





PENINSULA
RADIOLOGICAL
ASSOCIATES

PRIVATE PRACTICE PERSPECTIVE ON STAFFING SHORTAGES

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PRIVATE PRACTICE PERSPECTIVE ON STAFFING SHORTAGES

Goals.

Consider:

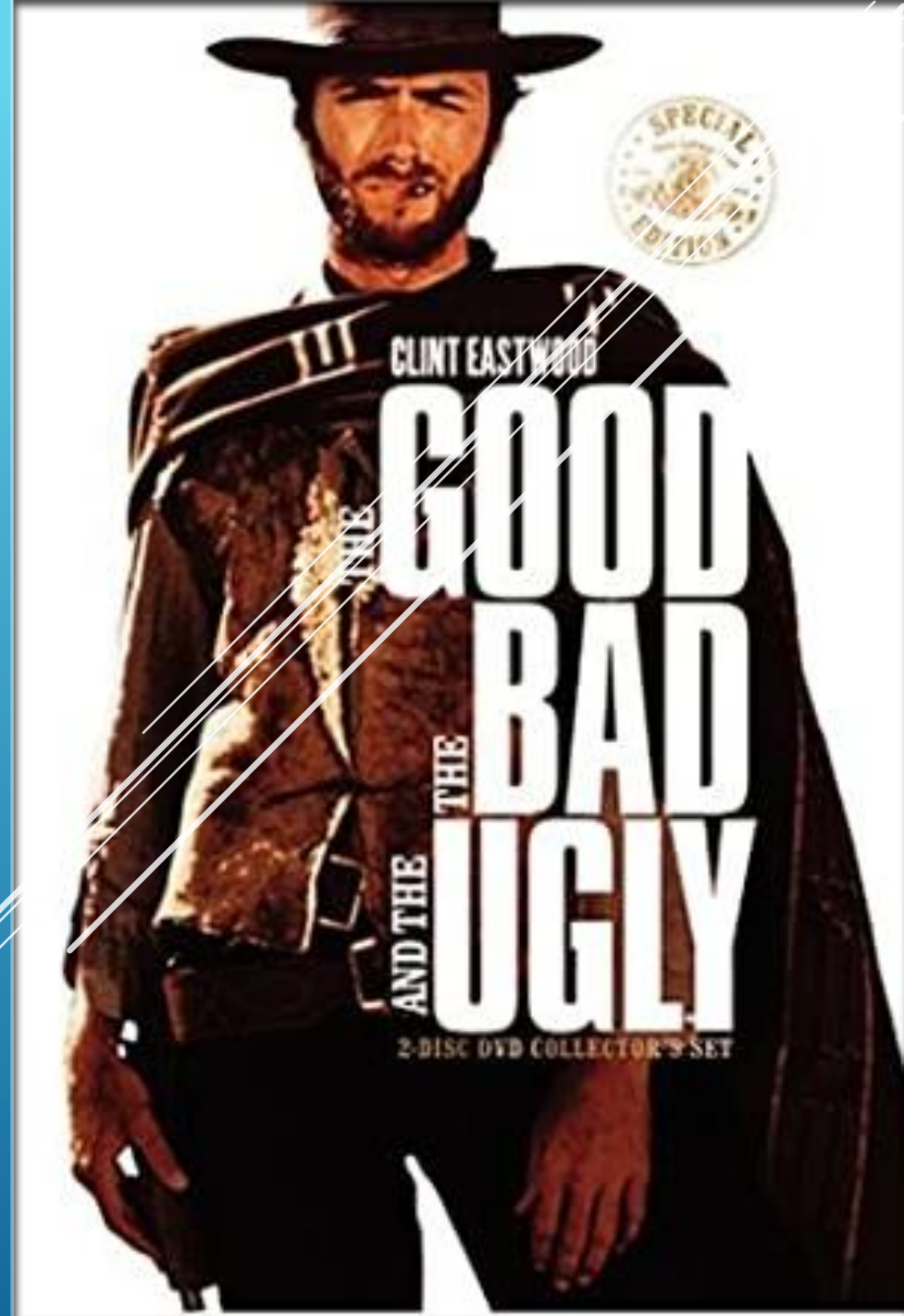
- ▶ How did we get to where we are as a specialty?
- ▶ What are the factors that have increased demand for our services?
- ▶ How do we satisfy this demand?
- ▶ Are staffing shortages real?
- ▶ What can we do to recruit and retain staff?

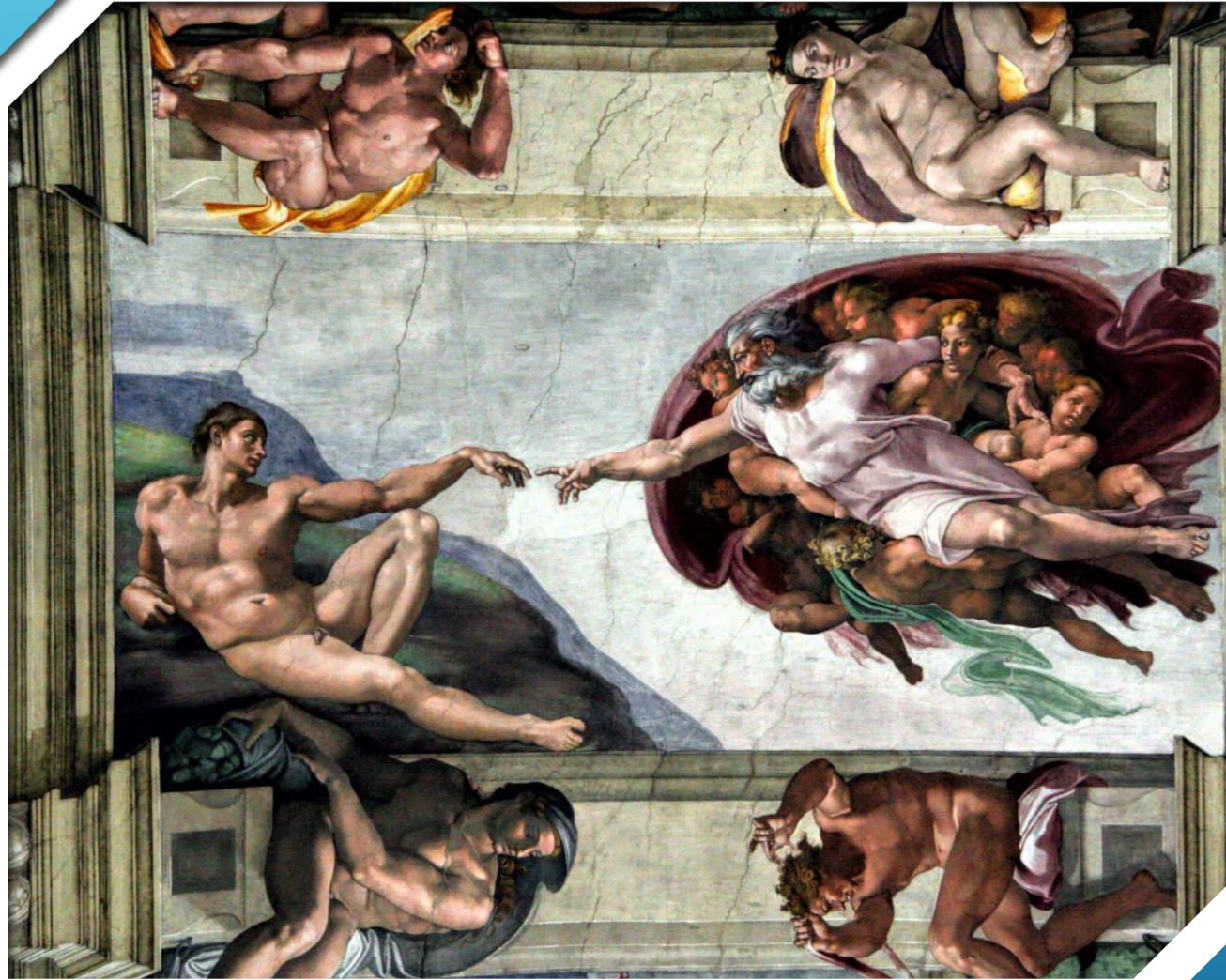


“THE GOOD
OLD DAYS”

“THE GOOD OLD DAYS”

The Good, the Bad and
the Ugly





“THE GOOD OLD DAYS”

▶ The GOOD:

“Radiologists were the doctor’s doctor. Medicine and surgery rounds started in radiology. . . . Every morning the clinicians and the radiologists collaborated.”



▶ The BAD:

Where are the patients?

“THE GOOD OLD DAYS”

- ▶ The UGLY:
SPEED and timeliness – or, rather,
lack thereof

“THE GOOD OLD DAYS”





M·AGRIPPA·L·F·COSTERTIVM·FECIT

Benvenuto a Roma!

#VaticanCity
Inquinazione e accoglienza per performance
e i livelli dei nostri artisti.

VATICAN



THE REVOLUTION - TECHNOLOGY

Imaging Modalities:

- CT
- US
- NM
- MRI

Interventional Radiology – DX and TX

Women's Imaging

PACS



THE REVOLUTION - SPEED

▶ Performance

▶ Obtaining results –
timeliness now a
factor



AFTERMATH OF THE IMAGING REVOLUTION

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016

Rebecca Smith-Bindman, MD; Marilyn
L. Kwan, PhD; Emily C. Marlow, MS; et al

September 3, 2019

JAMA. 2019;322(9):843-856.
doi:10.1001/jama.2019.11456

AFTERMATH OF THE IMAGING REVOLUTION

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016

- ▶ Reviewed 135 million CT & MRI exams in 7 US integrated health care systems and in Ontario performed from 2000-2016.

AFTERMATH OF THE IMAGING REVOLUTION

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016

- ▶ CT: 11.6% annual percentage increase among adults from 2000-2006 and 3.7% annual increase in 2013-2016.
- ▶ MRI: 11.4% annual percentage increase among adults in 2000-2004 and 1.3% annual increase in 2007-2016. adults).

AFTERMATH OF THE IMAGING REVOLUTION

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016

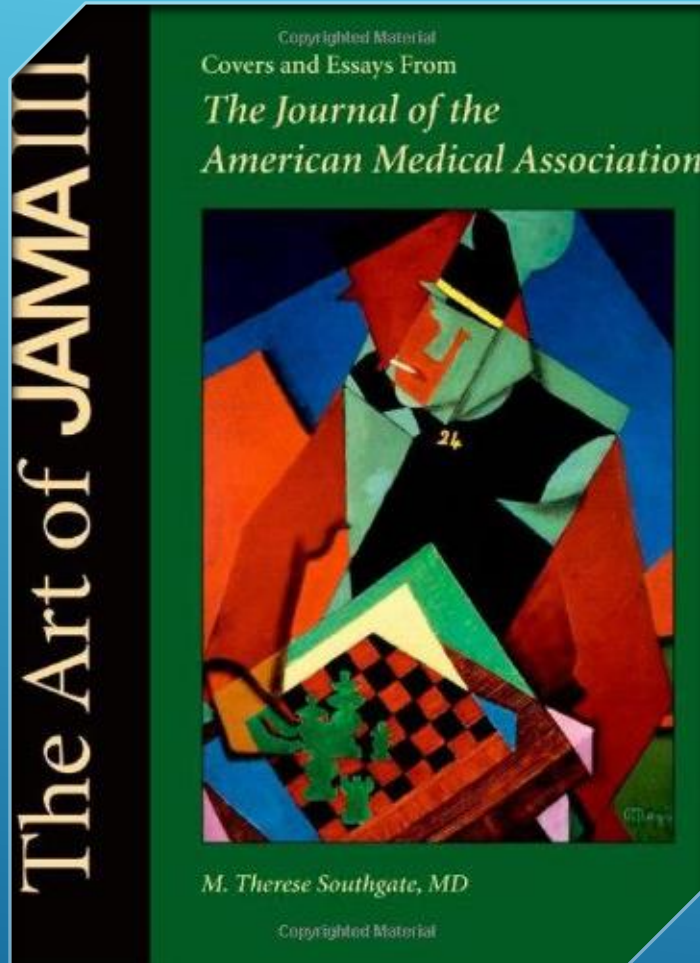
- ▶ **CONCLUSION:** From 2000 to 2016 in 7 US integrated and mixed-model health care systems and in Ontario, rates of CT and MRI use continued to increase among adults, but at a slower pace in more recent years.

AFTERMATH OF THE IMAGING REVOLUTION

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016

Why the slower pace?

- ▶ Government and Insurance Company Actions: A major cause of the slower rate of increase was the increasing use of “precertification”.



AFTERMATH OF THE IMAGING REVOLUTION

Evolving Priorities for Imaging Utilization Research

From Outputs to Outcomes

Deborah Levine, MD; Richard_Duszak Jr, MD

September 3, 2019

JAMA. 2019;322(9):819-821.
doi:10.1001/jama.2019.10158

AFTERMATH OF THE IMAGING REVOLUTION

Evolving Priorities for Imaging Utilization Research

“The increasingly burdensome preapproval steps that some treating physicians need to navigate to order imaging studies are relevant. If physicians did not perceive imaging as necessary or valuable, perhaps they would just stop ordering it. A plausible explanation, then, for increasing use of advanced imaging is that **the results of these tests continue to be perceived as improving patient care and outcomes.**”

The Increasing Use of Emergency Department Imaging in the United States: Is It Appropriate?

Santosh Kumar Selvarajan, David C Levin, Laurence Parker

AJR October 2019

AFTERMATH OF THE IMAGING REVOLUTION



AFTERMATH OF THE IMAGING REVOLUTION

The Increasing Use of Emergency Department Imaging in the United States: Is It Appropriate?

Examined Medicare Data from 2006-2014:

- ▶ The number of ED visits by Medicare fee-for-service patients increased 8.0% - from 20.0 million to 21.6 million.
- ▶ The total number of associated ED imaging examinations increased 38.4% - 14.6 million to 20.2 million.
- ▶ The number of imaging examinations per ED visit was 0.73 in 2006, increasing to 0.94 by 2014.

Technological, timeliness and quality factors have increased the demand for medical imaging. Medical education also has had an impact. But wait there's more.....

AFTERMATH OF THE IMAGING REVOLUTION





AFTERMATH OF THE IMAGING REVOLUTION

The “Baby Boomer” Generation is aging. What does that mean?

In 2018, research and consulting firm Frost & Sullivan looked at utilization controls versus the growing Medicare population, which tends to have higher rates of medical imaging. They predicted that, at least in the intermediate term, **the demand for services would continue to grow.**

- ▶ According to the World Health Organization, the proportion of the world's population over 60 years of age will be 22% by 2050, nearly double that of 2015.
- ▶ These people will need a LOT of imaging!

AFTERMATH OF THE IMAGING REVOLUTION



AFTERMATH OF THE IMAGING REVOLUTION

The Bottom Line: Since 1980, there has been an explosion of imaging services!

- ▶ More services are offered.
- ▶ The population is aging and people are living longer.
- ▶ IMHO, “slightly” more studies per radiologist are done during weekdays 8am-5pm, but...
- ▶ **MANY more studies are now done during evenings, overnights and weekends.**

ALL these things have increased the demand for radiologists.







HOW DO YOU DEAL WITH INCREASED IMAGING DEMAND?

- Increase radiologist **PRODUCTIVITY**
- Increase radiologist **WORK TIME**
- **OUTSOURCE** studies
- Increase radiologist **SUPPLY**

INCREASING PRODUCTIVITY – THE DEPARTMENT


- ▶ **Streamline the ordering process**
 - ▶ **Standardize patient information access**
 - ▶ **Communicate critical results and follow-up recommendations**
 - ▶ **Implement Interactive multimedia reporting**
- 
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INCREASING PRODUCTIVITY - REPORTING

- ▶ **PACS – many reports show significant improvement in obtaining and interpreting imaging studies**
 - ▶ **Voice Recognition**
 - ▶ **Templated Reports (10 seconds?)**
 - ▶ **Subspecialty Interpretation**
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.

INCREASING PRODUCTIVITY – “HELPERS”

Technologists can:

- ▶ **Put accurate history information in PACS notes**
 - ▶ **Mark location of symptoms on images**
 - ▶ **Flag abnormalities on images**
 - ▶ **Phone or message radiologists with additional hx or critical findings**
- 
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INCREASING PRODUCTIVITY – “HELPERS”

“Physician extenders” such as PAs, RAs, NPs can:

- ▶ **Perform fluoroscopy and minor special procedures, under the supervision of an attending radiologist**
- ▶ **Draft preliminary reports**
- ▶ **Assist IRs in a variety of tasks, including doing H&Ps, contacting patients, reviewing electronic medical records, see patients in clinic, etc.**



- ▶ Artificial Intelligence
- ▶ Computer Assisted Detection

INCREASING
PRODUCTIVITY
– THE FUTURE

- ▶ “In-house” coverage by radiologists (evenings, overnights, weekends) has increased significantly over the decades).
- ▶ Our practice is increasingly using shifts starting at 6am for daily coverage.
- ▶ We are also increasingly using “home work stations”.

INCREASING
RADIOLOGIST
HOURS



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OUTSOURCING WORK

- Any search-engine provides information regarding the many companies who do this.
- Most commonly done with overnight preliminary reads.
- Increasingly done with subspecialty studies,





INCREASING RADIOLOGIST SUPPLY

“Houston, we have a problem!”

AJR February 10, 2022

The Radiology Labor Shortage

Author: **Howard B. Fleishon, MD, MMM, FACR** Chair of the Board of Chancellors

THE RADIOLOGY LABOR SHORTAGE

“The current radiologist population is skewed toward seasoned professionals who may be looking at retirement. Of the 20,970 radiologists engaged in active patient care, 82% are age 45 and over, while 53% are age 55 and over.”

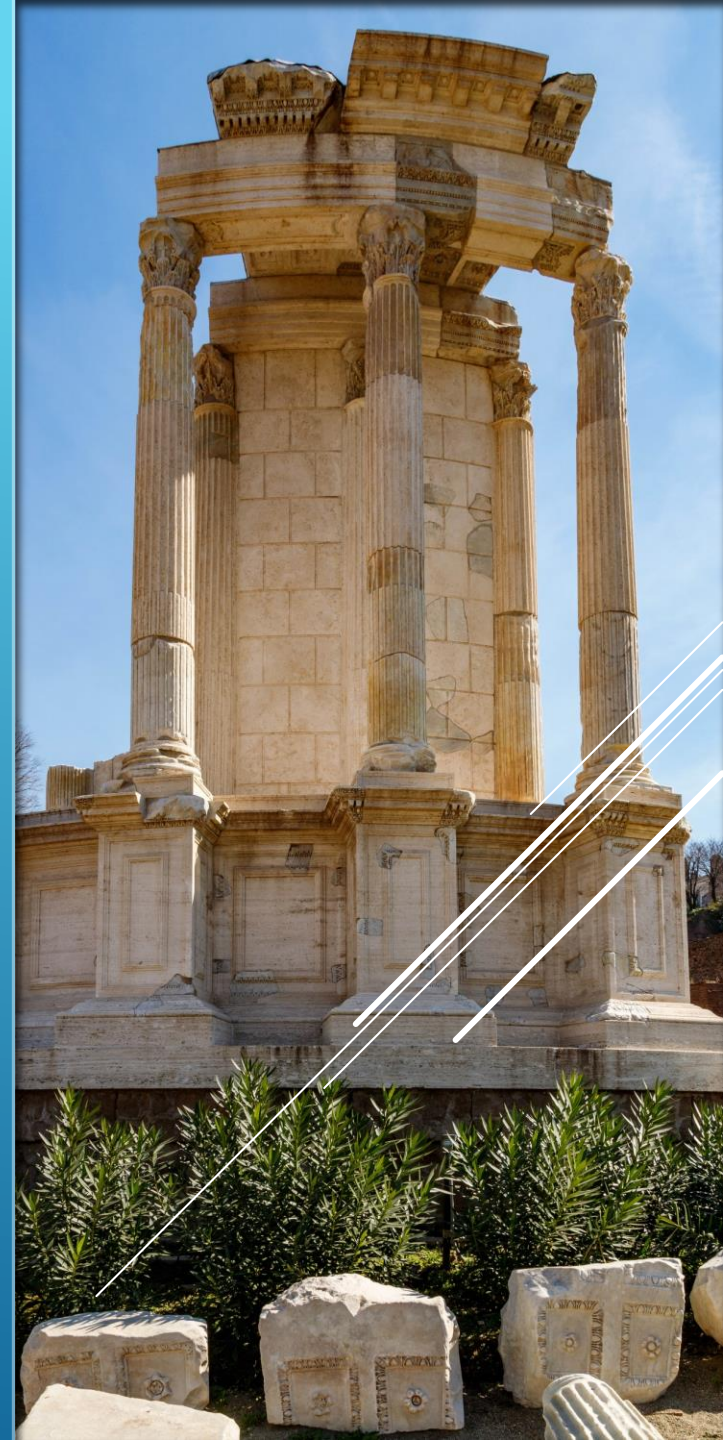
YIKES!

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Increased workload, hours and shift-work have had an impact:

- ▶ Practices and departments have been dealing with the issue of **radiologist burnout** for several years.
- ▶ According to a recent study published in Mayo Clinic Proceedings, radiologists ranked **fifth** out of more than 23 surveyed specialties in their reported burnout rate.

THE RADIOLOGY LABOR SHORTAGE



THE RADIOLOGY LABOR SHORTAGE

Increased workload, hours and shift-work have had an impact:

- ▶ A 2020 *Journal of Breast Imaging* study found a high prevalence of burnout among breast imagers, particularly early-career professionals.
- ▶ The ACR has developed resources through its Radiology Well-Being Program to address the problem of burnout in the profession.

THE RADIOLOGY LABOR SHORTAGE

Current radiology residency spots remain highly competitive, but...

- ▶ The U.S. House of Representatives introduced the Resident Physician Shortage Act of 2021 to address nationwide physician shortfalls by bolstering the number of Medicare-supported residency positions across all medical specialties.
- ▶ There is a push from the ACR and other organizations to prioritize radiology residencies from among the 2,000 newly-funded additional positions per year.

How to WE do it? What is OUR STRATEGY?

INCREASING
OUR
RADIOLOGIST
SUPPLY



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INCREASING SUPPLY: RECRUITING

- ▶ We are *ALWAYS* recruiting.
- ▶ We have a permanent Recruiting Committee with rotating members.
 - ▶ There is a detailed **job profile** with key data points about the practice and job opportunity which serves as a focal point for all discussions with candidates.
 - ▶ Committee is tasked with identifying key attributes for a new hire.

INCREASING SUPPLY: RECRUITING

We have a multipronged plan of attack:

- ▶ Multiple **sources** for candidates
- ▶ Detailed **Interview** process
- ▶ **Marketing** of the practice and geographical area
- ▶ Candidate **assessment**
- ▶ The **Offer**
- ▶ **Post-mortem**



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INCREASING SUPPLY: RECRUITING

Sources for Candidates:

- ▶ ACR Listing
- ▶ “Headhunters”
- ▶ Contacts with Training Programs
- ▶ Friends of Recently Hired Radiologists
- ▶ The “Military Connection”



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INCREASING SUPPLY: RECRUITING

Detailed Interview Process:

- ▶ CV Review and Phone Contact
- ▶ Formal Interview – all sites with “guide”.
- ▶ Evening Dinner attended by all available radiologists
- ▶ Group Discussion and Phone Contact
- ▶ May have second visit.

INCREASING SUPPLY: RECRUITING

Marketing:

- ▶ Discuss Group and Healthcare System
- ▶ Information regarding the area, schools, etc., given to candidate and/or spouse
- ▶ Real Estate Agent spends interview day with spouse or significant other
- ▶ ALL questions addressed

INCREASING SUPPLY: RECRUITING

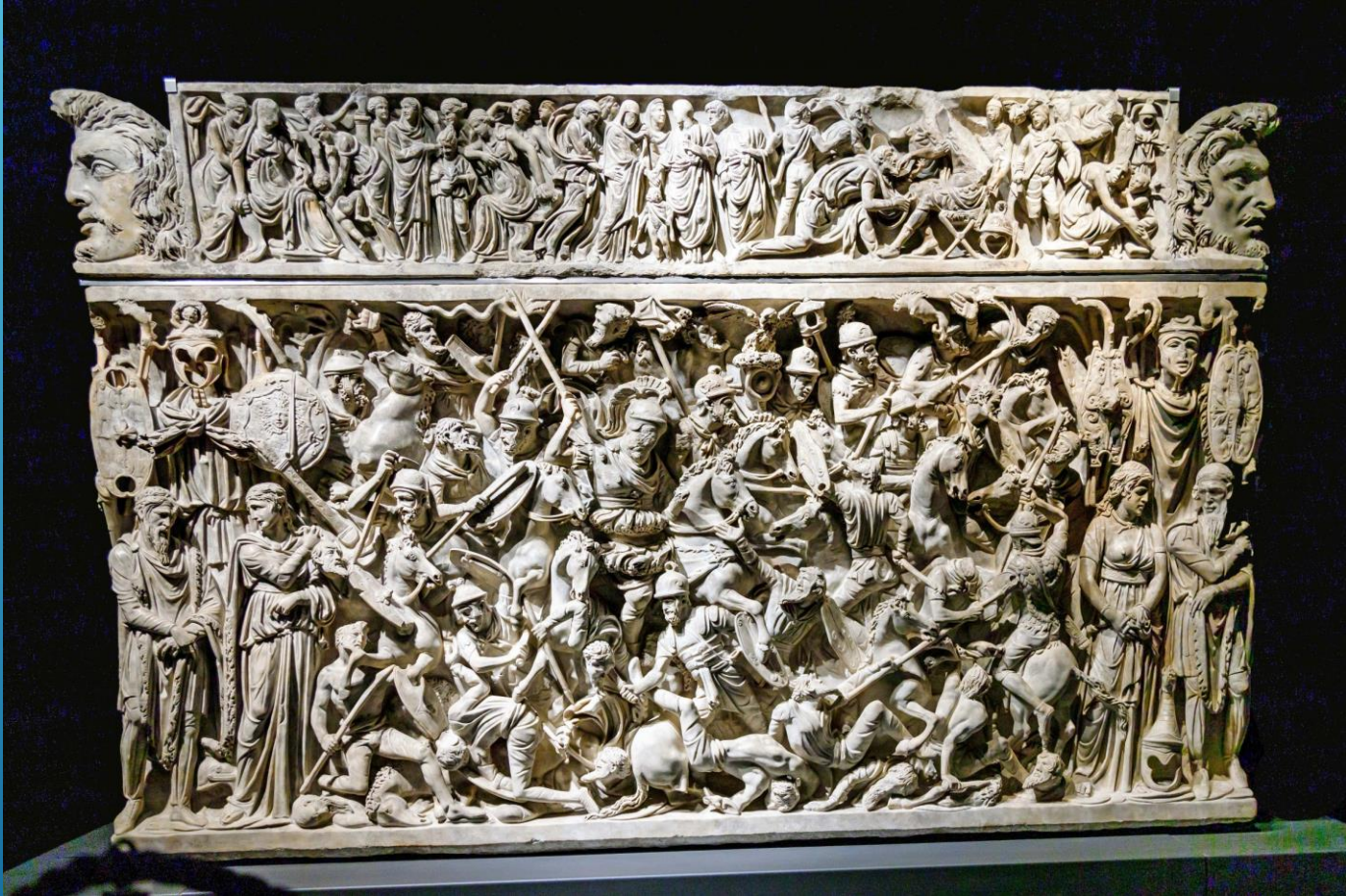
Candidate Assessment:

- ▶ Done initially by Committee and then the entire group
- ▶ Committee makes recommendation to the group what “package” to offer, with adjustments then being made at the group level.

INCREASING SUPPLY: RECRUITING

The OFFER:

- ▶ Competitive Salary – with adjustments based on experience, training, group need
- ▶ “Standard” benefit package (same for all)
- ▶ Vacations: $\frac{3}{4}$ partner level 1st year; $\frac{5}{6}$ partner level 2nd year
- ▶ Partnership track: 2 years (no buy-in)



INCREASING SUPPLY:
RECRUITING

POST-MORTEM



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IN SIGNE RELIGIONIS ADIUTANTE MON PAB IVVM
MELVOTI BVS CENS
PIVS SEPTIMVS PONTIFEX MAX
NOVVS OPERIBVS PRVCYVS DDM PLATVS DVM TITVS
FVLCIVS SENATORIS IVSIT
ANNO SACRI PRINCIPVS EIVS XCVIII