Private and Academic Practice
An Unlikely Transformational Partnership
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Topics for Discussion

- Description of the Private / Academic Stakeholders
- Objectives of the Collaboration Between Private / Academic Practices
- Mutually Beneficial Research Collaboration
- Advantages of the collaboration to Private Practice
- Advantages of the collaboration to Academic Practice
- Examples of Success
Stakeholders: Academic Practices

- Academic Practices have depth of subspecialty knowledge
  - Focusing clinical and research endeavors on radiology subspecialty results in a level of expertise in that anatomic region

- Mission is to promote education and research
  - Academic time is given to radiologists for the purpose of conducting research that advances our ability to diagnose and treat patients

- Funding challenges to perform non-grant research
  - Additional time for quality improvement work requires funding, which limits time investment in performance improvement implementation

- Academic practices tend to provide the highest level of tertiary care
  - Patients are referred for one element of their care, while the care continuum occurs in the community setting
Stakeholders: Large Private Practice

- Large private practices have depth and generally have breadth of practical clinical knowledge.

- Private practices have financial flexibility to make specific investments in clinical data management, analytical capabilities as well as analysts to monitor ongoing performance.

- Private practice radiologists have limited experience with:
  - Research design and publication
  - Writing and pursuing grants
  - Specific expertise, the knowledge tends to be more general
  - Clinical value tends to be based on government measures (i.e., MACRA)
Objectives of an Academic/Private Practice Collaboration

1. The primary objective is collaborate and integrate the strengths of both practice types and coordinate the promotion clinical value and establish radiology as the leader in the transition from volume to value

2. Academic researchers provide evidence-based standards that can be implemented in a private practice setting

3. Academic departments are dedicated to education and clinical research that cultivates the next generation and advances the specialty

4. The private practice experience and resources can be leveraged to provide practical insight into study design

5. Private practice resources can be utilized to provide project management and ongoing performance monitoring required to measure efficacy
Mutually Beneficial Research Collaboration

- Leveraging the strengths of the academic practice, the research collaborations start with an initial design:
  - Determine the approach, goals and expected outcomes
  - Determine what data is needed to appropriately validate the study
  - Recruit and educate the appropriate number of participants

- Leveraging the strengths of private practice and partnering with an academic institution to:
  - Program Management: Manage and monitor the study tasks and timelines
  - Conduct data mining, data analytics and performance measurement
  - Develop and implement innovative tools to measure ongoing performance metrics in a private practice setting
  - Perform research with patient cohorts that have longitudinal follow up
Advantages for the Private Practice

Clarification of Ambiguous Recommendations from professional society papers (i.e., the gold standard), for example:

- The private practice studied the 2017 Fleischner Society Criteria for implementation of a best practice method for following incidental lung nodules

- The Criteria indicates follow-up of single & multiple <6 mm solid lung nodules is 12 month follow-up
  - Certain patients at high risk with suspicious nodule morphology, upper lobe location, or both may warrant 12 month follow-up
  - The word certain makes the surveillance guideline ambiguous and makes this best practice difficult to implement

- Academic practice help private practice develop a proposed recommendation to clarify ambiguous areas and reduce adverse outcomes based on a literature study:
  - Suspicious morphology: spiculated margins
  - UL location: f/u at 12 months and if unchanged at 12 months, no further f/u
  - No f/u in patients with significant comorbidities
Advantages for the Private Practice

Clarification of additional criteria, 2017 Fleischner Society Criteria:

- Follow-up of single subsolid (GG and part solid) <6 mm nodules
  - Fleischner Guidelines: In *certain* suspicious nodules, consider follow-up at 2 and 4 years
    - Follow-up in selected patients with nodules *close* to 6 mm with suspicious morphology or other risk factors
  - Proposed recommendations to clarify undefined areas and make the recommendations clear and practical:
    - Define “close to 6 mm” as nodules 4.5 – 5.4 mm (rounded to 5 mm)
    - Suspicious morphology: bubbly lucencies/cystic areas
    - Patients with significant comorbidities are follow-up via an alternative care pathway based on specific clinical decisions
Advantages for the Private Practice

One last clarification of the 2017 Fleischner Society Criteria:

- Follow-up of single part solid nodule ≥ 6 mm
  - Fleischner Guidelines: CT at 3-6 months to confirm persistence
    - If unchanged and solid component remains <6 mm, annual CT should be performed for 5 years
    - Persistent part-solid nodules with solid component ≥ 6 mm should be considered highly suspicious. *(Specific follow-up not provided in table.)*
      - In body of article: For nodules with particularly suspicious morphology (i.e., lobulated margins or cystic components), a growing solid component, or a solid component larger than 8 mm, PET/CT, biopsy, or resection are recommended
  - Proposed recommendations to clarify ambiguous areas:
    - Include above recommendations, even though not stated in table
    - Apply above recommendations to nodules with solid component ≥ 6 mm
Advantages of Collaboration to the Academic Practice

A willing and pervasive audience to stress test objectives and make the guidelines practical for implementation:

- Is this template practical for the workflow of a typical radiologist?
- Are these interventions transformational to the specialty?
- Is large scale change possible and does it have a measurable impact on patient outcomes?
- What is the impact on the local community?
- What is the framework for developing an infrastructure for sustained performance improvement on a large scale?
- What is the impact for employers, CMS and other health care purchasing agents?
Success Story: Abdominal Aortic Aneurysm

- AAA Quality Intervention
  - A private practice implemented the evidence based guidelines for AAA surveillance, practice-wide
  - The practice developed metrics to assess and monitor physician adherence to the best practice guidelines
  - An academic practice utilized the same guidelines and followed the steps for implementing the evidenced based surveillance and monitored performance
  - It was then rolled out to a 2nd large academic institution via the High Value Practice Academic Alliance (HVPAA)
  - Please see the ePoster for the results of the implementation: *Increasing radiology value in patient care: Standardized evidence-based surveillance recommendations for abdominal aortic aneurysms*
Success Story: TIRADS

Thyroid Imaging Reporting & Data System (TIRADS) implemented in a private practice setting

- Developed a study to measure the impact of the TIRADS template on radiologist recommendations for FNA or further follow-up
- Results proved that the template provides an objective methodology for evaluating the appropriate recommendation and gives the radiologist confidence to declare that no further follow-up imaging is required for the patient
- As a result, cases with no recommendations were reduced by 550% and cases that required no further follow-up and had the appropriate recommendation increased by 340%
- In addition, recommendations for biopsy and continued US surveillance increased, further proving the importance of using a structured template to reduce variability and proper patient surveillance management
Conclusions

- Academic private practice collaborations are mutually beneficial and provide a complementary review of evidence based medicine.
- These collaborations will be a catalyst for radiology’s transformation from volume to value.
- Private practices can work with local academic centers to implement evidence based best practices into their community.
- Collaborations do not need to be limited to radiology, other specialties are critical to improving patient outcomes and clinical value.