Home Health Agency Utilization and Trends in Maryland, 2004-2011

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Maryland Demography

- 23 counties + Baltimore City = 24 jurisdictions
- ~5.9 million residents, 12.5% of the population are 65+
- 14.4% 65+ have 1 disability, and 18.5% 65+ have 2+ disabilities

Source:
- http://quickfacts.census.gov/qfd/states/24000.html
- Hourser A, et al. (September 2012). Across the States 2012: Profiles of Long Term Services and Supports. Public Policy Institute,
Home Health Agency (HHA)

- **Provide post-acute care, including:**
  - Skilled nursing services
  - Home health aides
  - Physical therapy
  - Occupational therapy
  - Medical social services
  - Speech & language therapy etc.

- Patients need physicians referral, and a medical care plan

- Maryland is one of the 18 states that require HHAs to acquire a Certificates of Need (CON)

- **Major payer:**
  - Medicare
  - Private insurers

**HHA Costs**

- **By Visits**
  - 55.1%
  - 18.1%
  - 21.2%

- **Totaled**
  - 93.3%

**Beneficiaries**

- 80%
- ↑10.8% from 2000 to 2009
Objectives

- To understand the changes in HHA utilization, I explored the variations in service patterns by demographic factors, payer source and visit type.

- To understand the scope of services rendered by the current supply of HHAs, I explored the trends and conduct a longitudinal analysis on home health utilization in Maryland as a whole and by jurisdiction.
Methods

- Publically available dataset:
  - HHA Annual Surveys between 2004 to 2011

- Measurements:
  - Visits and clients statewide, and by jurisdiction, payer source, age group and type of service
  - Costs of visits by type of service and longitudinal comparison

- Statistical analysis:
  - SAS Enterprise Guide 4.3 software
  - Multiple linear regression (MLR)
  - P<0.05, significant difference
Statewide HHA Utilization

Clients ↑9.9%  Visits ↑25.7%  Visits/Client ↑15.4%
HHA Utilization by Jurisdiction

- Baltimore City
- Prince George’s County
- Charles County
- Howard County
HHA Utilization by Jurisdiction

Allegany County
The percent of population 65 and over for Maryland is 12.3%.

Map prepared by the Maryland Department of Planning, Projections and Data Analysis / State Data Center, Source: U.S. Census Bureau, 2010 Demographic Profiles, May 2011
Statewide HHA Clients by Payer Source

- **Total # of clients**
  - **Payer source**
    - HMO
    - Medicaid
    - Medicare
    - Other
    - Other government
    - Private Insurance
    - Selfpay

- **Year**
  - 2004
  - 2005
  - 2006
  - 2007
  - 2008
  - 2009
  - 2010
  - 2011

- **Changes**:
  - **↑55.8%**
  - **↑23.5%**
  - **No change**
  - **↓76.8%**
Jurisdiction HHA Clients by Payer Source

Baltimore City

Prince George’s County

Charles County

Howard County
Worcester Medicare clients ↑87.2%, vs State average increase of 23.5%

An average decrease of 1 visit to 65+ clients from 2004 to 2011. p<0.05
2010 Percent of Population Ages 65 and Over for Maryland's Jurisdictions

The percent of population 65 and over for Maryland is 12.3%.

Map prepared by the Maryland Department of Planning, Projections and Data Analysis / State Data Center, Source: U.S. Census Bureau, 2010 Demographic Profiles, May 2011
State HHA Utilization by Service

SN: ↑17.2%
PT: ↑37.2%
OT: ↑47.5%
HH aid: ↓26.7%
Statewide Costs of HHA Services

On average
SN: ↓ $5.18
HH aide: ↓ $4.36
PT: ↓ $4.43
Overall: ↓ $5.18
each year from 2004 to 2011 (p<0.05)
Conclusion

- The overall utilization for HHA services has increased in the Maryland.

- Some jurisdictions such as Allegany has shown growing elderly population and growing HHA clients over the years, which my indicates higher demand for HH services in the future.

- Medicare is still the major payer for HH services. Clients covered by Private Insurance have increased over the years, while HMO clients have decreased.

- The costs of HHA services have decreased overall and by service type.

- Further study is needed to analyze the quality of care of HH services.
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