

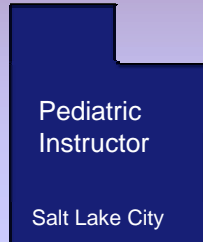
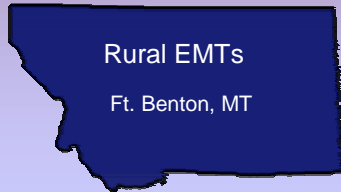
Using Remote Instruction to Improve Knowledge and Skills

Pilot test of distance program for rural EMTs – providing hands-on performance training and access to a remote pediatric emergency care expert

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Learning Methods

- Videotaped performance training
 - Self-critique | Expert critique
 - Testing tool | Training tool
 - Final performance rated by panel
- E-mail and desktop video conferencing
- Self-study material
 - World Wide Web site
 - Published textbooks
 - Interactive CD-ROM programs



Main Findings

Pilot test demonstrated the use of several distance learning methods for both knowledge and performance skills training

Gave rural EMTs access to expert instructor

Videotaped performance skill allowed EMTs to critique themselves
Remote instructor reviewed tapes and critiqued via E-mail

EMTs and instructor considered the videotaping a major strength of the program

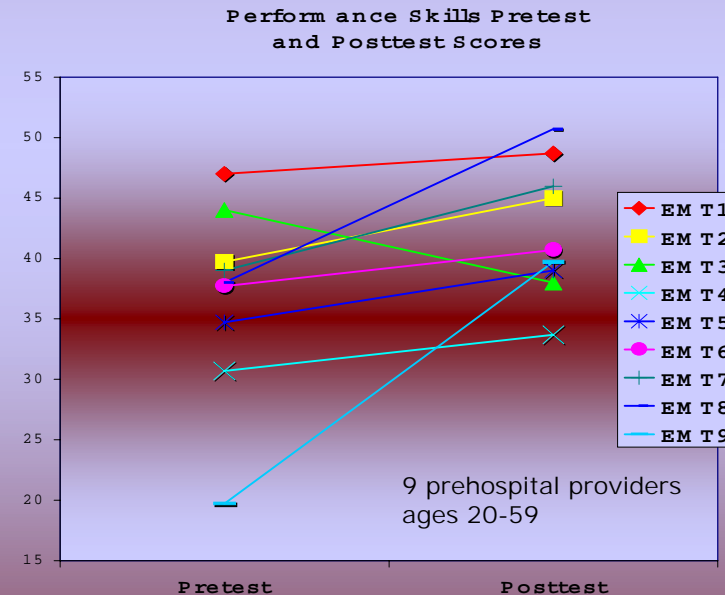
Desktop video conference allowed remote instructor and EMTs to discuss self-study materials and written performance critiques

Self-study didactic materials decreased required classroom time

Self-study was not well used
Students need good support system for self-study



Testing Results



Pretest performance scores range: 19.67 – 47 (median 38)
Posttest performance scores range: 33.7 – 50.67 (median 40.7)

Total scores significantly higher at posttest ($M = 42.4$) than pretest ($M = 36.7$), $t(2.357)$, $p = .025$ (one-tailed)

Pretest and posttest scores on written knowledge test and ratings of self-confidence on skills showed no significant difference