Overview of regulatory requirements and the physicist's role in the dose monitoring process

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Relevant Conflicts of Interest

Paid Speaker, Bayer

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States

• California SB 1237 and AB510
  – Dose metrics & excessive dose reporting
• Texas Administrative Code 25 TAC 289.227
  – Same + CT Protocol Committee
• Connecticut Bill 6423
  – Stalled in committee

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**Joint Commission**

- Monitoring Software not necessary, but can be useful

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**Elements of Performance for PC 12.01.01**

A. 9. This organization monitors and improves incident rates where the indication does not meet CT(CT) imaging protocols. These incident rates are compared to historical benchmarks.

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**MACRA/MIPS**

- Medicare Access and CHIP Reauthorization Act
  - Reimbursement pay for performance
- Merit-Based Incentive Payment System
  - Program that determines payment adjustment

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**MACRA/MIPS**

- 2019: +4%
- 2020: +5%
- 2021: +7%
- 2020: +9%
MACRA Metric 359

- Optimizing Patient Exposure to Ionizing Radiation: Utilization of a Standardized Nomenclature for CT
- Percentage of CT reports with the imaging study named according to a standardized nomenclature and the standardized nomenclature is used in institution’s computer systems

MACRA Metric 361

- Optimizing Patient Exposure to Ionizing Radiation: Reporting to a Radiation Dose Index Registry
  - ACR DIR
- Percentage of total CTs that are reported to a radiation dose index registry

MACRA Metric 436

- Radiation Consideration for Adult CT: Utilization of Dose Lowering Techniques
- Percentage of final reports with documentation that one or more of the following:
  - Automated exposure control
  - Adjustment of the mA and/or kV according to patient size
  - Use of iterative reconstruction technique
NEMA/MITA XR-29

- 15% reduction in payment for Medicare Outpatient procedures
- Requires
  - AEC
  - Pre-loaded protocols for adult and child
  - Dose notifications and alerts
  - RDSR
  - Key to monitoring

Role of Medical Physicist in Dose Review Process

- Organize and run meetings
- Translate physician need into specific action items

A Little Bit of Knowledge . . .

- Control dose metric data and how it is used
  - AAPM medical physics practice guideline 6.a.
A Little Bit of Knowledge . . .

• “Why did our dose data stay the same when we bought new machines”
  – You halved your slice thickness

Communicate Dose Metric Information

• 50 to 64% less than what?
• “Can we say that?”
• Should they say that?

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Thank You!