

Thriving in an Environment of Accelerating Change: A Technologist's Survival Guide

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1

Objectives

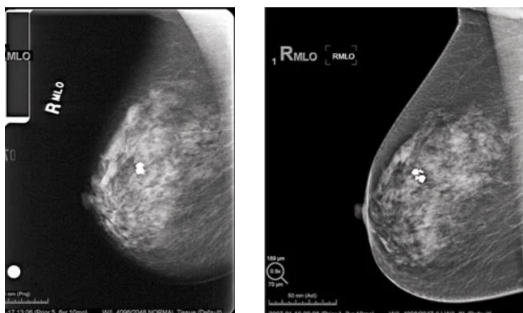
- Understand how breast imaging technologies and tools have changed over the last several years bringing challenges, opportunities, and growth to breast imaging teams
- Discover methods for minimizing burnout and stress from a physically and emotionally demanding environment
- Identify steps in the "Guide to Thrive" toolkit to overcome challenges and embrace opportunities in an environment of accelerating change



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2

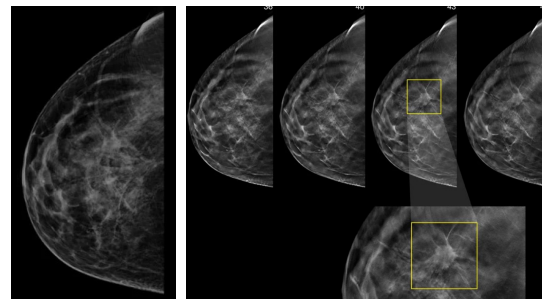
Technology is Everchanging



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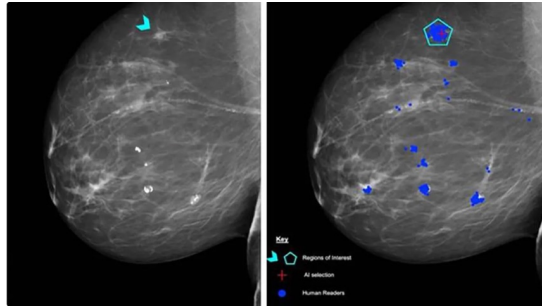
Technology is Everchanging



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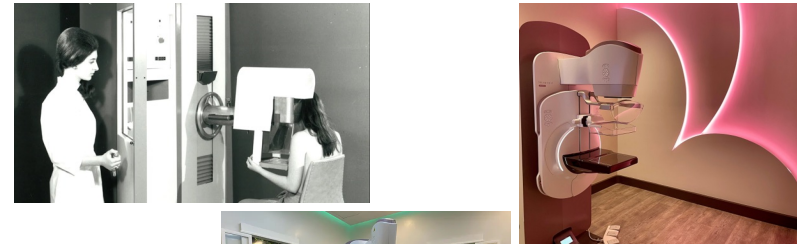
4

Technology is Everchanging



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5



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6

Technology is Everchanging

- Remote Reading
- Artificial Intelligence (AI)
- New Imaging Technologies
- New Technology in Electronic System



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7

Technology is Everchanging

- **Remote Reading**
- Artificial Intelligence (AI)
- New Imaging Technologies
- New Technology in Electronic System



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Personnel Shortages Lead to Remote Reading

- Current shortage of dedicated breast radiologists in almost every state in America
- In addition to the breast radiologist shortage, there are currently over 4,500 job postings for mammography technologists in the US
- The shortage has led to increased burnout and decreased job satisfaction over the last several years



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Personnel Shortages Lead to Remote Reading

- Tele mammography services
- Offsite radiologists (reading from home or another setting)
- Hybrid reading services



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Tele mammography



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Benefits of Tele mammography

- Increases access to breast radiologist expertise
- Improving outcomes in breast cancer diagnosis
- Provides timely interpretation and treatment for patients
- Accomplished without negatively impacting workflow



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Benefits of Telemammography



Potential **Increase**
in Job Satisfaction



Potential **Decrease**
in Burnout



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Challenges of Telemammography

- Cost of implementation
- Liability risks
- Radiologist resistance
- Loss of the team approach to breast imaging



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Challenges of Telemammography

- Lack of face-to-face interaction
- Lack of verbal interaction when using messaging platforms
- Studies show less rapport and connection due to isolation



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Technology is Everchanging

- Remote Reading
- **Artificial Intelligence (AI)**
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AI is not...



17

Benefits of Artificial Intelligence

- Cancer detection
- Compression
- Density
- Quality imaging
- Assist in EQUIP and accreditation processes



18

Artificial Intelligence Challenges

- Learning curve
- Can be viewed as punitive
- Interpreting the data
- Disagreement with results (density, positioning)



19

Technology is Everchanging

- Remote Reading
- Artificial Intelligence (AI)
- **New Imaging Technologies**
- New Technology in Electronic System



20

New Imaging Technologies

Contrast Enhanced Mammography (CEM):

- Includes a normal mammographic image
- Bilateral study with single CC and MLO images of each breast using dual energy
- Each breast is imaged at a different time point with high and low kVp



21

New Imaging Technologies

Contrast Enhanced Mammography (CEM):

- More commonly used tool in screening and diagnostic
- Debatably just as accurate and sensitive as MRI
- Less expensive than other modalities
- Faster and ease of scheduling versus MRI

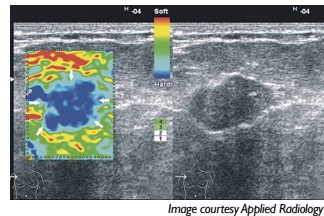


22

New Imaging Technologies

Elastography:

- Non-invasive
- Mechanical force introduced to breast tissue
- Measure the displacement of tissue
- Estimate stiffness of tissue

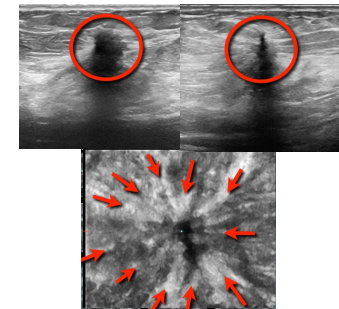


23

New Imaging Technologies

3D Ultrasound:

- Shows spiculations better than traditional US
- Show DCIS components and intraductal components
- Assesses complex cysts
- Identifying anatomy

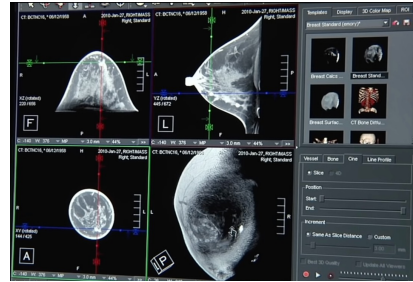


24

New Imaging Technologies

Breast CT:

- Computed Tomography of the breast



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25

Technology is Everchanging

- Remote Reading
- Artificial Intelligence (AI)
- New Imaging Technologies
- **New Technology in Electronic Systems**



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New Technology in Electronic Systems

- EMR updates
 - Letters populating MQSA final rules
- Electronic QC tracking
- Electronic EQUIP reviews



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We Work in Technology-driven Environments

- Efficient
- Productive
- Functional
- Informative
- Profitable



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Change Can be Stressful



- Learning something new can be overwhelming
- Stress and feelings of overwhelm can lead to burnout and even contribute to workforce shortages



29

Burnout Can Lead to Staffing Shortages

- Post-COVID catch-up
- Extreme schedules
- Limited staff
- Physical and emotional demands



30

How Will You Manage?

Guide to Thrive

01 FOCUS ON ERGONOMICS

For the CC View:

- Stand tall, close to the patient
- Keep elbows in line with the patient's back for the CC
- Keep thoracic spine straight

For the Med/Lateral View:

- Don't lunge
- Feet flat, wide stance
- Arms contact with the breast
- Keep thoracic spine straight

02 MAINTAIN CONNECTIONS

- Listen more, talk less
- Keep a positive mindset
- Give compliments
- Encourage guests
- Encourage collaboration, ask "How can I help?"
- Be open to your communication weaknesses

03 FEEDBACK

- Ask for feedback: "Is there something I could do better?"
- Offer appreciation
- Use coaching for change specific behaviors
- Use employee rounding to promote teamwork

04 SOCIABILITY

- Use digital ergonomics and introductions of staff
- Health lunch and learn
- Pick up the phone and talk, don't just text
- Ensure open lines of communications, open body language
- When gone around corner, around - use for, and other tips

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31

Guide to Thrive Step 1: Focus on Ergonomics



32

Focus on Ergonomics



33

Focus on Ergonomics



34

Focus on Ergonomics



35

Focus on Ergonomics



36

Focus on Ergonomics



37

Guide to Thrive Step 2: Maintaining Connections

- Improved health and wellbeing
- Greater productivity
- Higher job performance
- Increased job satisfaction
- Greater work participation and increased social inclusion
- Increased individual, team and organizational resilience
- Lower absenteeism rates
- Less workplace injury and workers' compensation claims



38

Maintaining Connections

- Identify your communication strengths and weaknesses
- Practice mindful listening
- Keep a positive mindset
- Skip the gossip
- Encourage workplace collaboration
- Be complimentary

Stay positive



39

Maintaining Connections

- Focus on implementing systems of offering effective feedback
- Sociability



40

Guide to Thrive Step 3: Give Feedback

- ACR Task Force on Teleradiology Practice states communication is critical to ensure overall quality and safety
- Relationships between radiologist and technologist based on trust
- Minimize communication barriers
- Critical to diagnostic breast imaging
- Communication must be timely



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Give Feedback

- Failure to have a communication system may result in adverse events (i.e. failure to diagnose a condition or unnecessary radiation exposure)
- Principal 6 of the ARRT Code of Ethics: “The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient.”



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Give Feedback

Feedback is an essential aspect of the MQSA’s Enhancing Quality Using the Inspection Program (EQUIP):

- Feedback helps technologists feel empowered and trusted to willingly offer their opinions or comments to improve systems and processes
- Feedback can be provided in the form of appreciation or individual coaching



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Give Feedback

- Appreciation – desire more of a specific behavior
- Coaching – intent of wanting to change a specific behavior
- Employee Rounding – to measure the engagement, satisfaction, and strength of imaging teams
- Use e-messaging options, onsite resources, or other personnel to assist



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Guide to Thrive

Step 4: Focus on Sociability

“The relative tendency or disposition to be sociable or associate with one's fellows.”

- Dictionary Definition

“The degree to which people have ... a sense of belonging and being cared for, valued, and supported.”

- CDC Definition



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Focus on Sociability

- Radiologists may work from home or from “off-site” locations
- Radiologists often work in isolation
- Technologists may be confined to exam room, limiting interaction with others



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Focus on Sociability

Lack of communication often results in:

- Likelihood of technologists refraining from asking questions or suggesting improvements
- Increase in radiation exposure to patients with unnecessary repeated images
- Technologists may be less likely to provide information and adequate patient history to IP



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Why is Sociability So Important

Positive working relationships:

- Improves job performance
- Contributes to a sense of belonging
- Contributes to a feeling of involvement
- Leads to higher quality care for patients



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Tips for Creating a Higher Level of Sociability

Offer digital photo and biography introductions of radiologists and technologists:

- Promotes recognition and identification
- Include general personal information such as hobbies and special interests



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Tips for Creating a Higher Level of Sociability



Video credit: Interior Health,
British Columbia

50

Tips for Creating a Higher Level of Sociability

- Team educational activities such as virtual lunch and learns
- Pick up the phone ... don't just text
- Protocols are necessary when digitally communicating
- Ensure continuous open lines of communication



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Tips for Creating a Higher Level of Sociability

- Efforts should be placed on maintaining relationships and connections with technologists in different locations
- A voice on the other end of a phone call relays a smile, enthusiasm, authenticity, and generosity
- The sound of a person's voice can brighten someone's day and turn a daily challenge into favorable optimism

52

Guide to Thrive for Mammographers



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Guide to Thrive

01 FOCUS ON ERGONOMICS

- For the CC View:**
 - Stand tall, close to the patient
 - Keep elbow or hand on the patient back for the CC
 - Keep thumb/forearm straight
- For the Med/Lateral View:**
 - Stand tall
 - Keep constant contact with the breast
 - Keep thumb/forearm straight

02 MAINTAIN CONNECTIONS

- Listen more, talk less
- Keep in positive mindset
- Give compliments
- Encourage change
- Encourage collaboration, ask "how can I help?"
- Be open to your communication weaknesses

03 FEEDBACK

- Ask for feedback: "Is there something I could do better?"
- Offer appreciation
- Use coaching to change specific behaviors
- Ask employees standing to generate feedback

04 SOCIABILITY

- Use digital introductions and introductions of staff
- Team lunches and games
- Pick up the phone and text, don't just text
- Encourage open lines of communication, open body language
- What goes around, comes around - ask for, and offer help



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53

Change Brings Chance



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“We either make ourselves miserable or we make ourselves happy. The amount of work is the same.”

- Carlos Castaneda



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56

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