

Medicare Health Outcomes Survey

Applied Research Center

Report on the Health Status of Medicare Disabled

Cohort I Baseline Data 1998

Prepared by

Health Services Advisory Group

November 30, 2000

TABLE OF CONTENTS

Introduction	1
Methodology	1
Data	2
Significant Findings	4
Tables	
Demographics	5
Chronic Conditions	6
Smoking Behavior	6
Degree of ADL Impairments	7
Number of ADL Impairments	7
Health Status	8
Depression	8
SF-36 [®]	9
Graphs	
Marital Status	10
Racial/Ethnic Distribution	11
Chronic Conditions	12
ADL Impairments	13
General Health	14
Health Transition	15
Health Compared to Peers	16
Depression	17
SF-36 [®]	18

INTRODUCTION

This report presents a comparison of the demographic and health characteristics of the disabled Medicare beneficiaries under age 65 and those beneficiaries over age 65 in the Medicare Health Outcome Survey (HOS) *Cohort I Baseline* measurement. The purpose of this report is to provide a descriptive picture of this disabled population and to identify differences between this group and the larger, elderly Medicare population.

METHODOLOGY

Medicare Health Outcomes Survey Sample Characteristics

In 1998, the Health Care Financing Administration (HCFA) drew a random sample of 1,000 Medicare beneficiaries from each applicable Medicare contract market. In plans with fewer than 1,000 Medicare beneficiaries, the sample included the entire enrolled Medicare population who met the inclusion criteria. The sample frame for the survey comprised the enrolled Medicare membership of a contract market. Institutionalized beneficiaries were eligible for inclusion in the sample frame, as were disabled beneficiaries. Beneficiaries with end-stage renal disease were excluded from the sampling. Specifically, members were eligible for sampling if they meet the following criteria:

- They were Medicare beneficiaries enrolled in a Medicare risk or cost contract with a contract effective date of January 1, 1997, or before.
- They were current health plan members who were continuously enrolled in the health plan for at least six months at the time the sample was drawn by HCFA.
- They were not included in the sample surveyed during the same calendar year for the Consumer Assessment of Health Plans Survey (CAHPS[®]), unless the plan's total Medicare membership was less than 1,600.

The data collection protocol used a combination of mail and phone surveys. The methods included multiple mailings, careful timing, and persistent follow-up of non-respondents for optimal response rates. The complete data collection protocols can be found in the Health Plan Employer Data and Information Set (HEDIS[®]) 1998 Medicare Health Outcomes Survey Manual¹.

¹National Committee for Quality Assurance. *HEDIS[®] 3.0/1998, Volume 6, Health of Seniors Survey Instrument and Protocol for Data Collection*. Washington, D.C. NCQA Publication.

Note: CAHPS[®] is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).
HEDIS[®] is a registered trademark of the National Committee for Quality Assurance (NCQA).

Cohort 1 Baseline

This report utilizes *Cohort 1 Baseline* data. This cohort is comprised of 279,135 Medicare beneficiaries from 269 Medicare + Choice Organizations (M+COs) representing 287 market areas. The total response rate for beneficiaries over the age of 65 was 60 percent (167,238). Of the original sample, 18,864 (5.5 percent) were under the age of 65, and Medicare recorded their reason for entitlement as being disabled. Of this group, 10,513 returned the survey, for a response rate of 56 percent.

DATA

Demographics

(Table 1, Figures 1 and 2)

Disabled beneficiaries are more likely to be male, whereas elderly beneficiaries are more likely to be female. The median age for the disabled group is 57 (range 21-64) and the median age for the elderly group is 73 (range 65-108).

As can be seen in Figure 1, both groups are most likely to be married, but the elderly are more likely to be married than are the disabled. Disabled beneficiaries are more likely to be divorced or never married than are the elderly, while elderly beneficiaries are more likely to be widowed than are the disabled.

Race/Ethnicity is disproportionately represented in the two groups; the proportion of both African Americans and those of Hispanic origin in the disabled population is nearly twice the proportion of these groups in the elderly population. The disparate proportion of ethnic minorities in the disabled population is shown in Figure 2.

A higher proportion of disabled beneficiaries live on incomes below \$20,000 (58% compared to 41% of the elderly). Likewise, more disabled beneficiaries are on Medicaid than are the elderly (13% compared to 3%). Both groups are more likely to own their homes, elderly beneficiaries are more likely than disabled to be homeowners. Disabled beneficiaries are more likely to rent than are the elderly. Interestingly, level of education is similar between the two groups.

Chronic Conditions

(Table 2, Figure 3)

Disabled beneficiaries have more chronic conditions than do the elderly. As seen in Figure 3, disabled beneficiaries are more likely than the elderly to have greater than three co-existing chronic conditions. Table 2 reveals that the most frequently reported condition for

both groups is hypertension, which is reported by over one-half of the beneficiaries in each group. Both groups showed arthritic conditions to be the second and third most frequently reported chronic conditions. Significantly more disabled respondents reported both types of arthritis than their aged counterparts. Disabled beneficiaries are almost twice as likely to report Emphysema/Asthma/COPD or Diabetes than are the elderly. On the other hand, the elderly are more likely to report cancer.

Risk Factors

(Table 3)

Nearly one-half (45%) of the disabled beneficiaries currently smoke, compared to 20% of the elderly beneficiaries. Conversely, 72% of the elderly beneficiaries have quit smoking, as compared to 51% of disabled.

ADL Impairments

(Tables 4 and 5, Figure 4)

Disabled beneficiaries are more impaired on Activities of Daily Living (ADLs) than are the elderly. This is particularly true in those ADLs that would potentially require physical therapy or assistive devices, such as walking, getting in and out of chairs, and bathing. Elderly beneficiaries who are impaired show the highest impairment on walking. As can be seen in Table 5 and Figure 4, disabled beneficiaries are three times as likely to be impaired on three or more ADLs.

Health Status

(Table 6, Figures 5, 6 and 7)

A greater proportion of the disabled group rated their health as fair to poor than did the elderly (68% compared to 28%). Figure 5 shows that general health perception is normally distributed in the elderly population. General health perception also seems to be normally distributed in the disabled population, but appears to be shifted by one category; the disabled beneficiaries perceive their general health to be worse than do the elderly.

Almost twice as many of the disabled rated their health as worse than the previous year (37% compared to 18%). Figure 6 reveals that perception of health compared to one year ago is also normally distributed in both groups.

As seen in Figure 7, the disabled see themselves as more ill compared to their peers than do the elderly.

Depression
(Table 7, Figure 8)

Nearly one-half of the disabled population show some level of depression, as compared to less than one fifth of the elderly. The magnitude of this difference is shown in Figure 8.

SF-36[®]
(Table 8, Figure 9)

Both the disabled and the elderly populations scored below the national norms on all SF-36[®] scales (with the exception of the elderly on the Mental Component Summary score and the Mental Health scale). The disabled consistently scored lower than the elderly, usually by one standard deviation, as is apparent in Figure 9.

SIGNIFICANT FINDINGS

Compared to the elderly (over age 65) Medicare beneficiaries, the disabled (under age 65) Medicare beneficiaries in *Cohort I Baseline*

- have a higher proportion of ethnic minorities
- are more likely to be on Medicaid
- are more likely to have a higher number of co-existing chronic conditions
- are more likely to smoke and less likely to have quit
- are three times more likely to rate their health as fair or poor
- are twice as likely to rate their health as worse than last year
- are more than twice as likely to report depression
- scored one standard deviation lower on all SF-36[®] scales

SF-36[®] is a registered trademark of the Medical Outcomes Trust.

Table 1					
Cohort I Baseline					
Basic Demographics					
Variable	Category	Disabled	Elderly	χ^2 value	P Value
Total		N=10,513	N=167,238		
Age		Median = 57 Range = 21-64	Median = 73 Range = 65-108		
Gender	Male	5,557 (52.9%)	71,029 (42.5%)	435.1	<.001
	Female	4,956 (47.1%)	96,209 (57.5%)		
	Missing/Total	0 / 10,513	0 / 167,238		
Race/Ethnicity	American Indian/Alaskan Native	162 (1.6%)	1,259 (0.8%)	1,266.6	<.001
	Asian/Pacific Islander	72 (0.7%)	2,851 (1.8%)		
	Black/African American	1,410 (13.9%)	10,721 (6.6%)		
	White	7,998 (78.9%)	144,099 (88.7%)		
	Other/Multiracial	495 (4.9%)	3,547 (2.2%)		
	Missing/Total	376 / 10,137	4,761 / 162,477		
	Hispanic Origin	848 (8.3%)	7,752 (4.8%)	246.9	<.001
	Missing/Total	357 / 9,308	6,799 / 152,687		
Marital Status	Married	5,066 (49.0%)	96,085 (58.5%)	8,863.8	<.001
	Divorced	2,432 (23.5%)	13,353 (8.1%)		
	Separated	366 (3.5%)	1,355 (0.8%)		
	Widowed	1,000 (9.7%)	49,185 (30.0%)		
	Never Married	1,473 (14.2%)	4,240 (2.6%)		
	Missing/Total	176 / 10,337	3,020 / 164,218		
Educational Level	8th Grade or Less	1,435 (14.1%)	21,181 (13.0%)	252.5	<.001
	Some High School	1,888 (18.5%)	29,555 (18.2%)		
	High School/GED	3,538 (34.7%)	56,123 (34.5%)		
	Some College	2,443 (23.9%)	33,195 (20.4%)		
	College Graduate	484 (4.7%)	10,885 (6.7%)		
	More than 4 Year Degree	417 (4.1%)	11,656 (7.2%)		
	Missing/Total	308 / 10,205	4,643 / 162,595		
Income Level	Less than \$5,000	577 (5.9%)	5,386 (3.6%)	1,406.0	<.001
	\$5,000 - \$9,999	1,973 (20.0%)	17,552 (11.7%)		
	\$10,000 - \$19,999	3,215 (32.6%)	40,050 (26.8%)		
	\$20,000 - \$29,999	1,590 (16.1%)	28,336 (18.9%)		
	\$30,000 - \$39,999	747 (7.6%)	17,310 (11.6%)		
	\$40,000 - \$49,999	337 (3.4%)	9,365 (6.3%)		
	\$50,000 - \$79,999	254 (2.6%)	8,988 (6.0%)		
	\$80,000 - \$99,999	44 (0.4%)	1,892 (1.3%)		
	\$100,000 or more	27 (0.3%)	2,320 (1.6%)		
	Don't know	1,084 (11.0%)	18,336 (12.3%)		
	Missing/Total	665 / 9,848	17,703 / 149,535		
Medicaid Status	No	9,175 (87.3%)	162,330 (97.1%)	2,797.5	<.001
	Yes	1,338 (12.7%)	4,908 (2.9%)		
	Missing/Total	0 / 10,513	0 / 167,238		
Homeowner Status	Owned/bought by you	5,557 (55.2%)	121,537 (75.9%)	2,196.2	<.001
	Owned/bought by someone else	1,180 (11.7%)	10,564 (6.6%)		
	Rented for money	3,060 (30.4%)	24,960 (15.6%)		
	Not owned and one in which you live without payment or rent	279 (2.8%)	3,127 (2.0%)		
	Missing/Total	437 / 10,076	7,050 / 160,188		

Table 2				
Cohort I Baseline				
Frequency of Chronic Conditions				
Variable	Disabled	Elderly	χ^2 value	P Value
Comorbidity				
Angina Pectoris	2,278 (22.3%)	25,929 (16.0%)	275.9	<.001
Arthritis hand/wrist	4,386 (42.6%)	55,514 (34.1%)	308.2	<.001
Arthritis hip/knee	4,805 (46.6%)	62,013 (38.0%)	302.2	<.001
Cancer	974 (9.4%)	21,770 (13.3%)	129.6	<.001
Diabetes	2,651 (25.7%)	26,700 (16.4%)	602.2	<.001
Emphysema/Asthma/COPD	2,518 (24.6%)	20,259 (12.5%)	1231.1	<.001
Hypertension	5,693 (55.0%)	86,527 (52.9%)	18.0	<.001
Myocardial Infarction	1,636 (16.1%)	16,972 (10.5%)	302.0	<.001
Other heart conditions	2,835 (27.7%)	34,197 (21.1%)	244.2	<.001
Stroke	1,254 (12.2%)	13,160 (8.1%)	212.6	<.001
Number of Chronic Conditions				
No Comorbid Conditions	1,323 (12.7%)	25,131 (15.2%)	1405.7	<.001
One Comorbid Condition	1,679 (16.1%)	38,952 (23.6%)		
Two Comorbid Conditions	1,989 (19.1%)	38,388 (23.3%)		
Three Comorbid Conditions	1,958 (18.8%)	29,044 (17.6%)		
Four-Five Comorbid Conditions	2,439 (23.4%)	26,835 (16.3%)		
Six or More Comorbid Conditions	1,029 (9.9%)	6,734 (4.1%)		

*Percent response is based on those individuals answering the question.

Table 3				
Cohort I Baseline				
Smoking Behavior				
Variable	Disabled	Elderly	χ^2 value	P Value
Ever Smoked 100 Cigarettes*				
Yes	6763 (66.9%)	88919 (56.3%)	435.0	<.001
No	3347 (33.1%)	69019 (43.7%)		
Total	10,110	157,938		
Current Smoking Frequency*				
Every Day	2592 (36.7%)	15125 (15.4%)	2650.4	<.001
Some Days	621 (8.8%)	4088 (4.2%)		
Not at All	3847 (54.5%)	78884 (80.4%)		
Total	7,060	98,097		
Quit Smoking*				
12 Months or Less	351 (10.2%)	2557 (4.0%)	304.3	<.001
More than 12 Months	3099 (89.8%)	61571 (96.0%)		
Total	3,450	64,128		

*Response option of "Don't know" excluded from calculations.

Table 4 Cohort I Baseline Degree of Impairment in Activities of Daily Living					
Activity of Daily Living	Response Category	Disabled	Elderly	χ^2 value	P Value
Difficulty Using Toilet	Unable To Do	252 (2.4%)	2,093 (1.3%)	3282.4	<.001
	Have Difficulty	2,217 (21.5%)	10,765 (6.6%)		
	Do Not Have Difficulty	7,852 (76.1%)	151,360 (92.2%)		
	Missing/Total	192 / 10,321	3,020 / 164,218		
Difficulty Eating	Unable To Do	225 (2.2%)	1,643 (1.0%)	2103.3	<.001
	Have Difficulty	1,475 (14.3%)	7,363 (4.5%)		
	Do Not Have Difficulty	8,587 (83.5%)	154,962 (94.5%)		
	Missing/Total	226 / 10,287	3,270 / 163,968		
Difficulty Bathing	Unable To Do	364 (3.5%)	4,313 (2.6%)	6123.3	<.001
	Have Difficulty	3,776 (36.5%)	17,643 (10.7%)		
	Do Not Have Difficulty	6,195 (59.9%)	142,397 (86.6%)		
	Missing/Total	178 / 10,335	2,885 / 164,353		
Difficulty Getting Out of Chair	Unable To Do	272 (2.6%)	2,406 (1.5%)	4528.0	<.001
	Have Difficulty	5,485 (53.2%)	39,412 (24.0%)		
	Do Not Have Difficulty	4,547 (44.1%)	122,212 (74.5%)		
	Missing/Total	209 / 10,304	3,208 / 164,030		
Difficulty Dressing	Unable To Do	310 (3.0%)	3,035 (1.8%)	6583.4	<.001
	Have Difficulty	3,514 (34.0%)	14,846 (9.0%)		
	Do Not Have Difficulty	6,514 (63.0%)	146,385 (89.1%)		
	Missing/Total	175 / 10,338	2,972 / 164,266		
Difficulty Walking	Unable To Do	714 (6.9%)	4,178 (2.5%)	6254.9	<.001
	Have Difficulty	6,656 (64.5%)	50,354 (30.7%)		
	Do Not Have Difficulty	2,947 (28.6%)	109,540 (66.8%)		
	Missing/Total	196 / 10,317	3,166 / 164,072		

Table 5 Cohort I Baseline Number of Activities of Daily Living Impaired				
Number of ADLs Impaired	Disabled	Elderly	χ^2 value	P Value
0	2,313 (22.2%)	99,580 (60.3%)	8665.0	<.001
1	1,632 (15.7%)	24,235 (14.7%)		
2	1,961 (18.9%)	18,626 (11.3%)		
3	1,195 (11.5%)	7,586 (4.6%)		
4	1,249 (12.0%)	5,828 (3.5%)		
5	1,151 (11.1%)	4,790 (2.9%)		
6	895 (8.6%)	4,424 (2.7%)		

*Percent response is based on those individuals answering at least one ADL question.

Table 6 Cohort I Baseline Health Status Responses					
Variable	Category	Disabled	Elderly	χ^2 value	P Value
General Health Question	Excellent	187 (1.8%)	10,573 (6.4%)	9908.4	<.001
	Very Good	710 (6.8%)	42,212 (25.4%)		
	Good	2,457 (23.6%)	67,487 (40.7%)		
	Fair	4,577 (43.9%)	37,100 (22.4%)		
	Poor	2,501 (24.0%)	8,582 (5.2%)		
	Missing/Total	81 / 10,432	1,284 / 165,954		
Health Transition Question	Much Better	345 (3.3%)	8,208 (4.9%)	2495.1	<.001
	Somewhat Better	1,071 (10.3%)	17,575 (10.6%)		
	About the Same	5,130 (49.1%)	110,138 (66.3%)		
	Somewhat Worse	3,130 (30.0%)	25,620 (15.4%)		
	Much Worse	771 (7.4%)	4,496 (2.7%)		
	Missing/Total	66 / 10,447	1,201 / 166,037		
Health Compared to Peers	Excellent	233 (2.3%)	23,463 (14.3%)	19106.0	<.001
	Very Good	712 (6.9%)	50,860 (30.9%)		
	Good	2,019 (19.5%)	53,667 (32.7%)		
	Fair	4,020 (38.9%)	29,602 (18.0%)		
	Poor	3,344 (32.4%)	6,752 (4.1%)		
	Missing/Total	185 / 10,328	2,894 / 164,344		

Table 7 Cohort I Baseline Percentage Responding Affirmatively to Depression Questions					
Depression Questions		Disabled	Elderly	χ^2 value	P Value
Sad/Blue for 2 weeks	Question 38	5,821 (56.7%)	34,447 (21.1%)	6849.8	<.001
	Missing/Total	247 / 10,266	4,229 / 163,009		
Depressed in past year	Question 39	4,561 (44.6%)	21,828 (13.4%)	7232.6	<.001
	Missing/Total	279 / 10,234	4,443 / 162,795		
Depressed two or more years	Question 40	4,481 (43.8%)	21,706 (13.3%)	6956.7	<.001
	Missing/Total	294 / 10,219	4,641 / 162,597		

Table 8				
Cohort I Baseline				
Mean Normed SF-36® Score				
SF-36® Component	Disabled	Elderly	T (df)	P Value
	Mean (SD)	Mean (SD)		
Physical Component Summary Score	29.7 (11.0)	41.3 (11.9)	93.2 (164,310)	<.001
Mental Component Summary Score	42.7 (13.5)	52.5 (10.0)	90.6 (164,310)	<.001
Physical Functioning Scale	29.2 (12.1)	40.7 (12.9)	89.0 (175,855)	<.001
Role-Physical Scale	33.0 (10.7)	43.2 (12.8)	78.6 (170,621)	<.001
Bodily Pain Scale	34.6 (11.1)	45.0 (11.2)	91.4 (173,821)	<.001
General Health Scale	32.4 (11.0)	45.9 (11.0)	120.3 (173,031)	<.001
Vitality Scale	37.2 (10.6)	47.9 (10.9)	96.8 (173,437)	<.001
Social Functioning Scale	34.9 (12.9)	47.9 (11.8)	108.6 (174,013)	<.001
Role-Emotional Scale	39.9 (13.7)	48.4 (11.4)	71.0 (169,442)	<.001
Mental Health Scale	40.6 (13.2)	51.2 (10.2)	100.5 (173,168)	<.001

Figure 1
Cohort I Baseline
Disabled and Elderly
Marital Status

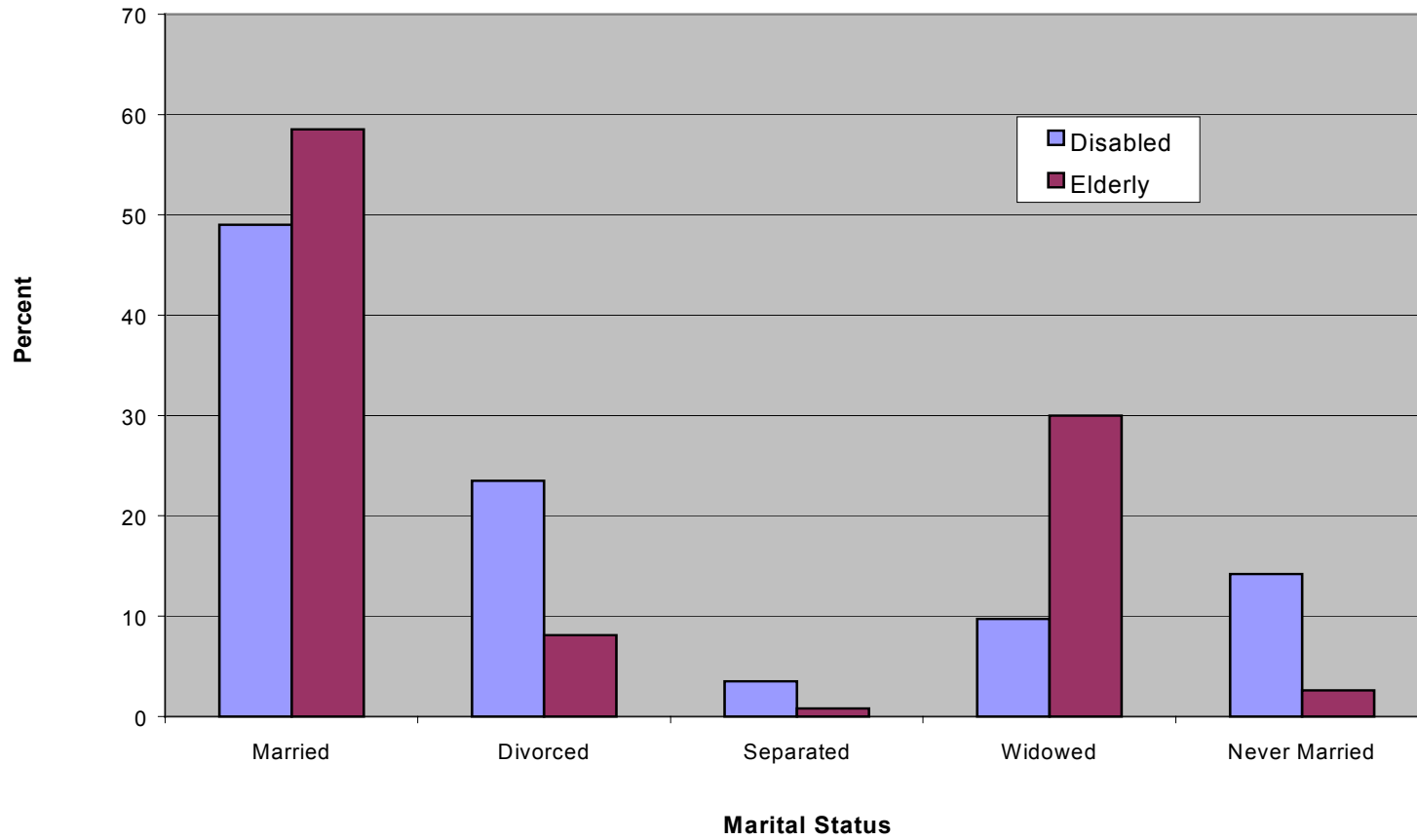


Figure 2
Cohort I Baseline
Disabled and Elderly
Racial/Ethnic Distribution

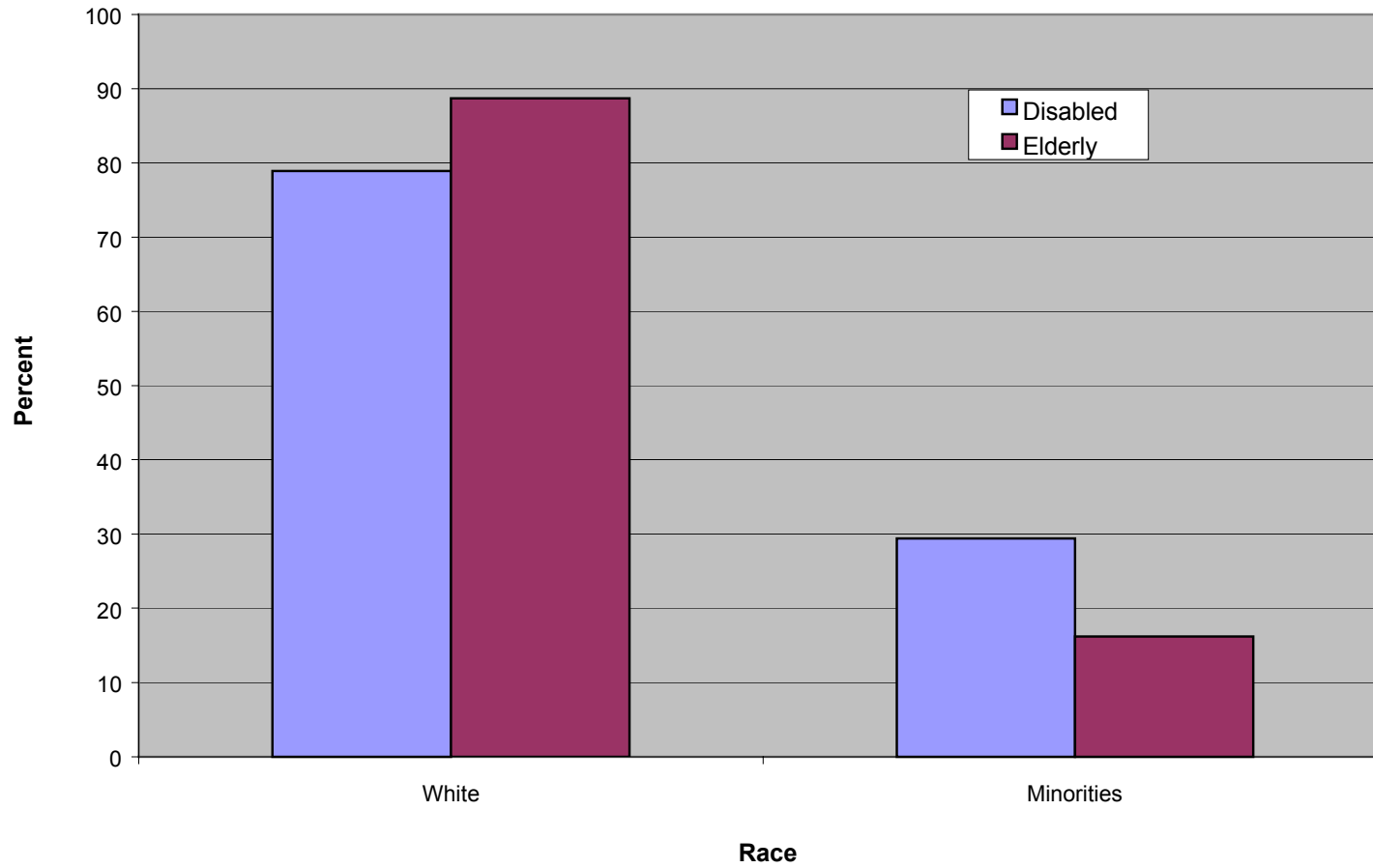


Figure 3
Cohort I Baseline
Disabled and Elderly
Percent of Chronic Conditions

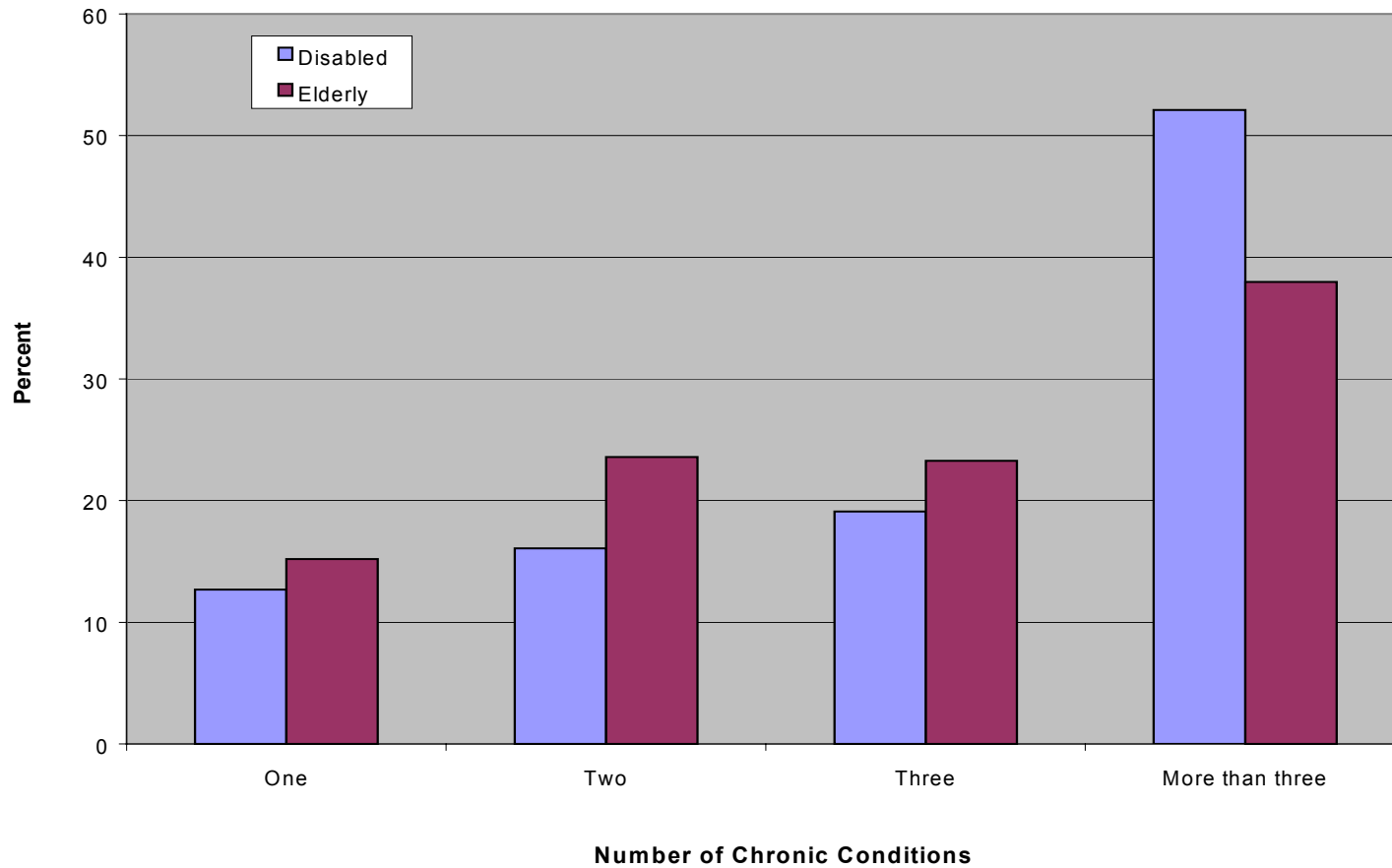


Figure 4
Cohort I Baseline
Disabled and Elderly
Percent with Impaired ADLs

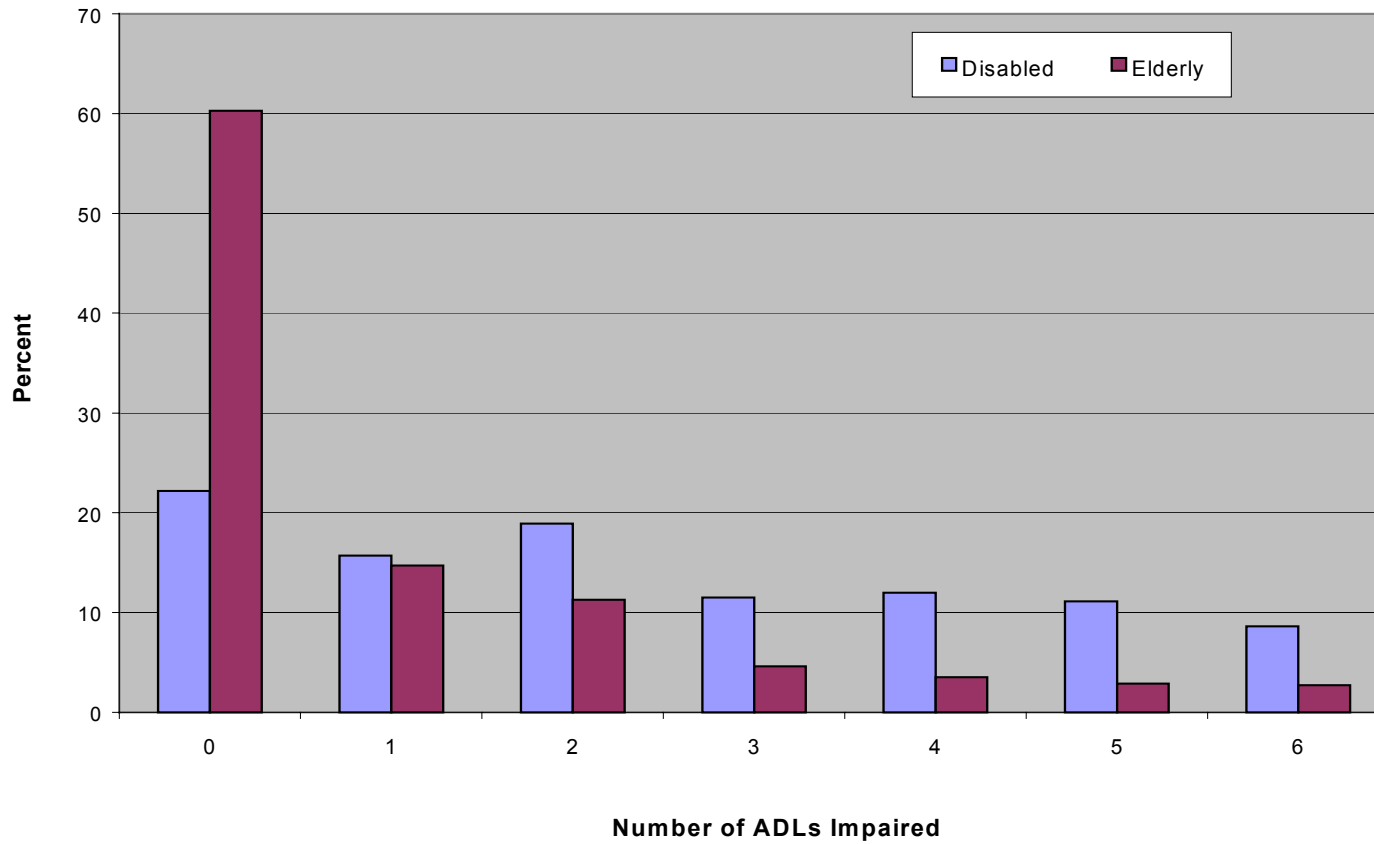


Figure 5
Cohort I Baseline
Disabled and Elderly
In general, would you say your health is:

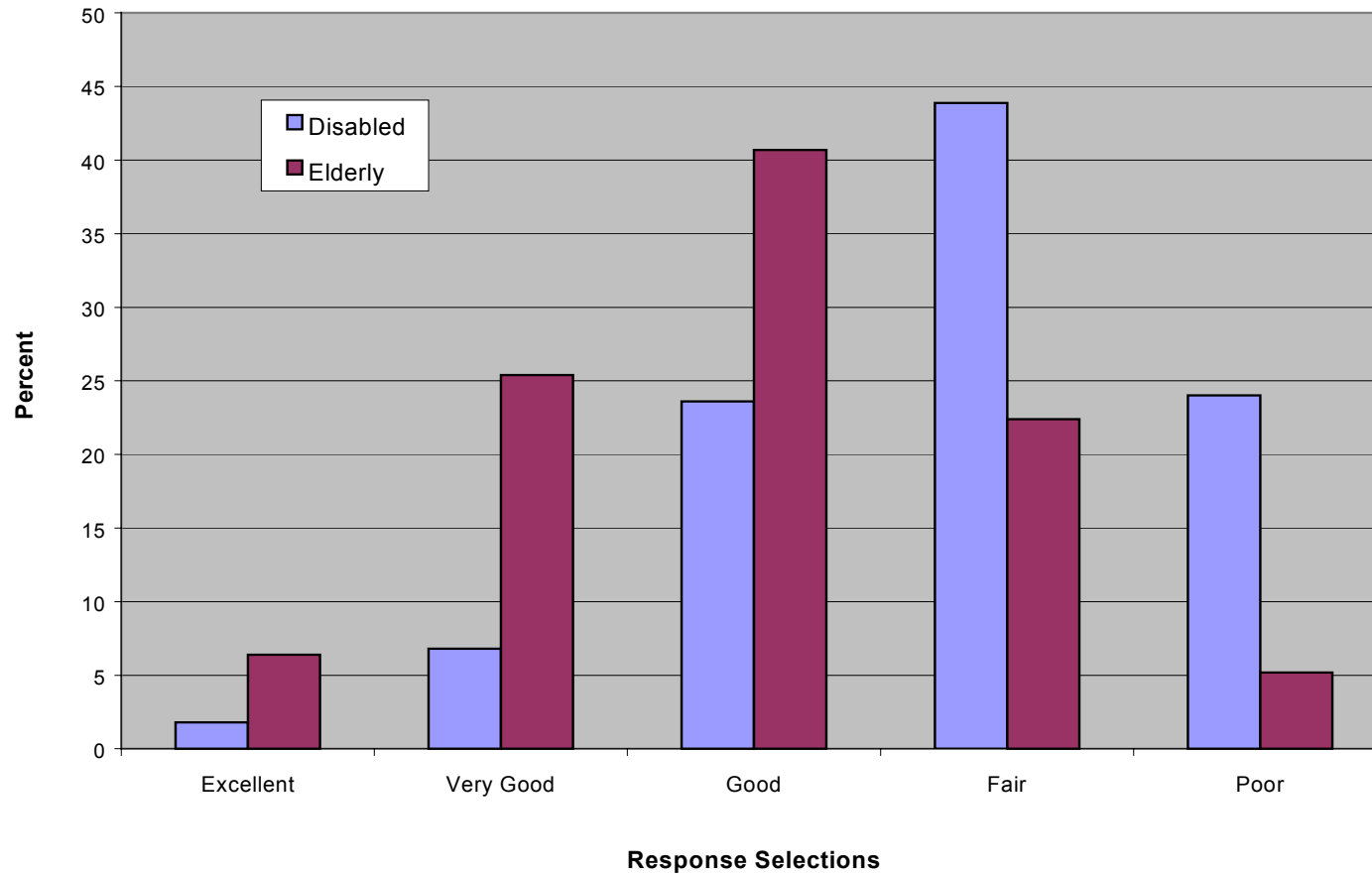


Figure 6
Cohort I Baseline
Disabled and Elderly
Compared to one year ago, how would you rate your health now?

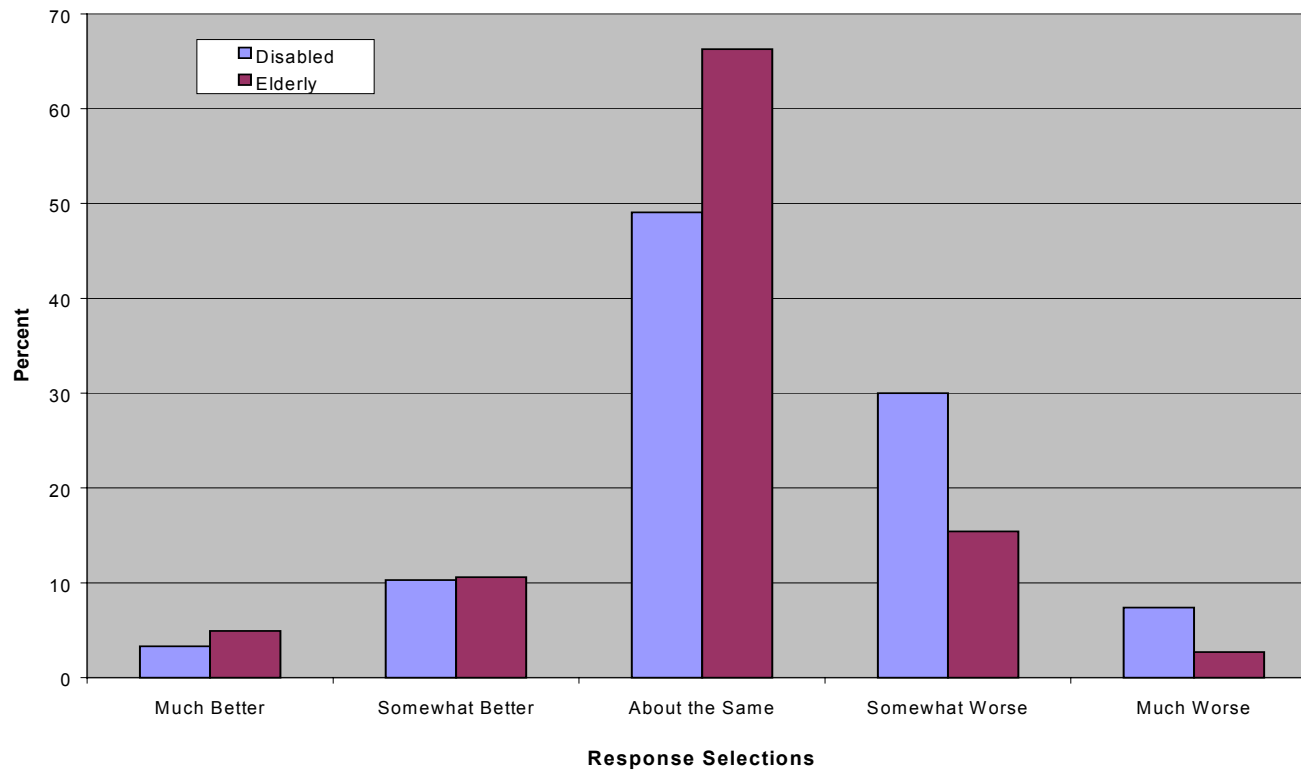


Figure 7
Cohort I Baseline
Disabled and Elderly
In general, compared to other people your age, would you say your health is:

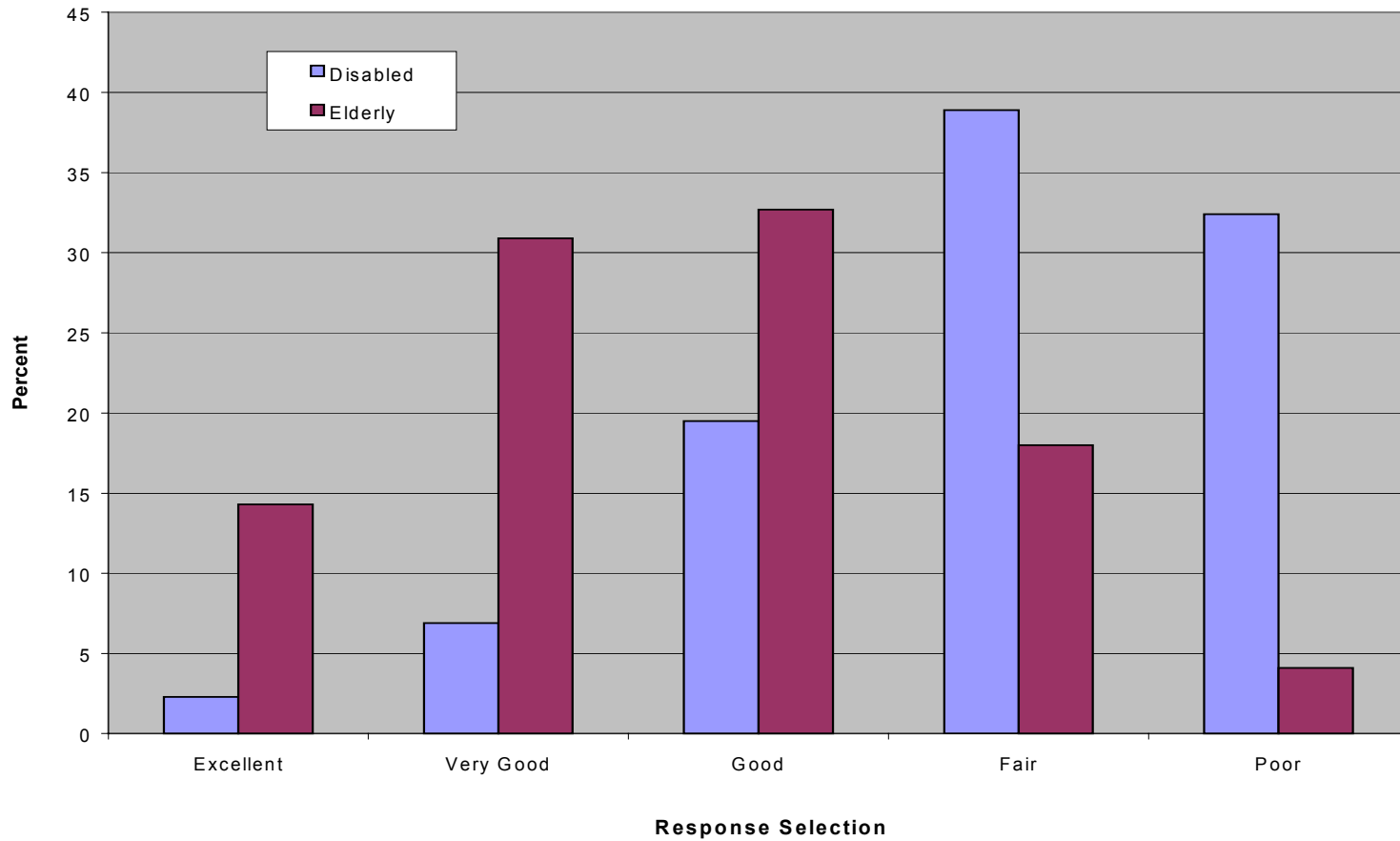


Figure 8
Cohort I Baseline
Disabled and Elderly
Affirmative Responses to Depression Questions

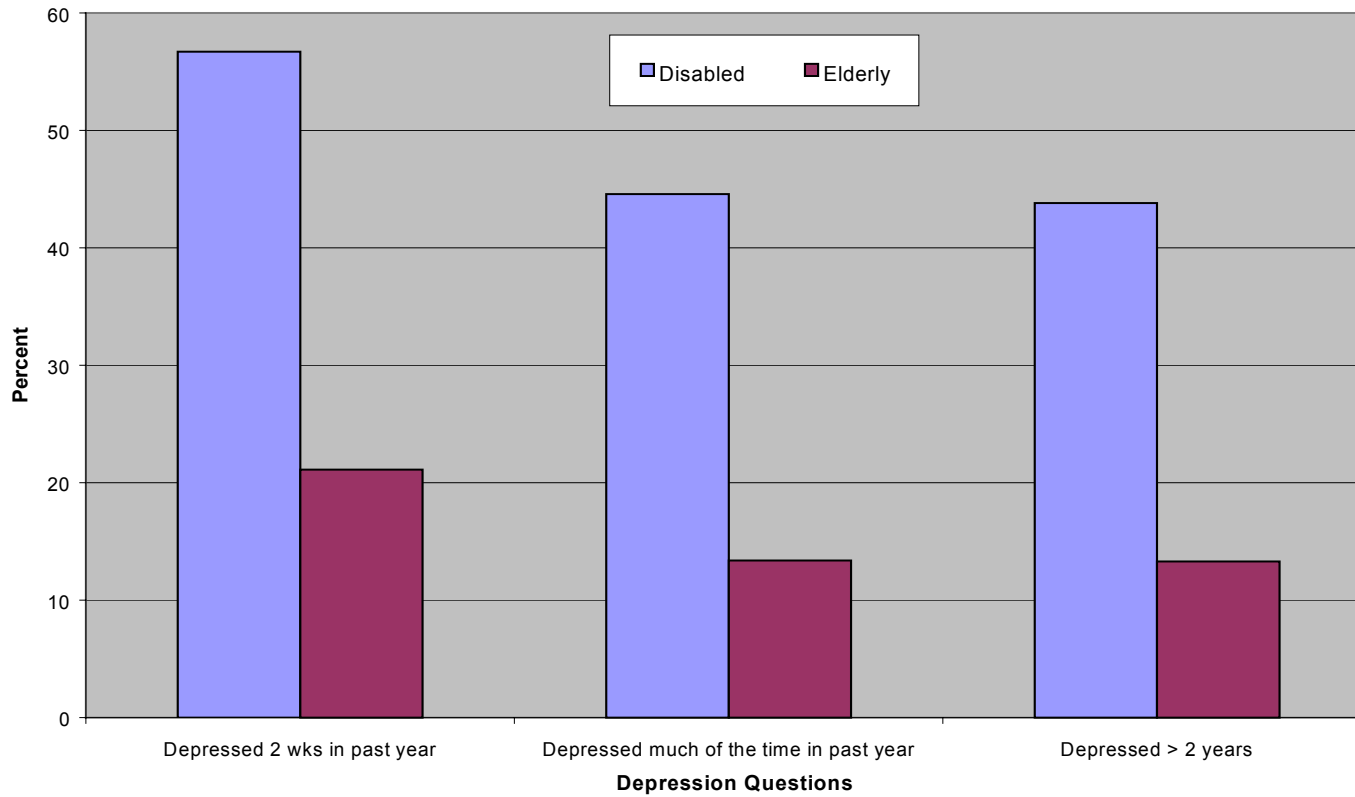


Figure 9
Cohort I Baseline
Disabled and Elderly
Mean Normed SF-36 Scores

