• Home health care is becoming increasingly necessary
• Advantages
  – More cost effective (Naylor et al., 1999)
  – Less exposure to hospital-associated infections (Leff et al., 2005)
  – Supports aging in place

(Beer, McBride, Mitzner, & Rogers, 2014)
Human–Systems Perspective

• Emphasizes the interaction between individual components, whole components, and the system as a whole
• Components in home health care:
  – Persons: Health care provider and health care recipient
  – Tasks: Broad categories of health maintenance, episodic care, chronic care, and end of life care (The National Research Council, 2011)
  – Equipment and technology
  – Environment: Home differs from controlled hospital environment
    • Includes socio-environmental factors like family support (McBride et al., 2011)

(Beer, McBride, Mitzner, & Rogers, 2014)
1. Identify challenges home health care providers encounter in the home
2. Consider how these challenges fit within a human-systems model of home health care
3. Propose potential human factors solutions

(Beer, McBride, Mitzner, & Rogers, 2014)
Method

• Interviewed 8 CNAs and 8 RNs with at least one year experience in home health care with older adults
• Questionnaires: demographics, health, frequency of tasks, challenges for each task
• Semi-structured interviews: focused on 7 home health care tasks chosen to represent the range of task types

(Beer, McBride, Mitzner, & Rogers, 2014)
Results

• Care recipient challenges: related the needs of the care recipient, not the recipients themselves
  – Most challenges were related to the care recipient’s affective and/or physical limitations, which often occurred in tandem
• Care provider challenges: coded when a characteristic of the provider was the source of the difficulty
  – Infrequently mentioned, suggesting that providers see these challenges as a merely a necessity of the job

(Beer, McBride, Mitzner, & Rogers, 2014)
Artifact challenges: coded when the challenges were associated with the devices used by the provider or the recipient
  – Poor design
  – Problematic setup
  – Unavailable or missing devices, including medication
  – Deterioration or failure

Health care environment challenges
  – Different layouts add time
  – Not always sanitary
  – Family interactions: can have a positive or negative influence
  – Isolation: physically challenging and lack of emotional support system

(Beer, McBride, Mitzner, & Rogers, 2014)
Adjustments to the Human-Systems Model

- Divided person component in two to represent the provider and recipient
- Added affect to the model as recipient and provider capability and demand
- Added training to the list of characteristics
- Renamed equipment/technology to artifacts to encompass a broader array of technology and supplies for home health care

(Beer, McBride, Mitzner, & Rogers, 2014)
Implications for Practice

• Human-systems goal is an ideal fit between system components
  – Physical support challenges can be reduced by using proper equipment and procedures
  – Affect and isolation challenges could be addressed through telesupport systems
  – Environmental challenges could be reduced by ensuring the homes are modified for the purpose of health care
  – Artifacts should be standardized and regulated
  – Home health workers should be trained on setting up and troubleshooting devices, and instructional materials should be provided

(Beer, McBride, Mitzner, & Rogers, 2014)
References


Prepared by H Goldstein (2014)