

Starting an Imaging Apprenticeship at Banner Health

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About the Speakers



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Session Goal

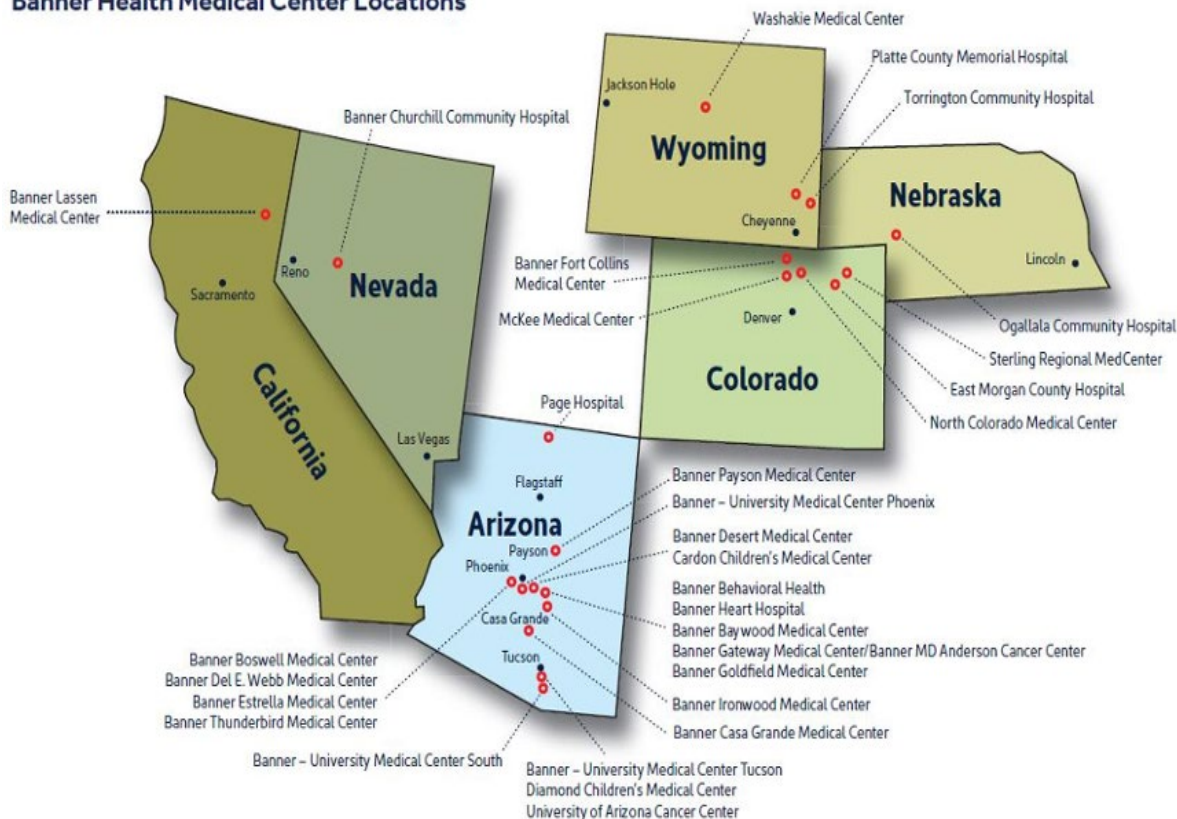
- To share Banner Health Technology Management/ ENTECH's journey in building an imaging mentorship/ apprenticeship program
- The program was developed as a pioneering in-house attempt to support, build, supplement, and fill imaging engineer/ technician demand and needs
- Both for our imaging service team and customers

Agenda

- Where we started
- Implementation steps
- Where we are today
- Where we want to go
- What went well
- Lessons learned

Mission: “Making health care easier, so life can be better.”

Banner Health Medical Center Locations

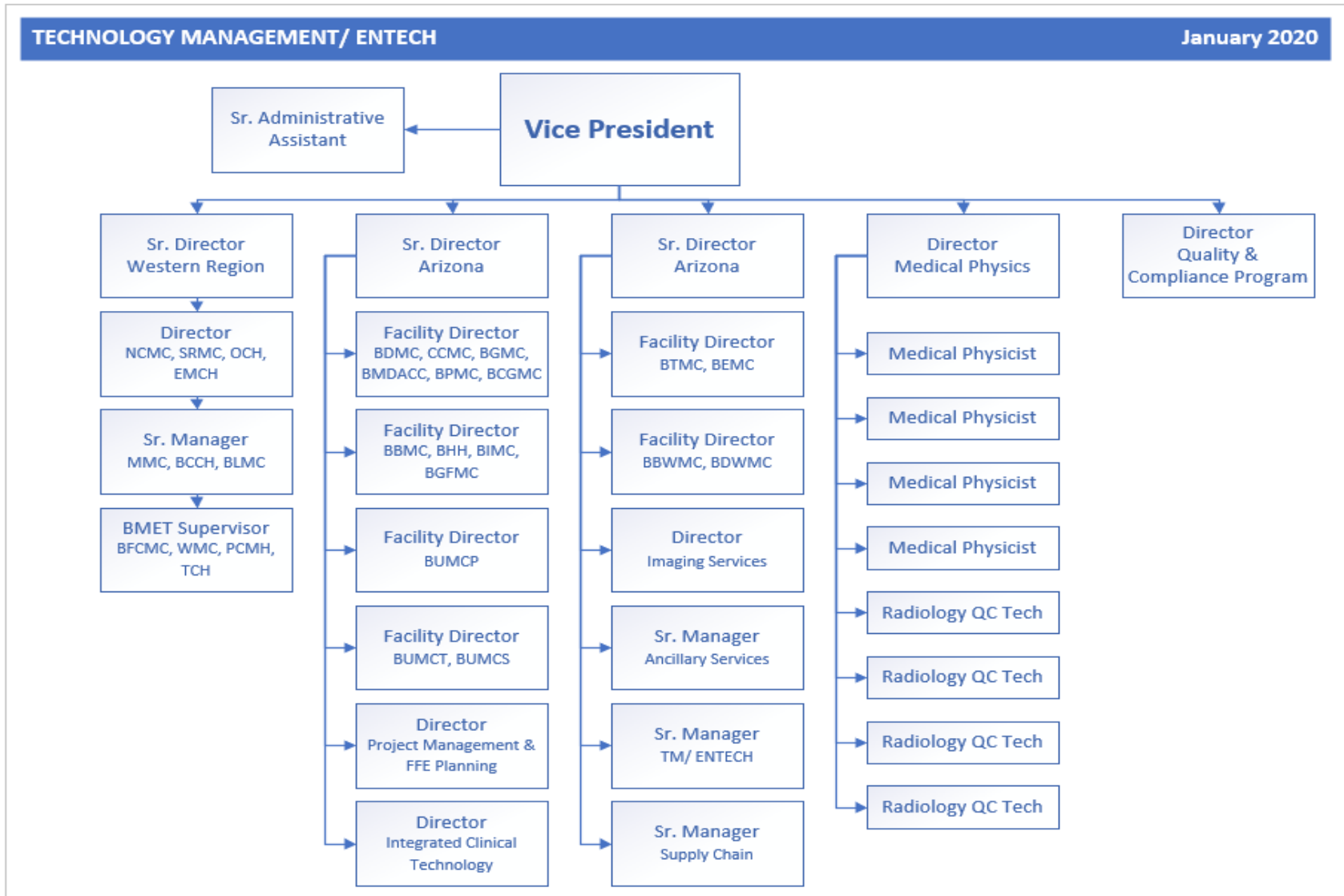


Banner Health is a non-profit health system in the United States, based in Phoenix, Arizona

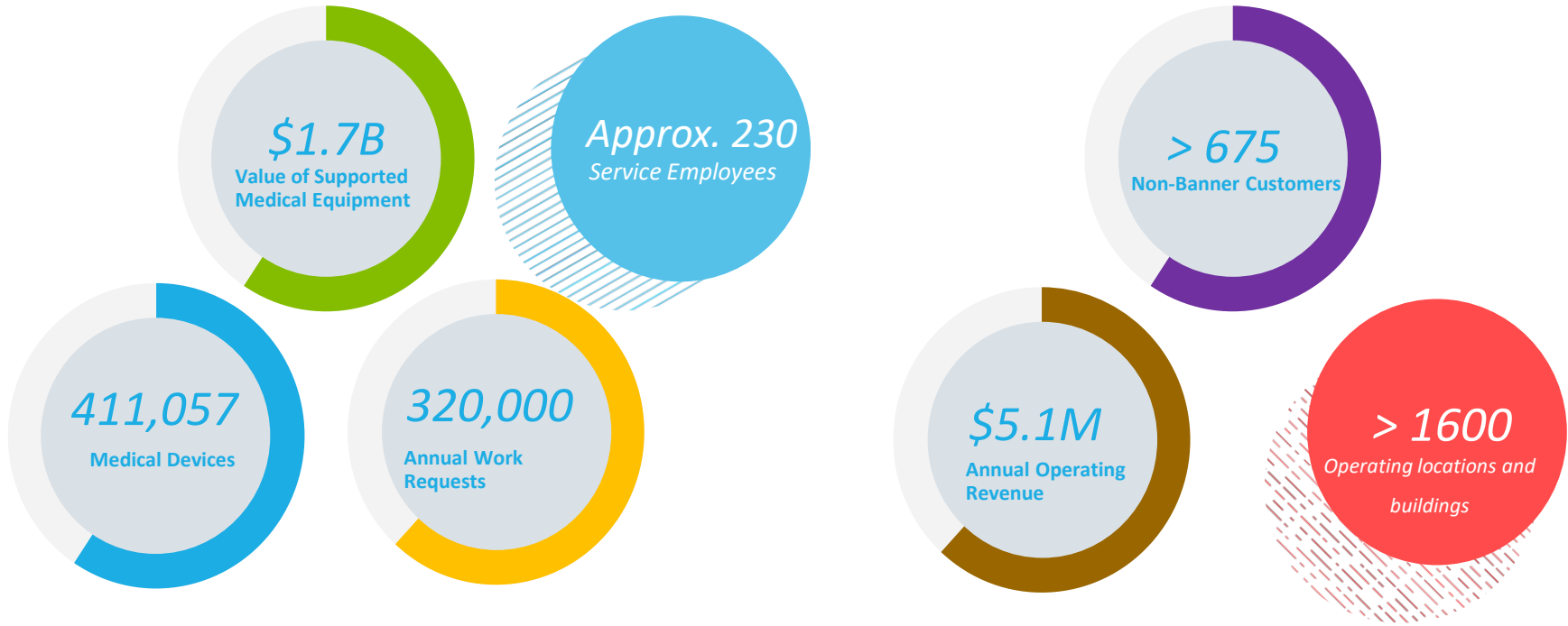
It operates 28 hospitals and several specialized facilities across 6 states

The health system is the largest employer in Arizona and one of the largest in the United States with over 50,000 employees

Mission: “Making health care easier, so life can be better.”



Mission: “Making healthcare easier so life can be better.”



Where we started

- When
- Why
- How

When

- Started developing the idea in early 2019
- Brainstormed and developed program throughout early and mid 2019
- First phase of student training started Q3 2019

Why

- Imaging leadership team brought up an idea to create an internal mentorship program in a leadership meeting
- Reasons for bringing this up
 - Vacancies
 - Long outstanding imaging team vacancies
 - Challenges to fill positions
 - Candidates limited/ challenging to find

Why – continued..

- Opportunity to create a pathway and pipeline to support the imaging team members exiting the field/ team
 - Retirement
 - Competition
- Opportunity to create a pathway for internal non-imaging technicians
 - Adds a possible new path for non-imaging team members to grow an aspire to
 - Create additional experience opportunity for non-imaging team members.
 - Objective was to improve satisfaction with this opportunity
 - Improved satisfaction has shown to positively impact retaining top employees in healthcare technology management (Douglas, 2019)
 - Objective was to create additional opportunity

How

- Had the idea proposed to leadership group by imaging team leadership
- Gained approval & support from Banner Health Technology Management/ ENTECH Sr. Leadership to perform a pilot

How – continued..

- Created routine meetings
 - Brainstormed on what would resources would be needed
 - Trainers/Teachers
 - Mentors
 - Experienced imaging team members
 - Students

- Equipment
 - Imaging equipment
 - Portable X-ray
 - Service manuals
 - Safety equipment
 - Shielding
 - Radiation Badges

How – continued..

- Safety classes
 - Radiation safety
 - Lockout/ tagout
- Tools
- Area/ space
 - Area for Lecture
 - Area for hands on training
 - Area for project/ leadership group

How – continued..

- Brainstormed on what to focus on
 - Focus ended up being on portable X-ray as starting modality
 - Determined students would be non-imaging technicians
 - Brainstormed ideas on how to select team members
- Brainstormed on locations where to physically hold the lecture and training
 - Creation group meeting location
 - Met in person where possible in central location
 - Students training
 - Conducted lecture in a meeting room at Banner Desert Medical Center in a classroom like environment
 - Hands on conducted at Banner Desert Medical Center in Imaging Department room

Implementation and action steps taken

- Brainstorming
- Selection of Teachers/ Instructors
- Development/ construction of materials
 - Lecture
- Safety
 - Radiation
 - Lockout tagout
- Medical device theory and operation
- Radiation theory

Implementation and action steps taken – continued..

- Selection of students
 - Asked for volunteers
 - Volunteers then had to be approved through their direct leader
- Held an interview session to select pilot group
 - Selected four members for pilot group
 - Had alternatives in case of cancellation

Implementation and action steps taken – continued..

■ Training

- One day of lecture
- One day of hands on
 - Split up the four members to two groups of two
 - One day each with mentor

■ Testing

- Internally written multiple choice test given out to students
 - Given several weeks after
 - Open book
 - 70 % was passing

Implementation and action steps taken – continued..

- **Mentorship**
 - Ongoing process and includes scheduled maintenance and learning with mentor when available
 - Followed by first look opportunities

Where we are today

- Current status of program
 - Still in phase one (pilot) of the program
 - Need to perform audit/ evaluation on program for value, satisfaction, outcomes, etc.
- Current status of project team members
 - In holding pattern for phase one and contemplating phase two pending positive outcomes
- Current status of mentors
 - One mentor member engaged with next steps to engage additional mentors

Where we are today

- Current status of students
 - Four students
 - All have completed the initial phases of safety and introduction
 - Both theory and hands on
 - Two students who have completed the program are now performing scheduled maintenance with guidance
 - ✓ One has even started some first look corrective maintenance
 - ✓ Another has started to work on other portable X-rays with guidance

Where we want to go

- Next steps in phase one program
 - Continue to have team members from phase one group learn and take on the equipment more directly
 - Perform scheduled maintenance independently
 - First look for corrective maintenance
- Create phase two session and team
 - Leader/ guidance group to remain the same
 - Add phase two of students

Accomplishments

- Imaging and non-imaging team members from different regions came together to support and brainstorm ideas
 - With a diverse team we feel this helped in identifying process issues/ pitfalls
 - This improved our support capability
- Had backup students ready in case of cancellation/ inability to attend
 - Situation did occur where a team member could not attend and had to use backup student

Lessons Learned

- Radiation badges
 - Started with temporary badges (numbered badges that were assigned)
 - Tracking badges - changing out, sending in, getting lost
 - Personalized badges for students of the program
 - This eliminates multi-person chain for badge tracking
- Hands-on work for scheduled maintenance and ongoing hands-on experience was not well planned/ executed
 - Next phase to include planning with the mentors
 - Closely map milestones:
 - When will the first independent scheduled maintenance be performed
 - When will the student take on first look corrective maintenance

References

Douglas, K. R. (2019, April 1). *Shrinking Pool: Recruit and Retain Amid Retirements*. TechNation. Retrieved from <https://1technation.com/shrinking-pool-recruit-and-retain-amid-retirements/>

Thank You!



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