

SURVEYING EMS PROVIDERS ON END-OF-LIFE CARE KNOWLEDGE

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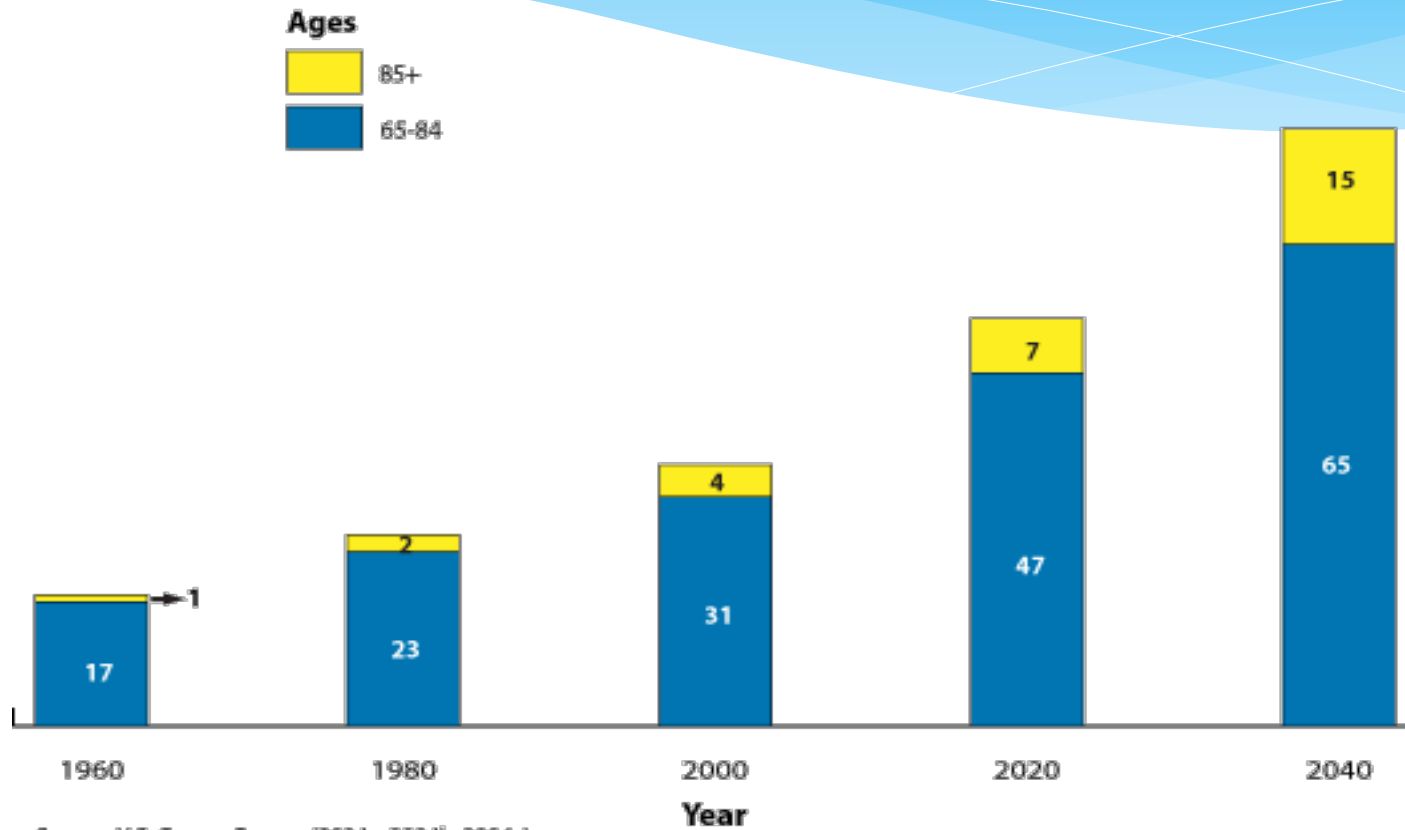
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Introduction

Aging Population

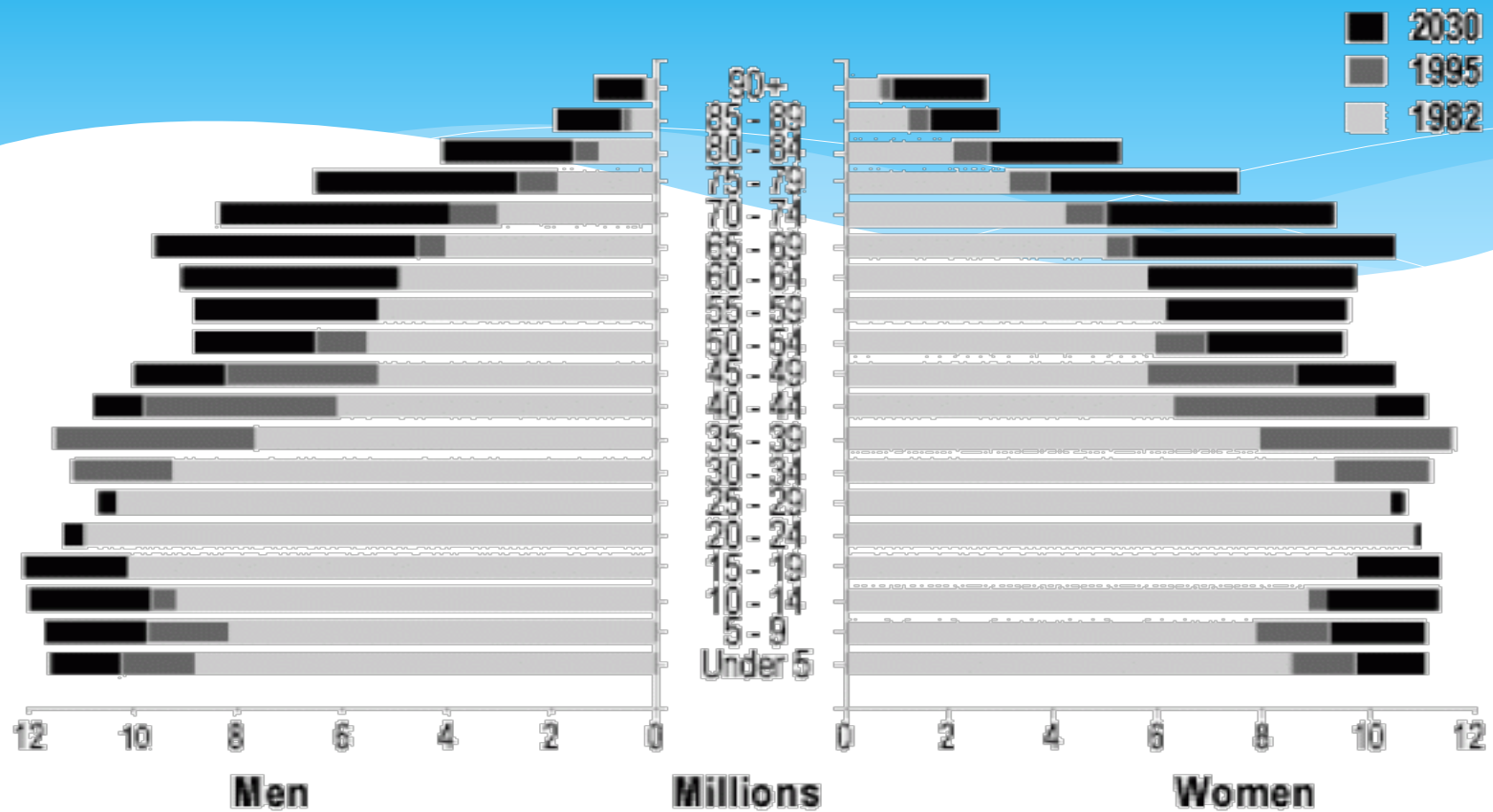
- Opportunities on planning the end of life
 - Of 2007 ED visits made by patients > 75 y.o., 45% arrived by ambulance
- EMS interfaces
 - Ambulance transports of Medicare beneficiaries increased 33%, 2004-2010 (US Govt. Accountability Office)

Number of Older Americans, 1960-2040 (in millions)



Source: U.S. Census Bureau (2004a, 2004b, 2004c).

Figure 3. Expanding Aging U.S. Population



Source: U.S. Census Bureau, Population Projections of the United States by Age, Race, and Hispanic Origin: 1993-2050, P25-1104, 1993

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Survey Question Types

- * 20 total multiple choice questions
- * 2 certifying questions
 - * Level of certification (Georgia)
 - * EMT-Intermediate (being phased out)
 - * EMT-Advanced (new)
 - * EMT-Paramedic
 - * Years of practice at highest certification level
 - * < 1 year
 - * 1-4 years
 - * 5-10 years
 - * >10 years

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Survey Question Types

- * 5 Experiential questions
 - * Never
 - * Once
 - * 2-4 times
 - * More than 4 times

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Survey Question Types

- * Content Questions
 - * 4 “Select all that apply”
 - * 5 Yes vs. No vs. N/A
 - * 1 on interventions
 - * Oxygen
 - * Glucose
 - * Intravenous fluid
 - * Narcotics

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* Survey Question Types

* Content Questions (continued)

- * 1 on understanding of official documents
 - * DNR Order
 - * Living Will
 - * Durable Power of Attorney for Healthcare
 - * Georgia Advanced Directive
- * 2 open-ended qualitative questions

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Survey Process

- * Design lead by EMS fellow & 3 supporting EMS faculty
- * Pilot Study
 - * Performed at municipality fire first response service
 - * 7 providers
 - * Average time to completion: 10 minutes
 - * Reformatting of spacing between questions
 - * Clarity of wording confirmed

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- * Survey Process (continued)
- * Administered to 182 providers at the 4-session quarterly Grady EMS All-Hands meetings
- * On-site collection of forms at the end of each of 4 sessions
- * Original paper data sheets secured

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* Survey Analysis

- * Based at Emory University School of Medicine
 - * Department of Emergency Medicine
 - * Section of Prehospital and Disaster Medicine (designers and on-site administrators of survey)
 - * Center for Injury Control (literature search, question formatting, data storage and tabulation)
 - * Palliative Care Center (statistical and qualitative data analysis)

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* Survey Analysis Strategies

- * Results stratification
 - * By certification levels
 - * EMT-Intermediate (EMT-I) & Advanced EMT (AEMT)
 - * EMT-Paramedic (EMT-P)
 - * By longevity of professional service
 - * Less than 4 years
 - * Greater than 4 years
- * Answers to qualitative questions 6 & 20 analyzed by 4 reviewers who independently formed themes → theme coalescence by independent researcher for analysis

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Qualitative Questions

- * 6) “Did you feel uncomfortable transporting this (hospice) patient?”... “If yes, please list the issue that made you uncomfortable:”
- * 20) “What challenges or difficulties have you had or experienced in dealing with hospice patients?”

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Themes of Qualitative Questions Responses

- * Involved the following parties interfacing EMS crews
 - * Patient
 - * Family members
 - * Guardian
 - * Hospice program personnel
 - * Patient physician

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Themes of Qualitative Questions Responses

- * EMS crew emotional tension
 - * Conflict in traditional mission & its training to save life with the imminent inevitability of death
 - * Tension between traditional therapeutic responses & non-traditional directives contradicting them
 - * Involuntary insertion of providers in involved party disagreements
 - * Empathy with both patient & family members' predicament

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Themes of Qualitative Questions Responses

- * End-of-Life documentation (DNR, DPOAH, living will, advanced directive, etc.)
 - * Lack of uniformity in processing & filing documents (electronic, paper) → inaccessibility to crews
 - * Recognition of documents authenticity & legality
 - * Understanding of functional (EMS-related) meaning of documents
 - * Provisions for contradicting document directives

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Themes of Qualitative Questions Responses

- * Involved party interfaces
 - * Comprehension of circumstances, plans, & related documentation
 - * Reversal of decisions & appropriate documentation of such
 - * Inter-party disagreements about terminal care plans
 - * Contingent courses of action for sudden changes in clinical condition

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Themes of Qualitative Questions Responses

- * Vested interest of EMS management in patient transport for reimbursement
 - * To ED
 - * To other than ED

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* CONCLUSIONS

- * EMS care of those at the end of life increasing
- * EMS providers need clarity of guidance (med directors) & conduct (operations) of this care
- * Our survey will inform curriculum design
- * Organizations concerned with EMS education should contribute to curriculum design and teaching

