Shaping the Future: The Path from BMET to CRES

By: Keith Hall CHTM, CRES – Diagnostic Imaging Analyst

Session Overview

Purpose of the Session

• Outline a practical pathway from BMET to Imaging Service Engineer (ISE) and CRES

Topics Covered

• Transitioning from BMET to Imaging Service Engineer
• Required mindset, skills, and training investments
• Structured development, mentorship, and organizational support
• Overview of CRES certification and preparation strategies

What Attendees Will Take Away

• Clear understanding of the imaging career pathway
• Actionable steps for individual and organizational development
• Resources to support imaging skills and certification growth

Keith Hall, CHTM, CRES

- Started Biomed career in 1999 with the United States Army
- Transitioned to imaging in 2010 through the Philips Training With Industry (TWI) program
- Retired from active duty in 2020
- Renovo account director at the University of Utah 2020-2022
- Imaging director of service @ Renovo 2022-2026
- Diagnostic Imaging Analyst @ Intelas 2026-present

The Transition Pathway

BMET → Imaging Service Engineer → CRES

- First step is to identify candidates for this transition. Skill (acumen) and desire (the right attitude)
- Fostering that desire (personally and professionally)
- Provide training (OJT to start) and then structured training
- Assess progress and design next steps

Why this pathway matters for the future of HTM

- Aging workforce in imaging and HTM
- The need for imaging techs
- Career development for HTM to move into imaging

CRES Certification Overview

What is CRES?

- The CRES certification, offered by AAMI, recognizes professionals with advanced knowledge and skills in the service, maintenance, and management of diagnostic imaging equipment.
- CRES-certified individuals demonstrate expertise in radiography, fluoroscopy, mammography, computed tomography (CT), magnetic resonance imaging (MRI), and ultrasound technologies, along with strong foundations in safety, regulations, and clinical applications.

Structured Development

Training programs

- Internal Training Program
- OJT
- OEM Training
- ISO Training

Mentorship approaches

- Choosing the correct mentor and Mentee
- Having set expectations and follow through

Hands-on experience in imaging modalities

- Shadowing
- Volunteering to tag along to learn

Lessons from My Journey

Key milestones in CRES success

- Decision to take the exam
- Scheduling the exam
- Choosing study strategies (ACI Study Programs, RSTI, study groups, self study)
- Arrive at the testing location early
- Confidently take the exam (after a good night's sleep)
- Upkeep CEUs to retain the certification

Challenges faced

- Time to study
- Finding the correct study material
- Will I be compensated
- Passing the exam
- Success stories and results

Career Pathway: BMET to Imaging to CRES

BMET

Core Clinical Engineering Skills
Preventive Maintenance
Troubleshooting
Foundations

Imaging Service Engineer (ISE)

Advanced Modality Knowledge
Higher Complexity Repairs
Increased Downtime Urgency

CRES Certified Professional

Validated Imaging Expertise
Professional Recognition
Career & Compensation Growth

From BMET to Imaging Engineer

Mindset and skill shifts required

- Moving from BMET skills to ISE Skills
- Work hours
- Type/complexity of repairs and PMs
- Urgency of downtime
- Interacting with imaging leadership
- Managing contracts

Value of specialization

- Not so much master of all
- Becoming an expert on a specific modalities

From BMET to Imaging Engineer

Bridging the gap from general biomed to imaging

- Identify BMET skills that align with imaging skills
- Consider workload/time/cost requirements to attend training
- Weigh training options: internal (OJT), OEM, ISO
- Develop the training path (OJT and formalized)
- Tracking the development of BMET's transitioning to imaging
- Reassess skill gaps as new devices enter the facility

Imaging career value

Growth opportunities

- Many channels for growth in imaging
- Unique skill set that travels well
- Opportunities for specialization

Market demand for imaging engineers

- ISEs are aging out at an alarming rate
- Can work in-house, ISO or OEM
- Very desirable skill set

Compensation & career progression

- ISE comp is typically greater than BMET
- Advancement opportunities (Technical and leadership)

How Organizations Can Support

Training investments

- Encourage OEM or Multivendor training
- Internal Training and OJT

Career pathing and mentorship

- Mentors are crucial
- Finding the career path that suits the individual

Retention strategies

- Trained staff stay longer
- Opportunities help retention
- Supporting career goals

Building Tomorrow's Leaders

Inspiring the next generation

- Identified possible Imaging leaders
- Mentoring and leading
- Speaking at conferences and schools

Strengthening the HTM workforce

- HTM and ISE should bridge gaps and spend time together

Creating a culture of excellence

Imaging Training & Certification Resources

Certification & Professional Bodies

• AAMI / ACI – CRES Certification, Study Guides, CEUs
https://www.aami.org | https://www.acertified.org

Imaging Skills & Training Portals

• RSTI – Imaging fundamentals and modality-specific courses https://rsti-training.com
• OEM Training Portals (GE, Siemens, Philips, Canon, Hologic)
• Independent Service Organizations (AllParts Medical, Avante, Block Imaging, DirectMed/Tri Imaging, Probo Medical)

Self-Study & Professional Development

• AAMI eLearning & Webinars
• Local HTM chapters, study groups, mentorship
• Structured OJT with defined milestones

Key Takeaways

- Clear pathway: BMET → Imaging Engineer → CRES
- Development requires planning, structure, support, and follow-up
- Organizations benefit from investing in imaging teams

Q&A

- Thank you for attending

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