

# A Bone Marrow Aspirate and Biopsy Educational Program for Advanced Practice Providers Utilizing Task Trainers

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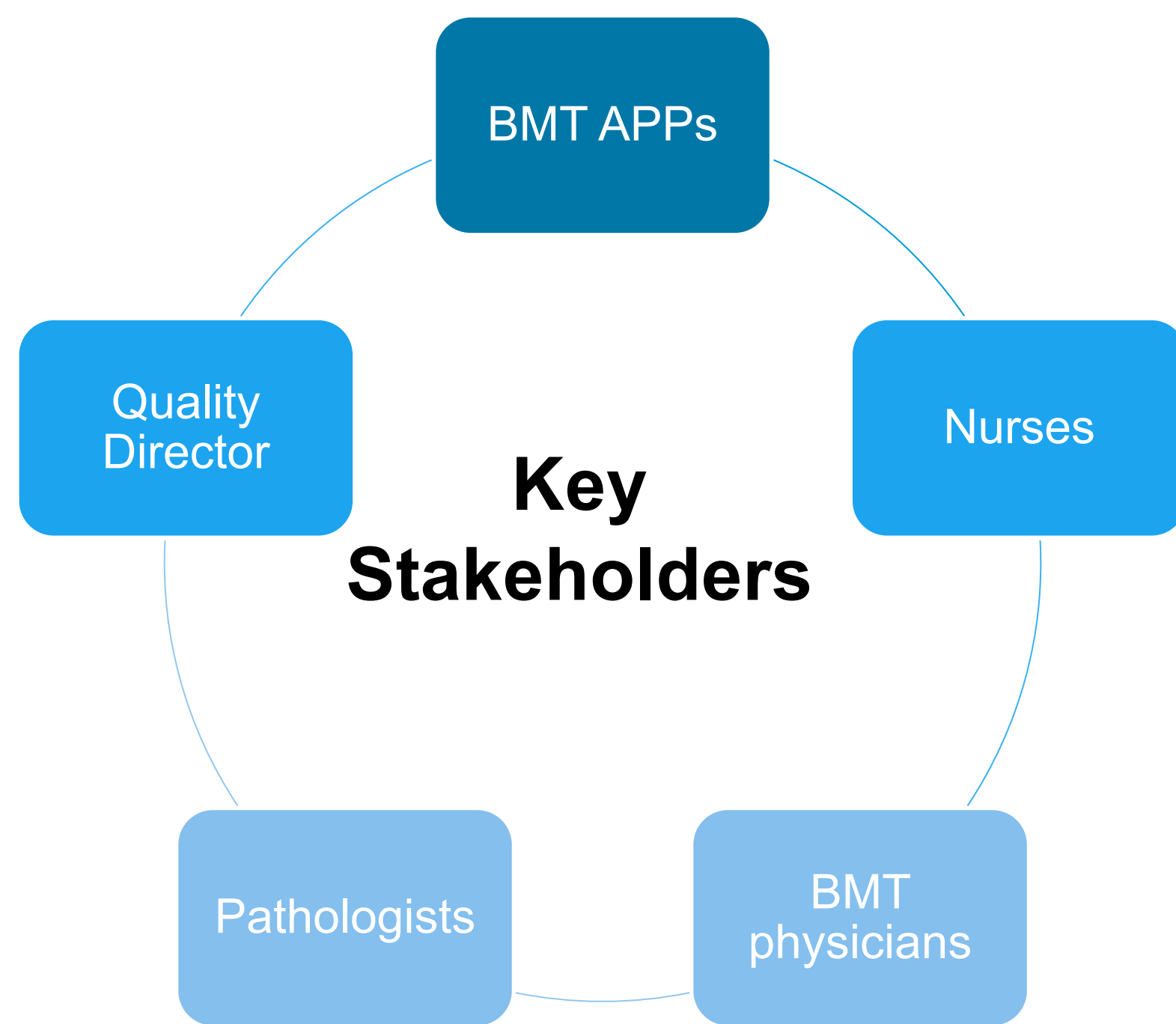
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## Purpose

- 98% of bone marrow aspirate and biopsies (BMBx) are performed by the Bone Marrow Transplant (BMT) Advanced Practice Provider (APP) team at this institution
- Historically APPs learned BMBx through observation
- Standardized, evidence-based curriculum essential for knowledge
- Simulation training utilized to avoid risk and complications by use of live subjects

## Design

- Three BMT APPs created curriculum
- BMT APPs of all skill levels were eligible for inclusion



## Objectives

Project Aims

Reduce specimen related errors by 10%

Increase BMBx knowledge by 25%

Increase self-reported confidence

## Process

• Baseline data surveys

• Didactic education  
• Sim on task trainers

• Post-surveys  
• 10 supervised BMBx required for credentialing

## Results

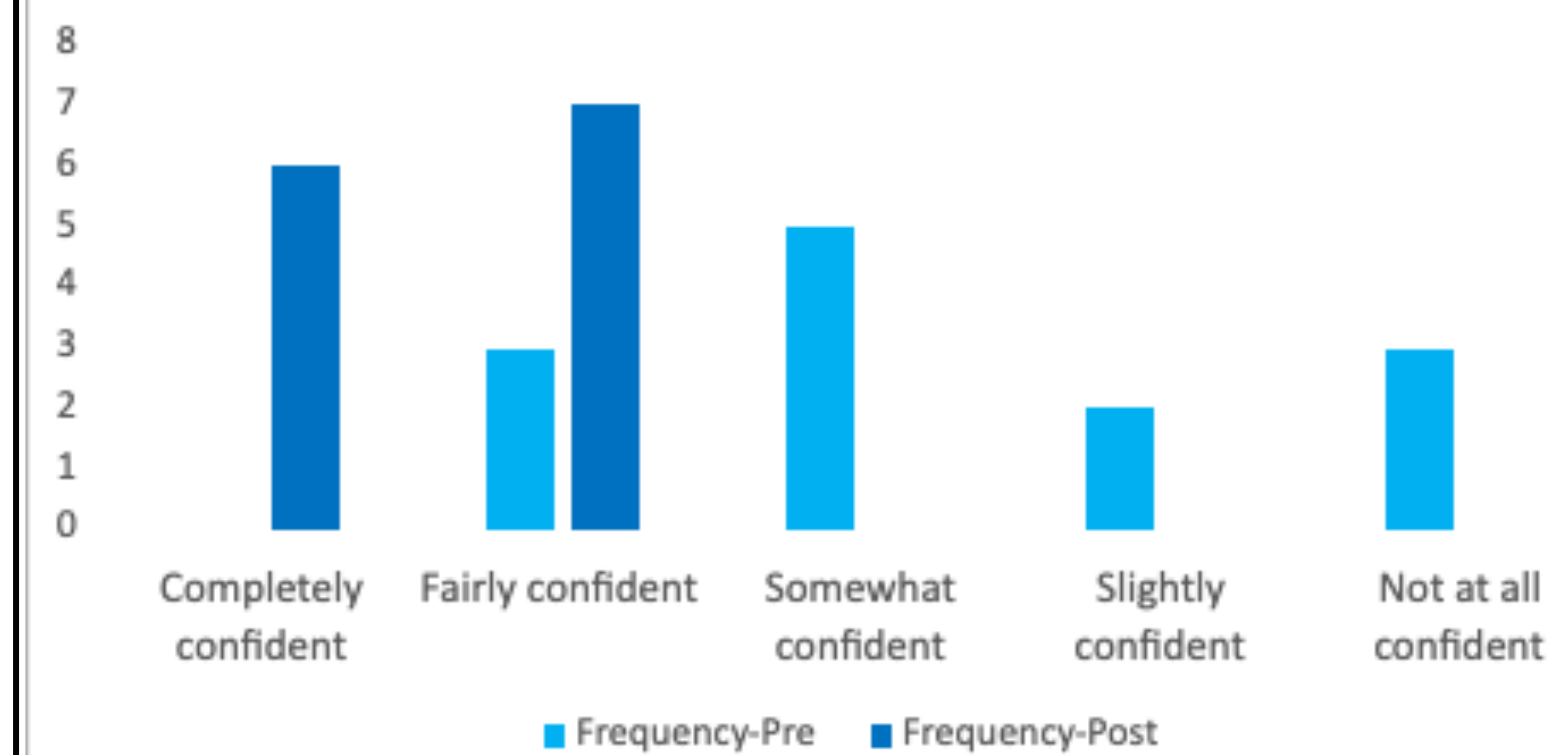
### BMBx specimen

Specimen labeling errors decreased by 62.5%

### Overall BMBx Knowledge

Baseline knowledge increased by 26.5%

## Self-reported Confidence



## Qualitative Data

- PowerPoint curriculum fostered understanding
- Task trainer allowed for prone and side lying technique review
- Embed content during onboarding orientation process

## Conclusions

Program beneficial, especially for those new to the procedure

Task training enhances mechanical, cognitive and interactive skills

Participants felt program could improve patient safety

## Discussion

### Implications

- Can serve for maintaining clinical competency
- Simulation training with task trainers or other mannequins can be utilized in APP models of care for the purposes of procedural skill acquisition and enhanced self-reported confidence

### Limitations

- Single institution
- Small sample size
- Lack of generalizability
- Utilization of needs-specific non-validated tool