

American College of Radiology

**RLI Power Hour Webinar:
Using a Change Management Framework to Address Gaps in Residency Training**

Brought to you by the Radiology Leadership Institute® (RLI) and the Association of Program Directors in Radiology (APDR)

acr.org

1

5 steps in the change management process

- Prepare the organization for change
- Craft a vision and plan for change
- **Implement the changes**
- Embed changes within company culture and practices
- **Review progress and analyze results**

American College of Radiology
Radiology Leadership Institute

2

APDR Procedural Toolbox – Modules

- Task force identified “improving educational resources available” as a priority
- How best to do this?

American College of Radiology
Radiology Leadership Institute

3

Evidence-based procedural training

- Learn
- See
- Practice
- Prove
- Do
- Maintain

American College of Radiology
Radiology Leadership Institute

Sawyer T, White M, Zaveri P, Chang T, Ades A, French H, Anderson J, Auerbach M, Johnston L, Kessler D. Learn, see, practice, prove, do, maintain: an evidence-based pedagogical framework for procedural skill training in medicine. Academic Medicine. 2015 Aug 1;90(8):1025-33. © 2015 American College of Radiology. All rights reserved. 4

4

Evidence-based procedural training

- **Learn**
- **See**
- Practice
- Prove
- Do
- Maintain

Toolbox can help individuals "learn" and "see" procedures

American College of Radiology
Radiology Leadership Institute

Sawyer T, White M, Zaveri P, Chang T, Ades A, French H, Anderson J, Auerbach M, Johnston L, Kessler D. Learn, see, practice, prove, do, maintain: an evidence-based pedagogical framework for procedural skill training in medicine. Academic Medicine. 2015 Aug 1;90(8):1025-33. © 2015 American College of Radiology. All rights reserved. 4

5

Evidence-based procedural training

- **Learn**
- **See**
- Practice
- Prove
- Do
- Maintain

Toolbox can help individuals "learn" and "see" procedures

Programs can focus more on remaining in-person and hands-on components

American College of Radiology
Radiology Leadership Institute

Sawyer T, White M, Zaveri P, Chang T, Ades A, French H, Anderson J, Auerbach M, Johnston L, Kessler D. Learn, see, practice, prove, do, maintain: an evidence-based pedagogical framework for procedural skill training in medicine. Academic Medicine. 2015 Aug 1;90(8):1025-33. © 2015 American College of Radiology. All rights reserved. 4

6

Online self-learning modules

Ten planned modules

- Paracentesis
- Thoracentesis
- Thyroid FNA
- Breast Biopsy
- Image-guided core biopsy
- Image-guided abscess drainage
- Catheter exchange
- US-guided venous access
- Arthrograms and joint aspiration
- Lumbar puncture

Module sections

- Goals and objectives
- Pre-assessment questions
- Core procedural principles
- Pre-procedural evaluation
- Consent
- Equipment and setup
- Procedural Technique
- Post-procedural evaluation
- Examples cases
- Post-assessment questions

American College of Radiology
Radiology Leadership Institute

7

Example – breast biopsy module

Pre-fire: Shows the needle tip at the skin surface. Post-fire: Shows the needle tip advanced into the breast tissue.

Check your knowledge!

1. What is NOT an absolute contraindication to US-guided breast biopsy?

- Patient on anticoagulation
- Patient on aspirin
- Lesion not definitively visualized on US
- Lesion is too close to chest wall to safely biopsy

2. Which BRACIS would you NOT biopsy?

- 1
- 2
- 3
- 4
- 5

American College of Radiology
Radiology Leadership Institute

8

Example – breast biopsy module

Biopsy Room Setup

Typical room setup for biopsy:

- Computer
- Ultrasound Machine
- Biopsy Tray
- Specimen Collection Setup
- Extra Supplies
- Patient Bed

Biopsy Device ("Mammotome")

- Gauche
- Scalpel
- US probe cover, gel, & rubber band
- Coastal
- Lidocaine
- Lidocaine with Epinephrine
- Biopsy Marker Device
- Sterile Drapes

American College of Radiology
Radiology Leadership Institute

9

Example – breast biopsy module

The Versar allows you to choose between an 18 mm and 25 mm throw. You can select by setting the switch to either throw.

Introduction to Versar Automated Core Biopsy (V-Cube)

Automated Core Device

American College of Radiology
Radiology Leadership Institute

10

Procedural toolbox modules

- Created using REDCap
- Will be available open-source via links hosted on national website
- Available by academic year 2024-2025
 - Goal is AUR 2024
- Grant submission for improved website design and hosting pending

American College of Radiology
Radiology Leadership Institute

11

ACGME case log – keeping track of what we do!

acgme case log

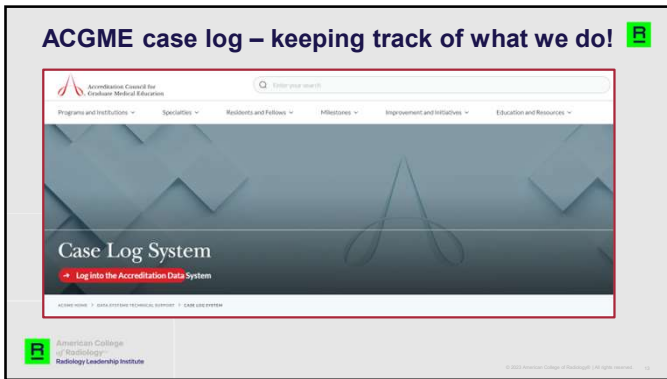
About 412,000 results (0.25 seconds)

ACGME.org
https://www.acgme.org/data-systems/technical-support/ |

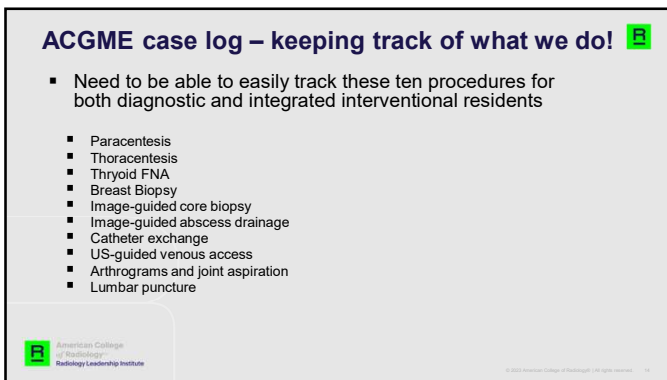
Case Log System
The Case Log System is a web application within ADS where residents and fellows (in certain specialties) are required to log their clinical experiences on...

American College of Radiology
Radiology Leadership Institute

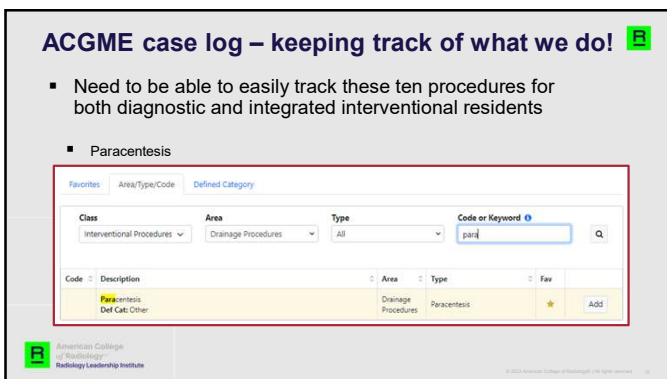
12



13




14



15

ACGME case log – keeping track of what we do!

- Challenges:
 - In current/old system, not all procedures had a tracked code
 - In current/old system, some procedures had many different applicable entries with no way to query them as a group

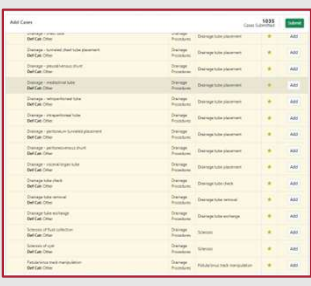


A screenshot of an Excel spreadsheet titled "ACGME Case Log". It lists various medical procedures in the first column, followed by columns for "Code", "Description", and "Count". The list includes numerous entries such as "Breast biopsy", "CT scan", "MRI scan", "Ultrasound", and "Biopsy". Each entry has a corresponding code and a numerical count. The spreadsheet is filtered to show entries with counts greater than zero.

16

ACGME case log – keeping track of what we do!

- Challenges:
 - In current/old system, not all procedures had a tracked code
 - In current/old system, some procedures had many different applicable entries with no way to query them as a group



A screenshot of an Excel spreadsheet titled "ACGME Case Log". It lists various medical procedures in the first column, followed by columns for "Code", "Description", and "Count". The list includes numerous entries such as "Breast biopsy", "CT scan", "MRI scan", "Ultrasound", and "Biopsy". Each entry has a corresponding code and a numerical count. The spreadsheet is filtered to show entries with counts greater than zero.

17

ACGME case log – keeping track of what we do!

- ACGME updates
 - New tracked codes added (breast biopsy, MSK interventions, LPs, etc) so that all "procedures expected of a general radiologist" are now captured
 - Each "procedure expected of a general radiologist" can be individually queried and will pull numbers from the appropriate entries
 - Example: Can get a report on "Image-guided abscess drains" that will automatically pull in all the different types of abscess drain entries

18

