Adopting Medication Technology Within Agencies Serving Older Adults: Lessons From the Trenches

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PURPOSE: To determine challenges and facilitators in implementing technology to improve medication management for older adults.

BACKGROUND

• Over 90% of older adults take one or more medications; an estimated 41% take five or more.
• Medication problems affect up to 40% of community-dwelling seniors and can result in injury and death.
• Medication optimization technologies help prevent up to 95% of medication problems.
• With support from The SCAN Foundation, the Center for Technology and Aging funded five projects implementing medication optimization technologies for chronically ill older adults.
  • Technology users: pharmacists, nurses, home health care workers, physicians, social workers, patients.
  • Technologies: videoconferencing, automatic medication dispensers, medication assessment tools, others.

METHODS

• Qualitative study conducted. Project leaders of five CTA-funded health service agencies interviewed.
• Audio-recorded and transcribed interviews were analyzed using grounded theory to identify themes.
• Semi-structured questionnaire included:
  (1) challenges and facilitators to implementing technology
  (2) policy, scope-of-practice, and regulatory issues
  (3) cultural barriers
  (4) client-level experience
  (5) support provided by grant-making agency
  (6) lessons learned.

RESULTS

Challenges:
• Lack of sufficient time to test technology prior to implementation.
• Funding concerns after grant ended.
• Technology difficulties, such as low bandwidth.
• Inconsistent technology reimbursement.
• Lack of staff training.

Facilitators:
• Technology easy to use; often “plug-and-play.”
• Information technology staff facilitated diffusion.
• Site champions, who advocate for new innovations, improved likelihood of implementation.
• Organization structure and mission supported innovation.

DISCUSSION & IMPLICATIONS

• Organizations which had greater success had infrastructure already in place that supported their work.
• Buy-in and site champions at different levels within organizations are critical to success.
• Grantees should be realistic about what they can accomplish during the project period.
• Grant makers can facilitate successful technology implementation by providing grantees with sufficient start-up time.
• Grant making organizations should consider the opportunity to facilitate national development and use of technology.