

## The changing US healthcare delivery system – potential impact on medical physics

2014 AAPM Professional Council Symposium

---

---

---

---

---

---

---

---

### Outline

- *Per Halvorsen* – Brief introduction
- *Dr. Shine* – Macro changes in the US healthcare delivery system – precedents in the physician profession
- *Jerry White* – How the medical physics profession may be impacted
- Q&A

2014 AAPM Professional Council Symposium 2

---

---

---

---

---

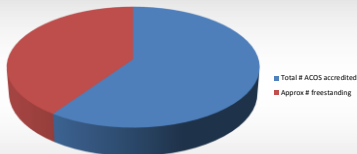
---

---

---

### RadOnc facilities in the US

2,338 total RadOnc facilities



2011 IMV Survey

2014 AAPM Professional Council Symposium 3

---

---

---

---

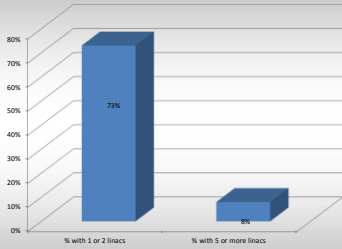
---

---

---

---

### RadOnc facilities in the US



2011 ASRT Survey

---

---

---

---

---

---

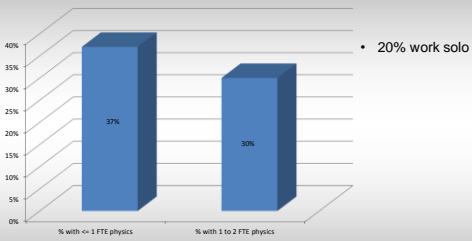
---

---

---

---

### RadOnc facilities in the US



2011 ASRT Survey

---

---

---

---

---

---

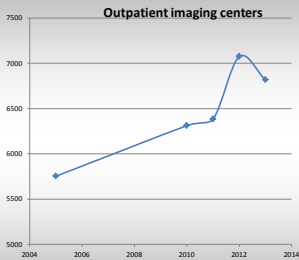
---

---

---

---

### Imaging Centers in the US



2013 Radiology Business Research Journal article

---

---

---

---

---

---

---

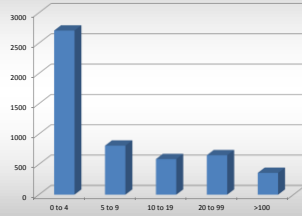
---

---

---

## Imaging Centers in the US

Imaging center size - Total # employees per imaging center



2006 US Census Bureau

2014 AAPM Professional Council Symposium 7

---

---

---

---

---

---

---

---

---

---

## Quality & Safety

*Institute of Medicine*  
*Shaping the Future for Health*

**CROSSING THE QUALITY CHASM:  
A NEW HEALTH SYSTEM FOR THE 21ST CENTURY**

The U.S. health care delivery system does not provide consistent, high-quality medical care to all people. Americans should be able to count on receiving care that meets their needs and is based on the best scientific knowledge—yet there is strong evidence that this frequently is not the case. Health care harms patients too frequently and routinely fails to deliver its potential benefits. Indeed, between the health care that we now have and the health care that we could have lies not just a gap, but a chasm.

2014 AAPM Professional Council Symposium 8

---

---

---

---

---

---

---

---

---

---

## Allocation of federal \$\$

Excerpted from CMS Publication 1590-P: 2013 Proposed Rule

Specialty	Total Impact (%)
10 - Family Practice	7%
14 - Geriatrics	4%
18 - Internal Medicine	5%
32 - Pediatrics	5%
37 - Radiation Oncology	-15%
38 - Radiology	-4%
47 - Diagnostic Testing Facility	-8%
57 - Radiation Therapy Centers	-19%

2014 AAPM Professional Council Symposium 9

---

---

---

---

---

---

---

---

---

---

# Bundling

## COMPREHENSIVE APCs

In the 2014 HOPPS final rule, CMS finalized a comprehensive payment policy, effective January 1, 2015, that bundles or "packages" payment for the most costly medical device implantation procedures under the HOPPS at the claim level. CMS defined a comprehensive APC (C-APC) as a classification for the provision of a primary service and all adjunctive services provided to support the delivery of the primary service. Under this policy, CMS designated each service described by a HCPCS code assigned to a comprehensive APC as the primary service and, with few exceptions, consider all other services reported on a hospital Medicare Part B claim in combination with the primary service to be related to the delivery of the primary service. **Under this policy, CMS calculates a single payment for the entire hospital stay, defined by a single claim, regardless of the date of service span.**

---

---

---

---

---

---

---

---

---

---

# Market consolidation

**South Shore Hospital**

Find a Doctor | Patients & Visitors | Medical Services | Classes & Events | Health & Wellness

**About Us**

**Merger with Partners HealthCare**

July 18, 2014: Update on Our Plans to Join Partners HealthCare and a Request

The regulatory review process surrounding our plans to join Partners HealthCare continues to rapidly evolve, and I am willing to provide you with the most recent developments.

July 17, 2014: The Massachusetts Attorney General (AG) asked the court to reschedule a hearing on the consent judgment regarding our proposed merger with

---

---

---

---

---

---

---

---

---

---

# Delegation

**MARYLAND BOARD OF PHYSICIANS**  
 P.O. Box 37217  
 Baltimore, MD 21297  
[www.mpb.state.md.us](http://www.mpb.state.md.us)

**PHYSICIAN ASSISTANT/PRIMARY SUPERVISING PHYSICIAN DELEGATION AGREEMENT FOR CORE DUTIES**

*All PAs must file a delegation agreement with the Board.*

Dear Primary Supervising Physician and Physician Assistant:

- The Board is no longer required to approve a delegation agreement before the physician assistant (PA) begins working if the delegation agreement does not include advanced duties. *This means that while the Board is not required to approve the delegation agreement prior to the PA practicing, Board staff still needs to review the delegation agreement for completeness.*

---

---

---

---

---

---

---

---

---

---

# NJ regulations – medical physics

## SUBCHAPTER 22 QUALITY ASSURANCE PROGRAMS FOR MEDICAL DIAGNOSTIC X-RAY INSTALLATIONS

### 7:28-22.1 Purpose, scope and applicability

(a) The purpose of this Subchapter is to increase protection to the public and radiation workers from unnecessary exposure to radiation and to reduce the occurrence of misdiagnosis caused by faulty equipment and operator error.

(b) This Subchapter establishes requirements for the development and implementation of quality assurance programs to ensure that registrants of diagnostic x-ray equipment who perform diagnostic x-ray procedures in the healing arts achieve consistent high quality imaging and improve diagnosis while reducing unnecessary radiation to the patients and workers. This Subchapter further establishes certain responsibilities of registrants of radiation sources used in the practice of diagnostic radiology. **This Subchapter also establishes the qualifications and training requirements for medical physicists, medical physicist assistants and qualified individuals designing or implementing quality assurance programs in accordance with this subchapter.** Certification requirements and associated fees are also established for medical physicists and medical physicist assistants.

---

---

---

---

---

---

---

---

---

---

# NJ regulations

## NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION FOR CERTIFICATION OF: QUALIFIED MEDICAL PHYSICIST ASSISTANT IN RADIOGRAPHY and/or QUALIFIED MEDICAL PHYSICIST ASSISTANT IN FLUOROSCOPY

### General Instructions:

- 1. Submit with the application a complete:
- All applicants must demonstrate compliance to a state seal of qualification system in number 2.
- Additionally, all applicants must demonstrate their residence in "number 4".
- All applications must be accompanied by a non-refundable fee of \$10 for our certificate computer and an additional \$10 handling fee for the annual certificate re-issues. Make checks or money order payable to the Treasurer, State of New Jersey.

### PERSONAL DATA

2. Social Security No.	
3. Profile of one year	
4. Name (last)	
5. First	(middle initial)
6. Birth date (mm/dd/yyyy)	
7. Current home	
8. Address	
9. City, State, Zip	
10. Telephone (home)	
11. Mobile	
12. E-Mail Address	

13. Education (include all degrees, including those from foreign countries) (include "high school" for those who did not graduate from high school and did not attend an accredited institution)

### C. CATEGORIES OF CERTIFICATION

N.J.A.C. 7:28-22 requires medical physicist and medical physicist assistant performance and annual Medical Physical QC surveys in radiography and fluoroscopy responses to be certified by New Jersey Department of Environmental Protection.

N.J.A.C. 7:28-22 permits a certified "Qualified medical physicist assistant in radiography" to perform under section 11 of N.J.A.C. 7:28-22 "Medical Physical QC Survey" (see attached) provided that their areas were assigned to the assistant by a certified qualified medical physicist for the purposes of quality assurance programs for diagnostic x-ray imaging. (See N.J.A.C. 7:28-22 for details.)

---

---

---

---

---

---

---

---

---

---

# TX proposal - assistants

## TEXAS BOARD OF LICENSURE FOR PROFESSIONAL MEDICAL PHYSICISTS

Mail Code 1982, PO Box 140347, Austin, Texas 78714-0347  
Phone: (512)834-6655 X, Fax: (512)834-6677  
Email: med\_physicist@dshs.state.tx.us  
Website: www.dshs.state.tx.us/mpi

### PUBLIC HEARING

September 10, 2014 2:00-5:00 p.m.  
Double Tree by Hilton-Austin  
6505 Interstate Highway 35-North, Austin, TX 78752.

The Texas Board of Licensure for Professional Medical Physicists will conduct a public hearing to receive oral or written testimony and comment regarding the duties and responsibilities of diagnostic licensed medical physicists (LMPs) with regard to the use of assistants, service engineers, or technicians (hereafter, assistants) to gather data for Equipment Performance Evaluations on medical x-ray equipment (excluding therapy, CT and fluoroscopy units). The Board seeks comment from diagnostic LMPs, registrants, facilities, service engineers, manufacturers, and other interested parties.

---

---

---

---

---

---

---

---

---

---

## JACMP Editorials

JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS, VOLUME 18, NUMBER 1, 2014

### **The Meaning of a Master of Science Degree in Medical Physics**

For our international readers, this issue's editorial is circumscribed with the meaning of the MS degree in medical physics within the United States. And with that statement, I probably just lost the minds of my readers. Nevertheless, this is an issue that indirectly affects the international medical physics community, as the United States casts a long shadow. And for those of us within the US, we need to think carefully about the future of graduate medical physics education and speak honestly to our students who would have us with their attention to join us as colleagues.

None of us have the history all too well, and I will not bother to repeat it. 2014 has arrived, and medical physicists now will need to complete a CAMPEP-accredited residency program in order to sit for the Board Certification offered by the American Board of Radiology (ABR) in the various medical jobs.

JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS, VOLUME 14, NUMBER 6, 2013

### **The future of medical physics in the US health-care system**

This issue, I would like to digress from the meaning of the JACMP and discuss with you some personal thoughts on the US health-care system and the future of medical physics under the *Affordable Care Act*. My credentials for discussing this topic include a newly minted PhD in Health Management from the School of Public Health at the University of Louisville. I spent many rewarding hours in classes, seminars, and lectures learning about the changes in US health care and public health over the past 11 years. This is a very difficult topic to explore in the limited space assigned to an editorial, but I would like to point out some themes that we need to bear in mind as we look forward.

2014 AAPM Professional Council Symposium 16

