**M17** - HR Business Hero – Reduce Your Clearance to Work Time

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Learning Objectives

• Understand the cost savings opportunities for your institutions by reducing new hire time to work clearance
• Understand how to streamline the new hire work clearance process to improve efficiency and get new hires started faster
• Understand tools that can reduce time to work clearance, such as a new TB screening method
Your Plan!

Become an HR Business Hero by dramatically reducing clearance to work time for your new hires, resulting in significant costs savings and happier hiring managers.
Employee Lifecycle

**Pre-Hire**
- Recruiting
- Posting Requisitions
- Interviewing
- Selection

**New Hire**
- On-boarding Tool / Orientation Process
- New Hire Checklist
- Coaching, Expectations

**Engaged Workforce**
- Employee Engagement
- Service Awards
- Performance Management (AoS)
- Policies
- Coaching to Improve Performance
- Workers Compensation, Benefits, Leave

**Separating Employees**
- Voluntary / Involuntary
- Exit Interviews
- Retirement
Employee Lifecycle

New Hire

• On-boarding Tool / Orientation Process
• New Hire Checklist
• Coaching, Expectations
Employee On-boarding Touch Map

- **Prior to Arrival**
  - Carefully Prepare
  - Personally Connect

- **Day One**
  - Enthusiastically Greet
  - Clearly Communicate

- **Week One**
  - Thoughtfully Train
  - Attentively Listen

- **Day 30-**
  - Continually Guide

- **Day 90+**
  - Thoughtfully Reflect and Assess

*ASHHRA*
*The Human Side of Healthcare*
Your Experience

How long does it take you to clear new hires for work?

- 2 - 3 days
- 4 – 7 days
- 8 – 13 days
- 14 + days
Mercy’s Challenge

Clearing new hires to work took up to 14 days
– Overtime costs
– Scheduling challenges

TB testing frequently the gating item
TB Testing Impact on New Hires

Simple Scenario

Day 1
- Place 1<sup>st</sup> TST

Day 2-3
- Read TST 48-72 hours later

Day 10
- Place 2<sup>nd</sup> TST

Day 13
- Read TST 48-72 hours later

13+ Days
- Cleared to Work
TB Testing Impact on New Hires
Non-Compliance Scenario

Day 1
• Place 1st TST

Day 2-3
• Read TST 48-72 hours later

Day 13
• Place 2nd TST

Day 16
• Read TST 48-72 hours later

16+ Days
• Cleared to Work

+2-3 days

Additional 4-6 days if non-return occurs twice.
TB in the US: 2013 data

- 11 million persons in US estimated to have LTBI
- 9,588 new active TB cases
  - 3 cases per 100,000 persons
- TB rate among foreign-born is 13x higher than US-born

### Tuberculosis Overview

#### What is TB?
- infectious airborne disease caused by a bacterial infection
- typically affects the lungs
- can affect other organs or disseminate
- can be fatal if not treated properly

#### What causes TB?
- *Mycobacterium tuberculosis* bacteria causes most cases
- sometimes referred to as tubercle bacilli
- *Mycobacterium* are extremely hardy due to waxy cell walls
- Obligate aerobic bacteria

#### How is TB transmitted?
- through airborne droplets expelled by those with active TB disease
- <10 bacilli to cause infection
- infectiousness of active TB disease patients is directly related to number of tubercle bacilli they expel into the air

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[ASHHRA: The Human Side of Healthcare]
Persons with LTBI

• Have live, although inactive, tubercle bacilli in their bodies
• Are not infectious
• Usually have a positive TB skin test or interferon gamma release assay (TB blood test)
• Should be evaluated for treatment to eliminate bacteria
• Have ~5% risk of progressing to active TB within 2 years post infection
• Have another 5% risk of developing active TB later in life
• HIV+ patients have a 7-10% annual risk of developing active TB

Latent Tuberculosis Infection

“All HCWs should receive baseline TB screening upon hire, using two-step TST or a single [IGRA] to test for infection with *M. tuberculosis*”

**Why a two step TST?**

– “In certain persons with LTBI, the DTH responsible for TST reactions wanes over time. Repeated TST can elicit a reaction called boosting in which an initial TST result is negative, but a subsequent TST result is positive. For example, a TST administered years after infection with *M. tuberculosis* can produce a false-negative result.”

1. Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005 CDC MMWR 54 RR-17.
Tuberculin Skin Test (TST)

- Developed in 1907 by Dr. Charles Mantoux
- Intradermal injection of TB “purified protein derivative” (PPD)
  - Positive result produces a measurable induration
- Highly effective in US for most of 20th century
- No longer meets the needs of the 21st century
**Issues Affecting the Use of TSTs**

- **Noncompliance**
  - Failure to return for TST interpretation

- **Subjective Results**
  - Misreading of induration/poor interobserver reproducibility

- **Costly**
  - Inaccurate results
  - Solution waste
  - Staff time

- **False-Positive Results**
  - Foreign-born persons account for 64.6% of all TB cases in US
  - Accuracy of results is key
  - Exposure to other mycobacteria
  - Unknown cause

- **False-Negative Results**
  - Immunosuppression
  - HIV/AIDS
  - Cancer
  - Biologics
  - Transplant

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TST Impact on HR

• Newly hired employees require a two-step tuberculin skin test (TST)
  – 4 visits to Employee Health (EH)
  – If one step of the process is missed, the process starts again
  – Non compliance requires EH to chase employees

• Existing employees require annual TST
  – 2 visits to EH
  – If one step of the process is missed, the process starts again
  – Non compliance requires EH to chase employees
**Current Testing Methodologies**

- **TB Skin Testing (TST)**
  - PPD, Mantoux test, Tine Test

- **Interferon-Gamma Release Assay (IGRA)**
  - T-SPOT®. *TB* test
  - QuantiFERON® -TB Gold

*T-SPOT is a registered trademark of Oxford Immunotec, Ltd; QuantiFERON is a registered trademark of Cellestis, Inc.*
Your Experience

How do you conduct TB testing for new hires?

- TST (skin test)
- IGRA (blood-based test)
- Don’t Know
New Hire Delays Cost $$$

- How long to clear new hires?
- How many require shifts covered?
- What is your overtime premium?
Your Experience

How do you cover open shifts while waiting for new hire clearance?

• Overtime
• Contract staffing
• Combination of OT & Contract Staffing
• No coverage
New Hire Delays Cost $$$

- How long to clear new hires? 14 Days
- How many require shifts covered? 100
- What is your average wage? $40
- What is your overtime premium? +50%

ASHHRA
THE HUMAN SIDE OF HEALTHCARE
New Hire Delays Cost $$$

<table>
<thead>
<tr>
<th>New Hire Clearance</th>
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<tbody>
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<td>14 Days (8 hour shift) * 100 openings</td>
<td>11,200 Overtime Hours</td>
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<tr>
<td>Overtime wages ($40*150%)</td>
<td>$60/hour</td>
</tr>
<tr>
<td>Overtime Costs ($60*11,200 hours)</td>
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<tr>
<td>Overtime Premium ($20*11,200 hours)</td>
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New Hire Delays Cost $$$

- How long to clear new hires? 3 Days
- How many require shifts covered? 100
- What is your average wage? $40
- What is your overtime premium? +50%
# New Hire Delays Cost $$$

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<td>2,400 Overtime Hours</td>
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<tr>
<td>Overtime Costs</td>
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<td>Overtime Premium ($20*2,400 hours)</td>
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# Reducing Clearance Time Can Save $$$

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**$528,000 Reduction in Overtime Wages**
Reducing Clearance Time Can Save $$$

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$176,000 Reduction in Overtime Premium
Mercy Health’s Experience
Mercy’s Initial Evaluation

**TST**
- 2 visits required (min)
- Method: injection into skin
- Results affected by BCG
- **Results in 48–72hrs**
- Subjective results

**T-SPOT. TB Test**
- 1 visit required
- Method: blood draw
- Results not affected by BCG
- **Results in less than 48-72hrs**
- Objective results
Demographic Considerations

Positive TST due to BCG status → unnecessary follow-up (including costly chest x-ray)
Foreign born healthcare workers may be BCG vaccinated
  – ~25% of US physician workforce educated internationally¹
  – 12-15% RNs are foreign born¹
  – 20-24% of other direct care workers¹

T-SPOT®.TB Impact on New Hires

Day 1
• Draw blood

Day 2-3
• Receive test result
Mercy Experience:
Post T-SPOT®.TB Implementation

Positive Employee Feedback
  – Reflects on organization as a whole

Additional time for other initiatives
  – Rapid drug screen
  – Refined influenza tracking system

Updated policies
  – Human Resources and Physical Therapy
Published Data Shows Similar Results

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