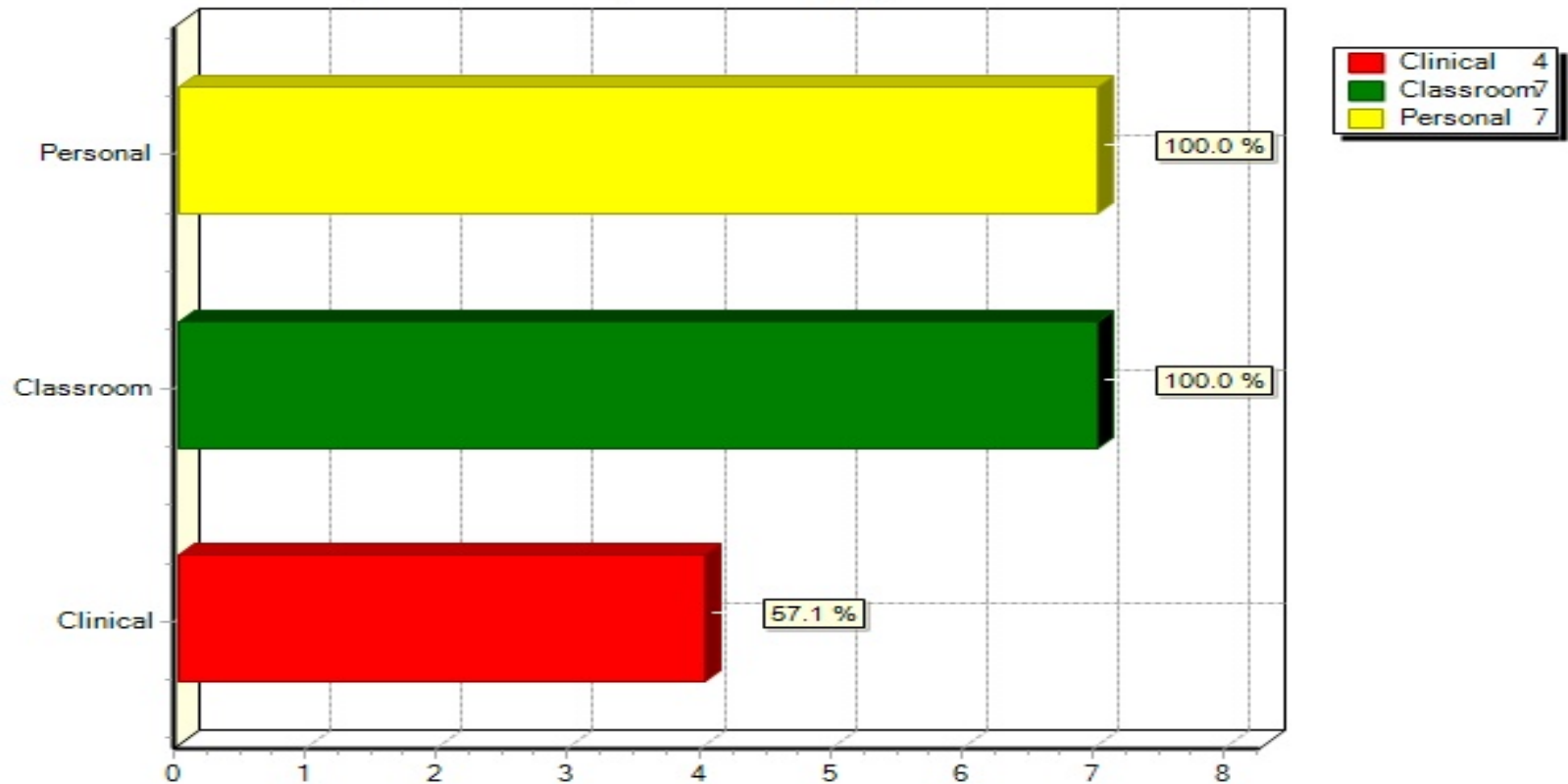


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## Assessment Results

In which situations do you use your iPad2? (select all that apply)



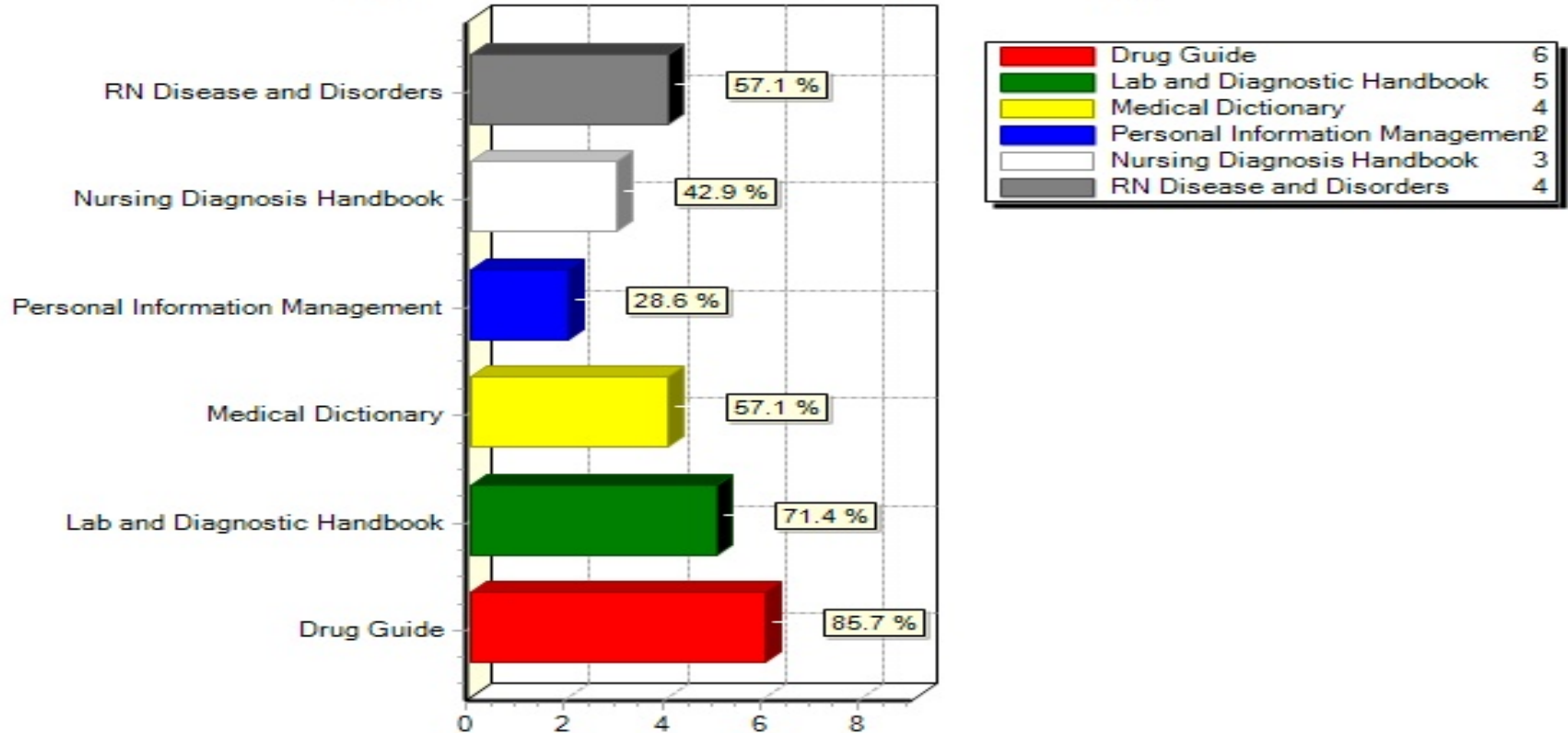


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## Assessment Results

Which of the following applications would be most useful to you? (select all that apply)



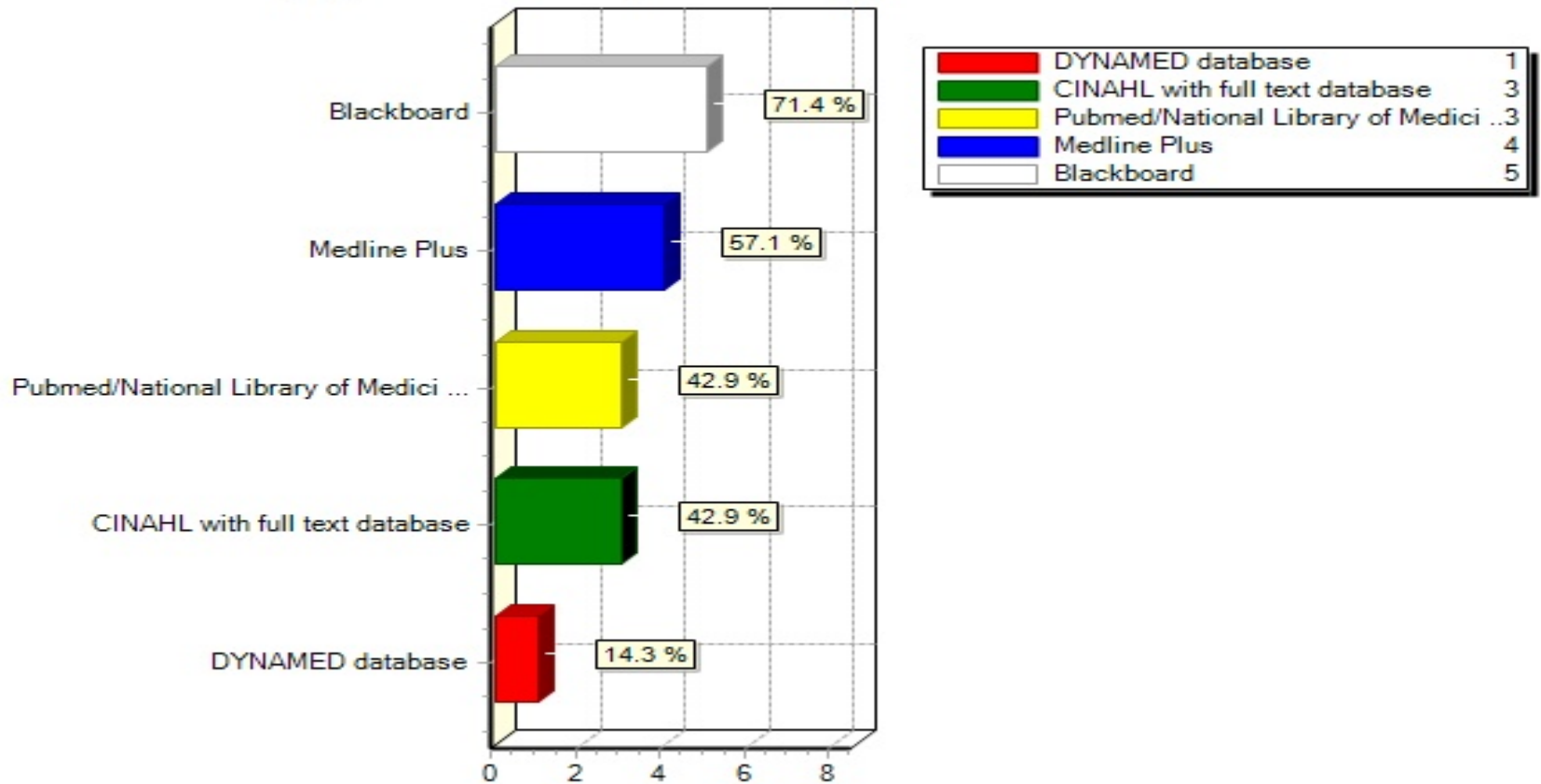


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## Assessment Results

Which RMU library applications do you use? (select all that apply)



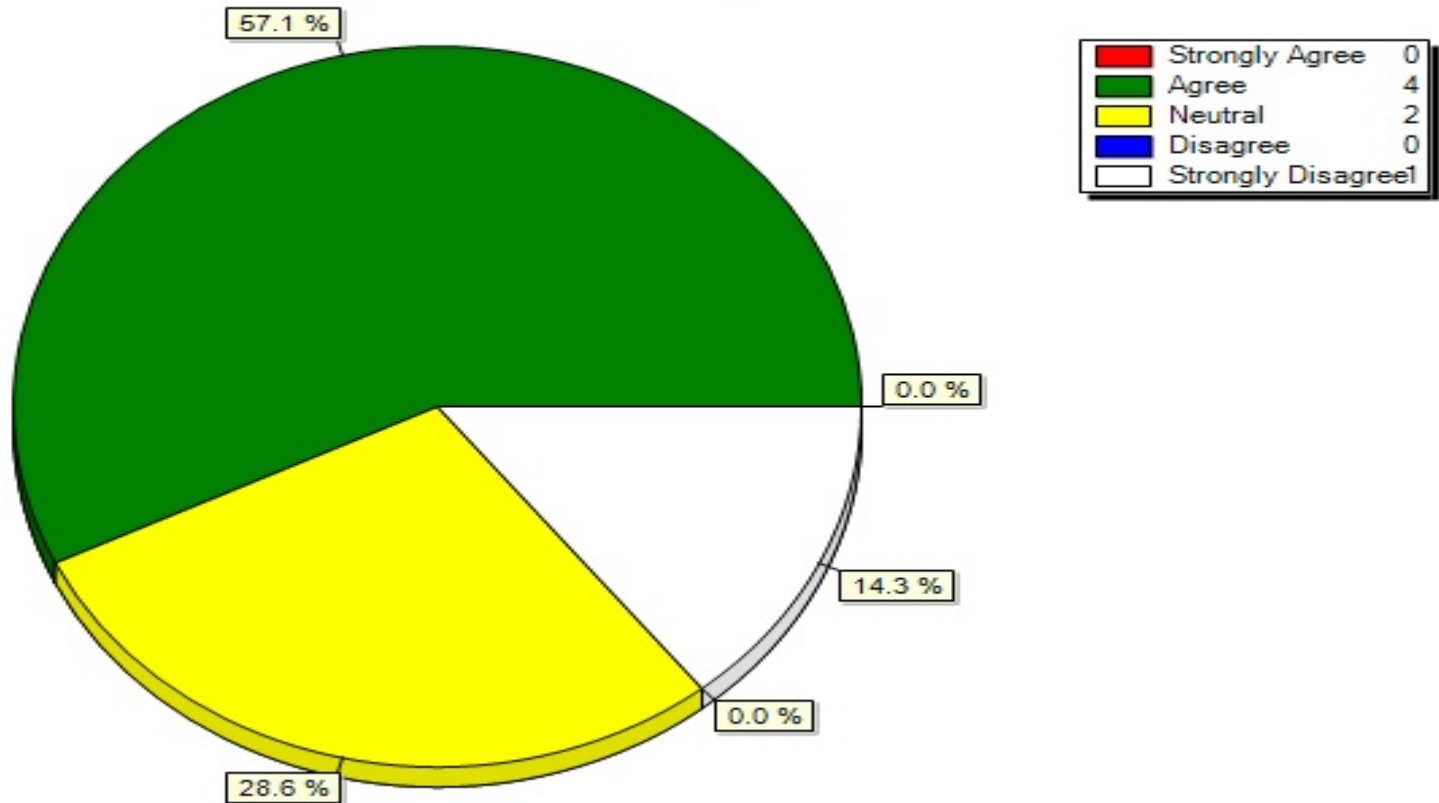


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## Assessment Results

My experience with iPad2 technology at RMU will contribute to my future use of mobile technology.





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## Future Directions

Fall 2012 Term:

- ❖ 9 iPads to be distributed to RMU students enrolled in NURS 3020 (Management of Adult-1) with a clinical rotation at UPMC-Passavant.
- ❖ Data collected via survey to assess utilization of iPad 2 devices in classroom, clinical, and nursing lab settings.



**+ Pilot Project  
using Anatomy  
Apps and  
Mobile  
Resources to  
Improve  
Learning in the  
Anatomy Lab**

**Joey Nicholson, MLIS, MPH  
Education and Curriculum Librarian  
NYU Health Sciences Libraries  
September 27, 2012**



# + Project Partners

- NYU Division of Educational Informatics (DEI)
- NYU Office of Medical Education (OME)
- NYU Anatomy Lab Faculty and Staff
- NYU Health Sciences Libraries

# + Project Goals

- Provide access to resources for students at the point of learning.
- Demonstrate effectiveness of librarian-faculty collaboration.
- Demonstrate utility of librarians to medical students.

# + Methods

Load 30 iPads with 4 different resources, put in anatomy lab, release to the medical students



# + Implementation



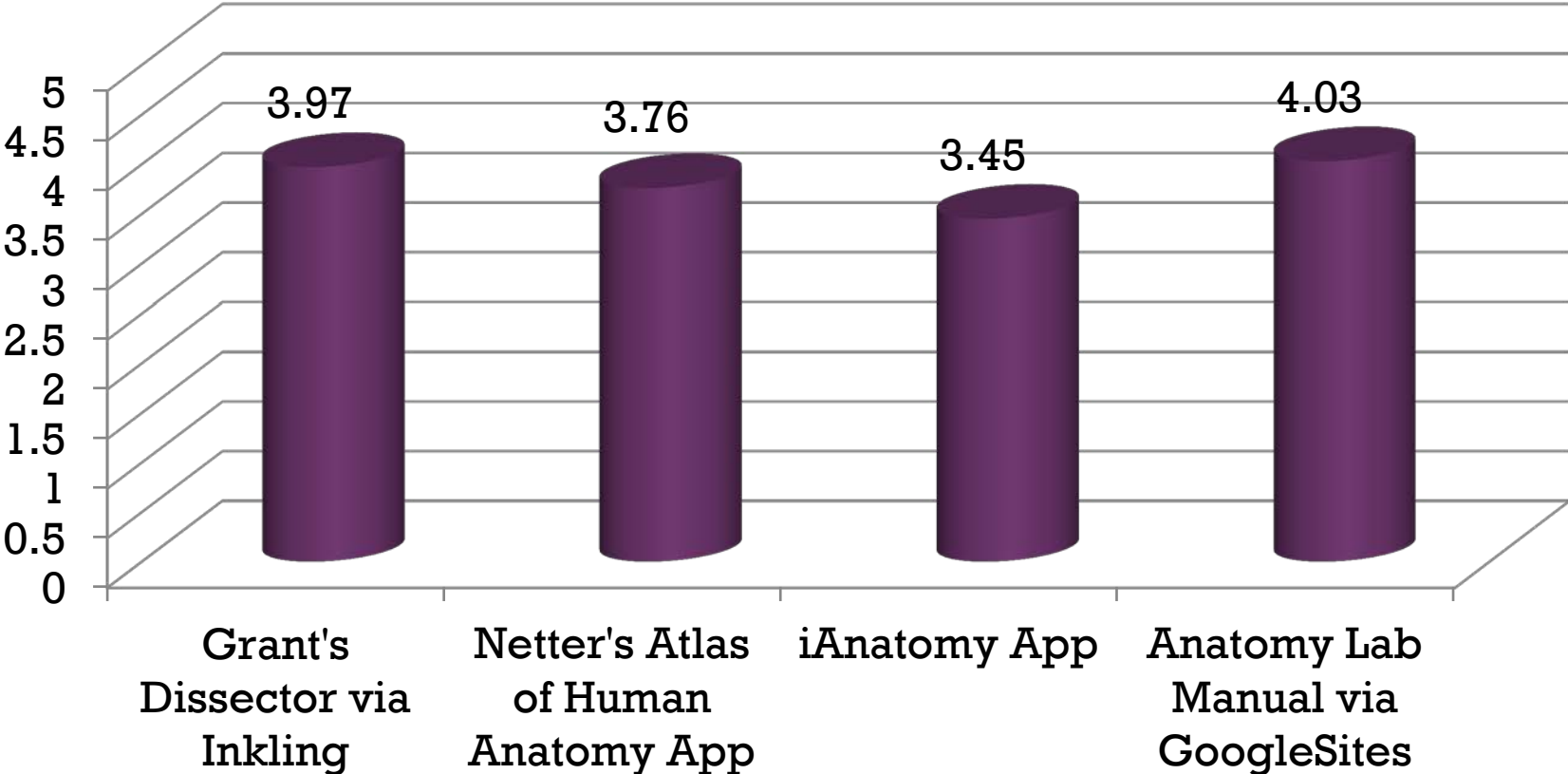


Retrieved from:

<http://www.nytimes.com/imagepages/2012/01/08/business/08-STREAM2.html>

# + Summary Statistics

**Enhanced Student Learning on a Scale of 1-5**



# + Outcomes

- Proven value of library resources to medical students
- Proven value of librarian to medical students
- Proven value with DEI, OME, and Anatomy Faculty



# + Additional Reading and Viewing

- New York Times article:

[http://www.nytimes.com/2012/01/08/business/the-human-anatomy-animated-with-3-d-technology.html?\\_r=0](http://www.nytimes.com/2012/01/08/business/the-human-anatomy-animated-with-3-d-technology.html?_r=0)

- The Atlantic video interview of NYU students and faculty:

<http://www.theatlantic.com/video/index/254306/>

# UPSTATE

## Emergency Preparedness: Enhancing Communications and Access to Health Information Resources

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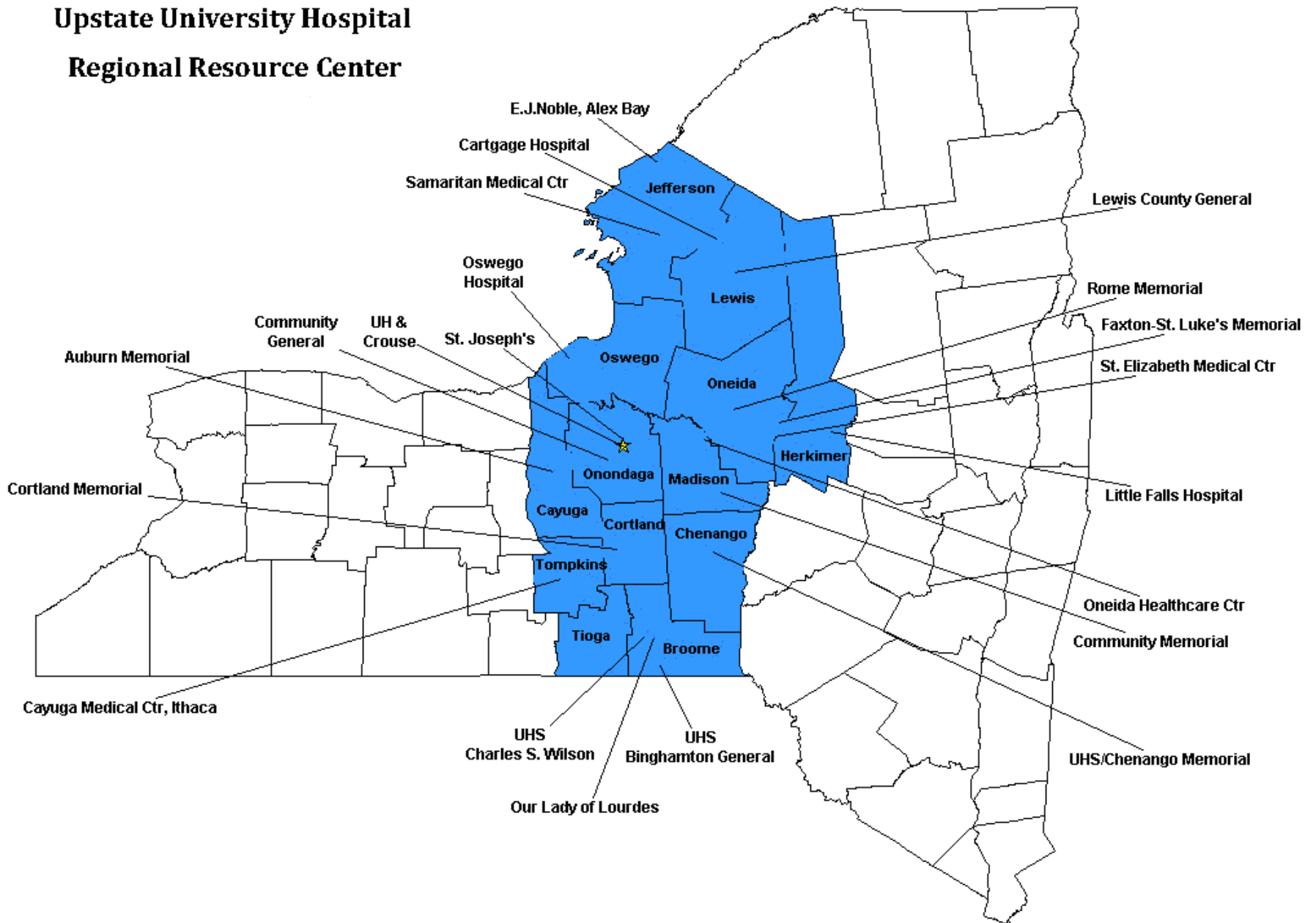
# MCI Triage Song



Knowing changes everything.™

[http://www.youtube.com/watch?v=REEyjL-wkaw&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=REEyjL-wkaw&feature=youtube_gdata_player)

# Upstate University Hospital Regional Resource Center



## The Project Plan

- Identifying partners
- Budget
- Applications & Shared Information
- Training
- NY State Fury
- Outcomes

## Unanticipated Learning Moments

- HIPAA
- Early Adopters v. Laggards
- Resource Center & NY State Politics
- New Partners & Opportunities

# Identifying Partners

- Geographic locations
- Innovators, laggards, & a representational sample
- People v. Hospital Administration
- Memorandums of Understanding

# Budget

- Devices – justifying the iPad
- Identifying communications software
- Savings for group purchases

# Applications & Shared Information

- NIH Basics – PubMed, ReUnite, ToxNet, Wisser
- Fun with police scanners
- Unanticipated institutional proprietary information
- HIPAA woes





# Training

- Innovators & Laggards
- Communications
- Integration of device into work / personal life



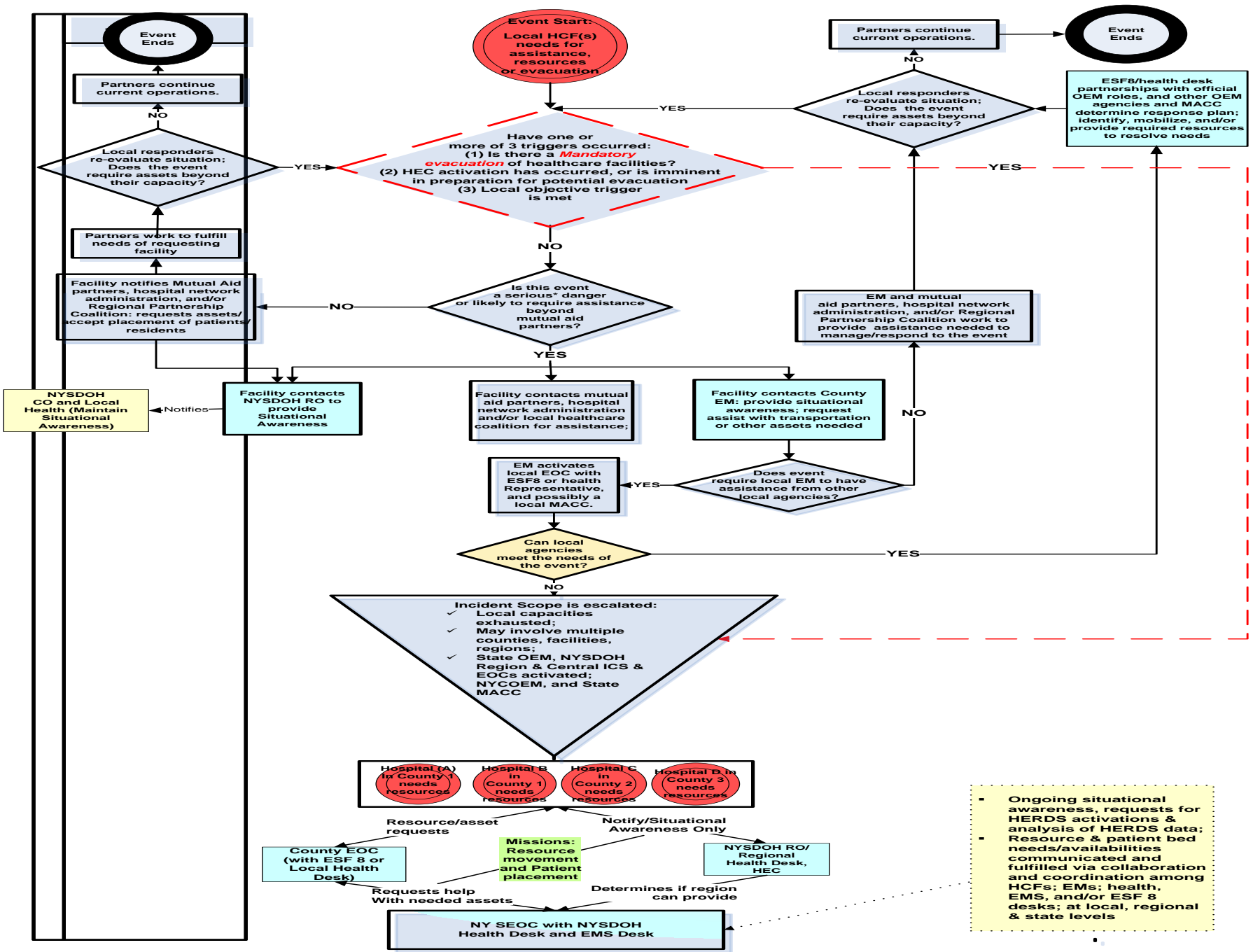
# Training on the Fly



Knowing changes everything.™

# NY Fury

- Innovators & Laggards
- What's my role?
- Batteries
- Runners
- Whiteboards & color markers
- 1 computer
- oh, my



- Ongoing situational awareness, requests for HERDS activations & analysis of HERDS data;  
 - Resource & patient bed needs/availabilities communicated and fulfilled via collaboration among HCFs; EMS; health, EMS, and/or ESF 8 desks; at local, regional & state levels

	Cardiac Cath Lab	Cardiac Surgery	Palliative Care	Hematology/Oncology	ENT/Dental	Bariatric	Orthopedics	Rehabilitation	Transplant	Trauma	Wound and skin care	Radiology	CT/MRI	Clinical Pathology	Hyperbaric	Ophthalmology
Auburn Memorial	-	-	-	+	+	+	+	-	-	-	+	+	+	+	-	+
Carthage Area	-	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-
Cayuga Medical	+	-	+	+	+	+	+	+	-	-	+	+	+	+	-	+
Chenango Memorial	-	-	-	-	+	-	-	+	-	-	-	+	+	-	-	+
Community General	+	-	+	+	+	+	+	+	-	-	+	+	+	+	-	+
Community Memorial	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-	-*
Cortland Regional	-	-	+	-	-	+	+	+	-	-	+	+	+	+	-	+
Crouse	+	-	+	+	+	+	+	-	-	+	+	+	+	-	-	+
Faxton St Lukes	+	-	+	+	+	+	+	+	-	-	+	+	+	+	-	+
Lewis County General	-	-	+	+	+	+	+	+	-	+	+	+	+	+	-	+
Little Falls	-	-	-	-	-	-	-	+	-	-	+	+	+	+	-	-
Oneida Healthcare	-	-	-	-	-	-	+	-	-	-	+	+	+	+	-	-
Oswego	-	-	-	-	+	-	+	+	-	-	+	+	+	+	-	+
Our Lady of Lourdes	-	-	+	+	+	+	+	-	-	-	+	+	+	+	+	-
River	-	-	-	-	-	-	-	-	-	-	-	+	+/-	-	-	-
Rome Memorial	-	-	-	-	-	-	+	+	-	-	-	+	+	+	-	+
Samaritan	-	-	-	+	+	-	+	+	-	-	+	+	+	+	+	+
St. Elizabeth Medical	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	-
St Josephs	+	+	+	+	+	+	+	-	-	-	+	+	+	+	+	-
UHS: Binghamton	-	-	-	-	-	+	-	+	-	-	+	+	+	+	-	+
UHS: Wilson	+	-	+	+	-	+	-	-	-	+	+	+	+	+	+	+
University Hospital	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
VA Medical Center	-	-	+	+	+	-	+	+	-	-	+	+	+	+	-	+

# Communicate with Pictures

**COMUNICACIÓN DE EMERGENCIA PARA TODOS .....Materiales de Comunicación con Imágenes**

ESPACIO VACÍO (para su mensaje personal)

No puedo hablar pero si lo puedo oír y entenderlo.

Necesito cambiar mis máquinas.

Mi información importante está en el reverso de esta página.

Por favor póngase en contacto con mi familia.

Hágame preguntas si necesita hacerles, pero por favor tenga paciencia y espere mi respuestas.

Yo señalaré dónde me duele. →

0	1	2	3	4
5	6	7	8	9
A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z	?	.	!!	Espacio

ME LLAMO	Yo, mi, mío	Sangrar	Infectar	Alergia	Discapacidad	Ayuda	Baño
¿QUIÉN?	Tú, tuyo	Quebrado	Quiero o Necesito	Frazada	Desastre	Hogar	Andador
¿DÓNDE?	Ella, de ella, suya	Quemar	Rescatar	Ropa	Emergencia	Hospital	Silla de ruedas
¿QUÉ?	Él, suyo, al	Ahogarse	Deletrear	Frio	Familia	Enfermo (a)	Viento
¿CUÁNDO?	Elos, les, de ellos	Comunicarse	Hablar	Daño	Fuego	Mascotas	Preocupado
¿POR QUÉ?	Nosotros, nuestro	Evacuarse	Entender	Peligro	Inundación	Refugio, Albergue	Poor. El peor
¿CÓMO?	Si	Herir, lastimar	Espera	Aparato de Comunicación	Calefacción, Caliente	Ataque	NO

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Knowing changes everything.™





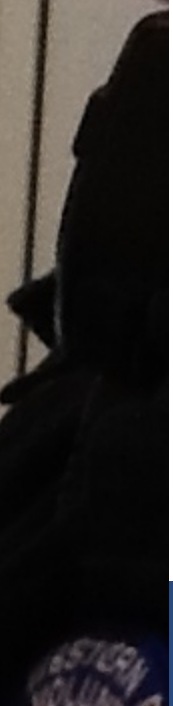
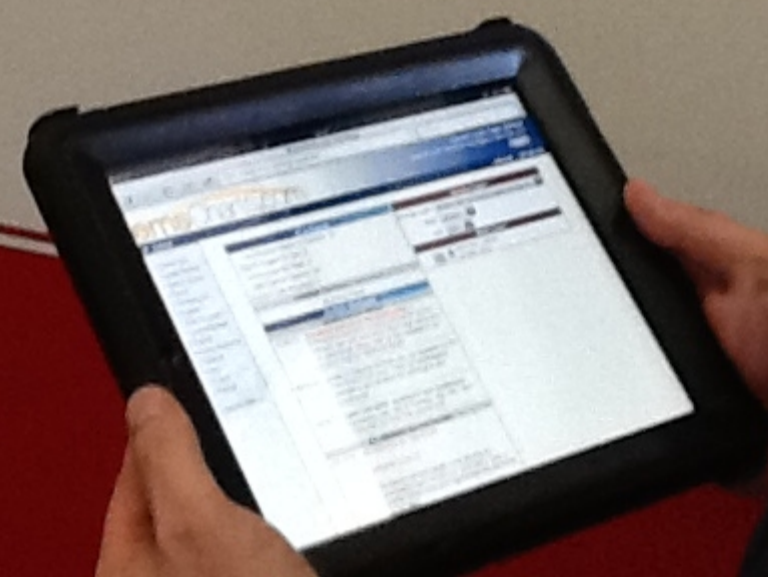
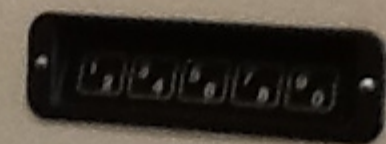
# Outcomes

- Integration with Hospital / University disaster response planning
- Incredible response from first responders (fire, police, EMT)
- Awareness of national emergency preparedness groups

AVES



BULANCE





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