National Estimate of the cost of Parkinson's Disease Medications 1999-2003

Watherine Anderson, PhD
Uniformed Services University of the Health Sciences

Outline

- Objectives of the study
- Introduction
- Background and Significance
- Methods
- Results
- Conclusions and Discussion
- Questions

Objectives of the study

- Describe the cost of medications for patients with Parkinson's disease at a national and regional level
- Articulate payment sources and amounts for Parkinson's disease medications
- Discuss how demographic characteristics relate to the cost of Parkinson's disease medications

Introduction

- Limited Data
 - One of the most expensive neurological diseases
- No Cure
 - Goal of therapy
 - 5 Categories of treatment

Background and Significance

- In 1900 only 3 million persons in the United States were over the age of 65
- In 2000, 39 million were over 65
- Population estimates for 2030
- Parkinson's has no cure
- Variety of pharmaceutical options

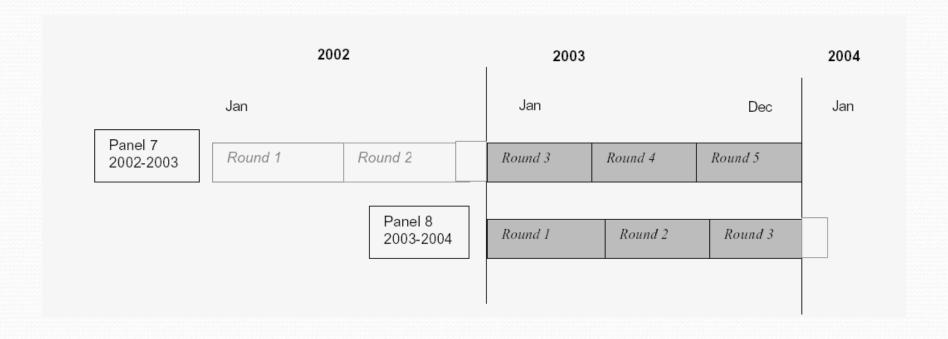
Previous Studies

- Cost Utility Analysis
- Cost Effectiveness Analysis

Methods

- Data Source- Medical Expenditures Panel Survey (MEPS)
 - Population- Civilian, Non-institutionalized
- Software-SAS 9.13
- Merging-Can be used when working with a sample size of less than 100 occurrences in a year
- Weighting- Each person in the survey is assigned a patient weight

MEPS Overlapping Panels: 2003 Annual File



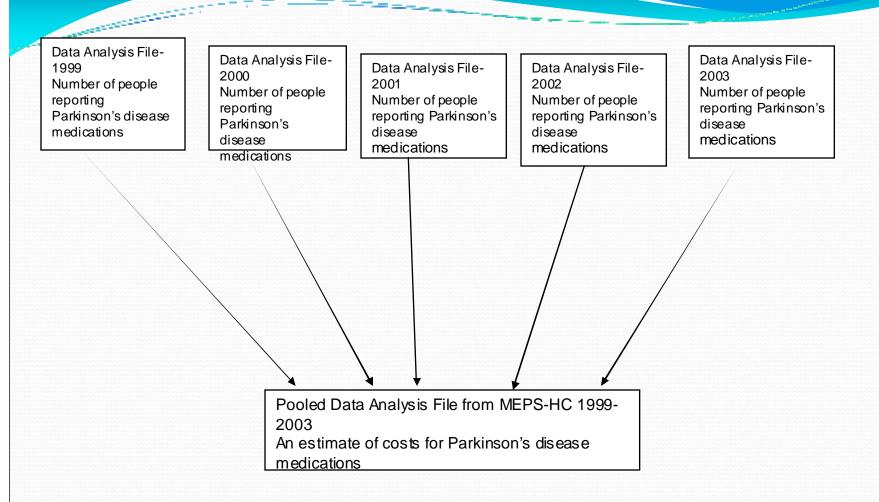


Figure 1. Merge of Five Years of MEPS-HC Data Files for a One-Year Pooled Estimate of Cost of Parkinson's Disease Medications in the United States MEPS Data Files.

Demographics MEPS-HC

Demographic	Unweighted	Unweighted	Weighted	Weighted
	Number	Percent	Number	Percent
Gender				
Male	117	50.3%	287,417	54.7%
Female	116	49.7%	237,737	45.3%
Age				
Under 65	43	18.5%	75,507	14.3%
65-84	156	70.0%	352,233	67.0%
>85	34	14.5%	97,414	18.7%
Education				
< Hi gh School	90	38.6%	157,324	30.0%
≥ High School	143	61.4%	367,830	70.0%
Marital Status				
Married	41	17.6%	74,830	14.2%
Widowed	115	49.3%	277,495	52.8%
Single	77	33.1%	172,829	33.0%
Income				
< \$20,000	164	70.3%	350,861	66.8%
\$20,000-\$29,999	28	12.0%	71,494	13.6%
≥\$30,000	41	17.7%	102,799	19.6%
Region				
Northeast	37	16%	95,170	18.1%
Mid-West	51	22%	118,132	22.5%
South	93	40%	196,153	37.4%
West	52	22%	116,699	22.0%

Source: Agency for Healthcare Research and Quality. Medical Expenditures Panel Survey.

Results at a National Level

- A weighted total of 2.6 million people reported having prescriptions filled for Parkinson's disease between 1999-2003.
- Just over 25 million prescriptions were filled for these patients
- The cost of the prescriptions were approximately \$2 billion dollars

Un-weighted and Weighted Number and Cost of Prescription Medication from the MEPS-HC 1999-2003 for Patients with Parkinson's Disease.

Year	Unweighted Number	Weighted Number	Unweighted Cost	Weighted Cost
1999	330	5,092,013	\$28,087	\$420,603,519
2000	473	4,917,244	\$37,121	\$377,857,783
2001	613	5,301,378	\$49,015	\$398,453,297
2002	514	4,980,544	\$37,912	\$361,345,738
2003	432	4,764,877	\$36,377	\$422,955,793
Overall Total	2,362	25,056,056	\$188,512	\$1,981,216,130

Results at a Regional Level

- Northeast
- Midwest
- South
- West

Payment Sources and Amounts

- Yearly amount by source
- Five year amount by source
- 12 Sources of payment
 - Medicaid
 - Medicare
 - Other Federal
 - Other Private
 - Other Insurance
 - Other Public
 - Private Insurance
 - Self or Family
 - State or Local
 - Tricare
 - Veterans
 - Workers Comp

Source, Annual Amount, and Five Year Totals

Source	1999	2000	2001	2002	2003	Source Total
Medicare	\$20,837,538	\$27,845,067	\$ 22,471,245	\$33,483,500	\$15,715,290	\$120,352,640
Private Insurance	\$94,021,764	\$66,408,511	\$21,545,292	\$59,315,672	\$137,243,216	\$378,534,455
Self/Family	\$279,772104	\$250,990,581	\$334,199,748	\$198,225,922	\$243,957,332	\$1,307,145,687
Veterans	\$25,972,113	\$24,201,701	\$3,418,511	\$61,418,496	\$18,704,018	\$133,714,839
Medicaid	\$0	\$8,411,923	\$16,818,501	\$8,902,148	\$6,726,181	\$40,858,753
Other Private	\$0	\$0	\$0	\$0	\$420,256	\$420,256
Tri-Care	\$0	\$0	\$0	\$0	\$189,500	\$189,500
Total	\$420,603,519	\$377,857,783	\$398,453,297	\$361,345,738	\$422,955,793	\$1,981,216,130

Demographic Characteristics and Statistics

Gender

Age

Marital Status

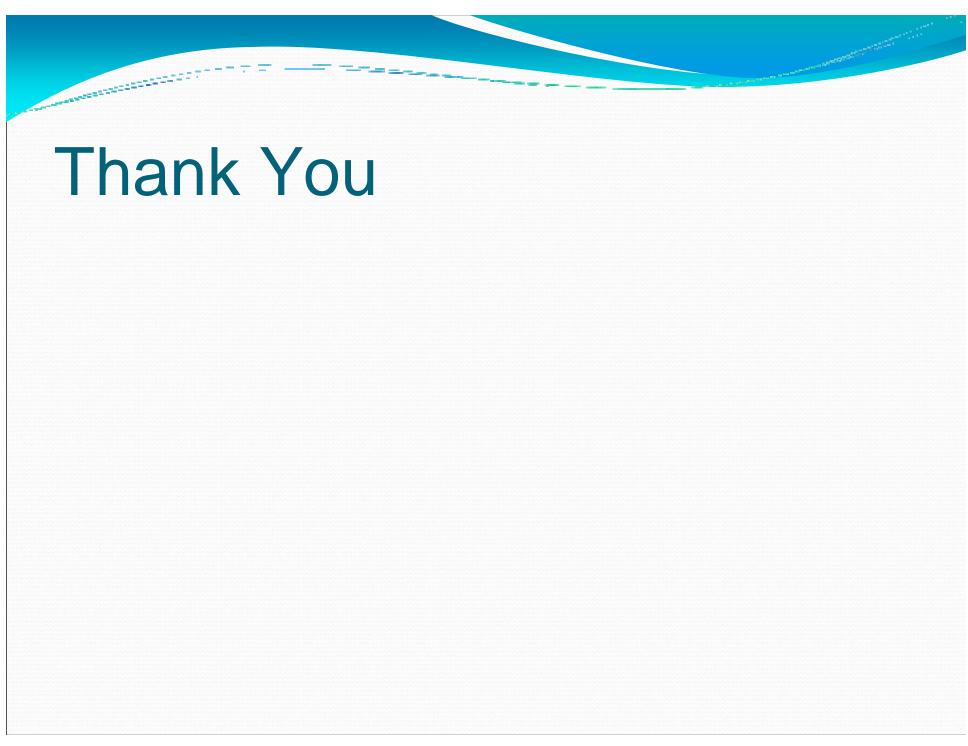
Income

Education Level

Region

Conclusions and Discussion

- What we found and why
- So What?
- Future Studies



Questions

• Katherine Anderson, PhD

Assistant Professor, Uniformed Services University of the Health Sciences

4301 Jones Bridge Road

A-2008

Bethesda, MD 20817

301-295-0112