

What Every Medical Physicist Should Know About the JCAHO Standards

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AAPM Summer School, 2001

Foreword by Myron Kandel, *Financial Editor, CNN*
("...it's must reading.")

The **COMPLETE**
IDIOT'S
Guide to

"This book is better than a big Broadway musical. Instead of humming one good tune and being \$100 poorer, it'll give you a whole chorus of advice that'll line your pockets."

—John F. Wasik,
Senior Editor,
Consumer's Digest
and author of
The Investment Club Book

JCAHO Accreditation Requirements

Joint Commission on Accreditation of Healthcare Organizations

- American College of Surgeons created “The Minimum Standard” in 1919
- Hospital standardization program developed in 1920s
- Hill-Burton Act of 1946 required ACS accreditation
- JCHA formed in 1951
- Medicare Act (1965) defined *deemed status*



Joint Commission on Accreditation of Healthcare Organizations

- Headquarters in Oakbrook Terrace, IL
- Accredits nearly 19,000 healthcare organizations
 - 5,000 hospitals
 - Long-term care
 - Home care
 - Networks
- Oldest and largest standard-setting and accrediting body in health care
- Only non-governmental accrediting body with such authority over health care

JCAHO Mission Statement

Continuous
Quality
Improvement

Our mission

*is to continuously improve the
safety and quality of care provided to the
public through the provision of
health care accreditation and
related services that support performance
improvement in health care
organizations.*



Joint Commission
on Accreditation of Healthcare Organizations

CQI: Continuous Quality Improvement

“A management approach to the continuous study and improvement of the processes of providing health care. Focus is on improving the system itself, rather than concentrating on outliers.”

JCAHO Lexikon

JCAHO Organization

- Board of Commissioners “... provide policy leadership and oversee activities...”
 - American College of Physicians (3)
 - American College of Surgeons (3)
 - American Dental Association (1)
 - American Hospital Association (7)
 - American Medical Association (7)
 - Public members (6)
 - At-large nursing representative (1)

JCAHO Organization (cont.)

- Dennis O'Leary, President and CEO, brought on board in XX? to institute change.



JCAHO Professional and Technical Advisory Committees (PTACs)

- Provide advice concerning needs of each field, and the Joint Commission's role in meeting these needs
- Members represent national healthcare organizations, and participate in development of standards and guidelines
- The ACR has one physician representative to a PTAC

Benefits to Medical Physicists

- JCAHO standards are about *quality*
- QA, especially related to *process* and *structure* is easy for us
- We are accustomed to keeping good records
- Physicist as “QA coordinator” can enhance visibility in the clinic
- By contributing to JCAHO accreditation, we demonstrate our *added value*

W. Edwards Deming

“A goal without a method is cruel”

Deming Triad:

- Structure
- Process
- Outcome



Medical Physics Interaction with JCAHO

AAPM
Professional Council

ACMP
JCAHO Liaison

ACR Physics Comm'n
Gov't & Public Relations Cmte



R. Croteau

JCAHO
Liaison Network

ACR Representative
to PTAC

Changes in Direction

1970s - Standards recast to represent optimal achievable levels

1980s - “Agenda for Change”

- Reformulation of standards to emphasize actual organization performance
- Redesign of survey process to provide interactive on-site evaluation and education
- Development of performance measures and Indicator Measurement System

2001 - Increased focus on patient safety

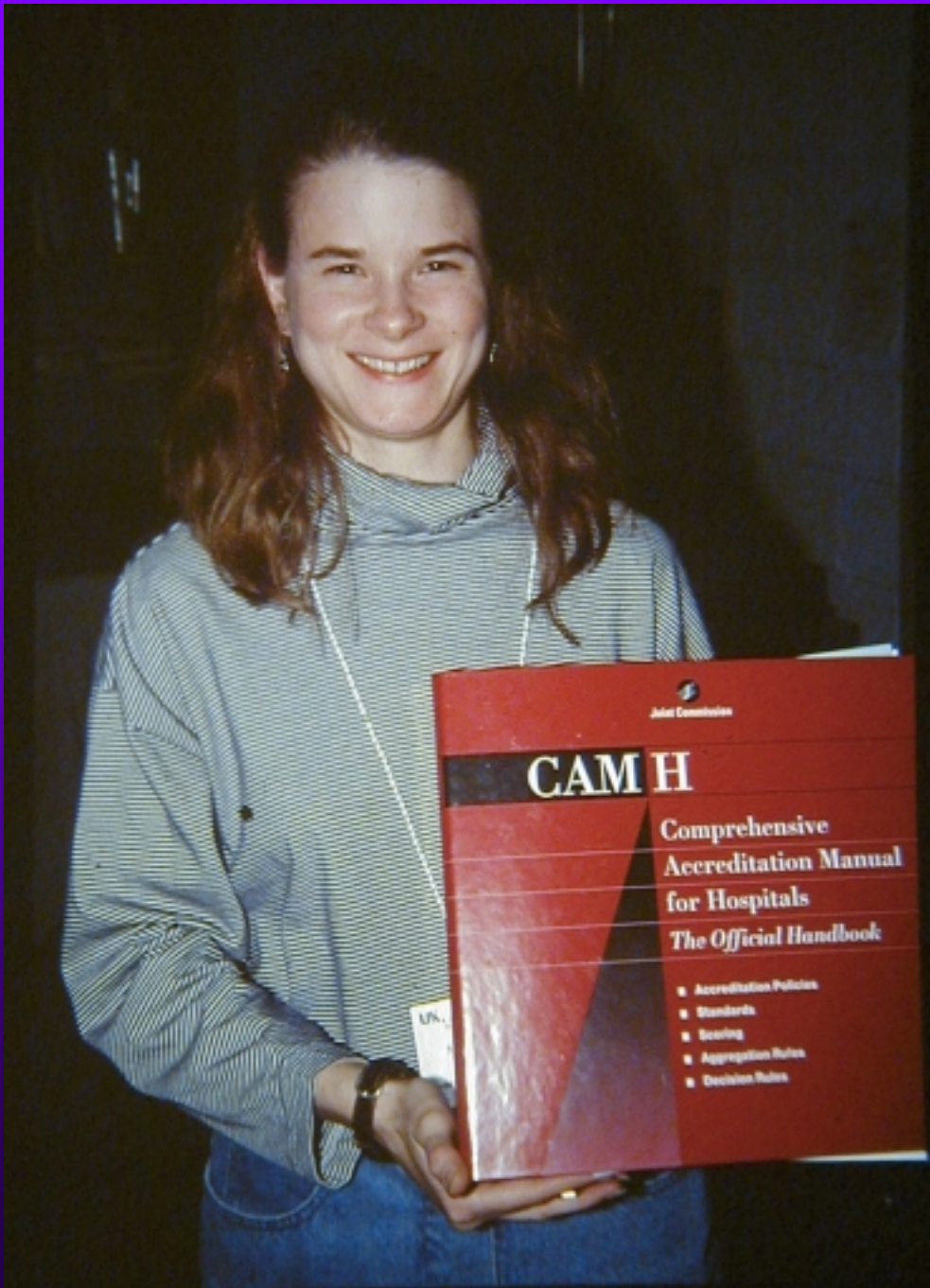
Performance Measurement System

- An interrelated set of process or outcome measures
- Provide meaningful performance profile about organizations to which measures are applied
- Key feature of *Performance Improvement*



Comprehensive Accreditation Manual for Hospitals

- CAMH - contains the standards and guidelines against which hospitals will be measured.
- All accredited hospitals have a copy
- Updated quarterly



CAMH Chapter Outline

- Introduction and Overview
- Flow chart and example
- Standards and Intent Statements
- Examples of Implementation and Examples of Evidence of Performance
- Aggregation Rules

Standard EC.1.3

- EC.1.3 A Management Plan Addresses Safety

Intent Statement

- EC.1.3
- The safety management plan describes how the organization will provide a physical environment free of hazards The plan provides processes for:

Intent Statement [cont.]

- a. Maintaining grounds and equipment
- b. Conducting risk assessment ...
- c. Examining safety issues ...
- l ...
- h. Orientation and education program ...
- i. Performance standards ...

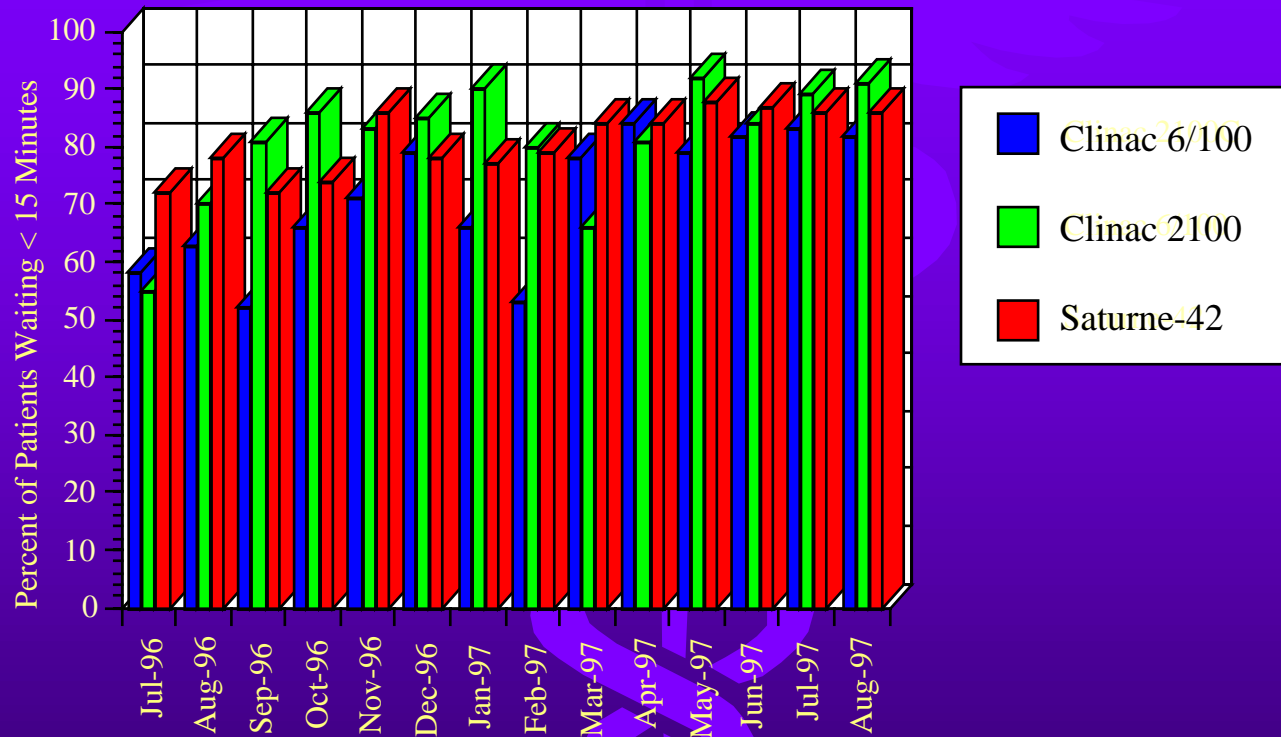
Proposed Probe Questions

P.I.3.3.3: Quality Control Activities

“By what process does your quality control program address patient satisfaction with services, equipment performance, and quality of service?”

Expected Answer: An indication that the department has developed and maintains a quality control program that addresses these items, among others

Results: Treatment Units



Results: The results indicate that, most of the time, the department's goal (at least 80% of patients wait less than 15 minutes) is met. However, procedures need to be modified so this goal can be raised to 90%.

Example of Implementation

EC.1.8 The Radiology department is revising its program for assuring safety and performance. A group of technicians, radiologists, the medical physicist and the biomedical engineer studied and revised procedures addressing

- Patient safety
- Staff safety
- Equipment performance

Proposed Probe Questions

E.C.1.8: A management plan addresses medical equipment

“At what frequency is the operation of the x-ray equipment evaluated by a medical physicist?”

Expected Answer: Annually (Radiology)

Monthly or more frequently (Radiation Oncology)

Proposed Probe Question

EC.1.5: A management plan addresses control of hazardous material and waste.

“Who in your institution or department is responsible for overall security of radioactive materials and radioactive waste?”

Expected Answer: “The radiation safety officer” or “the medical physicist.”

Proposed Probe Question

HR.4: An orientation process provides initial job training and information and assesses the staff's ability to fulfill specific responsibilities.

“Which staff member delivers radiation safety training to new hospital employees?”

Expected Answer: “The medical physicist” or “the radiation safety officer.”

Example of Implementation (Proposed)

- PI.4 The hospital uses a systematic process to assess collected data.
 - The nuclear medicine department has collected data as outlined in PI.3.3.3. The data are reviewed to answer the following questions:
 - Are patients and physicians satisfied with the service?
 - How many misadministrations were given?
 - How many days of gamma camera downtime?
 - What was the time from referral to appointment?
 - After review, procedures are altered to address deficiencies

Proposed Probe Questions

- HR.3: The leaders ensure that the competence of all staff members is assessed, maintained, demonstrated, and improved continually.

“Has the department undergone peer review, and if so, by whom was it conducted and what were the results?”

Expected Answer: The department is accredited under the ACR’s Practice Accreditation Program in the appropriate field; A site review was conducted by the RTOG; A physics review was conducted by the RPC; Mailed dosimeters are evaluated by RDS; A colleague was recruited to conduct a review of the department

Proposed Probe Questions

- HR.3:

“How often do staff members receive in-service training, on what topics, and how is their understanding reviewed?”

Expected Answer: An indication that the department has a program of regularly-scheduled in-service education and evaluation

EC.2.13 Medical equipment is maintained, tested and inspected

“... all records of service and maintenance are signed by a qualified individual to indicate the equipment has been cleared for return to clinical use.”

Proposed Probe Question

EC.2.1 Staff members have been oriented to and educated about the environment of care, and possess the knowledge and skills to perform their responsibilities under the environment of care management plans.

“How often do radiologic technologists receive in-service training on imaging protocols? How is their understanding of the protocols evaluated?”

Expected Answer: An indication that the department has a program of regularly-scheduled in-service education and review.

Management of Human Resources

HR.2 The hospital provides an adequate number of staff members whose qualifications are consistent with job responsibilities

Example of Implementation: The AAPM definition of Qualified Medical Physicist

Example of Implementation

LD.3.4 All department develop policies and procedures in collaboration with associated departments.

The written policies include:

Provisions that a qualified physician, qualified medical physicist or other qualified individual

- Monitor performance of diagnostic equipment quarterly
- Monitor administered doses for agreement with prescribed doses.
- Monitor, for validity, quantitative results
- Monitor absorbed doses in individual patients as requested

Proposed Probe Questions

EC.1.8: A management plan addresses medical equipment.

“How often is a measurement made of radiation output from each piece of x-ray equipment?”

Expected Answer: Annually (Radiology)

Monthly or more frequently (Radiation Oncology)

By a Qualified Medical Physicist

Proposed Probe Question

EC.1.9: A management plan addresses utility systems.

“Which pieces of diagnostic x-ray equipment would be kept operational in the event of a natural disaster that severely reduced the electrical power available to the hospital?”

Expected answer: An indication that the hospital had developed a plan for such an event.

Proposed Probe Question

- PI.4.5: The hospital initiates intensive assessment when statistical analysis detects undesirable variation in performance.
- “Give an example of ways in which a statistical analysis of equipment or staff performance has prompted an investigation into the cases of sub-optimal performance.”
- Expected Answer: The institution may point to statistical analyses of, for example, equipment QC programs that demonstrate deterioration of equipment performance. Or they may describe analyses of patient waiting times, and their plan to reduce excessive waiting times for certain

Hospital Performance Report



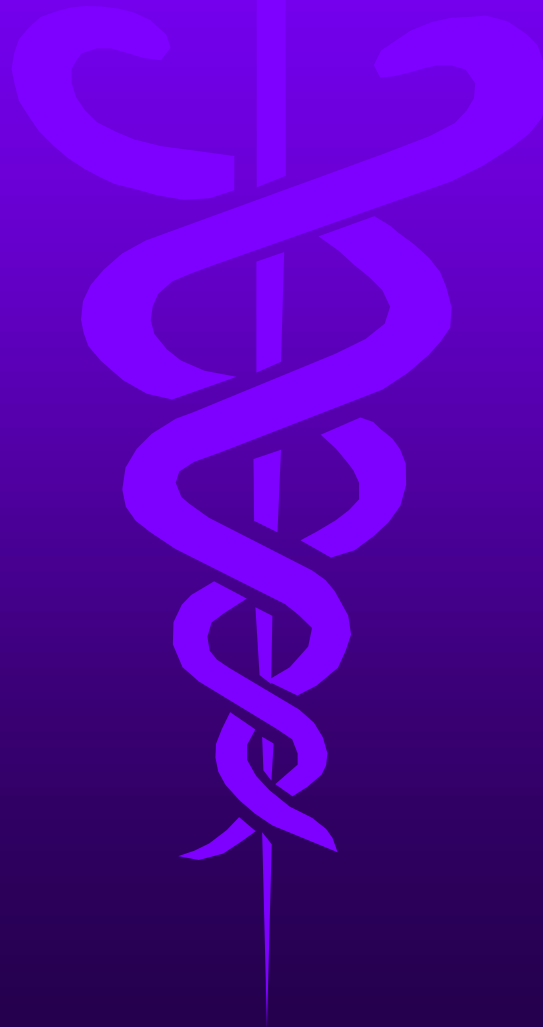
Example

- Dose delivery accuracy
- Goal: No misadministrations Measure 0

Sources of Regulatory Impact

- Nuclear Regulatory Commission
- CRCPCD - state health departments
- OSHA, EPA
- Health Care Financing Administration
- JCAHO
 - Only non-governmental

National Comparative Hospital Scores



Aggregation Rules



Scoring Guidelines



Examples of Implementation

- Strategies, activities, or processes that a hospital may use to meet the standards. Adapted and condensed from activities carried out in hospitals.
- AAPM definition of QMP has been adopted as an example for a standard in the Human Resources chapter.

- “A medical physicist periodically reviews and advises, as appropriate, on policies and procedures and those policies and procedures are revised as necessary.”

“Probe Questions”

- Questions that surveyors might ask to determine quickly if more penetrating examination of an area is required.
- Proposed probe questions would be asked during a survey of a radiology or radiation oncology department.

Proposed Probe Questions

- EC.1.3: A management plan addresses safety.
- “With what published safety standards and guidelines do you comply in your design of the facilities in which radiation is used?”
- Expected Answer: NCRP reports, NRC regulations, State regulations, and/or AAPM recommendations.

Standards/Examples

PI.3.3 Data on important processes and outcomes are also collected from

PI.3.3.3 Quality control activities

“Data on quality control activities include the following services ... diagnostic radiology, nuclear medicine, radiation oncology”

Medicare Changes

- HCFA has announced plans to publish ratings of the quality of care provided in:
 - Nursing homes
 - Medicare health plans
 - Dialysis centers
 -
 - Hospitals
 - Doctors

Washington Post, June 4, 2001

Recent Changes

- Accreditation of Managed Care plans
- Random unannounced surveys
- Change in accreditation categories
- Expanded pre-survey information
- Assessment of peer review
- Improved surveyor education, selection, monitoring
- Redesign of on-site surveys

Recent Changes (2)

- More non-management staff involvement
- Off-shift surveys, backtracking
- Notification of public
.....
- Electronic applications
- Database of standards
- Pre-survey self-assessment
- Assessment of adequacy of staffing