

GE Healthcare

TiP-TV[®] Training in Partnership Program Supplement and Test for Imaging Professionals

Leadership Education

Issues in Radiology Management – Part II

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1.0 ASRT-approved Category A CE Credit



imagination at work

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Program Summary

This page provides an overview of the program content and learning objectives. The Table of Contents provides a detailed list of the topics covered. Please keep a copy of this Program Summary and the Table of Contents with your continuing education certificate. It is also recommended that you provide a copy of this information to your manager as a record of your educational achievement.

Program Description and Target Audience

This program, the second in the series, provides a compilation of selected educational content presented at the 36th annual meeting of the American Healthcare Radiology Administrators (AHRA) in Denver, Colorado. Interviews with primary presenters and AHRA members focus attention upon imaging issues to include: operations, electronic imaging, human resource management, and regulatory initiatives.

The target audience is radiology administrators, managers, supervisors, and technologists.

Program Objectives

By the end of this program, the viewer should be able to:

1. Analyze management issues as presented in selected interviews/discussions at the 36th annual meeting of the American Healthcare Radiology Administrators.
2. Find four issue categories to include: operations, electronic imaging, human resources and regulation.
3. Recognize the extraordinary educational and networking opportunities available through the AHRA annual meeting and exposition.
4. Identify potential solutions to prevalent issues currently facing radiology administrators.

Continuing Education Credit

1.0 ASRT-approved Category A CE Credit

NOTE: While the technical content is most effective for the target audience, other administrators and medical personnel may also benefit from viewing this course. Regardless of your imaging specialty, you may apply for continuing education credit. Refer to the Continuing Education Credit page for additional information.

Continuing Education Credit and Video File Download (**NEW**)

Online Process for CE Credit (hls.gehealthcare.com)

In order to receive continuing education credit, you must log into the GE Healthcare Learning System (HLS) and complete all of the required steps. Please refer to the online TiP-TV Quick Start User Guide (click the User Guides link on the HLS Welcome page) for additional information on how to use the GE HLS as needed.

1. **View the entire program video** online or download the video file for later viewing (refer to the process below). This supplement is *not* intended to replace watching the video.
2. Go to the GE HLS web site at hls.gehealthcare.com and complete the **feedback form**.
 - ♦ NOTE: The Feedback Form link is not activated until the View Video Now module has been completed.
 - ♦ This provides valuable information regarding your thoughts on the program's quality and effectiveness.
3. Complete the **program post-test** without aids or assistance of any kind; this is an *individual effort*.
 - ♦ You have up to three attempts to successfully complete the test with a minimum passing score of 75% (ASRT-approved programs) or 80% (SNM-approved programs).
 - ♦ The post-test measures knowledge gained and/or provides a self-assessment on a specific topic.
4. Upon successful completion of the online CE information, you can instantly print a **certificate**.
5. Florida residents: The process for submitting CE credit to the FL DOH can be found online in the Related Documents tab on the bottom of the program's Item Details page.

Video Download Process (**NEW**)

For programs with an original start date of September 1, 2008 or later, the GE HLS includes an option to download the TiP-TV program video file. You can then watch the program on your personal computer or transfer the video file to your portable video player for viewing.

NOTE: Please refer to the **TiP-TV Video Download Quick Start Guide** for complete details (click the User Guides link on the GE HLS Welcome page).

- With the desired program in your GE HLS Learning Plan, launch the program content to view the Online Content Structure. In the Video Download (Optional) area, click the Download Video to View Later link.
- Save the video file on your personal computer, using your existing video download software.
- View the program on your personal computer or transfer it to your portable video player for later viewing.
- After viewing the entire program, log into the HLS and complete the CE activities as noted above.

Continuing Education Credit Eligibility – Important Notice!

A GE Healthcare TiP-TV course may be available in several different formats, such as an online web course or CD/DVD. You may only be able to receive CE credit once for a particular course, regardless of the format in which it was viewed. If you have already received credit for a course, you are encouraged to contact your CE certification organization (ARRT, NMTCB, ARDMS, etc.) to determine if you can repeat this course for CE credit.

Thank you for choosing GE Healthcare as your continuing education partner. We hope you will join us for other TiP-TV programs in the future. For more details and program schedule information, please visit our education web site (www.gehealthcare.com/education).

Please forward any questions or comments to: PSTIPApps-ct@med.ge.com

Introduction

This is the second of a two-part series providing an overview of selected issues from the 36th annual meeting and exposition of the American Healthcare Radiology Administrators. In the first program, entitled "Issues in Radiology Management – Part I," ideas were discussed pertaining to revenue, reimbursement, performance, and customer service. This program explores issues pertaining to:

- Operations
- Electronic imaging
- Human resources
- Regulation

At the conclusion of Part I of this series, a "wow" factor was advanced regarding what customers take away from their healthcare experience. Should this idea become a primary goal for setting your service apart from others?

This program proceeds with the idea that pleasing the customer is indeed the goal. To that end, included are a number of ideas and issues for you to review. The program begins with an overview of issues pertaining to operational efficiency and electronic imaging.

NOTE: The video portion of the program contains several interviews with administrators, healthcare business personnel, and industry experts. This document contains the main points of these conversations in bulleted form. Please view the video presentation in order to more fully understand the concepts discussed.

Operations/Electronic Imaging

Operational efficiency relates directly to how work gets done; its measurement can be performed using several methods, often including computers and workflow databases. Not everyone chooses to use computerized databases, and due to resource constraints, this option is not always available. There are manual techniques that can be very effective.

NOTE: Edited excerpts from Lisa Ghent, functional analyst at McKesson Medical Imaging Group in Richmond, British Columbia, Canada.

- Expensive software can be cost prohibitive.
- Picture archiving and communication systems (PACS)/radiology information system (RIS) link is not necessary with manual technique.
- The type of hospital information system (HIS) that is used does not matter.
- Qualitative and quantitative aspects are the most important workflow characteristics.
- Look at the entire picture.
- Present results to decision makers.

Ms. Ghent stated that the entire workflow model should not be centered around the work of radiologists, although their role is an important part of the process. In the program video she comments about other workflow aspects that need attention.

- Do not look only at things you can count.
- What about the steps involved in walking from place to place?
- Interactions are often not accounted for.
- Though small, 30-second encounters add up over a year.

Many organizations are embarking upon computerized workflow analysis via RIS and PACS. When asked whether the manual workflow evaluation technique could be effective prior to the implementation of PACS/RIS technology, Ms. Ghent stated that PACS/RIS provides an easier path, because there is a clearer idea of what is necessary before implementing the workflow technique.

NOTE: Edited excerpts from Michael Cannavo, President of Image Management Consultants in Winter Springs, Florida.

PACS and RIS technologies are becoming very common, yet there is substantial complexity associated with the overall preparation, implementation, and post-implementation period. According to Mr. Cannavo:

- Careful thought and planning are very important elements.
- Evaluate what you have, the effect new technology will have on budget, and its effect on people.
- Once you have PACS, you cannot go back.
- There are two key challenges:
 - Know what the PACS vendor can and cannot do.
 - The vendor, in turn, needs to know your precise requirements.
- Properly articulating everything to the vendor is critical.
- You need to establish the goals, the problems, and how they can be addressed.

The ultimate antagonist to operational efficiency is downtime. Mr. Cannavo drew a very sharp line between downtime associated with PACS and that encountered when a modality device, such as a magnetic resonance imaging (MRI) system, goes down.

- PACS are different than most modalities.
- Cannot calculate lost cost associated with PACS downtime because revenue is not generated by that type of system.
- There can be many exclusions in a 99% uptime guarantee service agreement.
- Workstations, interfaces, and archives may be excluded from uptime guarantee.
- Often, the only item covered is the PACS server.
- The solution is to build a system that minimizes the time it can be down.
- Fault tolerant, redundant, or continuous availability PACS are best for the elimination of downtime.

In the world of PACS, does one size fit all? What about the longevity of these systems? Mr. Cannavo comments.

- It's a commodities market; all PACS do the same things, but there are multiple additional options.
- Find a system that meets your requirements, one that does not give you more or less than what you need.
- Find a price point that is affordable.

- Application service providers (ASPs) allow a pay-as-you-go setup to avoid obsolescence.
- Typically, there is a five-year return on investment formula for PACS.
- Begin to re-evaluate where you are going after four years.

After re-evaluation of PACS, four years into the product's life, the issue becomes where to go from there. There will probably be an overwhelming number of choices available, based on abundant information sources that will need to be sorted out. These decisions will be based on specific needs, problems, or services.

MR. Cannavo comments on what he expects will occur over the next five years.

- More software-only solutions and integration services will be available.
- PACS will expand out of radiology; the next big occurrence will be in cardiology.
- Integrated information and image management systems will evolve.
- PACS will continue to provide hospital-wide, facility-wide, and network-wide service in bigger organizations.
- Look for central data repository evolution.

NOTE: Edited excerpts from Hazel Hacker, Business Manager at Edison Imaging Associates, P.A. in Edison, New Jersey.

The technology discussed up to this point of the program pertains only to the systems used for images, financial, operational, and quality data; changes in medical imaging equipment have not entered the discussion. When equipment evolution is brought into the equation, it is clear how dramatically everything is changing in terms of sophistication and application. Continual change can be welcomed, tolerated, or plainly rejected. This issue is of concern to every radiology administrator. In the program video, Ms. Hacker comments.

- Change is inevitable, lots of people do not like it.
- Education is necessary and it's often hard to keep up with training objectives.
- People coming into the workforce are more technically competent, especially with computer knowledge.
- Some groups tolerate change better than others.
- There are exciting changes afoot, but for many people, there are just too many to keep up with.
- The workforce is strained and there are not enough people to provide training.
- Things are moving too quickly to keep up.
- People are busy doing, doing, and doing some more; most are crazy busy.

NOTE: Edited excerpts from Megan McDonough of McDonough Company in Hardwick, Massachusetts.

When technical changes, workloads, responsibilities, and requirements are providing a full docket for most employees and when training, staffing, and administrative issues are seemingly overwhelming for managers, what is to be done? Ms. McDonough applies the principles of yoga to corporate minutiae and frantic activity.

- Change has been a constant, forever.
- Is there balance, in order to recover, when the rate of change escalates?
- We're often running a marathon at a sprinter's pace.
- It's important to take one step at a time.
- We're racing ahead of ourselves if we keep trying to move faster and faster.
- Try to stay in the moment,
- Try not to create more internal change while responding to external change.
- We cannot change anyone but ourselves.
- Be conscious of how you interact with everything.
- These ideas can lead to empowerment, self-confidence, higher self-esteem, and greater ability to change flexibly and fluidly.

Human Resources

NOTE: Edited excerpts from Richard Lewis, principal consultant at Phoenix Imaging Consultants in Orlando, Florida.

- A human resources (HR) department handles the majority of human resource issues, but a knowledge of HR is becoming more necessary in the radiology administrator's skill set.
- Many uncritical issues do not have to be escalated to HR.
- HR is one of the five critical domains of radiology administration.
- HR is part of the certified radiology administrator (CRA) exam.

NOTE: Edited excerpts from Sherry McHenry, mediator at Inner Change 4 You in Maineville, Ohio.

There is great complexity in human capital with its intellectual, emotional, and physical variability, and its need for continual attention. This section looks at internal strife in the form of employee conflict, either with each other, with a supervisor, or with someone from another area of the healthcare facility. Ms. McHenry spoke about mediation and the remediation process.

- A suitable mediation case is one where both parties want to resolve conflict.
- It is a voluntary process; it is not mandated.
- Mediation is designed to bring peace and to be instructive in how to communicate effectively and resolve conflicts.
- The remediation tools can then be used as people take ownership in the process.

Ms. McHenry talked about who the mediator is and whether in-house mediators can be used, or if a more expensive external source needs to be employed.

- There is a need for specific mediation training in order to do it properly.
- In-house mediators are effective for non-intense cases.
- Mediation is more cost effective than going through arbitration or the legal process.
- Can resolve conflict before it reaches something larger.

Ms. McHenry went on to say that because radiology administrators are likely to handle conflicts anyway, they are good candidates for formal mediation training. Using mediation to provide service to employees is a very positive human resource element.

- Mediation is an opportunity to improve the workplace environment.
- Mediation is a creative process.
- Conflict should be viewed as an opportunity to improve specific situations and the workplace as a whole.

NOTE: Edited excerpts from Brenda Rinehart, Director of Medical Imaging at Overlake Hospital Medical Center in Bellevue, Washington.

Conflicts between people may reach a point where there is a breakdown, and indeed may bring forth the idea of a mediation session. Ms Rinehart explains a useful tool derived from the Oz principle (getting results through individual and organizational accountability).

- Actions are based on experiences, which are based on beliefs.
- There is a need to change the experience so a person will believe differently.
- Example: "You did such and such; it made me feel this way. Did you intend for me to feel that way?"
- If the answer is "Yes, I did intend for you to feel that way," then it's understood. If that was not the intent, then there is an opportunity to change the experience.
- The belief has then been altered, the experience changed, and the conflict could potentially be resolved.

NOTE: Edited excerpts from Richard Lewis, principal consultant at Phoenix Imaging Consultants in Orlando, Florida.

Recruitment, retention, and succession planning are becoming more troublesome, because the baby-boomer generation is reaching retirement age. The commentary in the program video focuses on these issues, with Mr. Lewis beginning the conversation regarding recruitment recommendations.

- When recruiting, be honest about your facility.
- Describe the challenges currently in play.
- Do not sugarcoat what you say.
- Describe changes you want to make and how the person being interviewed can be part of those changes.
- Younger people may indeed want to play a big part in change.
- Being honest and including the new employee in initiatives can often dissuade them from looking for greener pastures.

NOTE: Edited excerpts from Sandra Anderson, Director of Radiology at Memorial Hospital in Colorado Springs, Colorado.

The interview process is extremely important to help visualize what kind of employee the interviewee will become. It's an enormous challenge to really grasp the essence of a person in the short time an interview or multiple interviews take place. There are many techniques available to choose from. Ms. Anderson comments in the program video.

- Try to use behavioral-based interview questions.
 - You'll often get a better fit.
- Use open-ended questions when asking about past behaviors, both positive and negative.
- Issue a statement that includes behavioral standards.
- Meet 30 days later, after employment begins, and go over these behavioral items to see if expectations are met.

Once an employee is aboard, the key is to be certain they fit the organization's goals, values, and behavioral requirements. Then, you do everything in your power to retain them! The program video includes some ideas that came out of the AHRA national meeting.

Ms. Anderson

- Call the new employee the night before their first day to welcome them.
- Post signs in the department to welcome them.
- Have a breakfast for the new employee; invite all staff.
- Have a candy drawer or other stress-free place.
- Use verbal praise.

Mr. Lewis

- Acknowledge employees for what they do; do not spend all your time on poor performers and neglect good workers.
- Employees may leave your employ because they do not feel recognized.
- Acknowledgement in employee meetings is an important element.
- Thank you cards for doing a good job are helpful.
- Employee recognition often impacts the employee more than money.
- Be the manager your employees want to work for.

It is often the very simple things that can go a long way in attaining a satisfied employee. It is amazing how much power a simple "thank you" can have. On the other hand, the deleterious effects of a manager whose approach is to say "It's their job – they're expected to do that" and consequently does not acknowledge good or exemplary behavior, are well known.

The way supervisors perform their work is changing due to the caliber of the employment pool, as Mr. Lewis explains in the program video.

- Generations are changing, it's not appropriate to use scientific management all the time.
- Be more of a referent manager.
- Be mentors and coaches, then let employees go and get it done.

- Ask employees to refer back to you for help.
- Much more collaborative as opposed to the boss behind the desk.

Who's going to step up to replace you when it's time for you to retire? Succession planning is an enormous concern and its procedure is open to interpretation. The program video includes a number of perspectives.

Charles Washington, Director of Clinical Services and Operations at M.D. Anderson Cancer Center in Houston, Texas.

- Take the time to effectively identify candidates.
 - That identification takes skill in itself, because we tend to lean on the best front-line practitioners; it's not always a good fit.
- Introduce people to growth opportunities as they progress in their continuum.
- There should be more than just one candidate that's included in the succession process.
- Too much attention to one person may limit progress of others.

Ms. Anderson

- It's important to share all knowledge so things can go smoothly when succession takes place.
- Look at managers, supervisors, and staff members for good candidates.
- Give people the tools they need in order to know the entire operation.

Bonnie Standley, Director of Radiology at the Mayo Clinic in Rochester, Minnesota.

- There is a generation gap within radiology.
- Supertechnologists will not necessarily make good managers and administrators.
- Older administrators learned with trial-by-fire methods.
- Educational opportunities for younger administration candidates are improving.
- AHRA Leadership Institute is a good alternative for young managers.
- Partners in Learning program is another AHRA opportunity for learning.

Regulatory

NOTE: Edited excerpts from Bruce Hammond, Chief Operating Officer at Diagnostic Health Services in Addison, Texas.

- It is crucial for radiology administrators to understand regulatory environment.
- Things that are important as a technologist are not the same as those that are important to an administrator.
- Information and regulatory revolutions have impacted society.
- The regulatory environment changes the way business is conducted; it is also more expensive.
- The Health Insurance Portability and Accountability Act (HIPAA) requires more personal liability.
- Regulations require jumping through more hoops.
- You need significant understanding of regulations and their ramifications.

NOTE: Edited excerpts from Penny Olivi, Senior Administrator-Radiology at the University of Maryland Medical Center in Baltimore, Maryland.

What are some of the more crucial issues to understand in the regulatory environment? There are many; discussion begins with a look at The Joint Commission.

- The National Patient Safety Goals (NPSG) are affecting radiology departments.
- Contrast media and screening and monitoring patients are important issues.
 - Documentation of screening and monitoring activities is the difficult part.
- Information technology methods need to be able to handle the data required by The Joint Commission.
- Increased regulation is not necessarily a bad thing; the healthcare environment will be safer.
- These changes do not come without pain.

NOTE: Edited excerpts from Judith Atkins, President/CEO of McKenna Consulting in Charleston, West Virginia.

Ms. Atkins has studied the NPSG extensively. She describes which elements will specifically impact medical imaging. Also discussed were specifics regarding medication management and contrast media.

- Three or four additional goals concentrate on infection control.
- Antiseptic technique for peripherally inserted central catheter (PICC) lines is important, because many of these procedures are performed in interventional radiology.
- Surgical infection rates are of renewed interest in all of radiology.
- Multiple drug resistant organisms (MDRO) are also a top issue for The Joint Commission.
- Contractors need to be knowledgeable about MDROs (example: use of alcohol gel not being effective for claustridium difficile, or as it's more commonly known, C Diff).
- Contrast media administration has to either be reviewed by the pharmacy or can be handled by a protocol-driven order from the radiologist.
 - This radiologist protocol must include an actual order for contrast media administration.
 - Modification of contrast injection procedures according to age has to be included in the protocol.
 - Response time to a contrast reaction needs to be included in the protocol.

Regulation pertaining to mixing of solutions in the form of United States Pharmacopeia 797 (USP 797) is an issue for imaging departments. Ms. Atkins talked about specifics of this initiative in the program video.

- USP 797 says mixing of compounds should be regulated. The Joint Commission has a standard stating that these compounds cannot be mixed in large bags.
- The pharmacy must do mixing, because they have laminar flow hoods.
 - Cardiac catheterization laboratory example: if solutions are mixed there, the patient does not have the advantage of an antiseptic technique afforded by use of a laminar flow hood.
- There are exceptions to the mixing rule – notably where speed is of the essence for patient safety, or situations in which the drug is unstable and will deteriorate quickly.
- Heparin protocols should be standardized and pre-mixed according to the NPSG.

NOTE: Edited excerpts from Lyn Mehlburg, Quality and Safety Specialist at Aurora BayCare Medical Center in Green Bay, Wisconsin.

- The United States Pharmacopeia is the governing body for the pharmacy world.
- USP 797 pertains to compounding and sterile preparations of materials.
- Radiology is not considered a sterile environment, except for interventional and assorted scattered procedures.
- Many infection control issues have occurred in radiology departments.
- USP 797's largest impact will be on nuclear medicine, and will then most likely affect other areas of medical imaging.
- USP 797 provides safer care to patients.

There are numerous perceptions pertaining to the regulatory environment and its effect on medical imaging. Ms. Mehlburg provides very effective commentary in the program video.

- A good point to get rid of procedures we've been doing forever.
- Time to figure out what's really important.
- What impacts care; what are we doing just to do it?
- Great opportunity to move forward.

Appendix A: Presenters

Roger Beck, M.S., R.T.(R)(CT)

CT/Leadership TiP-TV Program Manager
GE Healthcare

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Appendix B: Resources

Electronic Resources

American Healthcare Radiology Administrators: <http://www.ahraonline.org>

American Society of Radiologic Technologists: <http://www.asrt.org>

TiP-TV Leadership Series: <http://www.gehealthcare.com/us/en/education>

NOTE: The Internet is an ever-evolving environment and links are subject to change without notice.

Appendix C: Post-Test

LMS Course Number: 3358

To be eligible for CE credit, you MUST view the video presentation first. Then complete the post-test on the GE Healthcare Learning System (hls.gehealthcare.com) by the due date listed online.

1. According to Ms. Ghent, the _____ aspect of workflow efficiency is difficult to measure when compared to other components.
 - a. quantitative
 - b. qualitative
 - c. financial
 - d. logistical
2. Mr. Cannavo stated that PACS and modalities such as computed tomography are very different in terms of the ability to _____ when they are out of service.
 - a. save data
 - b. provide security backup
 - c. calculate lost cost
 - d. get service assistance
3. According to Mr. Cannavo, fault tolerant, redundant, or continuous availability PACS are most effective for eliminating downtime.
 - a. True
 - b. False
4. The typical return on investment period for PACS is _____ years.
 - a. three
 - b. four
 - c. five
 - d. six
5. According to Ms. McHenry, mediation is a /an _____ process.
 - a. expensive
 - b. voluntary
 - c. compulsory
 - d. lengthy
6. According to Ms. Rinehart, our actions are based on our experiences, which are based on our beliefs. In order to change an experiential outcome, you must change the belief. This is known as the _____ principle.
 - a. compassion
 - b. Peter
 - c. Id
 - d. Oz

7. According to Mr. Lewis, when recruiting a new employee, the most important thing to do is _____.
 - a. offer more money than competitors
 - b. offer flexible hours
 - c. be honest
 - d. tell the applicant how nice the facility is
8. Ms. Anderson recommends using _____ questions when interviewing candidates for employment in imaging departments.
 - a. multiple choice
 - b. true/false
 - c. abstract
 - d. behavior-based
9. According to Mr. Lewis, _____ most often hold(s) the most importance to the employee.
 - a. money
 - b. promotions
 - c. regulations
 - d. recognition
10. Mr. Lewis recommends that supervisors and managers become more _____ leaders.
 - a. referent
 - b. scientific
 - c. sympathetic
 - d. disciplined
11. When succession planning is taking place in order to replace an imaging administrator, according to Mr. Washington, it is important to nurture _____ person for advancement.
 - a. more than one
 - b. the most senior
 - c. a single
 - d. a non-technical
12. According to Mr. Hammond, HIPAA requirements constitute a _____ liability, not just an organizational liability.
 - a. personal
 - b. logistical
 - c. financial only
 - d. malpractice
13. The Joint Commission's National Patient Safety Goals for 2009 include three or four new elements pertaining primarily to _____ standards.
 - a. finance
 - b. patient privacy
 - c. infection control
 - d. documentation
14. MDRO is an acronym that stands for _____.
 - a. medical doctor reimbursement outlook
 - b. multiple drug resistant organism
 - c. management directives for radiology organizations
 - d. materials documentation for radiation oncology

15. Alcohol gels are not effective for use in hand hygiene when in the _____ environment.
- sputum
 - blood
 - staphylococcus aureas
 - claustridium difficile (C Diff)
16. According to The Joint Commission, responsibility for contrast media use can bypass pharmacy overview if the order for its use is included in a _____.
- request for the examination
 - standing protocol
 - Physician's Desk Reference (PDR)
 - request for approval
17. The Joint Commission requires contrast media usage be modifiable for age, under the guidance of a physician, most often a radiologist.
- True
 - False
18. The Clean IV (intravenous) Act is also known as the _____.
- Septic Screening Project
 - Universal Precautions Initiative
 - United States Pharmacopeia 797 (USP 797)
 - Phlebotomy Conditions Trial
19. The imaging service that will be substantially impacted initially by USP 797 is _____.
- ultrasound
 - nuclear medicine
 - magnetic resonance imaging
 - catheter angiography
20. USP 797 will make the greatest impact on the conduct of _____.
- budget deliberations
 - all healthcare personnel
 - accreditation procedures
 - quality management