Powering Collaborations in Clinical Research

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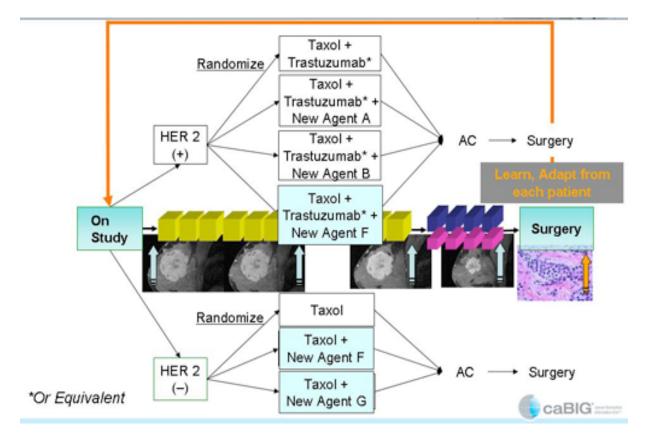
IT Bioinformatics Manager University of Arkansas for Medical Sciences

Agenda

- Setting the Scene (Speakman)
 - caBIG[®] is enabling live, real world, collaborative, adaptive trials today
 - caBIG[®] provides a transformative architecture for clinical trials
- caBIG[®] Clinical Trials Suite Demo (Dyer)
 - Free, open source, stable, secure, supported reference implementations of the architecture available today
- Lessons Learned from Deployment (Topaloglu)
 - Leveraging caBIG[®] enterprise-wide

NCI's Mission Requires an Informatics Response to These Challenges

- Tsunami of Genomic and Clinical Data 40+ Software Tools
- Standard Language Standardized Vocabularies
- Islands of Information National Grid for Data Sharing
- IT Systems Do Not Interoperate Interoperability



caBIG® Applications in Action Now: I-SPY 2 Adaptive Trial

Interoperability: Eliminating Multiple Sources of Record

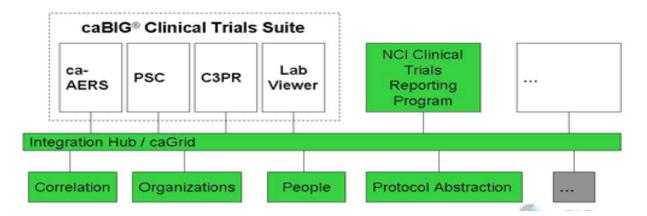
- Redundant data inevitably becomes redundant, inconsistent data
- Solution: a semantic services-oriented architecture
- Single source of record for each data type

"A man with a watch knows what time it is. A man with two watches is never sure."

- Lee Segall

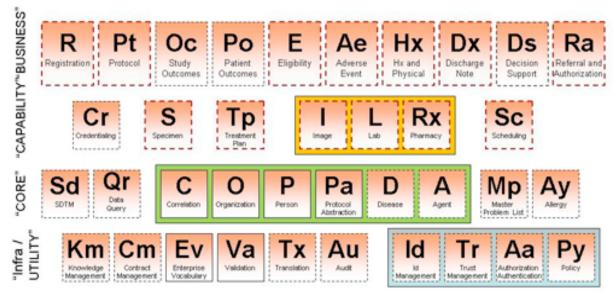
Getting There from Here: Eliminating Inconsistency, then Redundancy

- NCI is committed to this architecture for its own operations
- For-profit and non-profit developers have already demonstrated apps that leverage NCI services
- Alignment with standards bodies, public/private groups



Leveraging NCI Enterprise Services

Roadmap: caBIG[®] "Periodic Table" of Services



My Cancer eLIFE	• Qr Google
My Cancer eLIFE A one-stop shop for managing my health information	Personalize My eLIFE site
Welcome to My Cancer eLIFE. To manage your health information, o	click any box below.
Information from my doctor Information I create myself My Family Health History My Electronic Deposit Box	My research participation → My treatment path compared with others →
Store and manage all your health informatio in your Electronic Deposit Box.	Brought to you by:

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caBIG® Clinical Trials Suite

- Production software, ability to leverage services: "NCI content inside"
- Free, open source, non-viral license
- Installable as an interoperable Suite or as components
- Adverse event management (caAERS)
- Clinical data exchange (Integration Hub)
- Study participant calendar (PSC)
- Study participant registry (C3PR)
- Integration with CDMSes via Clinical Connector

Online Resources

Systems (CTMS) Workspace	https://cabig.nci.nih.gov/workspaces/CTMS
caBIG® Tool Landing Page	https://cabig.nci.nih.gov/tools
CTMS Knowledge Center	https://cabig-kc.nci.nih.gov/CTMS/KC
 Access to CTMS Tools: Recorded Demos Presentations Documentation and Training Materials Live Demo Environment 	 https://cabig.nci.nih.gov/workspaces/CTMS Product shortcuts for each tool provide access to: Recorded Demos Presentations Documentation and Training Materials Live Demo Environment
NCI Center for Bioinformatics (NCICB) Open Source Project Site	http://gforge.nci.nih.gov
caBIG® Product Representative	cabigproductrep@nih.gov

Up Next...

- caBIG[®] Clinical Trials Suite Demo (Dyer)
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caBIG[®] at Bio-IT World 2010

- The BIG Idea: Strategies to Achieve a Rapid-Learning Health System Ken Buetow, Ph.D.
 - Wednesday, April 21, 2:45 pm Amphitheater
 - Plenary, Tracks 2,3,4,6,7
- caBIG[®] in the Trenches: Deploying an Infrastructure that Enables Collaboration – R. Mark Adams, Ph.D.
 - Wednesday, April 21, 12:00 noon City View 2
 - Track 2: IT Infrastructure Software
- Developing and Implementing caBIG[®] Enterprise Services George Komatsoulis, Ph.D.
 - Thursday, April 22, 12:00 noon City View 2
 - Track 2: IT Infrastructure Software

Visit caBIG® at Booth #200-202