Study Tracking and Registration System (STARS)

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Disclosures

- No disclosures
- Perhaps one day I'll be more important

IDEAL and OIPDR at Weill Cornell Medical College

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IDEAL - Imaging Data Evaluation and Analytics Lab
OIPDR - Office of Imaging Protocol Development and Review

http://ideal-cornell.com

- Clinical Care
- IDEAL Research
- **Research Support**

Research Support Services

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- De-identify data
- Store data in Research PACS
- Maintain research key
- Transmit de-identified data to CRO
- Perform specialized image processing
- Complete specialized documentation
  - Case-report forms
  - Custom reads
  - Response assessment (RECIST, Cheson)

Clinical and Research Workflow

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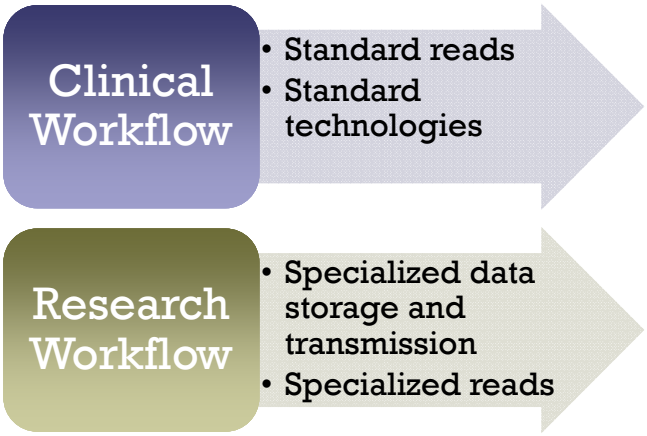

Challenges to Research Workflow

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- Adherence to imaging protocols
- Adherence to reporting standards
- Specialized billing
  - Imaging
  - Research support services

Study registration workflow

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OIPDR – Office of Imaging Protocol Development and Review
IDEAL – Imaging Data Evaluation and Analytics Lab

Researcher	OIPDR	IDEAL	Researcher
Basic info	Review protocol	Establish communication with CRO	Approve budgets
Study / imaging protocol	Define imaging and special instructions	Site survey / site initiation	Review cutom order forms
Contact information	Imaging budget	Data management / custom read budget	Submit IRB approval
		Custom order forms	

Study Tracking Workflow

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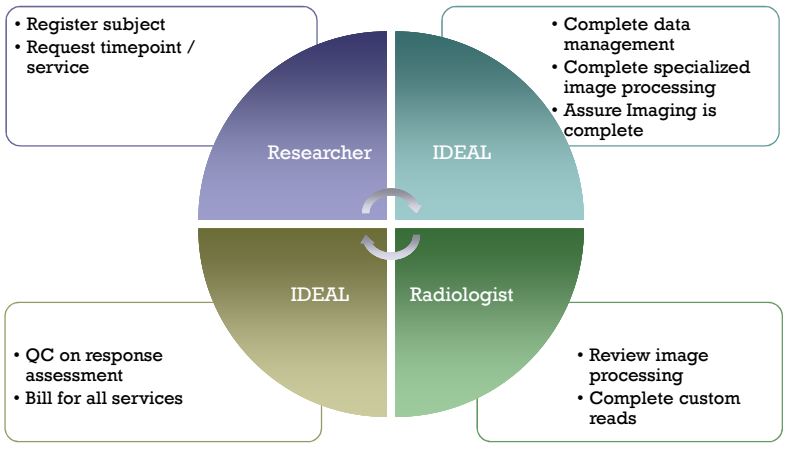

STARS Infrastructure

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- WEB based technology
- mySQL database
- Sits on Weill Cornell internal network
- Manages multiple user groups
  - PI
  - Research coordinator
  - Radiologist
  - IDEAL staff
  - OIPDR staff

STARS – Representative screens

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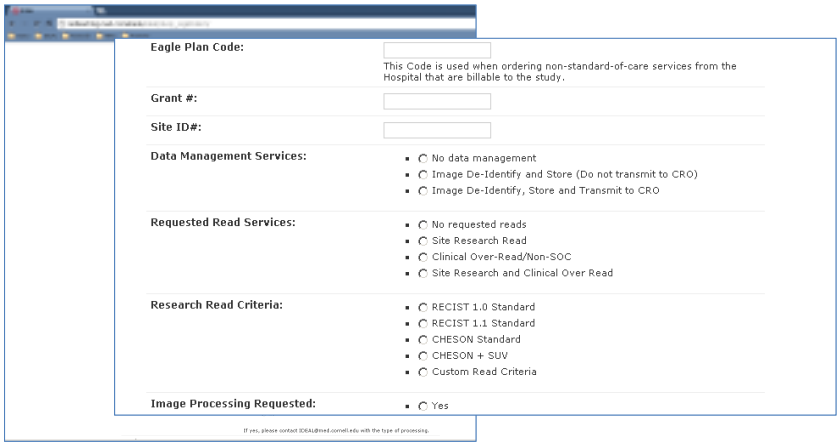
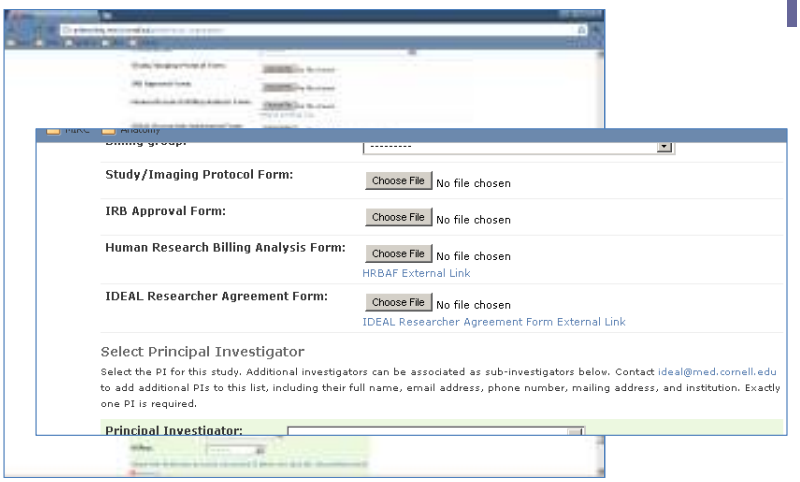


STARS – Study regstration



Study registration workflow

OIPDR – Office of Imaging Protocol Development and Review
IDEAL – Imaging Data Evaluation and Analytics Lab

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Study Tracking Workflow

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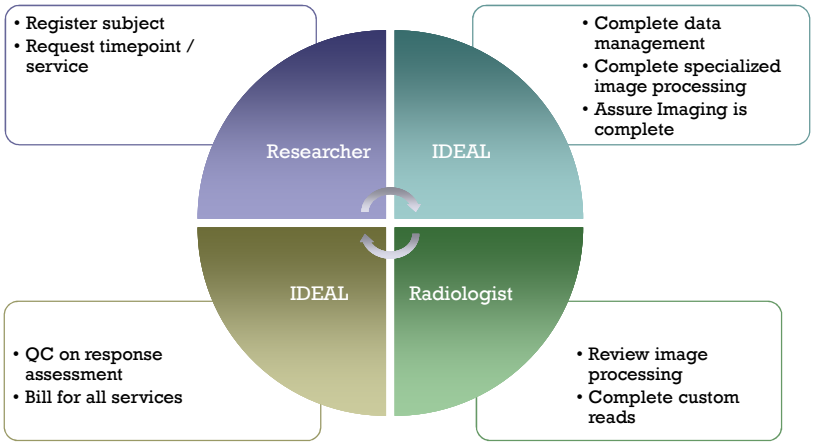

STARS – Subject registration

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STARS - Custom Order Form

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IDEAL Custom Order Form

ATTENTION! This order must be followed precisely. For any questions, contact IDEAL.

PATIENT NAME:
MRN:

REQUESTED IMAGING: CT - Without Contrast: Abdomen, Pelvis
SPECIAL INSTRUCTIONS (MUST BE FOLLOWED PRECISELY):

GLESBY Protocol
Series 1. Scan TWO axial (not helical) slices at level of L4-L5 as determined by lateral scout.
Scan parameters: 5 mm thickness | axial mode | kv=120 | mA=170 | rotation time = 1 sec | DFOV = entire body
Series 2. Scan of entire abdomen and pelvis from lung bases to pubic symphysis.
Scan parameters: Detector configuration: 0.625 x 64 | helical mode | kv=120 | mA= auto mA | ASIR = 40% | rotation time = 0.6 sec | pitch = 0.984:1 | speed = 39.37 mm/rot | beam collimation = 40mm | DFOV = entire body | algorithm = standard | noise index: 15 | Send 5 mm thick and 0.625 mm thick slices to PACS.

STARS – Reader assignment

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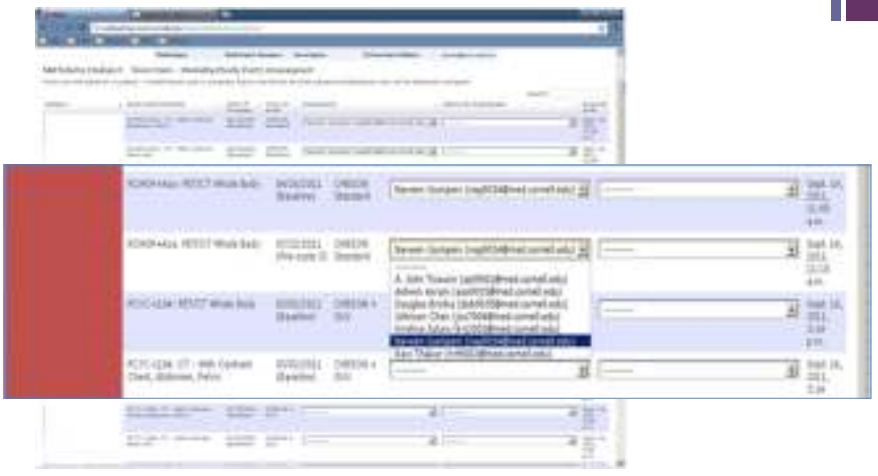
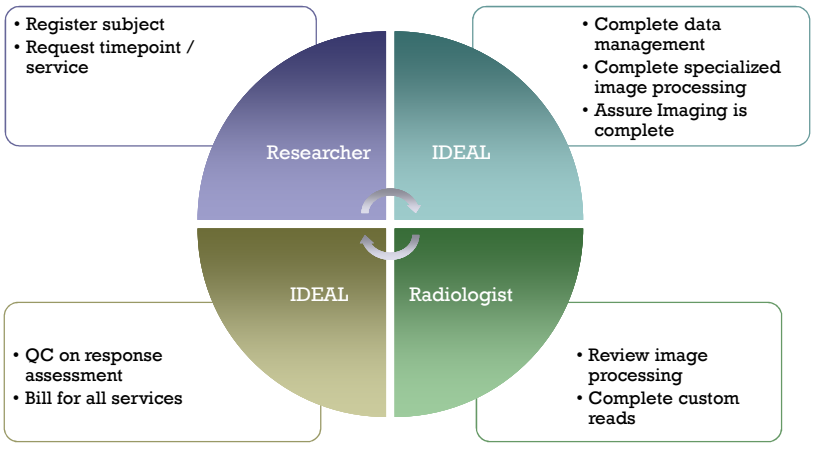


STARS – Reader submission

Study Tracking Workflow



Clinical and Research Workflow

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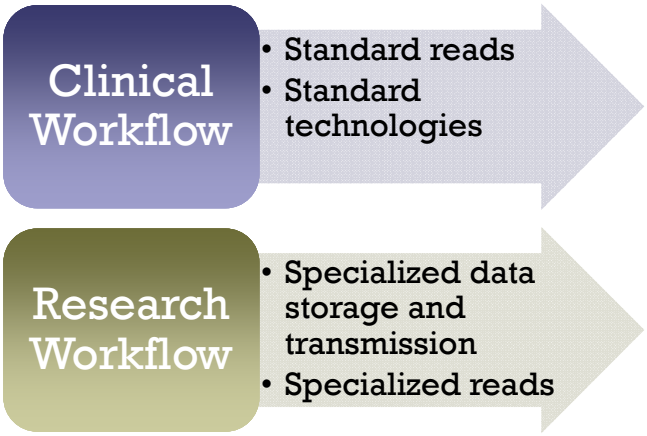

Challenges to Research Workflow - Addressed

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- Adherence to imaging protocols
  - Utilize custom order forms with imaging specific information
- Adherence to reporting standards
  - Parallel reports generated by readers, entered into STARS
- Specialized billing
  - Imaging
  - Research support services
  - Separate billing for data management and read services directly to research group

Summary of work done from 7/6/2011 to 8/24/2011

- 35 Research Studies being managed
- 403 tickets submitted
  - Data Management
    - De-Identify & Store: 41
    - De-Identify, Store, & Transmit to CRO: 38
  - Image processing: 53
  - Research Reads
    - Cheson: 94
    - Recist 1.0: 51
    - Recist 1.1: 73
    - Custom: 53

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