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Discussion

Human Factors in Home Healthcare:

People who receive & provide care

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Summary

- Social Context of Home Healthcare
- Scope of human factors (HF) concerns & gaps in knowledge:
 - care recipients (CR) and
 - informal & formal care givers (CG)
- Future directions & recommendations:
 - Practice
 - Research
 - Education & Training
 - Policy

Social Context: Drivers of HHC

- Numerous factors driving a rapid increase in Home Healthcare (HHC):
 - Advances in technology
 - Healthcare cost containment
 - Improved infection control
 - Desire of most to stay in their homes

Social Context: Demographics

- Age structure of the U.S. population is changing
 - 2 fold increase in 65+ years
 - 4 fold increase in 85+ years
 - Almost no increase in ages able to give care
 - Informal CG: adults 45 – 64 years
 - Formal CG: women 25 – 44 years

Social Context: Population Health Status

- Population living longer with multiple chronic conditions that require complex medical & personal care
 - Obesity, diabetes
 - Cancer
 - Heart disease
 - Asthma, COPD, other respiratory illness
 - Dementia, mental illness
 - HIV
 - Polytrauma due to war
- Chronic conditions add to care complexity in event of acute illness
 - Pandemic flu

Social Context: Public Perception

- Disconnected from demographic reality:
 - Nearly 1/2 of adults believe they will not need care in the future
 - 1/3 have never thought about needing care
 - Few have made preparations for their future care
 - >1/2 unprepared to carry out basic care tasks:
 - Bathing, Dressing, Toileting, Handling Medications

The Role of Human Factors for Care Recipients (CR)

- CRs are all ages, elders predominant
- Home not systematically considered as a care/work environment
- Fragmented HHC system complex to coordinate
- Technology offers HF promises & pitfalls
 - Physical strength & mobility limitations
 - Language ability
 - Hearing, Visual acuity
 - Cognition
 - Cultural & age-related attitudes & norms
 - Privacy & confidentiality

The Role of Human Factors for Informal CG

- No standard definition of care giving
 - Difficult to compare data across studies
- Disproportionately affects women & racial/ethnic minorities, low income
 - often at their peak in the formal workplace
- Ability to provide care often limited
 - Lack of training & social support

Informal CGs

- Significant HF impacts on CG health
 - Social isolation, economic deficit
 - Family relations strained
 - Psychological distress
 - Loved one in pain
 - Work/family/personal time balance
 - Technology interface
 - Care coordination
 - Musculoskeletal strain
 - Lifting, ambulation
 - Technology lacking
- Health & well-being of Informal CG & CR are linked

The Role of Human Factors for Formal CGs

- HHC among fastest growing industries
- HHC nurse & aide among top 10 fastest growing jobs
- Shortages & high turnover in workforce, especially aides
 - Contributes to reduced quality of care and increased costs

Formal CGs

- Heterogeneity of workforce leads to different HF experience:
 - Healthcare and social work systems
 - Paraprofessionals vs professionals
 - Low income, many in poverty
 - Many without healthcare coverage
 - Higher percentage racial/ethnic minorities
 - English as a second language
 - Also informal CGs in their own homes
 - Relatively invisible workforce

Formal CGs

- Little research on the role of HF for formal CGs, especially for aides
 - Full spectrum of hazards & their risks not known
- Many HF issues similar to informal CGs
 - But differences not well-understood

Formal CGs

- Formal CGs crucial in event of pandemic flu
 - Yet many not prepared and do not have health insurance
- Health & safety of formal CGs often linked to CR, yet Research tends to focus on CR
 - Overall lost work time disrupts care
 - Musculoskeletal & other injuries, psychosocial stress affect quality of care, medical errors
 - Infectious disease transmission and care

Recommendations: Practice

- Adopt Standard Definition of CG, especially for informal CG
- Create systems to coordinate formal & informal CG
- Update & expand training to account for new technologies, procedures, complexity
- Broaden skill base of paraprofessionals

Recommendations: Research

- Identify the full range of HF stressors for CR and informal & formal CGs
- Identify extent to which CR & CG health & safety are linked in order to develop comprehensive solutions for quality care
- Evaluate HF risks & prioritize for intervention
- Identify, develop, implement and evaluate interventions *with the input of CR and CG*
 - Fast-track internet & technology options with effective HF interface
- Identify effective methods to recruit & retain workforce

Recommendations: Education & Training

- Prepare society for care giving
- Improve training for informal CGs
- Improve training for formal CGs
 - Nurses, physicians, PTs, other clinicians
 - Paraprofessionals in agencies
 - Paraprofessionals hired privately

Recommendations: Policy

- Evaluate federal & state programs that impact HHC
 - Identify their role in human factors
- Health care coverage needed for CGs as well as CR
- Coordinate programs
- Provide improved social support for informal CGs
- Maintain autonomy for formal CGs
- **Preserve & enhance meaningful, dignified caring relationships**

Questions?

- Are there topics related to HF for CRs and CGs that have not been considered?
- What are the main questions the NAS committee should address?
 - Scope of the problem
 - Knowledge gaps
 - Recommendations