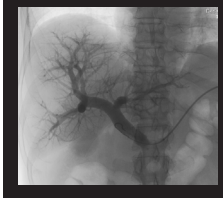


Radical Views...

from the Department of Radiology

Volume 8, Number 8

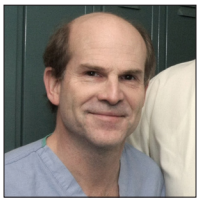
FEBRUARY 2016

Beth Israel Deaconess Medical Center

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

FROM THE CHIEF
Jonathan B. Kruskal, MD PhD

I am pleased to announce that **Felipe Collares** of our Vascular and Interventional Radiology Division has been appointed Co-Director of our ICAVL-accredited Noninvasive Vascular Lab with Vascular Surgeon Allen Hamden. Dr. Collares will be working to expand services to our community affiliates and imaging sites, and to standardize all vascular imaging operations and reporting between departments here at BIDMC.



Dr. Rob Sheiman has held this position since 1997 and I'd like to acknowledge and to thank Rob for sharing his expertise and knowledge, for his enthusiastic stewardship of the service, and for his outstanding teaching, which we know will continue!

Thanks Rob, and good luck Felipe.

I am also thrilled to announce that after almost 2 years of meetings, site visits, more meetings, and protracted negotiations, BIDMC has just signed an agreement to purchase a **new PACS system** for our radiology department. Several of you have devoted countless hours to this effort, and many participated in site visits and equipment evaluations. I'd like to acknowledge your efforts and to express all of our thanks. **Allen Reedy** in particular led the final negotiations and through his enormous efforts has ensured that we will have a state of the art system without losing any of our current stored data, including the arrows! I'd also like to especially thank Peter Gordon who planted the original seed that our current PACS system "could be improved", as well as **Jesse Wei** and **Seth Berkowitz** for their tireless efforts, which will continue.

We have a signed agreement with McKesson to purchase the following:

a. McKesson Base PACS product
b. McKesson Mammography PACS product
c. McKesson [Conserus] Enterprise web viewer
d. McKesson QICS software products (all modules) including PeerVue and the ability to develop our own custom modules
e. McKesson Workflow Intelligence Enterprise Worklist
f. TeraRecon advanced imaging products
g. McKesson [Conserus] vendor-neutral archive (software; the hardware for the system will be provided by BIDMC IS)
h. Web-based system that will not require specific licenses for use and can be remotely and securely accessed via any digital media or device

I am writing to share the welcome news that

Dr. Jennie Ní Mhuircheartaigh will be coming on board as Co-Fellowship Director for Musculoskeletal Imaging and Intervention. In this capacity, Jennie will be able to lend her passion for teaching and her extensive expertise in Musculoskeletal Intervention, among her many other talents, to our Fellows' training experiences. I very much look forward to working with her in this capacity.

- Mary Hochman, MD
Chief, MSK Imaging

SAVE THE DATE:
Friday, Feb 26, 2016
12-1 pm
Sherman Auditorium

These products will initially support the BIDMC main campus, HMFP offices at 1101 Beacon Street, and our BIDMC clinics in Lexington, Chelsea, and at Chestnut Hill Square. The package includes full PACS support for Needham, including interfaces to the Meditech RIS and local image storage.

We will have a full migration of the entire existing archive of GE PACS images, including retention of all annotations, overlays, arrows, and other mark-ups to the extent possible. Full migration of the GE PACS images into the new archive may take nine

months or longer. In the interim, all images will be accessible though access may be slow at times if the requested images have not yet been migrated. The system will be fully integrated with the M*Modal Fluency voice recognition product.

There will be an extensive, phased, training program with on-site trainers. In addition, there will be a clinical resource on-site for a full six months to help address any technical usage questions and to provide specialized training.

It will take at least six months from project kick-off until go-live for the first sections/modalities to start using the system. We currently anticipate that the first use of the live system will be during this coming summer.

Agreements are still being negotiated with the following vendors of PACS-related products: MIM (Nuclear Medicine products) and Olea (for Neuro imaging products).

We have much work ahead over the next few months as we plan for training and implementation of this wonderful new system. This is a very exciting step as we now start to develop and deploy a sophisticated contemporary PACS system.

Thanks! - Jonny

QUALITY UPDATE: OUR RADIOLOGY SAFETY TEAM's PROGRESS

Suzanne Swedeen, RN
MSN CNIV
Quality Improvement Specialist

At our last Safety Workgroup meeting, the group developed a working definition of a "safety concern". A safety concern was defined as "any situation that has potential to cause harm to patients, staff or family". Harm was defined using NCC MERP Index definition as "impairment of the physical, emotional or psychological function or structure of the body and/or pain resulting therefrom."

Also this month we conclude our review of the suggestion called out in the survey as opportunities to improve safety and began work on our first barrier to speaking up- reporting threshold. Reporting threshold was cited as the reason for not speaking up by 51% of all survey respondents and nearly 70% of respondents who said they do not always speak up. Reasons included not feeling 100% sure therefore would rather not say; it was after the fact that I realized that I should have spoken up; I don't know who to report my concern to.

Back row: Hazel Malolos, Bettina Siewert, Bridget O'Bryan and Robert Beeman. Middle row: Suzanne Swedeen, Nicole Caddell, Maggie Cybulska, Jennifer Ní Mhuircheartaigh, Fritz Honore, Macarthur Cherenfant and Donna Hallett. Front row, standing: Meredith Cunningham, Juline Horan. Front row, seated: Leighton Atkins and Aaron Thurston.

Reporting threshold was the most common barriers to speaking up identify by the following groups:

- Administration
- Attending physicians
- Nursing
- Transport

Members of our workgroup would love to hear your thoughts and feedback. What needs to happen in order for you to speak up even if you are not 100% sure.


Muneeb Ahmed


Bessie Gray


Catherine Melchin


Chip Watts


Steve Warren


Jim Wu

In case you missed an issue of Radical Views: All back issues are available on the BIDMC portal under "News and Events":

https://portal.bidmc.org/Intranets/Clinical/Radiology/news.aspx

We also have an outside link on the alumni site:

http://radnet.bidmc.harvard.edu/education/newsletters.asp

Radiology Calendar FEBRUARY 2016

Check for the most up-to-date schedule at: **https://apps.bidmc.org/departments/radiology/residency/conferences/displayMonth.asp**

Mon	Tues	Wed	Thurs	Fri
Weekly Mon Section Meetings: 3:00-4:00 ED section meeting [ED annex, WCC]		Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 CardioThoracic, GI/GU Oncology 3:00-4:00 Mammo [TCC-484]	Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK	Friday Grand Rounds: 12 noon Sherman Auditorium, East Campus (unless stated otherwise)
1 7:30 - 8:15 IR and Womens Health (Salomao Faintuch) 8:15 - 9:00 IR in Hemodialysis (Salomao Faintuch)	2 7:30 - 9:00 ABCs of the IR (Jeffrey Weinstein)	3 7:30 - 8:15 Aortic Interventions (Barry Sacks) 8:15 - 9:00 Advanced guidance for interventional procedures (Seth Berkowitz)	4 7:30 - 9:00 MRI (Georgeta Mihai)	5 7:30 - 8:30 Nontraditional Revenue Models in Radiology (Giles Boland, MGH) 12:00-1:00 No Grand Rounds
8 7:30 - 9:00 Breast MRI (Vandana Dialani) 12:00-1:00 MRI Meeting [Ansin 2]	9 7:30 - 9:00 QA/QC in Breast Imaging (Shambhavi Venkataraman) 10:30-11:30 NMMI meeting [GZ-103]	10 7:30 - 9:00 Benign Breast Disease (Nancy Littlehale) 7:15-8:00 US meeting [WCC-304A]	11 7:30 - 9:00 Breast Imaging Cases (Priscilla Slanetz)	12 7:30 - 8:15 MSK (TBD) 12:00-1:00 Chief Rounds:Ammar Sarwar (Jason Song, Tom Anderson, Geunwon Kim, Michael Johnson)
15 President's Day (No lecture)	16 7:30 - 8:15 Intro to ED, Contrast Allergies (Sejal Shah) 8:15 - 9:00 Nontraumatic GU Emergencies (Sejal Shah) 8:00-9:00 IR Meeting [West Recovery]	17 7:30 - 8:15 Scrotal Ultrasound (Robert Kane) 8:15 - 9:00 RUQ Ultrasound (Robert Kane) 12:00 - 1:00 Practical Applications of MR Spectroscopy (Will Mehan via webex, neuro reading room)	18 7:30 - 8:15 Stroke Imaging (Rafael Rojas) 8:15 - 9:00 Head and Neck CTA and MRA in the ED (Yu-Ming Chang)	19 7:30 - 8:15 12:00-1:00 Grand Rounds: Novel Concepts of Skeletal Integrity in Obesity (Miriam Bredella, MGH)
22 7:30 - 8:15 Post Operative Abdominal Emergencies (Bettina Siewert) 8:15 - 9:00 Bowel Obstruction and Bowel Ischemia (Bettina Siewert)	23 7:30 - 9:00 Upper and Lower Abdominal Pain in the ED (Karen Lee) 10:30-11:30 NMMI meeting [GZ-103]	24 7:30 - 8:15 Emergent Pelvic Ultrasound (Robin Levenson) 8:15 - 9:00 Nontraumatic Brain Emergencies (Elisa Flower)	25 7:30 - 8:15 Chest Trauma (Phillip Boiselle) 8:15 - 9:00 Chest Nontraumatic Emergencies (Paul Spirn)	26 7:30 - 8:15 Resident Case Conference (Chiefs) **12:00 PM - 1:00 PM** **Grand Rounds: TJC Preparation Jeopardy Conetst!**
29 7:30 - 9:00 ED Month (TBD)				

Check out the **Sven Paulin & Morris Simon Cardiothoracic Imaging Reading Room plaques** on Sherman-3 the first of which was dedicated on Oct. 30th to coincide with the 9th Annual Sven Paulin Lecture given by Charles S. White.

FEBRUARY 2016 GRAND ROUNDS

Friday, February 19, 2016
12 noon - 1:00 PM • Sherman Auditorium
Novel Concepts of Skeletal Integrity in Obesity

Miriam A. Bredella, MD is an Associate Professor of Radiology at HMS, Director of Musculoskeletal Research and a member of the Division of Musculoskeletal Imaging and Interventions at Massachusetts General Hospital.

Her research focuses on the physiologic imaging of the musculoskeletal system using MR spectroscopy, high resolution CT, and whole body MRI and positron emission tomography (PET) and she also has spearheaded the use of whole body MRI (WBMRI) for tumor quantification in neurofibromatosis as she is an expert in MR neurography for patients with pudendal neuralgia.

Currently, a PI of two NIH R01 awards on obesity and bone, sheis a member of the NIH study section for Diabetes and Obesity and serves as a grant reviewer for the NIH, the Harvard KL2/Catalyst Medical Investigator Training Program, and the Executive Committee on Research (ECOR) at MGH. She has recently received the Annual Investigator Award from the Academy of Radiology Research and the Presidents Medal of the International Skeletal Society.

Check out Dr. Bredella's video article "Fat in Organs and Blood May Increase Risk of Osteoporosis" on the RSNA website of July 16, 2013: https://www2.rsna.org/timssnet/media/pressreleases/pr_target.cfm?ID=681

Friday, February 26, 2016
12 noon - 1:00 PM • Sherman Auditorium

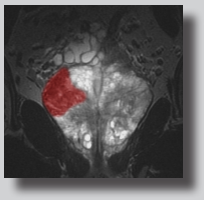
Jeopardy Contest for The Joint Commission Survey

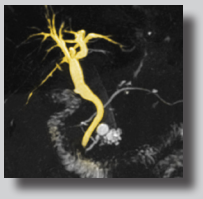
As part of Radiology's Preparation for the TJC's unannounced triennial survey of BIDMC's Quality and Safety (2015-2016) expected this spring, Dr. Bettina Siewert will be holding a Jeopardy Contest to help us all prepare!

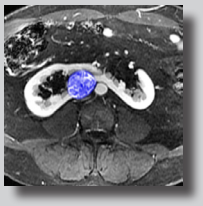
Mon June 6 - Wed June 8, 2016

ABDOMINAL & PELVIC MRI 2016

Imaging Review of GI and GU Tracts







Guest Speakers:

Scott Reeder, MD
University of Wisconsin Hospital & Clinics

Evis Sala, MD, PhD
Weill Cornell Medical College

Claude Sirlin, MD
University of California San Diego

Course Director:

Koenraad J. Mortele, MD

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Joseph B. Martin Conference Center, Harvard Medical School, Boston, MA

HARVARD MEDICAL SCHOOL
Department of Continuing Education

Beth Israel Deaconess Medical Center
Department of Radiology

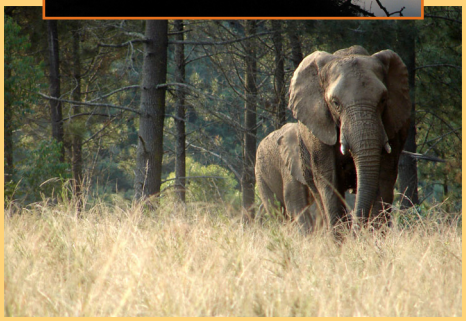
FREE LUNCH & Wi-Fi will be provided

To register or view activity information online, visit:
https://www.hmscmeregistration.org/732241-1602

The Gallery at WCC-304B presents My Africa by Katie Armstrong

Photographer & Manager, Medical Education Programs in Radiology

Katie presents an encore of her photography, this time sharing her favorite photos from the 6 months she spent in Cape Town for an internship program in public relations in 2008.



As always, please contact Donna Wolfe if you, too would like to share your photos, paintings or sculptures: dwolfe@bidmc.harvard.edu or 4-2515

KOMMUNITY KORNER: Radiology in the Community

Jeffrey Bernard, RT
Manager, Community
Radiology Network Services

Harrington HealthCare System Announces Second Urgent Care Center to Open in Oxford

OXFORD, Mass. Harrington HealthCare System has announced it will open a second urgent care center in Oxford early this summer.

Harrington Physician Services, an affiliate of Harrington HealthCare System, recently signed a lease to renovate 5,000 square feet of a building located at 78 Sutton Avenue, across the street from the new Oxford Crossing retail center. The building is owned by Dorr Aviation Credit Corporation.

UrgentCare Express, Harrington[1]'s first urgent care center, opened in September inside the Harrington HealthCare at Charlton medical office building at 10 North Main Street where it has continued to exceed projected patient volumes.

[3]We can see from our urgent care center in Charlton that there is a need in the community for this type of service,[2] said Harrington President and CEO Ed Moore. [3]The urgent care facility in Oxford will mirror the one we operate in Charlton, including being staffed by board-certified physicians.[2]

The Town of Oxford Planning Board approved plans to build the urgent care center at its meeting on Monday, January 25.

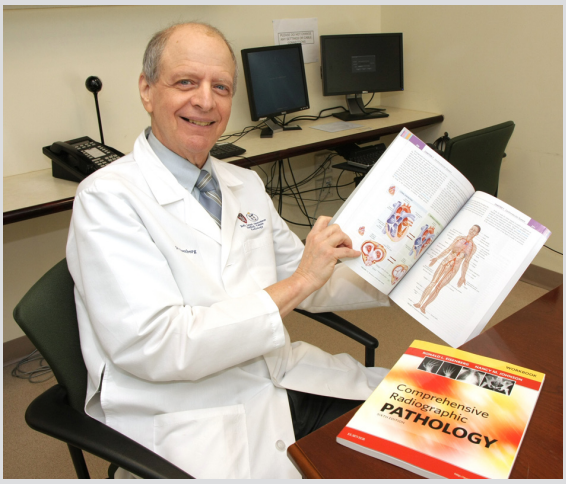
Construction will create approximately eleven exam rooms, in addition to X-ray and lab services.

[3]We are continuing to respond to the growing demand for urgent care centers,[2] said Kristin Morales-Lemieux, executive director of Harrington Physician Services. [3]Our new site in Oxford will give patients in the community greater access to care seven days per week, including after-hours and on the weekends.[2]

Urgent care centers are designed to treat patients whose primary care physicians are not available, and patients with non-life-threatening conditions that require same-day treatment.

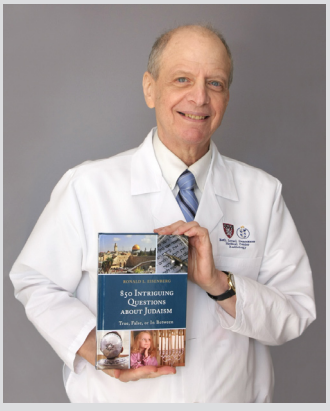
Harrington currently has emergency departments at its main campus in Southbridge and at the Remillard Family Emergency Department in Webster. Anyone who is experiencing a serious illness including chest pain, difficulty breathing, dizziness, stroke-like symptoms, or abdominal pain, should call 911 or visit the nearest Emergency Department.

Congratulations noted author Ron Eisenberg



Cardiothoracic and MSK Imager Dr. Ronald L. Eisenberg recently published the 6th edition of **Comprehensive Radiographic Pathology**, which has become a standard work for students in radiological technology. An understanding of basic principles of pathology and an awareness of the radiographic appearances of specific diseases are essential parts of the training of a radiologic technologist and this book enables the radiologic technologist to become a more competent professional and a knowledgeable member of the diagnostic team. The first edition of Comprehensive Radiographic Pathology, which appeared in 1990, was designed to meet the need for a book specifically directed to students of radiologic technology and as a reference guide for graduate technologists.

The latest version, accompanied by a workbook, is co-authored by Nancy Johnson, a faculty member of the radiology technology school at GateWay Community College in Phoenix.



Outside of Radiology, Dr. Eisenberg has also published **850 Intriguing Questions about Judaism:** *True, False, or In Between*.

"This is an engaging compendium designed to appeal to general readers seeking to learn more about the diversity of Jewish thought and practice." - Amazon.com

LEAN Improvements²: New Radiology Distribution Room on Sherman 3, East Campus

Our LEAN improvement project on WCC3 (now Rosenburg 3) was a team effort in conjunction with our partners in distribution, which resulted in a new and improved supply room located across from the new RCU last June.

And this month, again, spearheaded by Ryan Erskine (distribution), Ann Marie Cathcart, Juanita Cook, Julie Robens, Kim Antonellis, Briege Kerr, Usama Abraham, Bernie Kennedy & Lekisha Hamiliton, this cross sectional team spent many hours on Sherman 3 establishing hundreds of product par levels, streamlining the ordering processes and mapping out the items for the new supply room.

The team did a fabulous job combining & adding supply requirements from L2 which is relocating to the 3rd floor. A lot of creative thinking in making it come to together in a challenging space.

Well done, all!

- Bridget O'Bryan, RN
Director, Radiology Nursing

KUDOS – Each month, we share the positive feedback we receive about staff members and ask you to join us in congratulating them; as always, we are especially proud to acknowledge an unprecedented constellation of staff for providing outstanding care and service!

Chestnut Hill

Jackie Gattonini works weekends at Chestnut Hill and we are lucky to have her. Urgent Care staff members come to me on a regular basis letting me know that she is hard working and a pleasure to be around. This past Saturday was extremely busy and Jackie met these challenges head on with a great "team approach" attitude.

CT

A call out from the SICU Nursing Director: Again, your wonderful staff heard the concern we had about traveling with a very sick patient in the SICU, and came to the unit at 5:30 pm last night for a portable head CT. This is clearly outside of the normal parameters for a portable head CT, yet time and time again, your staff makes accommodations to do what is best for the patient, and bring the scan to them. The teamwork and relationship between our departments is inspiring and a great example of working together to provide extraordinary care to our patients. Please pass along to your entire staff our sincere thanks and gratitude for their care, concern, and efforts and in particular to **Gary LaFlamme, Moira Murphy, Jessica Buttaro, Patty Peters,** and **Ashkan Jalali**.

Gary LaFlamme

Jessica Buttaro

Patty Peters

Kristen Hill did a fantastic job on a technically difficult study (intubated patient) with many questions to be answered and she performed a perfect examination. This is a huge contribution to patient care and makes our job as radiologists very easy.

KUDOS – New this month, we are proud to share the positive feedback we receive about residents and fellows and ask you to join us in congratulating them; as always, we are especially proud to acknowledge an unprecedented constellation of trainees for providing outstanding care and service!

From: Edlow,Jonathan A (HMFP - Emergency Medicine)
Sent: Thurs, Jan 7, 2016 10:32 PM
To: Kappler,Amanda (BIDMC - Radiology); Kruskal,Jonathan; Siewert,Bettina; Levenson,Robin B. (HMFP - Radiology)
Subject: Great job

Amanda Kappler
3rd year resident

Jonny,

I wanted to call out one of your residents for doing especially great work. I've been out here at Needham for 2 busy shifts (they were also very busy in town).

I have worked with many dozens if not hundreds of radiology residents over the years, and I am not sure I've ever sent you an email about any of them. **Dr. Amanda Kappler** was on for both of these busy shifts.

She really stood out in that she was VERY fast, very proactive and professional in her communications, and also, in that she was often quite definitive in her interpretations.

I am not sure who your PD is but please forward this note to that individual.

– Jonathan (Edlow)

From: Roberge,Pamela
Sent: Sun, Jan 10, 2016 11:07 PM
To: Parritt,Tim; Siewert,Bettina
Cc: Steinkeler,Jennifer A. (BIDMC - Radiology)
Subject: Saturday in the EU

Jenny Steinkeler
3rd year resident

Hi Tim and Bettina

I would like to express some kudos to **Jenny Steinkeler** for this past Saturday. With the scanner being down and having to scan all EU patients up on the 3rd floor it made for a difficult day. It was extremely busy in the EU and Jenny was the Radiologist assigned to the West to read.

Jenny was phenomenal, we paged her as we had cases for her to eprotocol, kept up with all of the eprotocols, pleasant attitude the entire day and into the evening, she did not complain about the situation and just dealt with it with ease. Jenny made a difficult day tolerable and she is a good example of being a team player.

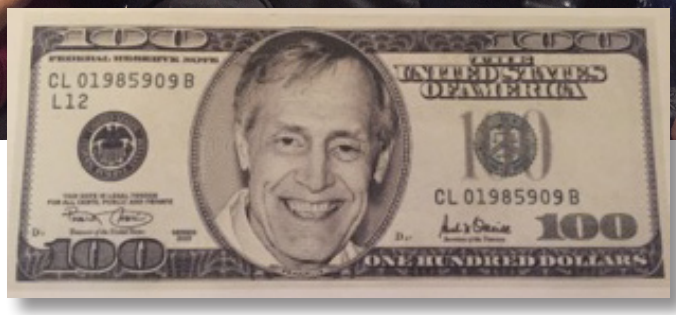
Just wanted to let you know
Pam

Pamela Roberge R.T (R)(M)(CT), Weekend CT Supervisor, BIDMC

RADIOLOGY COMMUNITY NEWS: Ferris Hall Celebrated at 1101 Beacon Street

The 1101 Beacon Staff surprised Dr. Hall with an 80th birthday luncheon on Thurs., Jan 21. Dr. and Mrs. Hall enjoyed many laughs as tales of Ferris and a few others were revisited as we walked downmemory lane!

(Thanks to Marian Howes for the photos!)



Front row: Suzie Konopka, Dr. Hall, Marian Howes. 2nd row: Taryn DiFilippo, Josefina Valera, Vicki Albano, Audris Ruiz. Back row: Carl Nickerson, Jane Corey, Cheryl Egan, Erika Byard

Ben Franklin's replacement:
"In Ferris We Trust"

Radiology's Preparation for (TJC) Survey at BIDMC:

*The Joint Commission will be conducting its unannounced triennial survey of BIDMC's Quality and Safety (2015-2016). Here is **Tip #4** for helping BIDMC maintain its Joint Commission Accreditation.*

Medication Management

How are medications stored?

- All medications are stored in designated areas that ensure proper sanitation, temperature, light, segregation, rotation of inventory and security.
- Medications are stored separately from non-medications (i.e., supplies and equipment). Exceptions to this include certain procedure trays which contain small quantities of drugs needed for a procedure, e.g., lidocaine and neut; additionally, contrast media stored in clean utility or stock rooms.

How to handle medications removed from secured storage (Omnicell)?

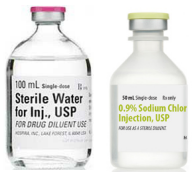
- Medications should be administered a soon as possible once removed from Omnicell
- Medications must not be left unattended

It is important to check expiration dates on all medications prior to opening even when procured from the Omnicell.

What is the difference between a "Single Dose" vs Multi-Dose" vial?

A Single-dose vial:

- does not contain preservatives
- is for one time use only, discard unused portion
- All vials/containers should be considered single use unless specifically labeled as multi-dose until verified otherwise

Sterile Water for injection – Single dose **Normal Saline for Injection**		one patient, one time use, discard unused portion immediately
SINGLE DOSE VIALS	e.g., Lidocaine Single Dose Preservative Free →  or Neut (Sodium Bicarb) 	one patient, one time use, discard unused portion immediately Medications contained in procedures kits must be discarded at the end of procedure even if not opened

Single use containers – ***not for parenteral administration***

Normal Saline for Irrigation **Sterile Water for irrigation**		one patient, one time use, discard unused portion immediately

A multiple-dose container of injectable drug:

- contains a suitable substance to prevent the growth of microorganisms
- permits withdrawal of successive portions of the contents without changing the strength, quality or purity of the remaining portion.
- permits withdrawal of the contents without removal or destruction of the closure, and permits penetration by a needle and upon withdrawal of the needle, closes at once, protecting the container against contamination

Multi-dose vials (MDV)	e.g., insulin 	Multi-dose vials are good for 28 days (or the manufacturer-assigned expiration if less than 28 days). When opening an MDV for the first time, label the vial with the last date the product can be used, i.e., *discard date*

Other solutions:

Antiseptic Solutions:	e.g., hydrogen peroxide 	• Solutions with expiration date, open, use, discard at expiration date. • Solutions without expiration date, per BIDMC pharmacy recommendation, open, use, label with a discard date 1 year from date opened. • If using in a sterile area do not use previously opened product

Radiology's Preparation for (TJC) Survey at BIDMC:

*The Joint Commission will be conducting its unannounced triennial survey of BIDMC's Quality and Safety (2015-2016). Here is **Tip #5** for helping BIDMC maintain its Joint Commission Accreditation.*

Medication Labeling FAQs -

Medication labeling significantly decreases the chances of an incorrect medication or solution being used.

When should medications or solutions be labeled:

- When a medication or solution is removed from its original packaging and transferred to a different container such as a syringe, medication cup, basin, or contrast injector, the medication or solution must be labeled.
- Labeling takes place immediately after transfer to the new container and never before.

Are there any exceptions to this labeling requirement?

The only exception to this rule is if you administer the medication or solution in full immediately affter removing it from its original container without the medication ever leaving your hand.

What substances are covered under this policy?

All medications and solutions including but not limited to, saline, contrast media, water, antiseptics in any form that are removed from their original packaging.

Do I have to label it if:

- It's the only medication being administered – yes it requires a label
- If I put it down for only a few moments – yes it requires a label
- I hand it to someone to administer and they watched me draw it up – yes it requires a label

What do I need to include on the label:

- drug name
- strength
- amount (if not apparent from the container)
- expiration date when not used within 24 hours
- expiration time when expiration occurs in less than 24 hours

Marge Guthrie and Patty MacDonald demonstrate a verbal and visual handoff (Courtesy of MyPath and Michael Larson)

What can I use to label?

- Preprinted labels can be found in some procedure kits
- Sterile labels and pens are available for use in sterile procedure
- White labels
- Orange medication label
- Fentanyl and Versed preprinted labels

Can I use a medication labeled by someone else?

All labels are verified both verbally and visually by two qualified individuals when the person preparing the medication is not the person administering the medication.

What do I do with the original container?

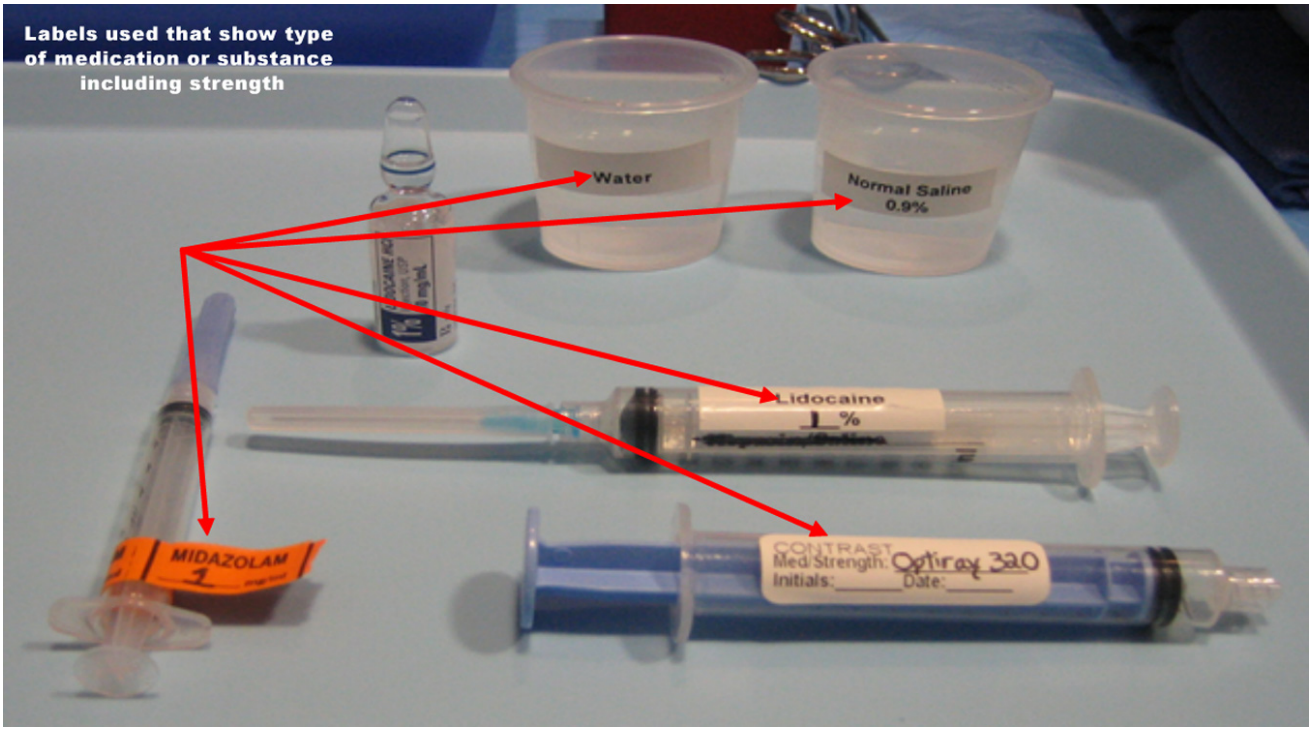
Medication bottles/vials are to be retained in the room until the end of the procedure for later identification if necessary.

Anything else I should know?

- No more than one medication or solution is labeled at one time
- All labeled containers on or off the sterile field are discarded at the conclusion of the procedure
- At any hand-off, all medications and solutions both on and off the sterile field and their labels are reviewed by entering and exiting personnel.

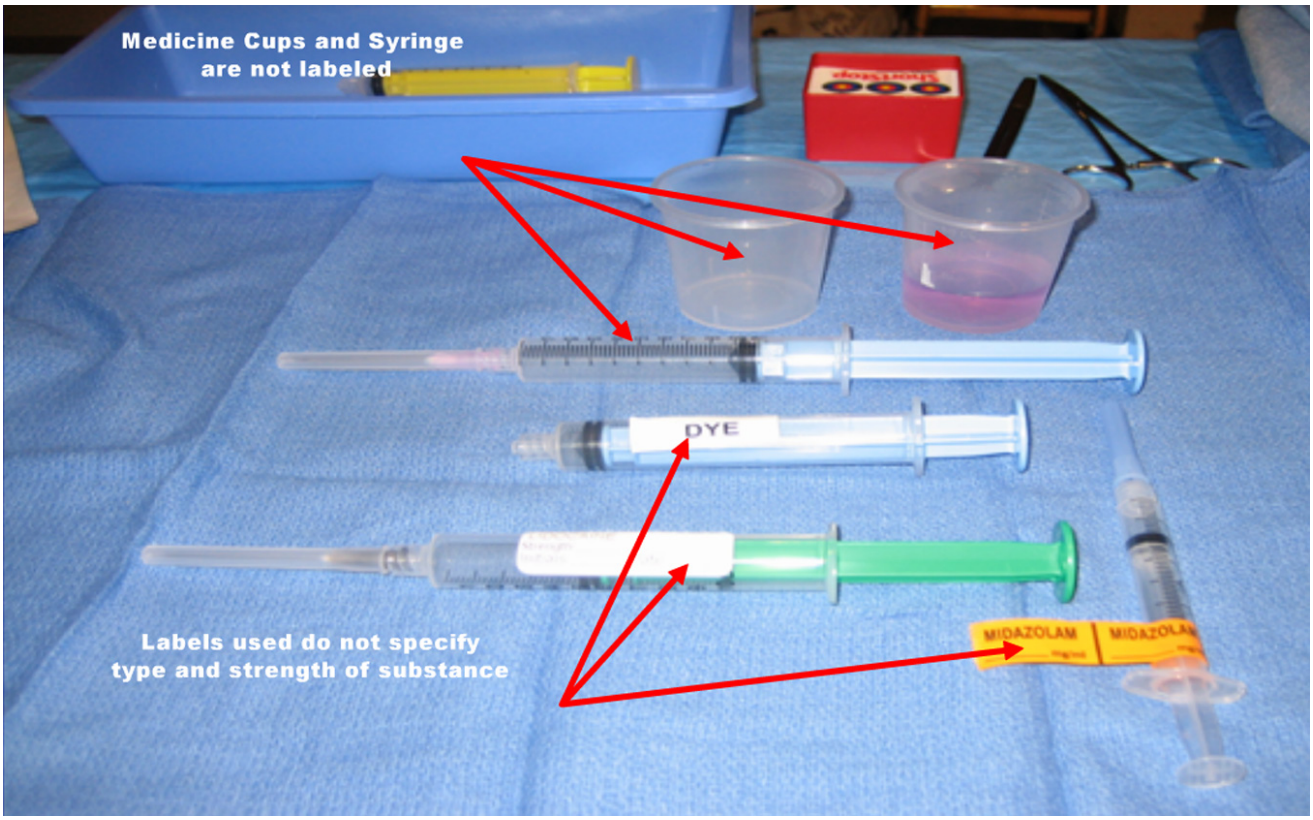
TJC # 5: Medication Labeling *(cont'd)*

Examples of **CORRECT** labeling:



Labels used that show type of medication or substance including strength also need an expiration date/ time

Examples of **INCORRECT** labeling:



AIDEEN SNELL ON THE PATIENT EXPERIENCE -

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Radiology Action Planning Committee's Patient Engagement

FEBRUARY TIP OF THE MONTH

Close your conversation with a patient by telling them your name again… you might be surprised at the response you get!

Example: My name is (name), if you need anything else come up and let me know

In a recent two week pilot of this **Closing Approach**, staff was asked to record observations. Initially it was timed to see how much time was added to their "normal" check in process. The range was an additional 5-7 seconds per patients. If they checked in 55 patients that day, that's 385 seconds – a total of 6.4 minutes for the entire day. The staff reported the following feedback:

- Patients felt comfortable coming back to the desk.
- So many patients smiled at me.
- They thanked me using my name.
- Their body language changed.
- Patient was able to come out and ask specifically for me when concerned about the delay.
- Our mystery shopping result we really good.
- Feedback from patients was wonderful, there were a few repeats during the same week and the second time here they just felt so welcomed.
- "You are a very nice young man. If I speak to your manager will you get a raise?"
- "I just wanted to say you made my day right before my surgery. You are so kind and polite and I love your smile."
- "Thank you for letting me know my next steps."
- "Your very professional, thank you" then they shook my hand!
- "I really appreciate your help today!"
- "Thank you and nice to meet you today. I will come to you next time."
- "You are very sweet today, thank you for your help today."

If you try this month's Tip of the Month, send me YOUR feedback and observations of patients reactions and I will post them as an update in next month's Newsletter.

ALLONE HEALTH

According to Gallup, "engaged employees are involved in, enthusiastic about and committed to their work. Extensive research shows that employee engagement is strongly connected to business outcomes essential to an organization's financial success, such as productivity, profitability and customer engagement. Engaged employees support the innovation, growth and revenue that their companies need."

So, are you engaged? Are you energized by your work?

When a cell phone is charged, it's a device that can move mountains, but when the battery life is depleted, it's just a few ounces of fused metal. Like a cell phone, when we're fully charged, we can change the world (or at least our small corner of the world).

However, when our batteries are less than 10%, our ability to manage our work, our subordinates and our patients is significantly affected. When we run low on energy, we have difficulty making decisions, we become irritable, and we feel stressed, guilty and powerless. When we are depleted, it's challenging to engage in our work.

If your battery has run low, the employee assistance program can help you to recharge your battery and better engage in your work. The EAP can be reached at 800-451-1834.

AIDEEN SNELL ON THE PATIENT EXPERIENCE - *(cont'd)*

In order to increase the **Patient Satisfaction Survey access** to our outpatient population and make it easier for staff to direct patients to the kiosks, we have purchased and deployed 5 additional kiosks in various high volume locations throughout the department. You will find these kiosks in bright cheerful colors in the Shapiro CC4 waiting rooms (men's, women's and MRI waiting room), Rosenberg CC3 corridor near the administrative offices and on the East Campus in Nuclear Medicine. These kiosks are in addition to the 4 kiosks installed in 2012. **Our goal is to engage our patients about their experience and encourage them to provide us feedback via the Radiology Patient Experience Survey.** Survey results are reported monthly and quarterly results are place on the BIDMC public website's transparency page:

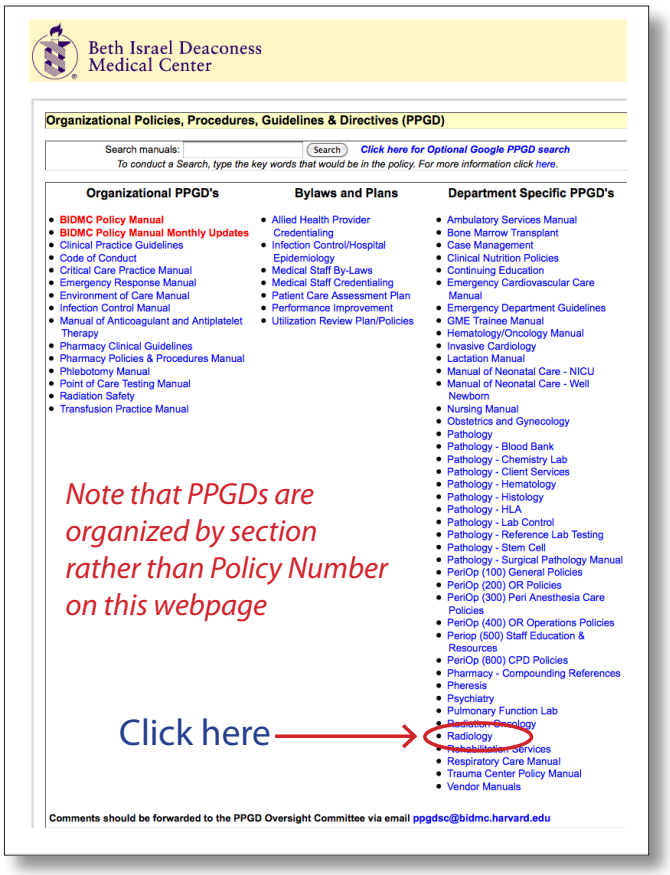
http://www.bidmc.org/Quality-and-Safety/Patient-Experience-and-Satisfaction.aspx

Our Service Excellence & Action Planning group meets monthly to discuss survey results and develop action plans. This year's goal falls under Courtesy & Respect and we will be working on departmental service standards, scripted greetings and closing with a patient, as well as everyone communicating their role in the patient's care in all interactions. If you are interested in being involved in the patient experience, please notify your manager or contact Aideen Snell, Service Excellence Program Manager directly x7-2570.

Updated Policy Notifications

Donna Hallett, BSc
Director of Operations

As we announced in July, 2014 the following departmental policies, procedures, guidelines and directives (PPGD) have been added, edited or reviewed with no change. To ensure that you are up to date on the newest, most current information, please click on the link below to view the specific PPGD:



https://apps.bidmc.org/cms/dispManuals.asp

Renewed with no edits/changes:

RAD-69: Pre-Imaging workup on ED Patients

Renewed with edits:

RAD-67: Pre-medication guidelines for patients with contrast allergies

– Amended to add guideline for changing the type of contrast the patient receives based on what type the patient had the prior reaction to.

RAD-93: CT and MR Venous injection guidelines

– Added guidelines for IO and PFO administration

Department guideline and competency formally documented in PPGD format:

RAD-100: Infection Control Injectors policy

New to PPGD, this is the practice guidelines for managing multidose contrast and saline in the environment of injector setup and administration to the patient as well as the competency sign off at date of hire for new employees.

New Policy

RAD-99: ED Patient Transport Guidelines

To provide guidelines for Radiology Staff transporting ED patients.

KIP Coach TIPS

SUZANNE SWEDEEN DONS HER OTHER HAT AS KIP COACH IN RADIOLOGY:

Hold up the Hackers

Suzanne Swedeen, RN
MSN CNIV
Quality Improvement Specialist

This month's Tip is about wisely using your BIDMC username and email – and passwords in general.

Use your BIDMC username, email or password **only for work** – never for personal, non-work sites!!!
If a non-work site is attacked, it could compromise your work email and BIDMC systems.
Create different passwords for every site you use – whether at work or at home.
Using the same password for multiple sites is like giving a hacker the key to all your accounts!
If you use your BIDMC email for outside, work-related sites, remember:

- Make sure the password is different from your BIDMC password
- Change your password for each site every six months

See this Wise Words on Passwords page in the KIP site on the Portal for more information.
Be sure to print out and post the attached Tip in visible places in your area. Remember to put your contact information in the last line.

Questions?
Call or email Suzanne Swedeen
at 617-754-2768 or
sswedeen@bidmc.harvard.edu

KIP Keep Information Private

Beth Israel Deaconess Medical Center

PUBLICATION CALL OUT: In honor of Ferris Hall who retired this month after 45 years of service at Beth Israel Hospital/ Beth Israel Deaconess Medical Center, we are proud to reproduce what Dr. Kruskal considers one of Dr. Hall's most significant contributions to the field of Radiology.

Opinion

Language of the Radiology Report: Primer for Residents and Wayward Radiologists

Ferris M. Hall[1]

The ability to write clearly is a skill, not an art, and it is learned by practice. [1]

The lucid and terse conveying of factual information necessitates more stringent rules than do other types of expository writing. Scientific journals have formulated and refined such rules over many years [2]. However, in other areas of clinical medicine, including radiology reporting, few linguistic guidelines exist. The ACR (American College of Radiology) standard for communication [3] provides only brief common sense guidelines for the wording of reports.

The major reason that most residents receive little or no formal instruction in dictating is the lack of consensus about what constitutes a good report [4]. My own efforts at teaching this subject to residents are constantly undermined by colleagues with strongly held but differing views. I direct this article primarily to residents because the "bad" habits of mature radiologists, of which I am certainly one, are difficult to change.

General Thoughts

Our reports are our product, and it is important to read and correct those products before they are finalized [3, 5, 6]. Judgments of clinical colleagues about radiology are increasingly made through these documents rather than through personal interactions. It is embarrassing to read a garbled report, particularly when it is your own. Fortunately, it is easier to correct today's computer-generated reports than those of the carbon paper era.

Efficient conveying of information does not require complete sentences in a narrative style. This subject is contentious [7], but the sample reports in the ACR Breast Imaging Reporting and Data System (BI-RADS) [8] are composed primarily of nonsentences such as "no evidence of malignancy."

Acronyms are rampant in medicine and are entirely appropriate in radiology reporting when usage is well established. Think of the time saved over a lifetime by dictating, transcribing, and reading Hx, CHF, CABG, SOB, WNL, XRT, Fx, SBO, PTX, CT, or MR.

Parentheses often convey information more tersely although this punctuation is frowned on by editors.

The present tense is always preferable and is appropriate despite the fact that every examination or procedure is performed before the dictation [7]. Comparisons can be dictated "there is" rather than "there has been" no change. Avoid the passive voice "is seen."

Paragraphs are overused. Single-sentence paragraphs in the "Impression" of the report are particularly vexing [7].

History (Indications or Symptoms)

Keep it short. Remember, restating the same information is noncontributory to the ordering physician. Because the purpose of this section of the report is primarily to facilitate reimbursement, notation of symptoms is important. Do not repeat the age and sex of the patient when this information is already included in the header. All computer-generated requests in my department have the provided history automatically incorporated into the official report [9]. If pertinent history is not provided, this omission should often be explicitly stated in the report. This recommendation reflects current medicolegal advice, sends a subtle message to the ordering physician, and may appropriately convey diagnostic uncertainty [10].

Observations (Descriptions or Findings)

Brevity is espoused by most radiologists, but its definition is in the eye of the beholder [7, 11]. Length often varies inversely with the confidence and preparation of the radiologist. To paraphrase Winston Churchill, I would be shorter if I had more time to prepare. In this regard most residents would benefit from moonlighting as transcriptionists. This section does not require a separate heading. Most discussions belong here rather than in the impression

[7, 12].

Detailed technical descriptions are less necessary as examinations become more commonplace. I look forward to the time when reports no longer detail MR sequences, CT parameters, and the nuances of common interventional procedures.

Only pertinent negatives are appropriate, but what is pertinent? Beginning residents who are formulating methods of search may find it useful to comment on nonpertinent findings. Redundancy may be necessary for billing purposes such as separate paragraphs for CT of the abdomen and pelvis, or for with and without contrast media.

Do not confuse "Descriptions" with "Impressions." This observational section of the report is for vascular congestion and consolidations, whereas the "Impression" is for congestive heart failure (CHF) and pneumonia.

Comparisons logically come after descriptions. It is disconcerting to read a report that begins with the statement "this examination is compared with the study of…." Not only does the reader not yet know what findings are being compared, but there is repetition when the comparison is finally made.

Numeric dating will be an increasing problem with teleradiology extending across national boundaries. July 8 may be 7/8 in the United States, but it is 8/7 throughout most of the world.

Terminology

The following words and phrases can be omitted from most reports: this exam is provided, is obtained, is taken, or is submitted for interpretation; appearances are; a finding is seen, visualized, or identified; as stated above, as described above, or as noted above; please note, as noted, of note, or note is made of; is remarkable for; unremarkable; if clinically indicated; as well as; at this time; however; in addition to; in nature; otherwise normal; quite; unique; some and somewhat.

Avoid tautological phrases such as oval in shape, close proximity, small in size, slightly anechoic, direct comparison, interval change, time period, interval comparison, previous history, previous exam of (date), and completely asymptomatic [2]. "Total or partial occlusion" and "normally or abnormally dilated" are part of our everyday lexicon but are no less inappropriate [2]. Avoid double negatives like "not uncommon" and "not rare" [2].

Received January 24, 2000; accepted after revision May 2, 2000.

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AJR 2000;175:1239–1242 0361–803X/00/1755–1239

A "hedge" is an evasive statement to avoid the risk of commitment, and it has perhaps justifiably been called the tree of our specialty [13]. A rule of thumb is not to use more than one hedge per sentence [13]. Avoid "no overt evidence of CHF" and "no obvious pneumonia identified." Common hedge vocabulary includes density or opacity [14, 15], apparent, appears, possible, borderline, doubtful, suspected, indeterminate, identified, seen, no definite, no gross, no obvious, no overt, no evidence of, no significant, possible, probable, suggested, suspected, suspicious for, vague, clinical correlation needed, and equivocal.

The word "significant" in scientific writing is usually used only in the context of statistical significance. In radiology reporting "no significant abnormality or change" is acceptable but overused.

The following list of inappropriately used words and phrases reflects my personal biases and interests:

- Azygos lobe: This mythic lobe results from an anomalous vein and fissure [16, 17]. There is no corresponding bronchial or vascular anatomy.
- Aphthous ulcer: An aphtha is already an ulcer, "a small ulcer on a mucous membrane" [16].
- Atypical, asymmetric, adynamic: The meaning of these words will be reversed if they are transcribed "a typical." Nontypical is preferable.
- Bony or boney: The noun "bone" has evolved into an adjective [2]. Osseous is preferable.
- Cardiac silhouette: This term, rather than simply "heart," is appropriate only in the 1% of chest radiographs in which a pericardial effusion is suspected.
- Cardiothymic silhouette: This pediatric term is inappropriate in adults.
- COPD: Chronic obstructive pulmonary disease is a clinical spectrum of diagnoses that includes chronic bronchitis. Radiographs reveal emphysema, a far more specific and important entity [18].
- Dye: Contrast agents have no color [16, 19]. The only rationale for the misuse of this term is that dye has only three letters and is a single syllable.
- Echolucent and sonolucent: These terms are throwbacks to "radiolucent," whatever that is. "Anechoic" or "hypoechoic" are more acceptable [16].
- Epicenter: This term, meaning over the center, is applicable to earthquakes [16].
- Flat plate of abdomen: Most of us would not recognize an antique glass photographic plate [13, 16]. This term is on a par with KUB (kidneys–ureters–bladder).
- Good, satisfactory, acceptable: These judgments are in the eye of the beholder.
- Hip fracture: Joints dislocate and bones fracture [16].
- Infiltrate: This is an acceptable pathology term, but its use will unduly disturb most of your pulmonary imaging colleagues [14,15,20].
- Inhomogeneous: Do you mean heterogeneous?
- IVP: Pyelo means pelvis. The acronym IVP originated because early contrast agents often opacified only the renal pelvis. The acronyms EU or IVU (excretory or intravenous urogram) are preferable [16, 19, 21, 22]. If you perform many of these obsolete examinations, you and your referring clinicians might benefit from additional continuing medical education [23].
- KUB: This term originated with urologists. Radiologists need broader horizons when perusing abdominal radiographs [16, 21].
- Lung markings: This terminology is controversial [14, 24, 25], but the use of "lung fields" is inexcusable.
- Mild: Mild (or severe) are functional or physiologic adjectives. "Slight" is the preferable scientific term for size or quantity. Slight cardiomegaly and slight congestion may reflect mild CHF [26].
- Neer and Judet views: Radiologists were obtaining oblique images of the shoulder and pelvis long before Neer and Judet made their important contributions.
- Obese: This is an acceptable scientific word but it has pejorative connotations, and patients read their reports. Preferable language might be large size or large body habitus.
- Osteoporosis and osteopenia: The use of these qualitative terms to describe radio-graphs has been preempted by quantitative T scores greater than 2.5 and 1.0, respectively. I now use the term "demineralization" [27].
- Permits and permission: Physicians should not request permission to perform an examination. The patient does the requesting and should sign an informed consent rather than a permit. Take note when physicians and lawyers agree.
- Plain and conventional radiograph: I agree with Rogers [28] that "radiograph" without the modifiers [28, 29] is preferable.
- Poor inspiration or inspiratory effort: A poor effort is subjective, possibly disparaging, and often incorrect. High diaphragms usually reflect body habitus or decreased lung compliance [16].
- Portable radiograph: Portable means capable of being carried. Radiographs are portable, but X-ray machines are not. The term "bedside" is also imperfect but preferable [16, 19, 30].
- Pulmonary edema: This term is etiologically less specific than CHF [14, 31]. It may also confuse clinicians who associate it with symptomatically severe CHF.
- Reading examinations: Books are read and images interpreted [28]. Likewise, images "show," "reveal," and possibly "detect" but only thinkers, like the radiologist, can "demonstrate."
- Shadow: Shadows are the lowest level of interpretation [14, 31]. I associate them with electromagnetic waves in the visible spectrum.
- Shoulder separation: Acromioclavicular joints separate and glenohumeral joints dislocate.
- Status post: How does status post differ from post? Is one status post surgery for life, or is there a time limit?
- Wet reading: For persons rendering these interpretations, I recommend a film proc-essor and a new business manager [16, 19].
- X ray or roentgenogram: These terms for a radiograph are incorrect or archaic [16, 19, 28].

Impression (Conclusion)

"Impression" or "Conclusion" is preferable to "Diagnosis" [32] because a diagnosis is more specific and thereby encourages radiologists to hedge. Others disagree and alternative words include summary, opinion, interpretation, and reading [33].

When there is a 98% chance that findings are normal, or cancer, or fracture, or smallbowel obstruction (SBO), "go for the gusto" and omit the hedges. After all, it is only an impression. The statement that no fracture is seen or identified, implying that a fracture may have been missed, is appropriate for radiographs of ribs or externally rotated hips in osteoporotic women. It is inappropriate for radiographs of long bones in young individuals.

Impressions are an excellent gauge of the common sense and clinical judgment of the radiologist. Separating the important from the incidental often takes time and thought.

Keep it short. If readers want details they can refer to the descriptive section of the report. Impression: "Pneumonia" is preferable to repeating that it is a "patchy posterior segment left upper lobe pneumonia."

Brief reports do not require "Impressions." Unfortunately, the definition of "brief" is variable [3, 7]. "Impressions" are superfluous when reports will never be read (my apologies to several orthopedic colleagues).

Do not number diagnoses and place each on a separate line or paragraph. This practice lengthens reports and encourages listing of nonpertinent findings.

Tailor the "Impression" by addressing the clinical problem. Urgent or important findings should be described first [7]. This advice is particularly applicable to lengthy reports and impressions that are unlikely to be completely read.

Do not repeat observations in the "Impression." This admonition is difficult when the diagnosis is uncertain. However, stating that there is an abnormality of uncertain cause or significance is preferable to iterating previous descriptions.

I prefer the "Impression" at the end of the report because I often reach my conclusion only during the course of the dictation and because I am old-fashioned and think summaries belong at the end [6, 32]. However, computers make it possible to place them at the beginning [5].

Do not repeat the name of the examination in the "Impression." "Normal chest radiograph," "normal CT of the abdomen" (if there is such a thing), and "no mammographic evidence of malignancy" are repetitious.

The use of the first person adds a personal touch, particularly when there is equivocation: "I doubt this is of clinical significance " or "I would be happy to discuss this with you."

Radiologists make too many recommendations, particularly in patients about whom we have little clinical history. These recommendations are often not helpful, are sometimes inappropriate, and are occasionally simply wrong. When the recommendation is obvious, it may be resented: most clinicians are not interested in our suggestions when the tube is in a bronchus or there is a new lung mass. Conversely, insecure clinicians may feel medicolegal pressure to act on our suggestions for additional imaging.

The terms "clinical correlation needed" and "if clinically indicated" are overused. They sometimes reflect defensive posturing by the radiologist.

State in the report that findings were conveyed to the referring physician [3, 10, 34]. Written documentation is also necessary if a preliminary report, perhaps by a resident, undergoes substantive change before finalization [35]. In our department any change in a preliminary report automatically prompts the radiologist regarding a generic addendum stating that a significant change has been made.

Summary

In 1922, a classic article by Hickey [36] in the American Journal of Roentgenology concluded that "the ARRS should recommend a standardized nomenclature to be used in writing roentgenological reports." Only one such standard has been developed: the ACR BI-RADS [8]. It includes an imaging lexicon, report organization, conclusions, and recommendations. These guidelines have almost entirely replaced the previous haphazard reporting of mammograms in the United States. Kudos are particularly forthcoming from our clinical colleagues, some of whom participated in the collaborative development process. Similar guidelines are under development by the ACR Expert Working Panel on Breast Ultrasound.

Guidelines for general radiology reporting would be developed by consensus, be subject to change, not be mandated, and have few of the medicolegal implications of the ACR standard for communication [34, 37, 38]. The logical umbrella organization to develop such a project would be the ACR, which was instrumental in developing both BI-RADS [8] and the ACR standard for communication [3]. A collaborative group of the ACR and the Association of Program Directors in Radiology is currently developing noninterpretive skills curricula in residency training programs [39–41]; this would be the logical group to develop guidelines for general radiology reporting.

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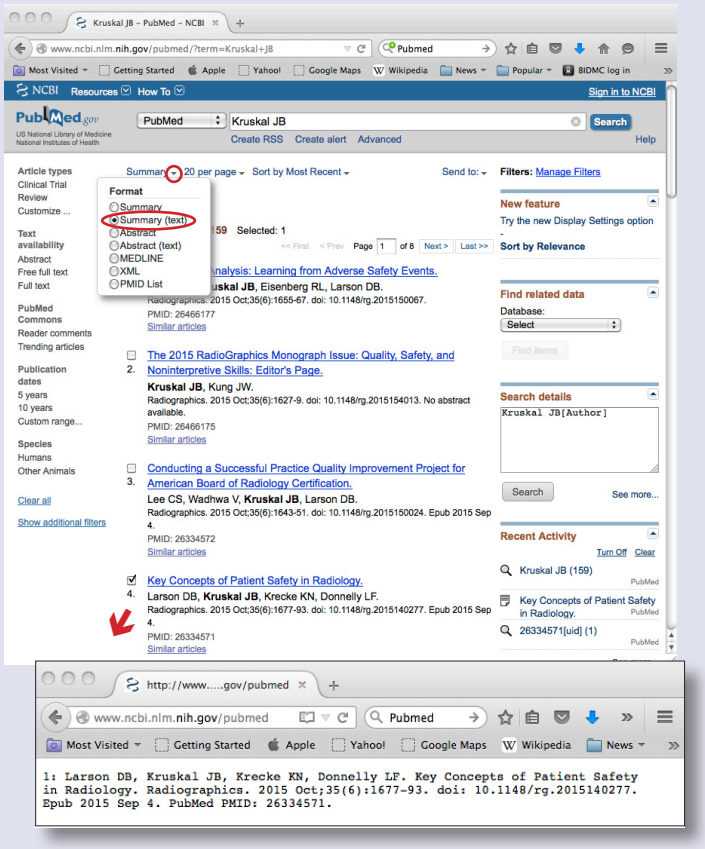

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