

Health Information Technology and Aging Services Technologies at ASPE

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HIT and Aging Tech at ASPE

- Office of the Assistant Secretary for Planning and Evaluation (ASPE)
 - Disability, Aging, and Long-Term Care Policy
 - Lead office in HIT in LTC and PAC settings
 - Lead office in Aging Services Technologies
 - Science and Data Policy
 - Lead office in HIT
 - Health Policy
 - Health and Human Services Policy

HIT in Long-Term Care and Post-Acute Care at ASPE

- ASPE has led/supported policy and research in HHS linking/coordinating Health IT in Post-Acute and Long-Term Care (PAC/LTC) including:
 - research identifying the HIT functions used in PAC/LTC and associated costs and benefits with this technology;
 - development of survey questions to track progress of health IT adoption and use in nursing homes;
 - development of health IT standards (US and international realm) for interoperable health information exchange and use in PAC/LTC. These standards have been accepted for use by public and private sector organizations; and
 - research on electronic health information exchange on behalf of persons receiving PAC/LTC to support continuity and quality of care.

PAC/LTC HIT/HIE Functions: Some Examples

1. **Administrative functions** (e.g., claims submission, census, Accounts Receivable - A/R [e.g., claims submission], Accounts Payable - A/P, general ledger, etc. in LTC these are often linked to required assessments (e.g., MDS, OASIS... data entry / management / submission))
2. **Point of Care** data collection
3. **Electronic health information exchange** functions include:
 - E-prescribe for medications
 - CPOE (Computerized Provider Order Entry) for other (non medication) orders
 - transfer/discharge documents
4. **Telehealth** applications
5. **Secure electronic messaging**
6. **Decision Support** Tools
7. **Quality Reporting** Functions
8. **Medication Administration Records**
9. **Automated Medication Dispensers**

Reported Benefits of HIT/HIE in PAC/LTC

1. Clinicians able to remotely: access LTC provider's EHR, monitor & coordinate care, enter orders, etc.
2. Electronic medication ordering supports: more informed medication ordering, use of generics, and efficient filling, quality checking, and dispensing by the pharmacy.
3. Supports transfers care, improves care coordination, and creates efficiencies.
4. Enables immediate, real-time access to needed information and more complete and accurate data collection.
5. Enables access to and integration of evidenced-based practice guidelines into EHR.
6. Telehealth permits remote monitoring of patients, reduces provider costs, decreases ER visits, and increases access to clinicians, particularly in remote areas.
7. Enables prompt, more complete claims submission, fewer claim denials, and remote utilization review.

Tracking EHR/HIT Adoption by LTC Providers

- ASPE is sponsoring research to:
 - review existing surveys on current HIT use and adoption, barriers to adoption for PAC/LTC and other providers;
 - recommend issues to consider when developing survey questions about HIT adoption, use, and barriers to adoption and use in nursing homes; and
 - develop a core and comprehensive set of survey questions on HIT adoption, use, and barriers to adoption and use in nursing homes.

HIT Standards for Patient Assessments that include Functional Status

- Federally required patient assessments are the backbone of HIT products in PAC/LTC. Providers are required to complete and electronically transmit these assessments.
- HIT standards for patient assessments have been:
 - Required for use in the Federal Government through the CHI (Consolidated Health Informatics) Initiative.
 - Accepted by HITSP (HIT Standards Panel)

ASPE Work on PAC/LTC Standards

- **Patient Assessment Standards:** ASPE has sponsored a multi-year research effort to identify and link health IT standards to patient assessments including:
 - Chaired and co-chaired CHI efforts on patient assessment standards that resulted in the requirement that federal agencies use these standards when upgrading/acquiring new information systems
 - Participating in HITSP's identification of and re-use of the CHI patient assessment standards
 - Leading a collaborative research effort applying CHI-required and HITSP accepted standards for patient assessment instruments (MDSv2, MDSv3, OASIS-C)

- **LTC-NH EHRs Functional Profile:** ASPE supported private sector collaborative efforts that developed a LTC-NH EHR-System Functional Profile:
 - (i) The LTC-NH-EHR-S-FP is now a US-realm HL7 standard; and
 - (ii) CCHIT will consider the LTC-NH-EHR-S-FP as it begins to specify certification criteria for NH EHRs (and possibly other LTC providers)

- **Standard Transfer Document:** ASPE participated in the HL7 standard for the exchange of discharge/ transfer documents (i.e., CCD).

Health Information Exchange

- **ASPE has sponsored qualitative case studies on HIE finding some progress in the use of HIT and HIE:**

- In 2002: *e-HIE between affiliated* health delivery systems (HDS) and PAC/LTC providers was rare and if it existed was usually one-way. E-HIE was observed between:

Affiliated Providers
HDS →→→ PAC/LTC

- In 2007: *e-HIE between affiliated and unaffiliated* health delivery systems (HDS) and PAC/LTC providers remains rare, but a little more common, and while still usually one-way communication there were instances of two-way HIE. E-HIE was observed between:

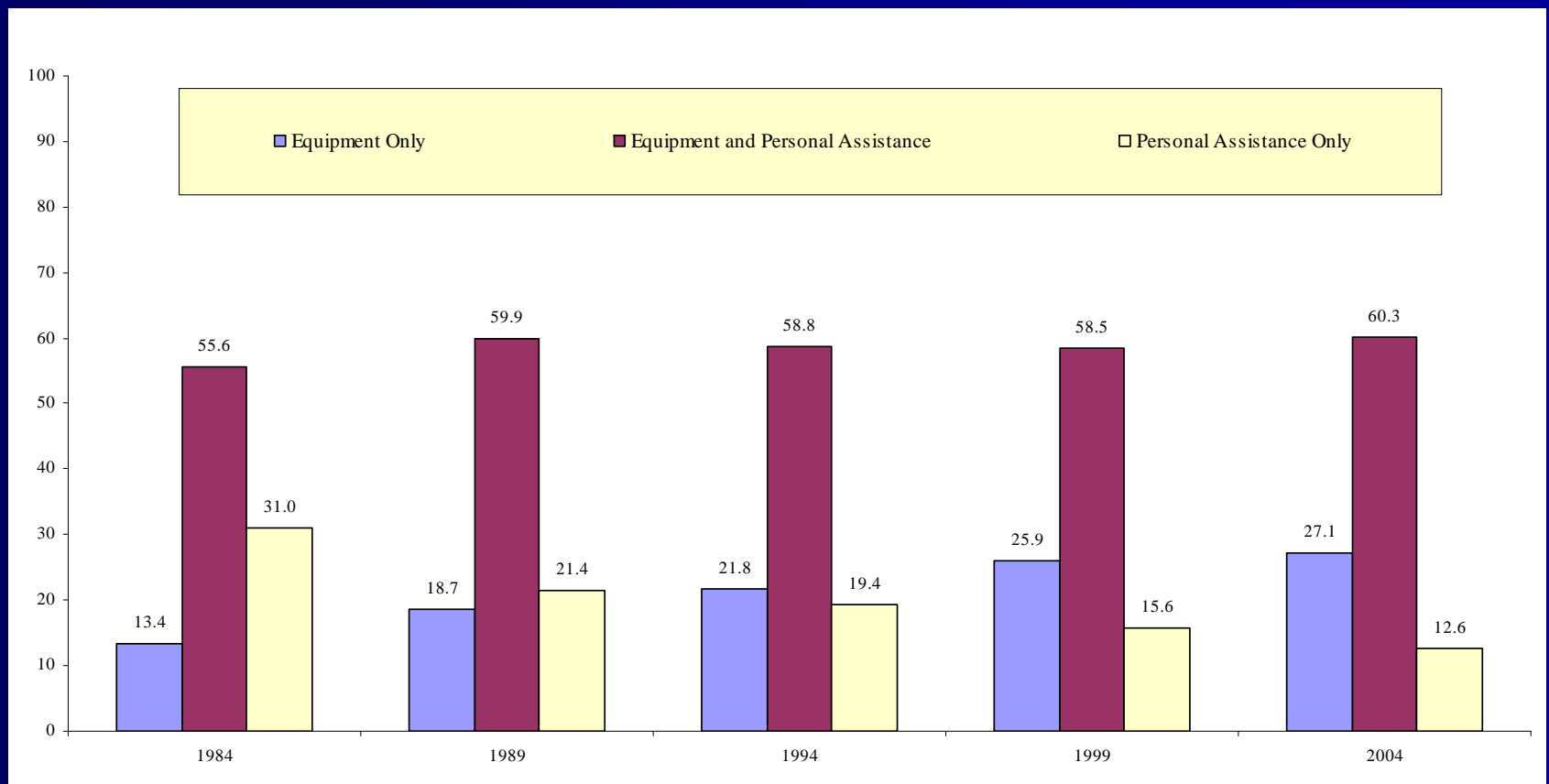
Affiliated or Unaffiliated Providers
HDS →→→ PAC/LTC
PAC/LTC →→→ HDS

- **During both studies use of HIT standards was rarely observed.**

Aging Services Tech at ASPE

- Monitoring Trends in AT Use Among Elderly
- Technologies Available for Use in LTC Settings
- State Policies and Practices for AT/Home Mods
- Improving Data Collection on AT/Home Mods

Monitoring Trends in AT Use Among Elderly



Data Source: National Long-Term Care Survey (draft estimates using newly available sample weights)

Technologies Available for Use in LTC Settings

- "Technology for Long Term Care" (TechForLTC.org)
 - designed for professionals engaged in planning, designing, managing, researching, and providing care in LTC settings.
 - focuses on technologies related to important care issues including:
 - Fall Management
 - Wander Management
 - Lifting and Transferring
 - Medication Management
 - Assistance Call
 - Bathing
 - Incontinence
 - supports the dual objectives of *informing* and *educating* LTC providers or other potential consumers about available technology products.

Technologies Available for Use in LTC Settings – Cont'd

- Barriers to Implementing Technology in Residential Long-Term Care
- Review of the literature and conversations with providers, regulators, manufacturers and other experts
 - Lack of information about technologies and the residential long-term care market
 - Perceived lack of financial resources to develop and purchase residential long-term care technologies
 - Failure of regulatory process to keep pace with technological advances
 - Industry's lack of standards for technologies central to residential long-term care
 - Providers' lack of knowledge and experience with implementing and managing technological change

State Policies and Practices for AT/Home Mods

- Compendium of Home Modification and Assistive Technology Policy and Practice Across the States
 - To what extent do Medicaid State Plans and HCBS waivers cover AT and HM services?
 - Almost every HCBS waiver includes AT and HM as listed services, while Medicaid State Plans more greatly limit what they include as AT and HM. Even though most states report including AT and/or HM, considerable variation exists in how states define and refer to AT and HM.
 - What are the processes available to Medicaid recipients to obtain AT and HM services?
 - Most HCBS waivers and some state plans offer service coordination or case management to recipients to facilitate access to AT and HM services; they also use health professionals (e.g., therapists) to assess recipient need for AT/HM services. Majority of state plans require physician orders for these services.
 - What mechanisms -- if any -- do states use to control use and costs of AT and HM services?
 - Almost all Medicaid State Plans and many HCBS waivers use "medical necessity" criteria and require prior authorization when determining coverage for AT/HM services.

Improving Data Collection on AT/Home Mods

- Development of an Assistive Technology and Environmental Assessment Instrument for National Surveys
 - The purpose of this project was to develop, pilot, and disseminate a set of questions for national surveys to measure the use of assistive technology and the environments in which they are used.
 - The project focused on older adults (ages 50 and older) living in the community.
 - The instrument was designed as a series of modules that can be adopted into a computer-assisted telephone interview (CATI).
 - The full instrument, consisting of five modules, takes approximately 8-10 minutes to administer.
 - A brief (2-3 minute) module was also developed.

Improving Data Collection on AT/Home Mods – Cont'd

- Instrument development process involved
 - development of a conceptual framework;
 - review of existing measures;
 - input from policy makers, survey designers, and an expert panel;
 - cognitive testing with individuals who used assistive devices; and
 - pilot testing with a sample of 360 people ages 50 and older.
- Instrument has the following modules:
 - Home Environment
 - Mobility and Other Devices
 - Effectiveness (effect on QOL: safety, control, participation)
 - Information and Communication Technology
 - Residual ADL/IADL Difficulty
- Analyses of data from pilot testing
- Home Environment Module included in the 2006 Health and Retirement Survey

Contact Info

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