Toward minimum practice standards in Medical Physics

Robert J. Pizzutiello, MS, FAAPM, FACMP
Senior Vice President, LMP Imaging Physics
President, Upstate Medical Physics – A LANDAUER Medical Physics Partner

Bob’s COI statement

- Sr. Vice-President, LMP and President UMP PC Provider of Medical Physics services
- ACR MAP, SBBAP – Reviewer
- IAC CT, Reviewer and one of two AAPM representatives to BOD

Bob’s comments

1. MIPPA accreditation requirements
2. ACR, ICACTL, TJC requirements
3. Impact on consistent practice and patient safety
4. Market conditions affecting the medical physicist
5. What must we do?
MIPPA OVERVIEW

• The Medicare Improvements for Patients and Providers Act (MIPPA) passed in July 2008
• Providers of advanced diagnostic imaging services (ADIS) that bill under Part B of the Medicare Physician Fee Schedule must be accredited by January 1, 2012 to receive payment for the technical component
• Advanced imaging services include:
  — CT, PET, Nuclear Medicine, MRI
• Beginning January 1, 2012 payment will only be made if your facility is fully accredited
• Facilities that already have accreditation must keep renewals current.

ACCREDITATION ORGANIZATIONS

• Which accreditation organizations has CMS recognized?
  — ACR (radiology)
  — IAC (multispecialty)
  — The Joint Commission (uses Ambulatory Care program, no evidence of image evaluation or specific image expertise)

ACCREDITATION REQUIREMENTS

The following requirements apply to suppliers of the technical component of advanced imaging:

• Effective January 1, 2012, all suppliers furnishing the technical component of advanced diagnostic imaging services for which payment is made under the outpatient physician fee schedule, shall be accredited by one of the CMS designated accreditation organizations.

• Advanced imaging is defined as: diagnostic magnetic resonance imaging, computed tomography, and nuclear medicine to include positron emission tomography, X-ray, mammography, ultrasound and fluoroscopy are excluded from these accreditation requirements.

• The accreditation requirements do not affect hospitals.
ACR (radiology)
Many MP's are ACR members,
Sub-committee members
Invited AAPM to collaborate on Joint Standards
Overwhelming majority are Radiologists

IAC (multispecialty)
Stephen Bulas - Board Member - IAC Conrad Sterling - (Report to Committee: PC)
Stephanie Franz - Board Member - IAC CT - (Report to Committee: PC)
Robert Pizzella - Board Member - IAC CT - (Report to Committee: PC)
Chas Ross - Board Member - IAC MR - (Report to Committee: PC)
Jennifer Stickel - Board Member - IAC Nuclear/PET - (Report to Committee: PC)

The Joint Commission
Ralph Leito, participates in Annual Liaison Forum
No other official, direct AAPM input

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**ACREDITATION ORGANIZATIONS**

**MEDICAL PHYSICS ROLE**

ACR (radiology)
Many MP's are ACR members,
Sub-committee members
Invited AAPM to collaborate on Joint Standards
Overwhelming majority are Radiologists

IAC (multispecialty)

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**ACREDITATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Medical Physicist Qualifications</th>
<th>ACR</th>
<th>IAC</th>
<th>TJC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>MR</td>
<td>Yes</td>
<td>Let's look</td>
<td>None</td>
</tr>
<tr>
<td>Nuclear Imaging</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PET</td>
<td>Yes</td>
<td>None</td>
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**ACREDITATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Standards for Medical Physicist Annual Survey</th>
<th>ACR</th>
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<th>TJC</th>
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<tr>
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<td>None</td>
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<tr>
<td>PET</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
7.2 The quality assurance program must consist of MR system installation acceptance testing and major upgrade acceptance testing.

7.2.1 Acceptance testing must be performed as part of the system installation process and after major upgrades, prior to patient clinical use.

7.2.2 The manufacturer’s representative, service engineer, or the MR site-appointed medical physicist, or qualified expert should perform the acceptance testing.

7.2.3 The system parameters should be assigned to the manufacturer’s system specifications or industry standards and reviewed by the Quality Assurance Committee and the Medical Director. Acceptance testing should include, but is not limited to:

7.2.3.1 Magnetic field homogeneity
7.2.3.2 Gradient and RF calibration
7.2.3.3 Resonance frequency
7.2.3.4 Slice thickness
7.2.3.5 Slice selectivity
7.2.3.6 Image quality

The Joint Commission
Accreditation
Ambulatory Care

What would you like to request?

- Just send me a trial version of the standards
- Just send me the application
- Send me both the standards and the application

Ambulatory Care Contact Directory

Useful Resources from JCAHO
- JCAHO’s mission: To improve health care quality, reduce costs, and protect patients
- A Joint Commission-Accredited Hospital Requires an Accredited Medical Staff
- Joint Commission Accreditation of Ambulatory Care Providers
- Joint Commission Resources for Hospitals
- Joint Commission Resources for Healthcare Providers
- Joint Commission Resources for Patients
- Joint Commission Resources for Physicians

Credible Websites
- PatientTracker: AD and "What You Should Know About Your Health Information" (February 20, 2007)

Previous Webinars
- February 20, 2007
- March 29, 2007
- April 24, 2007
- May 22, 2007
- June 19, 2007

Joint Commission Resources for Healthcare Providers

Accreditation

Announcement: The Joint Commission is seeking to improve the quality of care provided to patients in the United States. They are working to develop a comprehensive system to ensure that healthcare providers meet high standards of care. The Joint Commission is committed to improving health care and reducing costs through accreditation.

The Joint Commission is a private, non-profit organization that accredits and certifies health care organizations and programs in the United States. They are dedicated to providing a standard for healthcare excellence through accreditation and survey processes. The Joint Commission is recognized as an independent third-party accreditor by the U.S. Department of Health and Human Services according to the Dearth Act.
### 7/30/2012

#### Standards and Elements of Performance: 3 results

**EC.C1.08.01: The organization selects, installs, and maintains medical equipment.**

<table>
<thead>
<tr>
<th>Program: Ambulation</th>
<th>Component: Equipment of Care</th>
<th>Element of Performance:</th>
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<tbody>
<tr>
<td><strong>EC.C1.08.01</strong>: The organization selects, installs, and maintains medical equipment. These activities are documented. (See also EC.C1.08.02, 03, 04, 05, 06)</td>
<td></td>
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</table>

**EC.C1.08.02**: The organization selects, installs, and maintains medical equipment. These activities are documented. (See also EC.C1.08.01, 03, 04, 05, 06) | | |

**EC.C1.08.03**: The organization maintains medical equipment. These activities are documented. (See also EC.C1.08.01, 02, 04, 05, 06) | | |

**EC.C1.08.04**: The organization ensures that medical equipment: is serviced, calibrated, and maintained according to the manufacturer's guidelines. These activities are documented. (See also EC.C1.08.01, 02, 03, 05, 06) | | |

**EC.C1.08.05**: The organization ensures that medical equipment: is serviced, calibrated, and maintained according to the manufacturer's guidelines. These activities are documented. (See also EC.C1.08.01, 02, 03, 04, 06) | | |

**EC.C1.08.06**: The organization ensures that medical equipment: is serviced, calibrated, and maintained according to the manufacturer's guidelines. These activities are documented. (See also EC.C1.08.01, 02, 03, 04, 05) | | |
**ACCREDITATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Standards Specify Phantom for Medical Physicist Annual Survey</th>
<th>ACR</th>
<th>IAC</th>
<th>TJC</th>
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<td>PET&lt;sup&gt;2&lt;/sup&gt;</td>
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1. ACR and IAC require submission of phantom images in application
2. ACR requires submission of phantom images in application
3. IAC also accredits non-whole-body systems (CBCT, ENT, Dental etc.)

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**CT ACCREDITATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Standards Specify CT Dosimetry for Medical Physicist Annual Survey and Submission</th>
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<td>Measurements</td>
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<td>Comparison with Standards</td>
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<tr>
<td>ACR Accreditation Reference and Pass/Fail Levels</td>
<td>MP to determine</td>
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1. IAC require submission of phantom images in application
2. ACR requires submission of phantom images in application

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**ACCREDITATION REQUIREMENTS**

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<th>Clinical Image Review</th>
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</table>
**Consistent Practice and Safety**

- Early ACR and MQSA experience with mammography physics reports
- ICACTL review of physics reports
  - Published accreditation standards promote minimum standards of practice
- Tight economy, pricing competition can lead to short cuts
  - Unqualified personnel, supervision issues
  - Submitting FSE (state inspector) reports as MP reports
  - Reporting displayed CTDI rather than measurements

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**Impact on Medical Physics**

- Outside organizations now determine MP practice
  - MP’s do not have majority membership position
  - MP’s have little or no power to determine outcome
  - Organizations primarily focused on their own mission, goals (as they should be)
- AAPM must determine minimum practice standards
  - Only we understand nuances and impact on quality/safety
  - Economics, staffing realities, too!
  - State regulators need AAPM to set standards
- Once implemented, MP’s can say
  - “Services conform to the AAPM Practice Standards”
- Standards updated periodically
## Summary

1. MIPPA accreditation requirements
2. ACR, ICACTL, TJC requirements
3. Impact on consistent practice and patient safety
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