Objectives

- We all need help designing MET tools
- Failing to do so limits MET outcomes

For more info, come to breakout session: Thurs, 9AM

Radar Scope to Detect “enemy” ships

Performance Graph (curve)

How can we move the curve upwards?
Radar Scope to Detect “enemy” ships

Common Human Factors Engineering Design Challenges in Healthcare
- Hospital computer and communication systems
- Syringes, catheters, bags and tubing
- \( \text{O}_2 \) cylinders
- Code cart surface and drawers
- Defibrillators
- \( \text{O}_2 \), Suction, other utilities in the room

Human Factors Engineering Design Challenges in MET: Phases
- Monitoring to call for help
- Calling for help
- Using devices and code cart contents

Human Factors Engineering Design Challenges in MET: Tools
- Monitoring to call for help
- Calling for help
- Using devices and code cart contents
- Paper flow sheets
- Central telemetry monitor stations
- Computers
- Phones
- Pagers
- Hybrids
- Emergency (code) carts

Human Factors Engineering Design Challenges in MET: Problems
- Monitoring to call for help
- Calling for help
- Using devices and code cart contents
- Paper flow sheets
- Central telemetry monitor stations
- Computers
- Phones
- Pagers
- Hybrids
- Emergency (code) carts

Human Factors Engineering Design Challenges in MET: Detail
- Monitoring to call for help
- Calling for help
- Using devices and code cart contents
- Paper flow sheets
- Central telemetry monitor stations
- Computers
- Phones
- Pagers
- Hybrids
- Emergency (code) carts

www.metconference.com
Solution Types

1. Cognitive aids
   - Pocket-sized MET booklet
2. Standardization and simplification
   - MET "go kits" should all be the same throughout the hospital (contents, appearance, location)
3. Inventions
   - ???

Conclusions

- We have human factors engineering design challenges with code responding systems, emergency carts, etc.
- Human factors engineering can help anticipate and solve design issues with MET (RRS)
- You have THE central role to anticipate and fix...For more, see resources below or come to break-out session on Thursday at 9AM

Bibliography

- Gosbee JW. Conclusion: You need human factors engineering expertise to see design hazards that are hiding in "plain sight!". Jt Comm J Qual Saf. 2004;30(12):696-700.

HFE Web Resources

- VA Web Site http://www.patientsafety.gov/hf.html
- FDA Web Site and Publications (free and good!)
  - http://www.fda.gov/cdrh/humanfactors/
  - Human Factors Engineering and Medical Devices ("Do It By Design" & "Device Use Safety")