

Vermont Choices for Care



HCBS Provider Case Rate Analysis

The Pacific Health Policy Group
October 2008

HCBS CASE RATE ANALYSIS OVERVIEW

Objectives

- Evaluate efficacy of using Independent Living Assessment (ILA) data to classify HCBS recipients into case rate groups
- Identify ILA elements that correlate positively with higher long term care claim costs
- Determine if there is a sufficient basis to move forward with development of classification methodology and case rate values (or ranges)
- Document the advantages and disadvantages of adopting a case rate system, including as a first step toward development of an integrated delivery model
- Outline next steps in development of case rates, should the state elect to proceed

HCBS CASE RATE ANALYSIS OVERVIEW

Analysis Steps

- 2008 ILA data entered for 1,421 persons (includes new applicants, reassessments and updates)
- July – Dec 2007 claims data matched to ILA records for 1,213 persons and converted to monthly average payment amounts
- Analysis database restricted to reassessments with six months of paid claims data, to improve integrity of results. Final dataset of 880 persons
- Correlation analysis performed to identify ILA items (variables) with a positive relationship to higher claim costs
- Data elements showing moderate or greater correlation are ideal candidates for further analysis to set case rate triggers/ thresholds
- ILA variables with fewer than 10 cases (e.g., syringe feeding) not tested. Other variables with small case counts (i.e., 10 – 50 range) typically show low correlation but in some instances may still be candidates for case rate grouping, as noted in the presentation
- Note – correlation test assumes linear relationship between measured items. Where linearity is not present, correlation test may understate relationship (taken into consideration when making recommendations)

HCBS CASE RATE ANALYSIS

ILA DATA ELEMENTS TESTED

Intake Section

- ✓ Hospitalized past 30 days
- ✓ Hospital stays past year
- ✓ Orientation to time

Emotion/Behavior

- ✓ Wandering
- ✓ Verbally Abusive
- ✓ Physically Abusive
- ✓ Socially Inappropriate
- ✓ Resistive

Cognitive

- ✓ Memory
- ✓ Global Confusion
- ✓ Verbal Communication
- ✓ Daily Decision-making

Health Assessment

- ✓ Diagnoses
- ✓ Infections
- ✓ Problem Conditions
- ✓ Special Care/Treatments

continued...

HCBS CASE RATE ANALYSIS

ILA DATA ELEMENTS TESTED

Health Assessment cont'd

- ✓ Nutrition
- ✓ Pressure/Stasis Ulcers
- ✓ Urinary Incontinence
- ✓ Bowel Incontinence

ADLs/IADLs

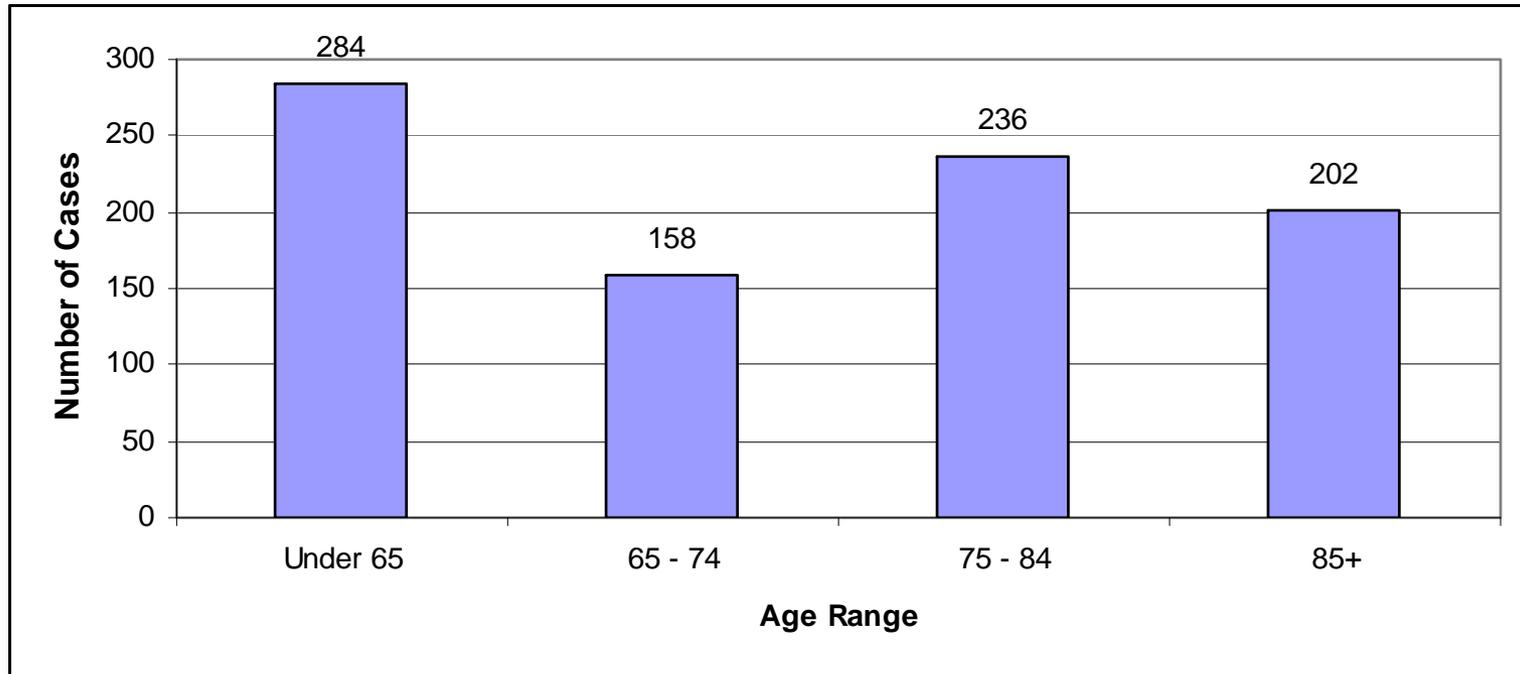
- ✓ Dressing (deficit/support)
- ✓ Bathing
- ✓ Personal Hygiene
- ✓ Bed Mobility

ADLs/IADLs cont'd

- ✓ Toileting
- ✓ Adaptive Devices
- ✓ Transferring
- ✓ Mobility
- ✓ Eating
- ✓ Phone Use
- ✓ Meal Preparation
- ✓ Medication Management

HCBS CASE RATE ANALYSIS

AGE DISTRIBUTION

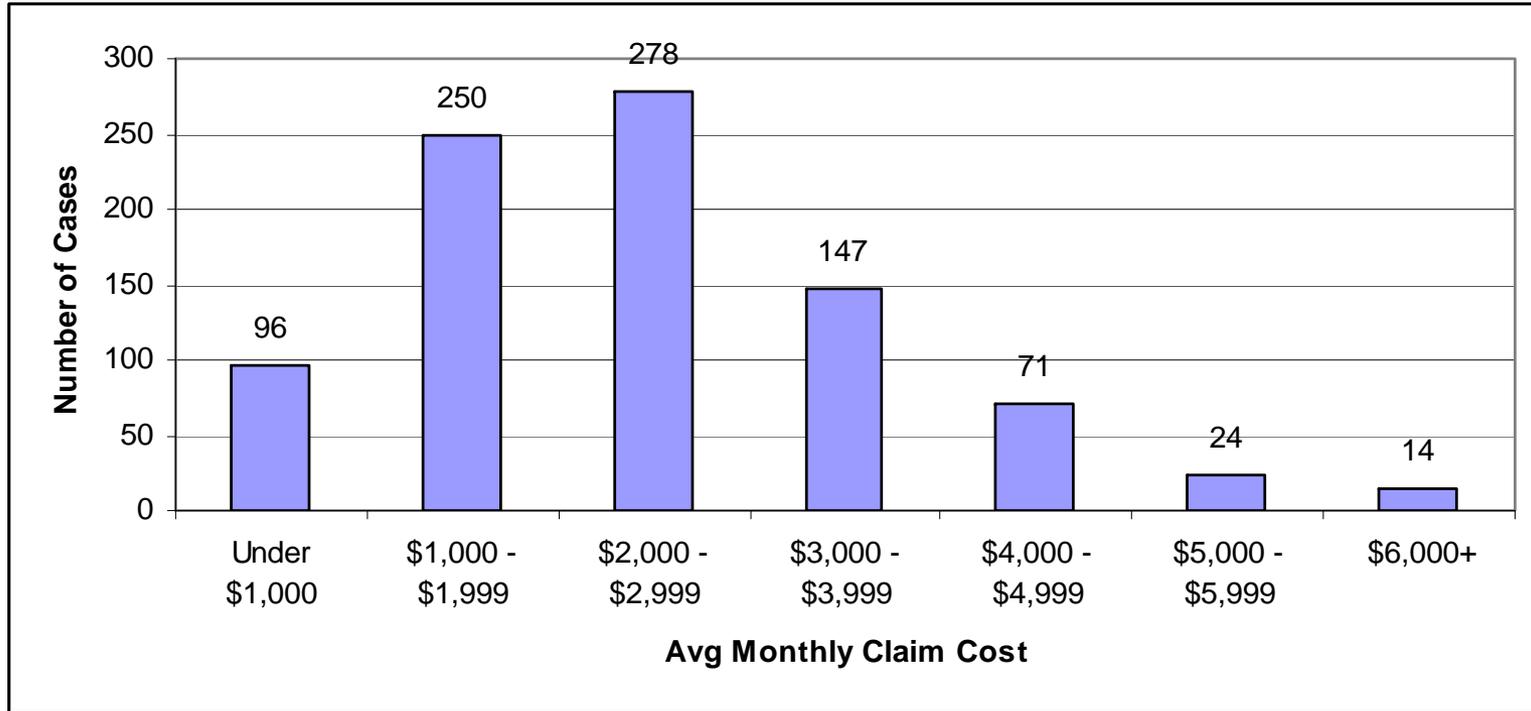


Note: Analysis restricted to reassessment cases with six months of claims data

Youngest	Median Age	Oldest
20	74	102

HCBS CASE RATE ANALYSIS

MONTHLY CLAIM COST DISTRIBUTION



Note: Analysis restricted to reassessment cases with six months of claims data

Lowest	Median Cost	Highest
\$28	\$2,273	\$8,584

HCBS CASE RATE ANALYSIS

CORRELATION: INTAKE (HOSPITAL/ORIENTATION)

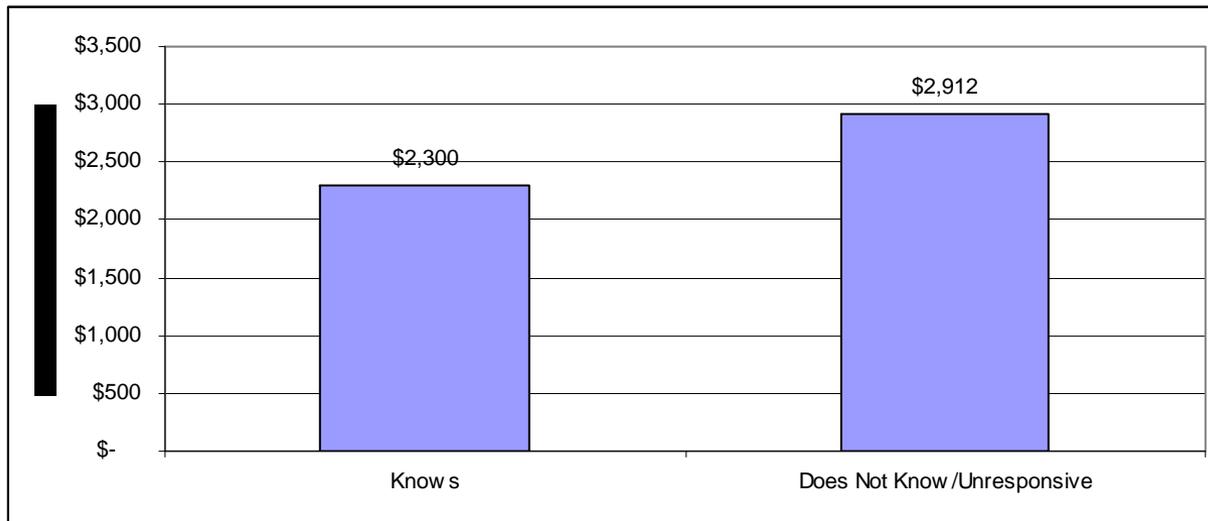
ILA Variable	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Admitted to hospital in past 30 days? (0 – no; 1 - yes)	\$2,525	\$2,252				-.06	None
Times overnight in hospital during past year (0 – none; 1 – 1 time; 2 – 2 or 3 times; 3 – 4+ times)	\$2,577	\$2,475	\$2,138	\$1,874		-.14	None
Orientation – what year is it? (0 – correct response; 1 - incorrect or no response)	\$2,300	\$2,912				.20	Low (sufficient for consideration)
Orientation – what month is it? (0 – correct response; 1 - incorrect or no response)	\$2,371	\$2,679				.10	None
Orientation – what day of week is it? (0 – correct response; 1 - incorrect or no response)	\$2,405	\$2,564				.06	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY ORIENTATION MEASURE

WHAT YEAR IS IT?



HCBS CASE RATE ANALYSIS

CORRELATION: EMOTION/BEHAVIORS

ILA Variable	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Wandering - Frequency (0 – never; 1 – less than daily; 2 - daily)	\$2,450	\$2,453	\$3,176			.09	None (daily may still represent usable trigger)
Wandering – Alterability (0 – behavior not present or easily altered; 1 – behavior not easily altered)	\$2,457	\$3,200				.09	None
Verbally Abusive - Frequency (0 – never; 1 – less than daily; 2 - daily)	\$2,448	\$2,532	\$4,106			.08	None (daily may still represent usable trigger)
Verbally Abusive – Alterability (0 – behavior not present or easily altered; 1 – behavior not easily altered)	\$2,461	\$3,363				.06	None
Physically Abusive - Frequency (0 – never; 1 – less than daily; 2 - daily)	\$2,451	\$3,131	\$3,318			.09	None (daily may still represent usable trigger)
Physically Abusive – Alterability (0 – behavior not present or easily altered; 1 – behavior not easily altered)	\$2,461	\$3,615				.08	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: EMOTION/BEHAVIORS *cont'd*

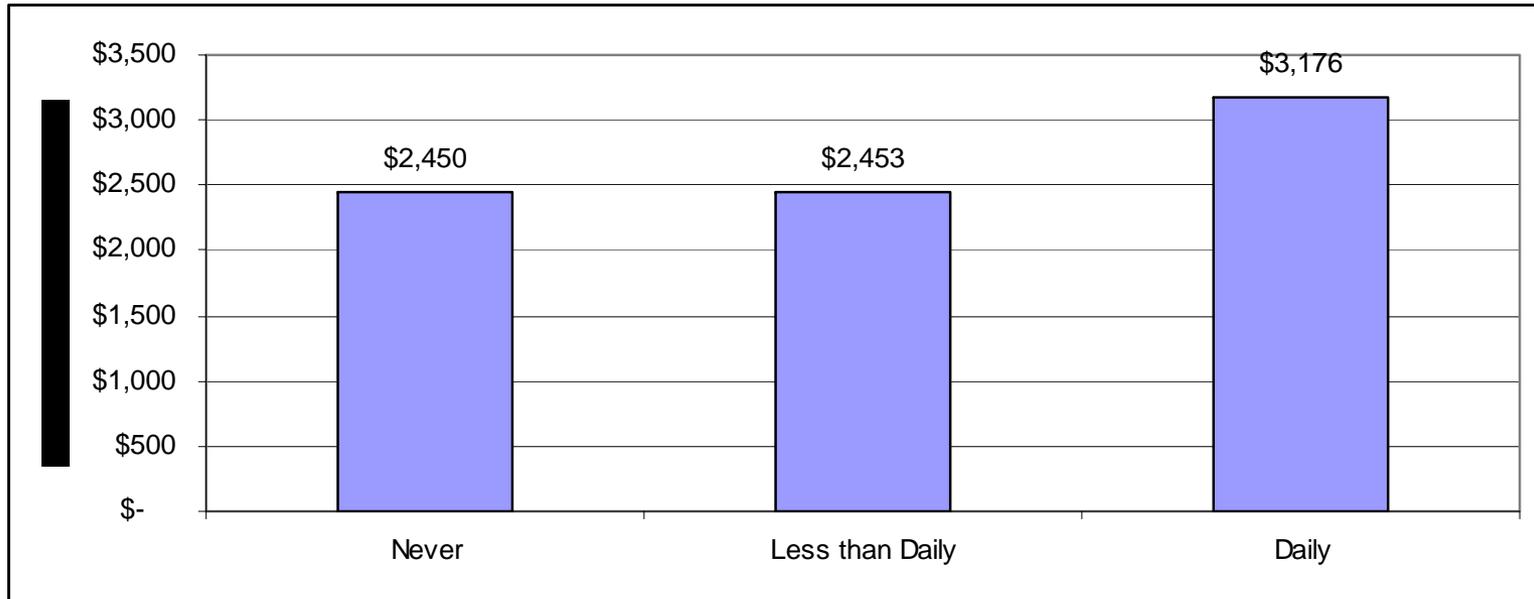
ILA Variable	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Disruptive - Frequency (0 – never; 1 – less than daily; 2 - daily)	\$2,417	\$2,912	\$3,466			.13	None (daily may still represent usable trigger)
Disruptive – Alterability (0 – behavior not present or easily altered; 1 – behavior not easily altered)	\$2,441	\$2,936				.06	None
Resistive - Frequency (0 – never; 1 – less than daily; 2 - daily)	\$3,011	\$2,414	\$2,694			.00	None
Resistive – Alterability (0 – behavior not present or easily altered; 1 – behavior not easily altered)	\$2,449	\$2,681				.04	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY BEHAVIOR FREQUENCY

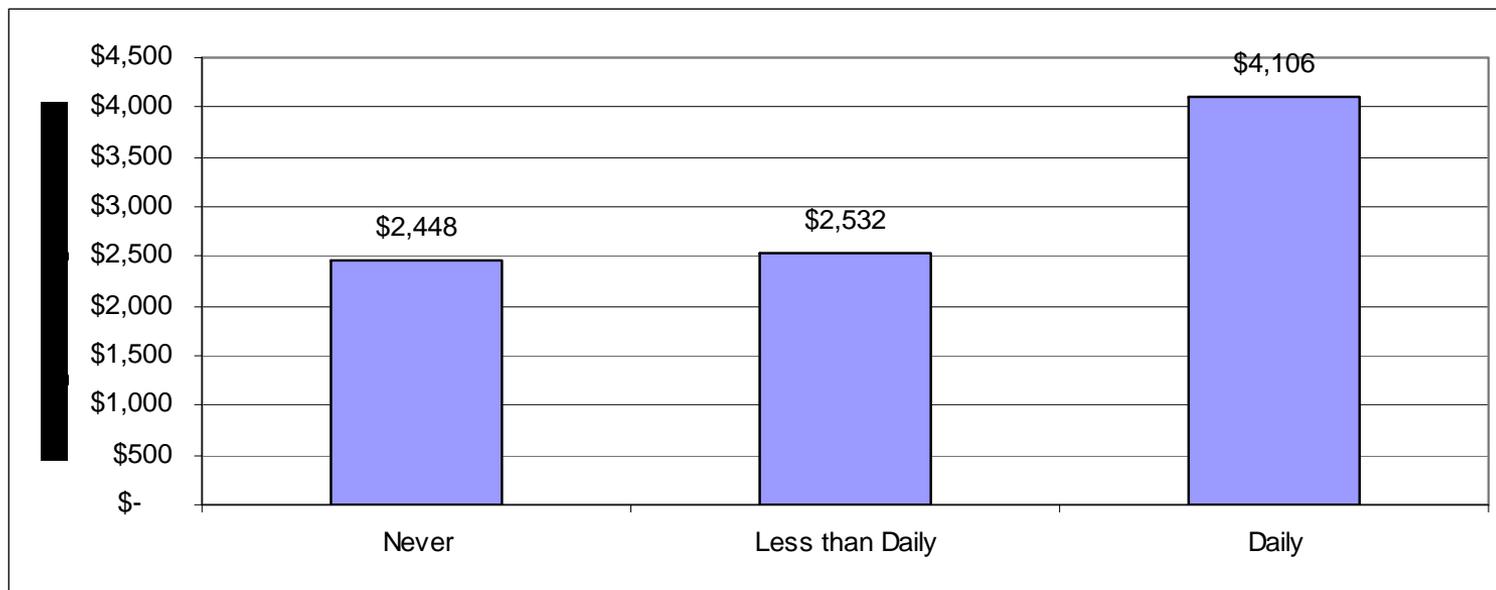
WANDERING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY BEHAVIOR FREQUENCY

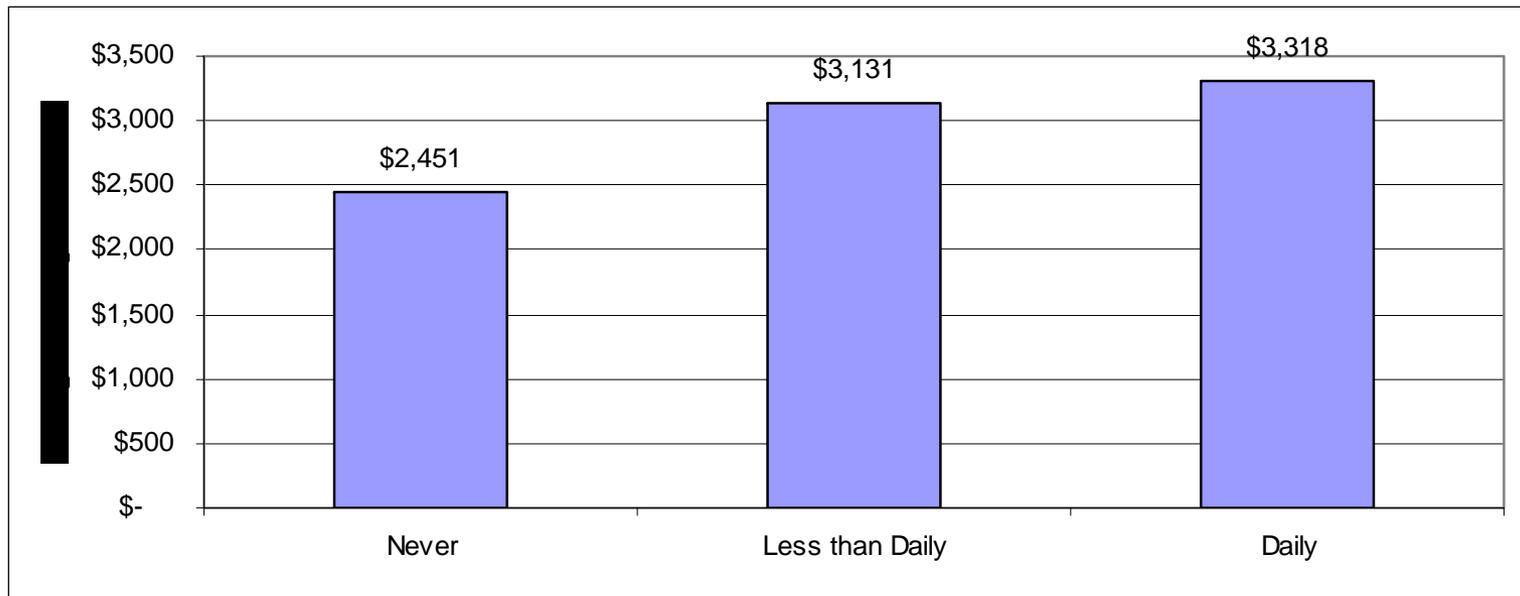
VERBALLY ABUSIVE



HCBS CASE RATE ANALYSIS

AVERAGE COST BY BEHAVIOR FREQUENCY

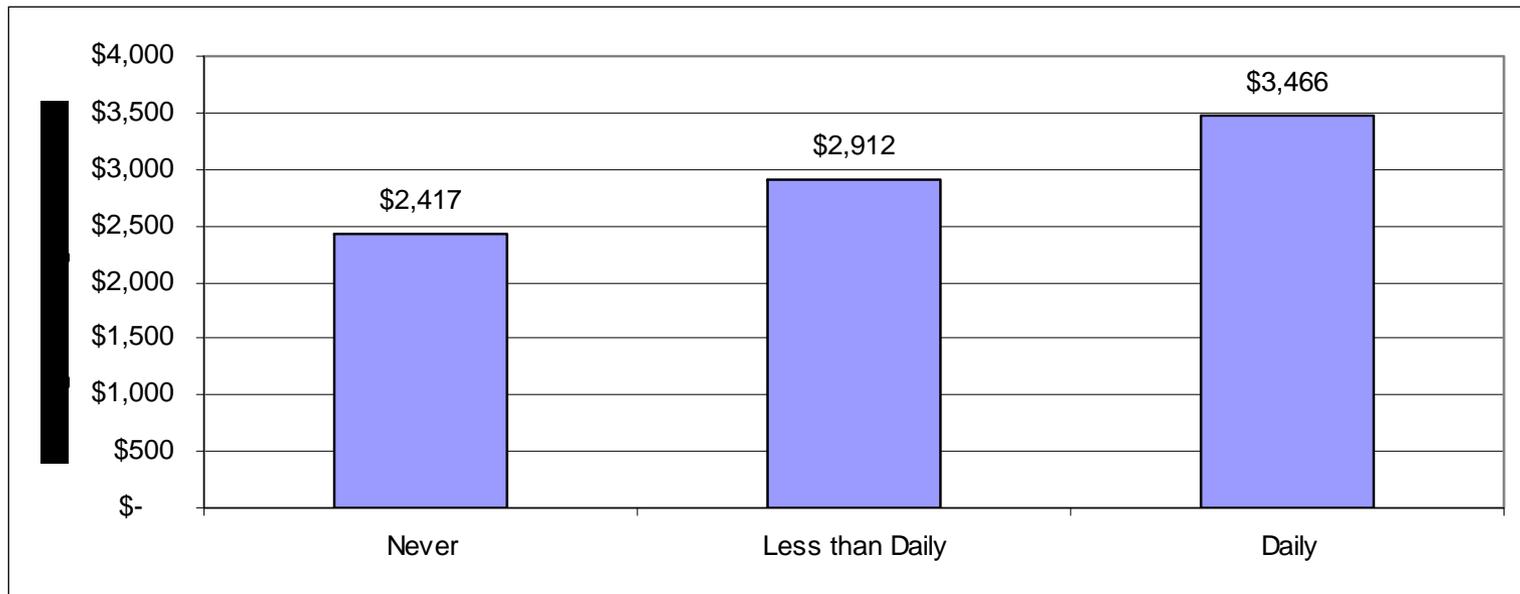
PHYSICALLY ABUSIVE



HCBS CASE RATE ANALYSIS

AVERAGE COST BY BEHAVIOR FREQUENCY

SOCIALLY INAPPROPRIATE/DISRUPTIVE



HCBS CASE RATE ANALYSIS

CORRELATION: COGNITIVE

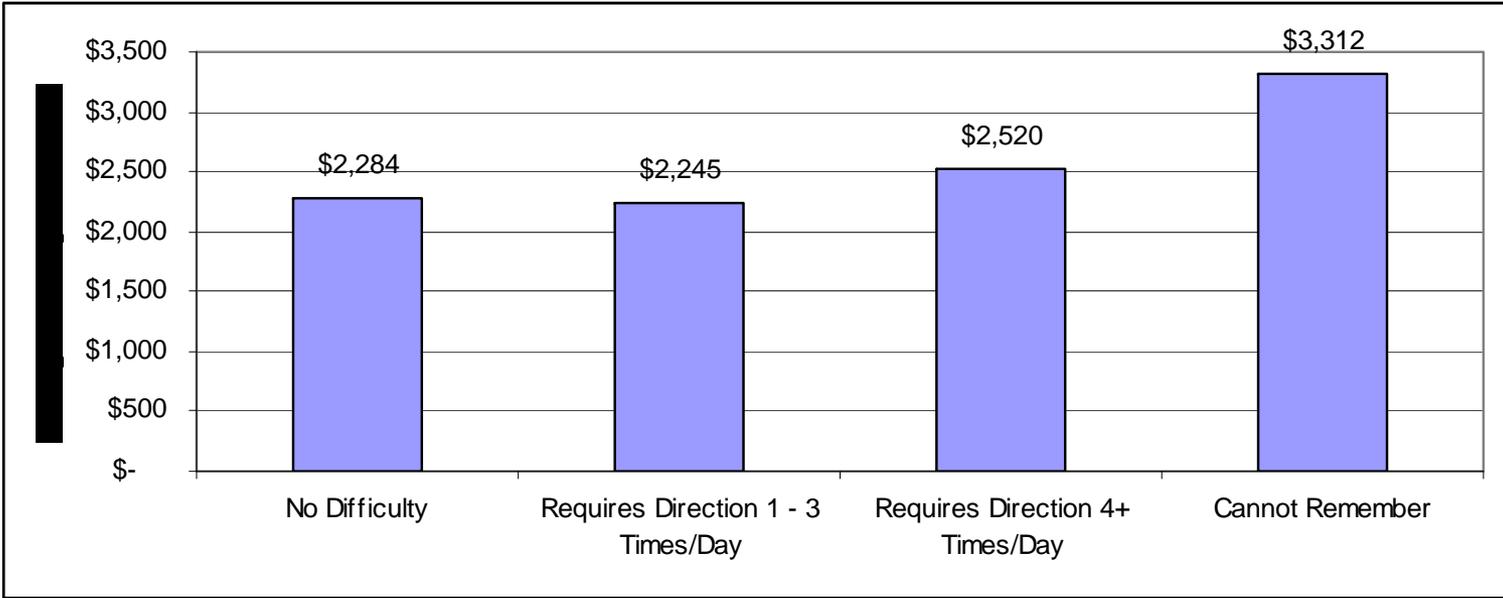
ILA Variable	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Memory & Information Use (0 – no difficulty; 1 – minimal difficulty; 2 – difficulty remembering/using information; 3 – cannot remember/use information)	\$2,284	\$2,245	\$2,520	\$3,312		.23	Low (sufficient for consideration)
Global Confusion (0 – appropriately responsive; 1 – confusion on awakening; 2 – daytime confusion; 3 – nearly always confused)	\$2,295	\$2,391	\$2,564	\$3,384		.23	Low (sufficient for consideration)
Verbal Communication (0 – normal; 1 – minor difficulty; 2 – simple conversations; 3 – unable to speak or make needs known)	\$2,227	\$2,416	\$3,090	\$3,385		.28	Low (sufficient for consideration)
Cognitive Skills for Decision-making (0 – independent; 1 – modified independence; 2 – moderately impaired; 3 – severely impaired)	\$2,309	\$2,272	\$2,479	\$3,125		.20	Low (sufficient for consideration)

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY COGNITIVE MEASURE

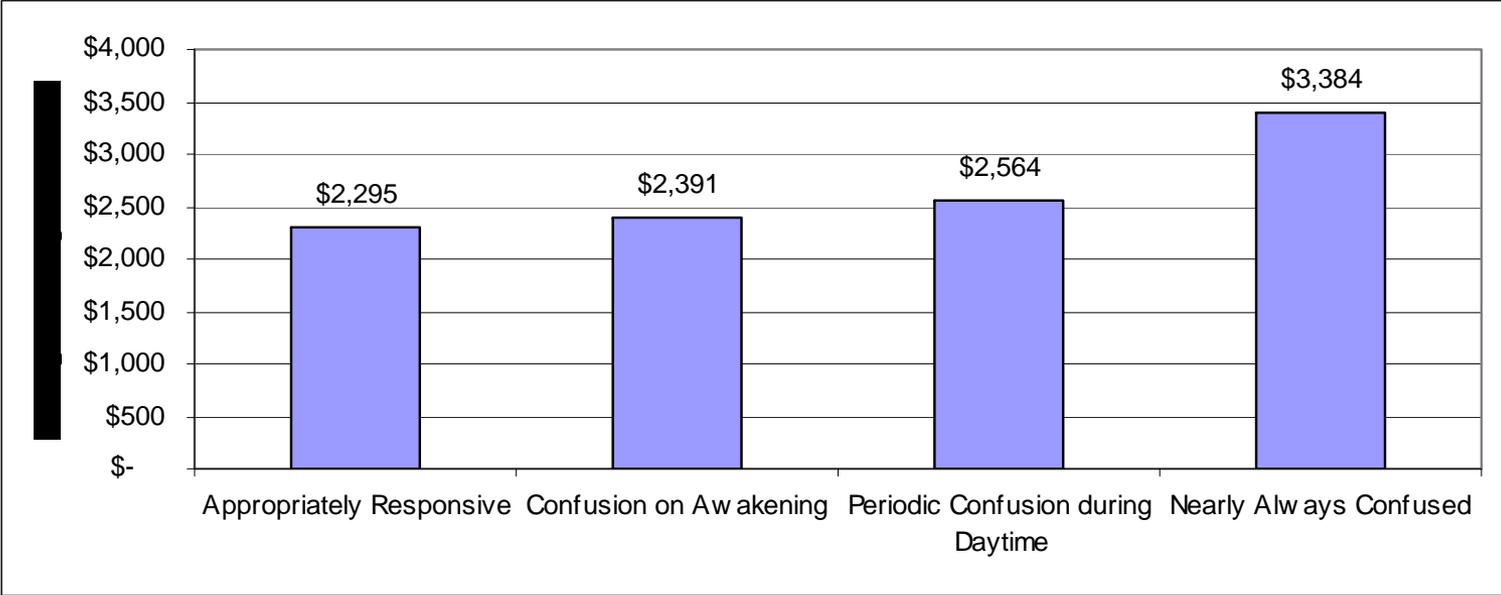
MEMORY AND INFORMATION USE



HCBS CASE RATE ANALYSIS

AVERAGE COST BY COGNITIVE MEASURE

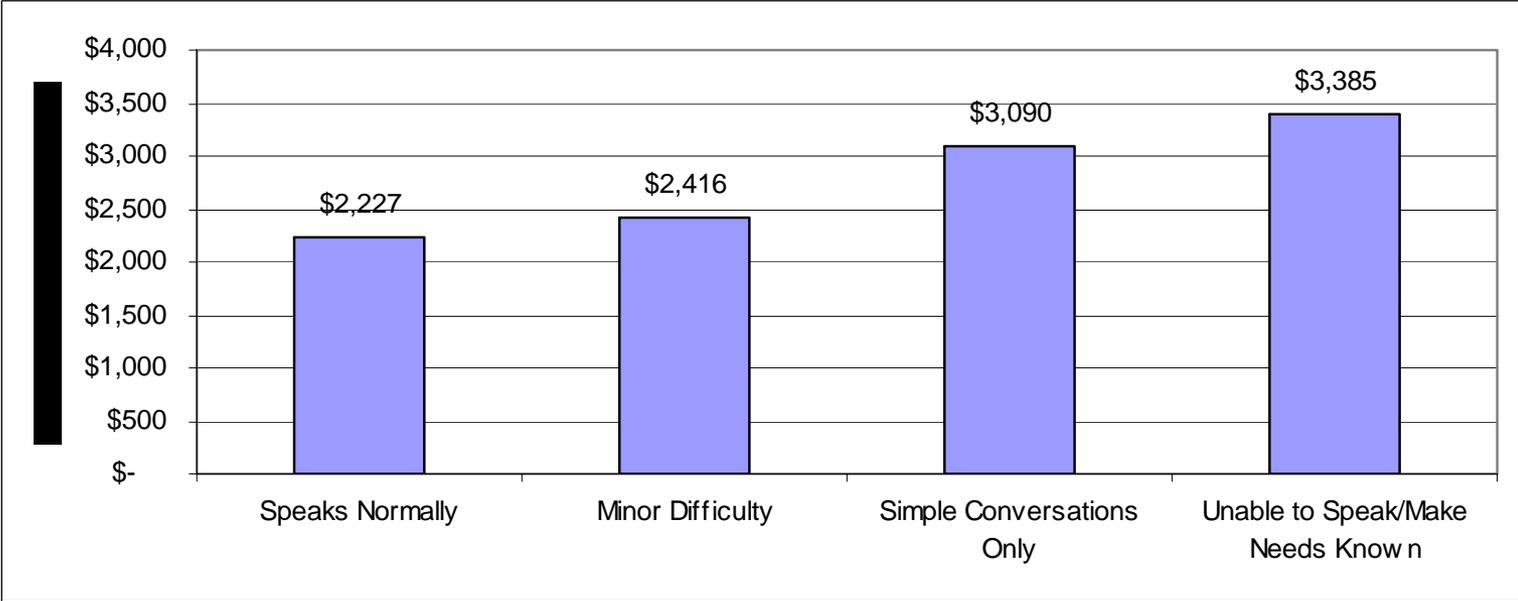
GLOBAL CONFUSION



HCBS CASE RATE ANALYSIS

AVERAGE COST BY COGNITIVE MEASURE

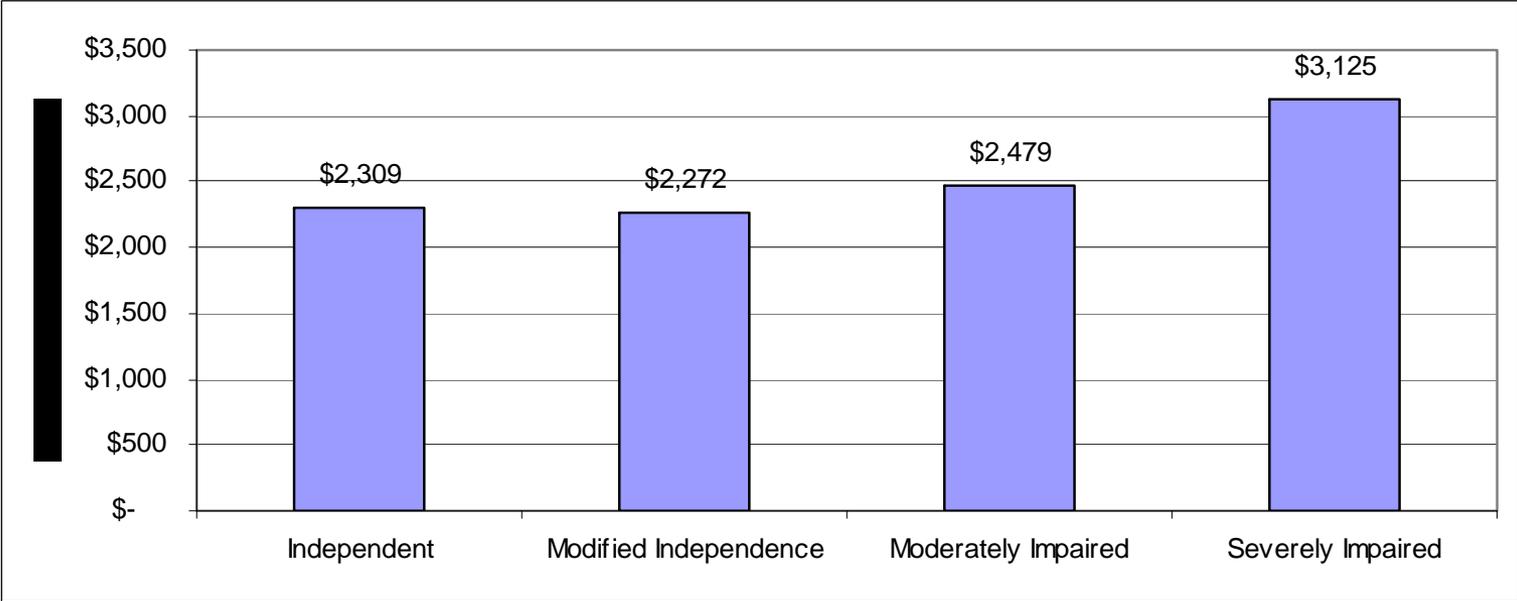
VERBAL COMMUNICATION



HCBS CASE RATE ANALYSIS

AVERAGE COST BY COGNITIVE MEASURE

COGNITIVE SKILLS FOR DECISION MAKING



HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Diabetes Mellitus (324 cases)	\$2,569	\$2,320				-.09	None
Hyperthyroidism (10 cases)	\$2,476	\$2,618				.01	None
Hypothyroidism (118 cases)	\$2,495	\$2,364				-.03	None
Arteriosclerotic Heart Disease (196 cases)	\$2,497	\$2,408				-.03	None
Congestive Heart Failure (180 cases)	\$2,489	\$2,434				-.02	None
Deep Vein Thrombosis (28 cases)	\$2,479	\$2,446				.00	None
Hypertension (477 cases)	\$2,609	\$2,366				-.09	None
Hypotension (41 cases)	\$2,491	\$2,196				-.05	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Peripheral Vascular Disease (169 cases)	\$2,473	\$2,497				.01	None
Other Cardiovascular Disease (94 cases)	\$2,478	\$2,475				.00	None
Arthritis (514 cases)	\$2,592	\$2,396				-.07	None
Hip Fracture (47 cases)	\$2,491	\$2,248				-.04	None
Missing Limb (28 cases)	\$2,476	\$2,537				.01	None
Osteoporosis (167 cases)	\$2,514	\$2,320				-.06	None
Pathological Bone Fracture (36 cases)	\$2,488	\$2,227				-.04	None
Alzheimer's Disease (68 cases)	\$2,464	\$2,644				.04	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Aphasia (33 cases)	\$2,450	\$3,191				.11	None
Cerebral Palsy (36 cases)	\$2,444	\$3,253				.12	None
CVA/Stroke (181 cases)	\$2,426	\$2,678				.08	None
Dementia, non-Alzheimer's (155 cases)	\$2,399	\$2,843				.13	None
Hemiplegia/Hemiparesis (140 cases)	\$2,402	\$2,878				.13	None
Multiple Sclerosis (44 cases)	\$2,480	\$2,425				-.01	None
Paraplegia (30 cases)	\$2,472	\$2,635				.02	None
Parkinson's Disease (48 cases)	\$2,455	\$2,871				.07	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

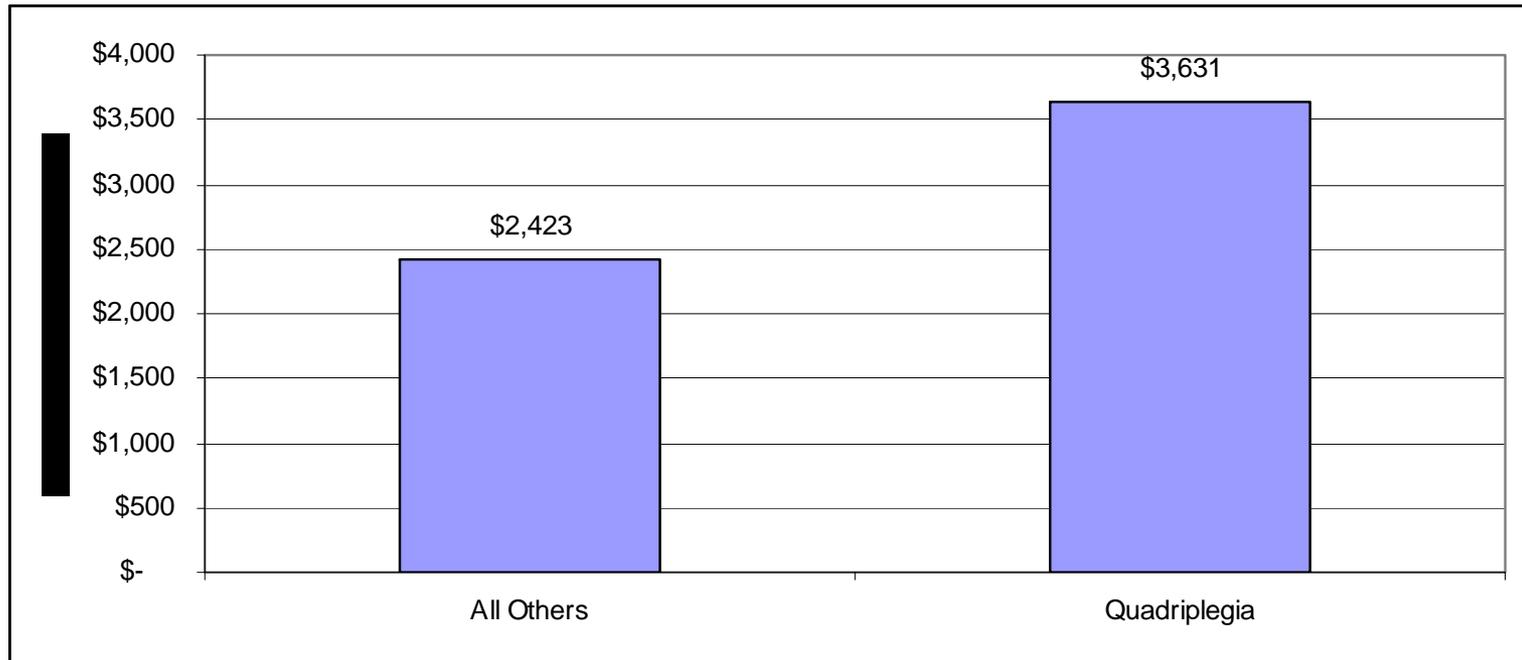
ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Quadriplegia (40 cases)	\$2,423	\$3,631				.19	"Low" (sufficient for consideration)
Seizure Disorder (84 cases)	\$2,453	\$2,706				.06	None
Transient Ischemic Attack (77 cases)	\$2,476	\$2,498				.00	None
TBI (24 cases)	\$2,467	\$2,851				.05	None
Anxiety Disorder (313 cases)	\$2,528	\$2,386				-.05	None
Depression (417 cases)	\$2,451	\$2,507				.02	None
Manic Depressive/Bi-Polar (18 cases)	\$2,483	\$2,204				-.03	None
Schizophrenia (12 cases)	\$2,469	\$3,122				.06	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY DIAGNOSIS

QUADRIPLÉGIA



HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Asthma (105 cases)	\$2,488	\$2,398				-.02	None
Emphysema/COPD (193 cases)	\$2,537	\$2,267				-.08	None
Cataracts (197 cases)	\$2,497	\$2,410				-.03	None
Diabetic Retinopathy (46 cases)	\$2,487	\$2,308				-.03	None
Glaucoma (53 cases)	\$2,480	\$2,437				-.01	None
Macular Degeneration (417 cases)	\$2,481	\$2,422				-.01	None
Allergies (362 cases)	\$2,456	\$2,509				.02	None
Anemia (100 cases)	\$2,519	\$2,156				-.09	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Cancer (111 cases)	\$2,488	\$2,403				-.02	None
Renal Failure (71 cases)	\$2,514	\$2,063				-.09	None
INFECTIONS							
Antibiotic Resistant Condition (21 cases)	\$2,482	\$2,308				-.02	None
Pneumonia (44 cases)	\$2,483	\$2,365				-.02	None
Respiratory Infection (56 cases)	\$2,462	\$2,704				.04	None
Urinary Tract Infection - past 30 days (89 cases)	\$2,438	\$2,830				.09	None
Wound Infection (30 cases)	\$2,479	\$2,433				.00	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: DIAGNOSES *cont'd*

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
<i>PROBLEM CONDITIONS</i>							
Dehydration (42 cases)	\$2,479	\$2,456				.00	None
Edema (417 cases)	\$2,532	\$2,417				-.04	None
Fever (34 cases)	\$2,471	\$2,651				.03	None
Recurrent Lung Aspirations (12 cases)	\$2,474	\$2,698				.02	None
Syncope (19 cases)	\$2,470	\$2,817				.04	None
Unsteady Gait (635 cases)	\$2,866	\$2,328				-.18	None
Vomiting (28 cases)	\$2,479	\$2,445				.00	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: SPECIAL CARE/TREATMENTS

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Dialysis (26 cases)	\$2,495	\$1,896				-.08	None
IV Meds (17 cases)	\$2,491	\$1,770				-.07	None
Intake/Output (19 cases)	\$2,473	\$2,676				.02	None
Monitor Acute Condition (140 cases)	\$2,539	\$2,152				-.11	None
Ostomy Care (24 cases)	\$2,459	\$3,137				.08	None
Oxygen Therapy (116 cases)	\$2,522	\$2,188				-.09	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: OTHER HEALTH

ILA Variable (cases) 0 – Not Present 1 – Present	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
SKIN STATUS (0 – no ulcer; 1 – 4 – ulcer stage)							
Pressure Ulcer (69 cases > 0)	\$2,449	\$3,134	\$3,066	\$2,611	\$3,088	.08	None
Stasis Ulcer (22 cases > 0)	\$2,479	\$3,570	\$2,427	\$2,974	\$2,535	.04	None
NUTRITION							
Feeding Tube (18 cases)	\$2,464	\$3,128				.07	None
Mechanically Altered Diet (89 cases)	\$2,408	\$3,098				.16	None
Therapeutic Diet (374 cases)	\$2,464	\$2,494				.02	None
Dietary Supplement (44 cases)	\$2,454	\$2,916				.08	None
Planned Weight Change (20 cases)	\$2,465	\$3,042				.06	None
Plate Guard (17 cases)	\$2,459	\$3,414				.10	None

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: INCONTINENCE

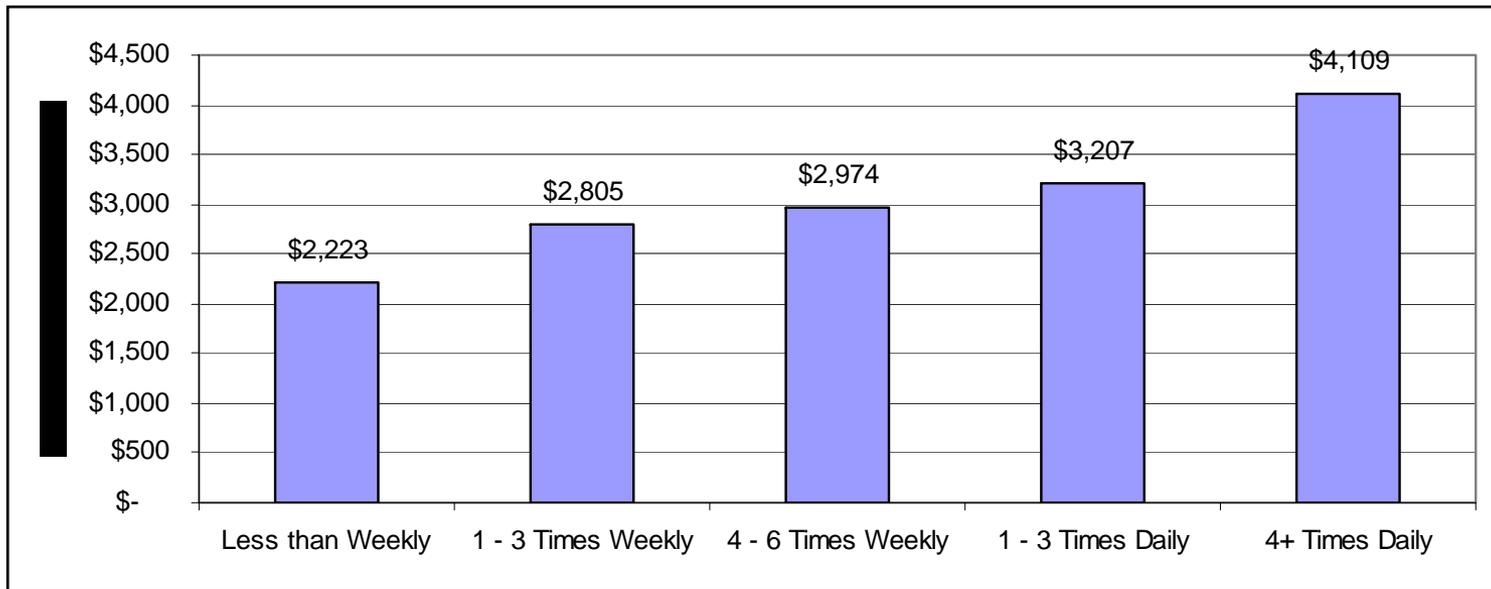
ILA Variable	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost*
	0	1	2	3	4		
Urinary Incontinence (0 – continent, with or without catheter; 1 – incontinent)	\$2,254	\$2,586				.13	None
Urinary Incontinence Frequency (0 – less than weekly; 1 – 1-3x weekly; 2 – 4-6x weekly; 3 – 1-3x daily; 4 – 4x or more daily)	\$2,240	\$2,321	\$2,485	\$2,370	\$2,898	.20	Low
Bowel Incontinence (0 – continent, with or without catheter; 1 – incontinent)	\$2,149	\$2,871				.28	Low
Bowel Incontinence Frequency (0 – less than weekly; 1 – 1-3x weekly; 2 – 4-6x weekly; 3 – 1-3x daily; 4 – 4x or more daily)	\$2,223	\$2,805	\$2,974	\$3,207	\$4,109	.30	Low (sufficient for consideration)

*Relationship thresholds: 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY INCONTINENCE SCORE

BOWEL INCONTINENCE FREQUENCY



HCBS CASE RATE ANALYSIS

CORRELATION: ADLs

ILA Variable* 0 – Independent 1 – Setup assistance 2 – Limited physical assistance 3 – Extensive assistance 4 – Total dependence	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost**
	0	1	2	3	4		
Dressing	\$1,459	\$1,564	\$1,874	\$2,376	\$3,398	.48	Moderate
Bathing	\$1,574	\$1,305	\$1,844	\$2,140	\$3,232	.39	Moderate
Personal Hygiene	\$1,434	\$1,716	\$2,073	\$2,788	\$3,411	.50	Moderate
Bed Mobility	\$1,810	\$2,133	\$2,341	\$3,063	\$3,444	.49	Moderate
Toileting	\$1,576	\$1,683	\$2,192	\$2,624	\$3,321	.49	Moderate
Adaptive Device	\$1,723	\$2,085	\$2,183	\$2,224	\$3,266	.41	Moderate
Transferring	\$1,554	\$1,729	\$2,170	\$2,635	\$3,494	.49	Moderate
Mobility	\$1,664	\$1,716	\$2,257	\$2,926	\$3,526	.47	Moderate
Eating	\$1,761	\$2,430	\$2,768	\$3,355	\$3,792	.45	Moderate

• **Note** – ADL support variables also tested. Lower relationship found, along with very high correlation to base ADL/IADL variable. Not shown here

****Relationship thresholds:** 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

CORRELATION: IADLs

ILA Variable* 0 – Independent 1 – Done with help 2 – Done by others	Average Monthly Claim Cost x ILA Score					Corr. Co- efficient	Relationship of ILA Score to Claim Cost**
	0	1	2	3	4		
Phone Use	\$1,882	\$2,623	\$2,864			.32	Low (sufficient for consideration)
Meal Preparation	\$838	\$1,604	\$2,569			.23	Low (sufficient for consideration)
Medications	\$1,691	\$2,176	\$2,753			.28	Low (sufficient for consideration)

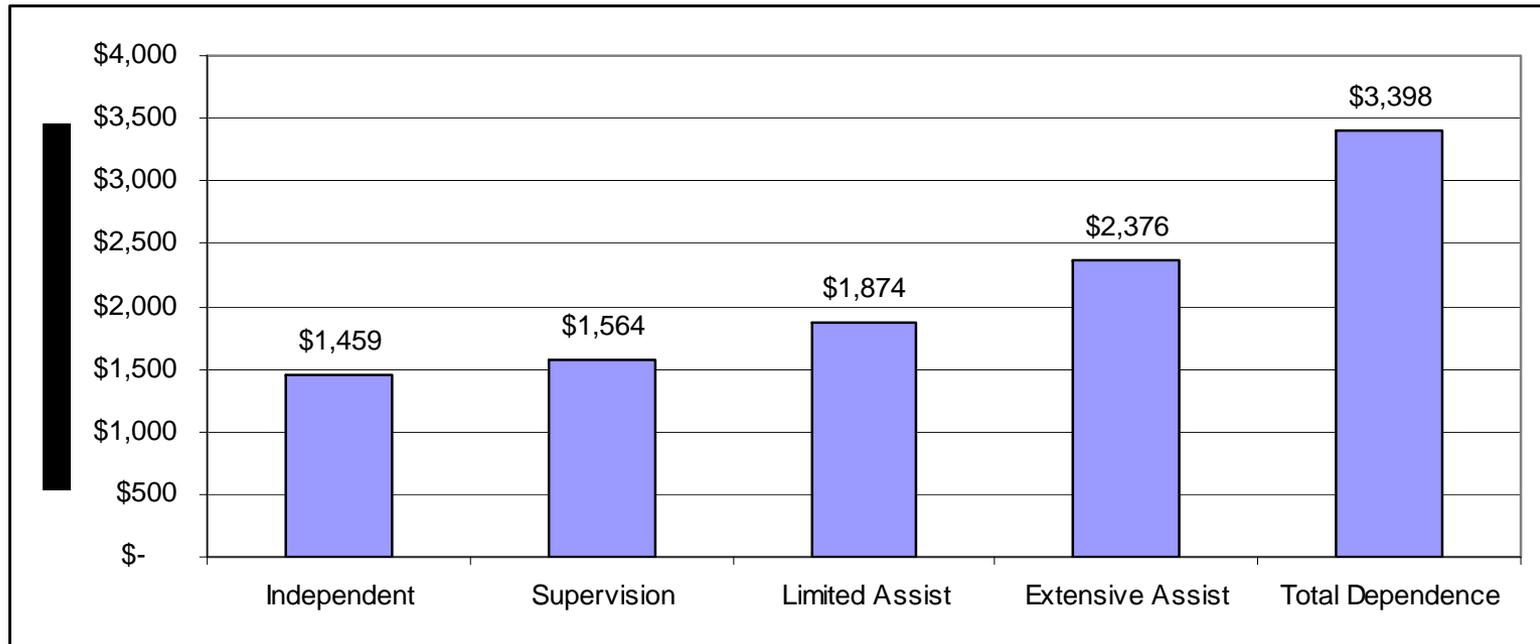
• **Note** – ADL support variables also tested. Lower relationship found, along with very high correlation to base ADL/IADL variable. Not shown here

****Relationship thresholds:** 0.00 – 0.19 – None; 0.20 – 0.39 – Low; 0.40 – 0.59 – Moderate; 0.60 or greater – Strong

HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

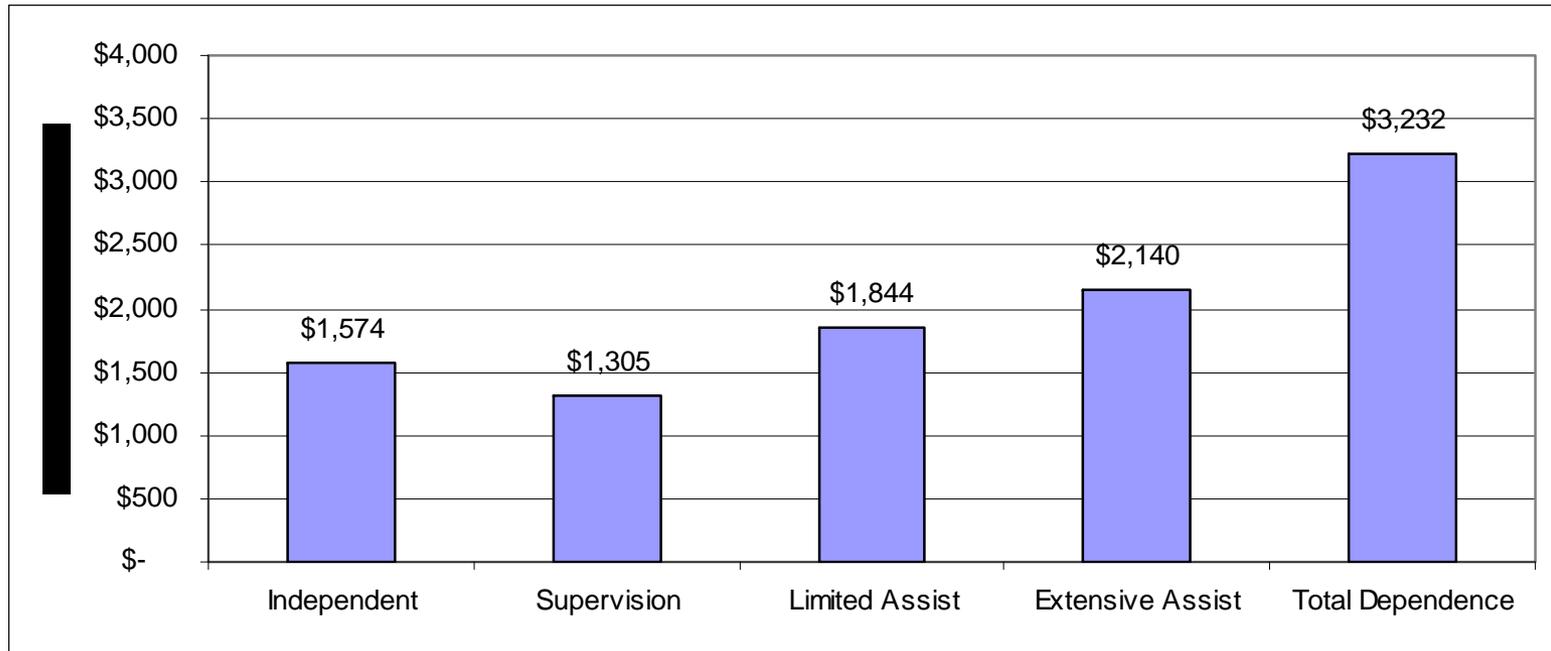
DRESSING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

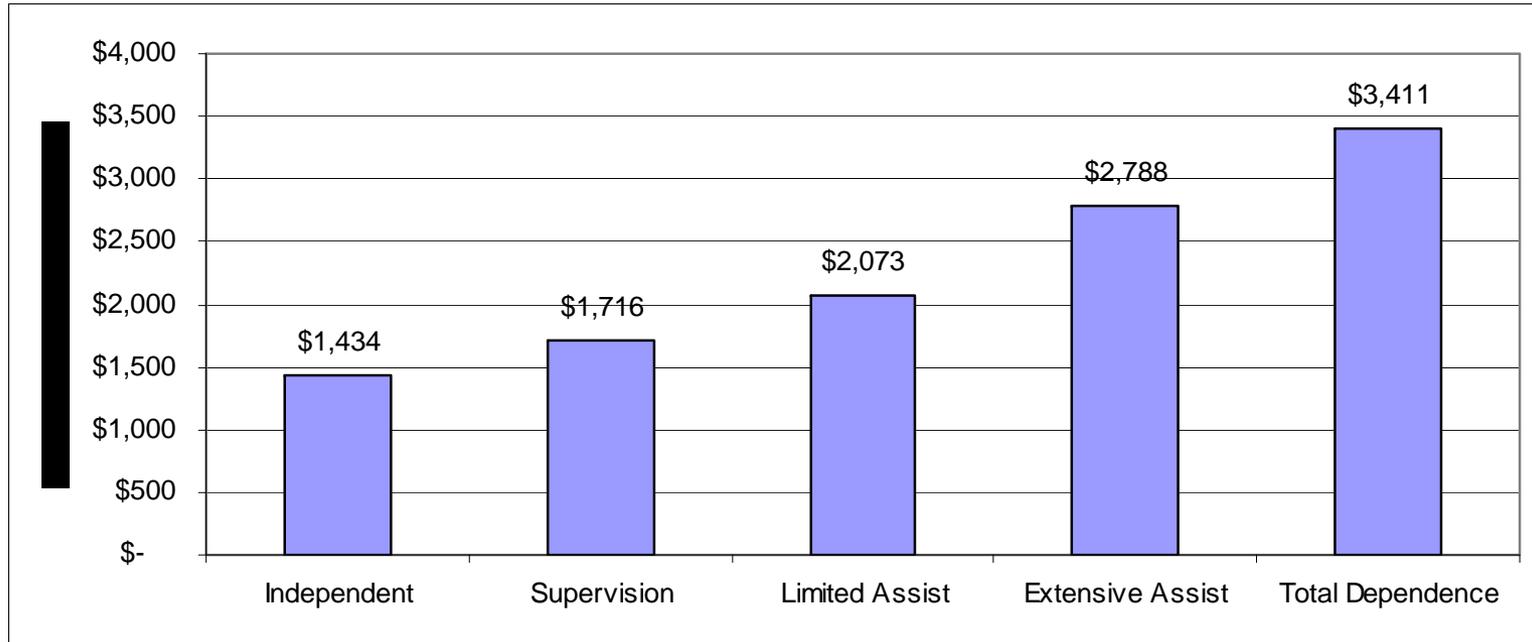
BATHING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

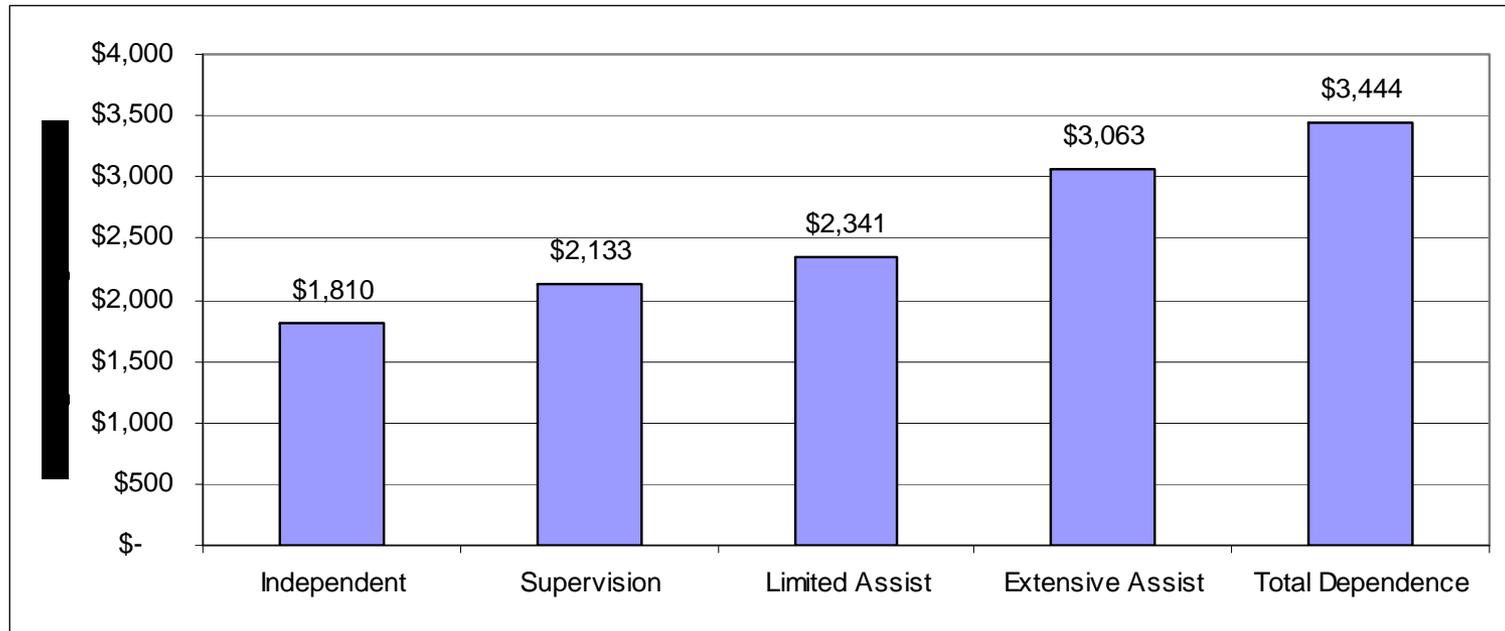
PERSONAL HYGIENE



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

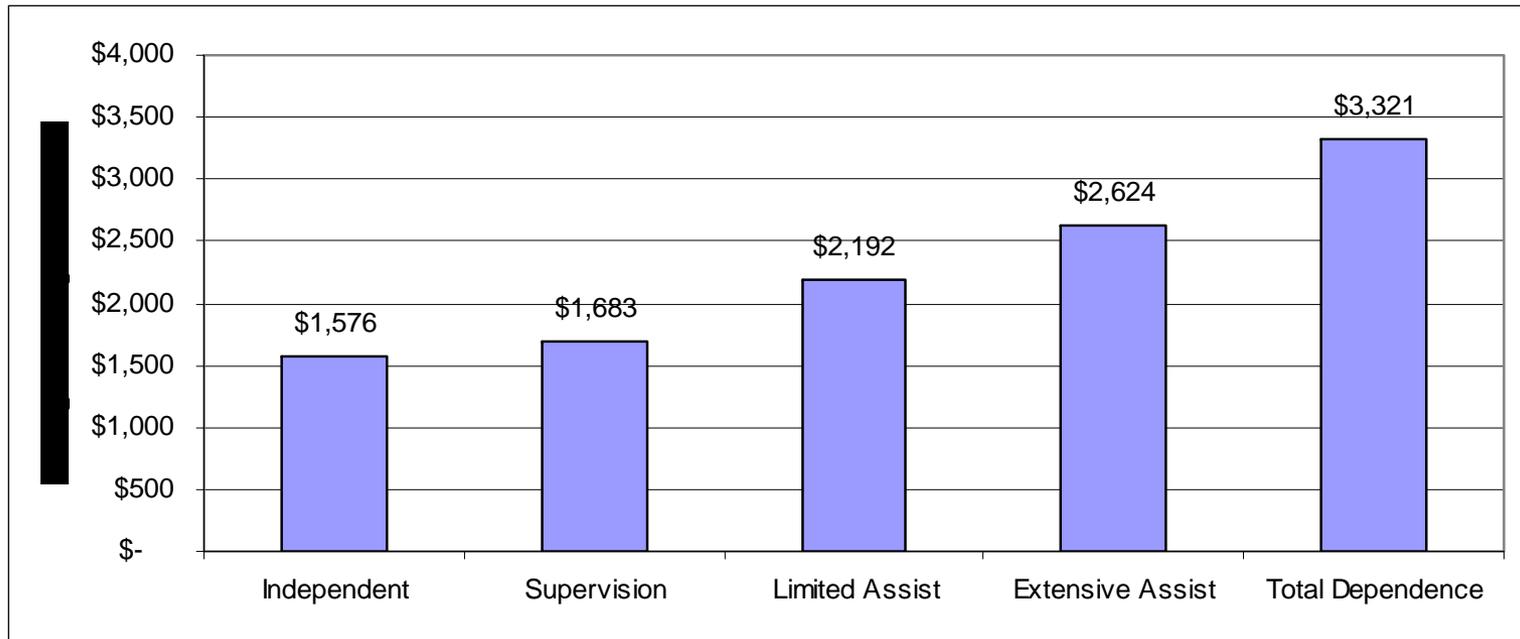
BED MOBILITY



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

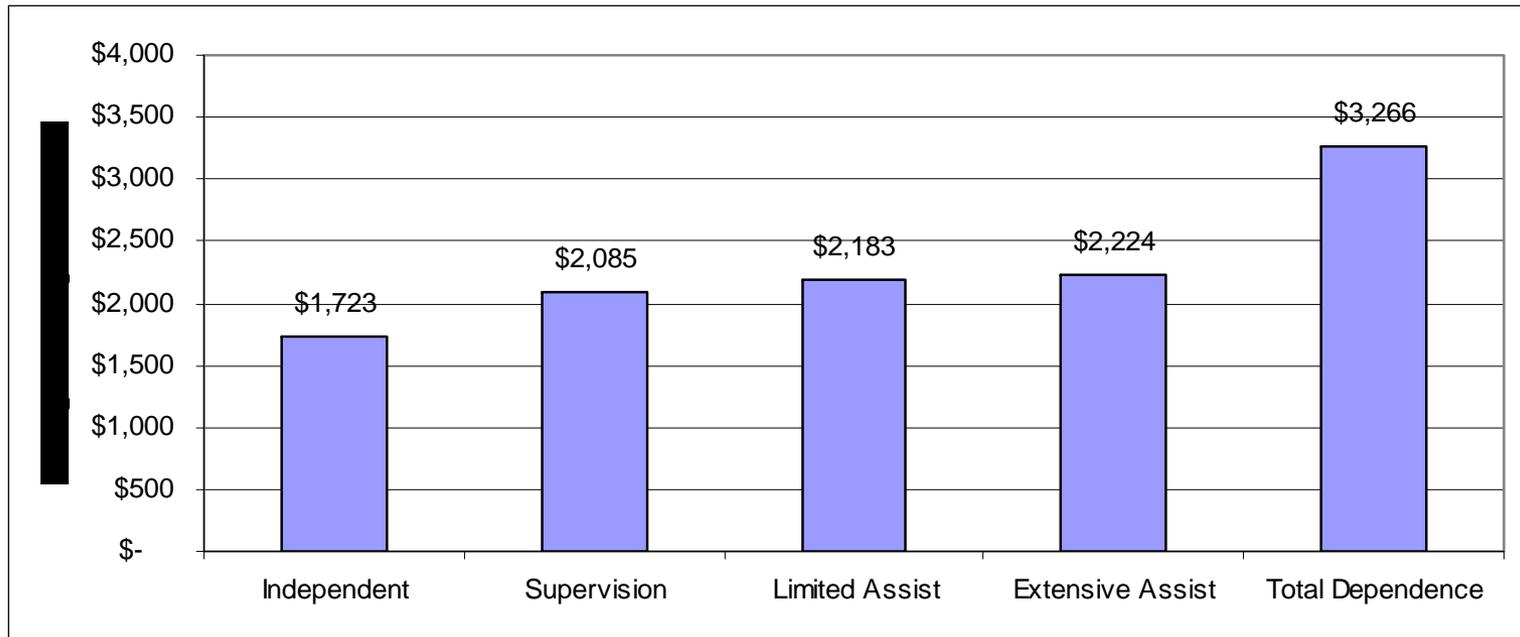
TOILETING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

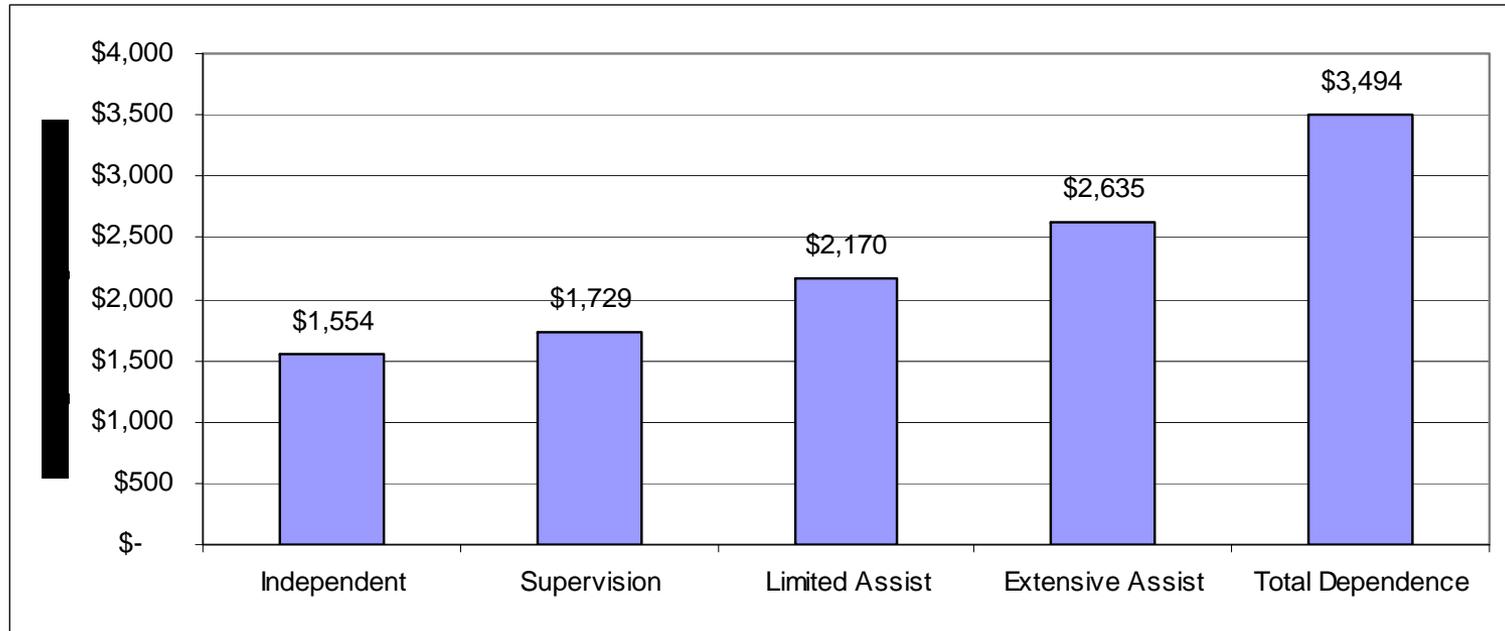
ADAPTIVE DEVICES



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

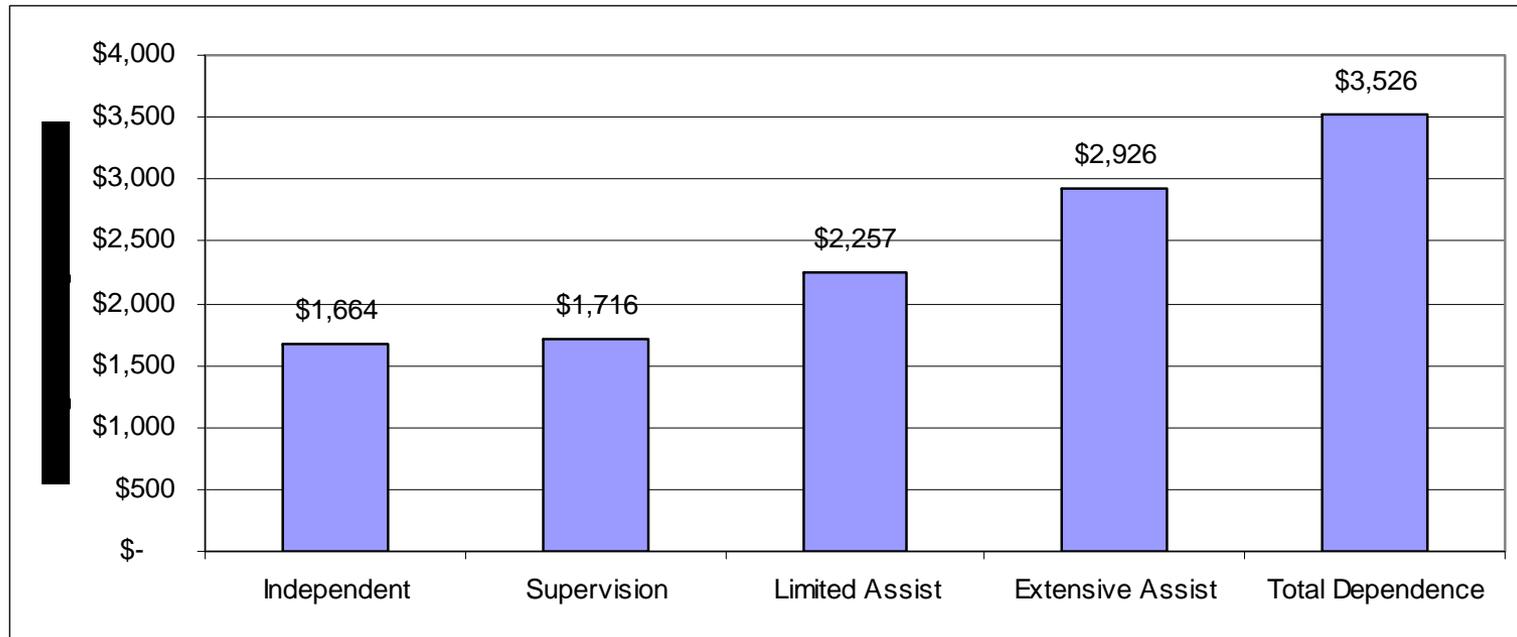
TRANSFERRING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

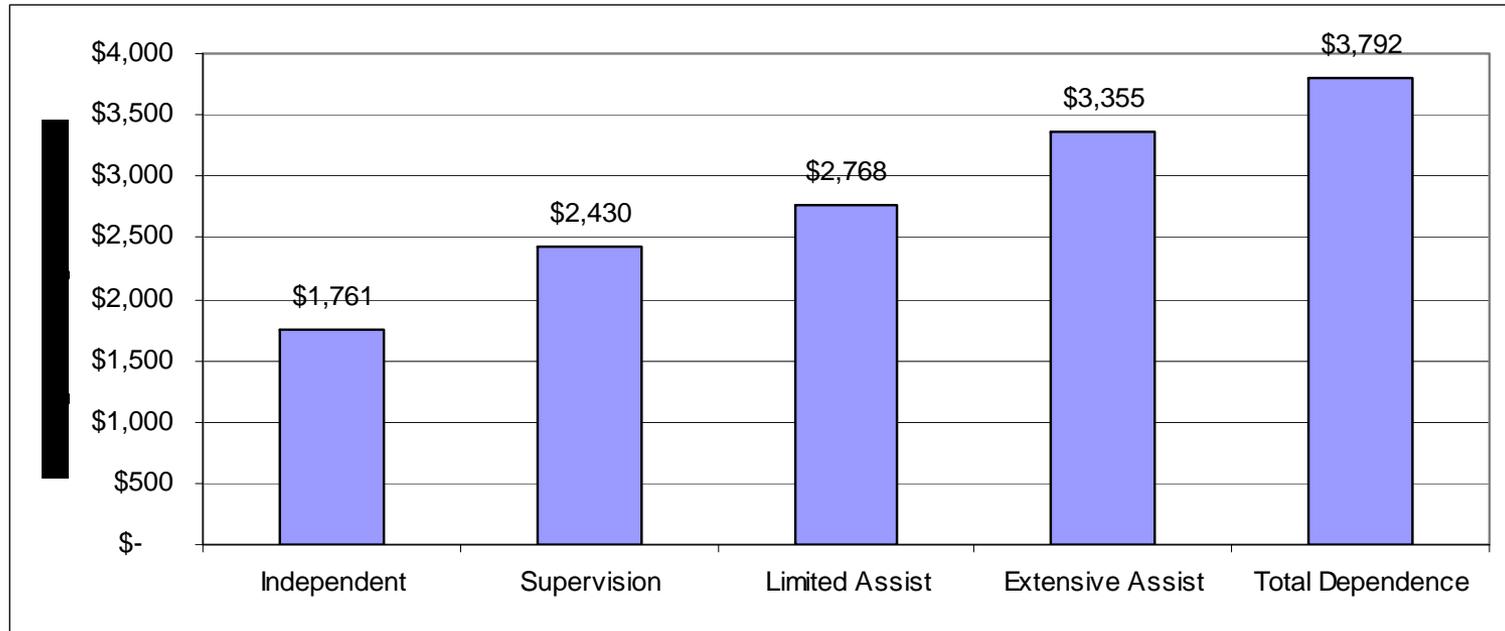
MOBILITY



HCBS CASE RATE ANALYSIS

AVERAGE COST BY ADL SCORE

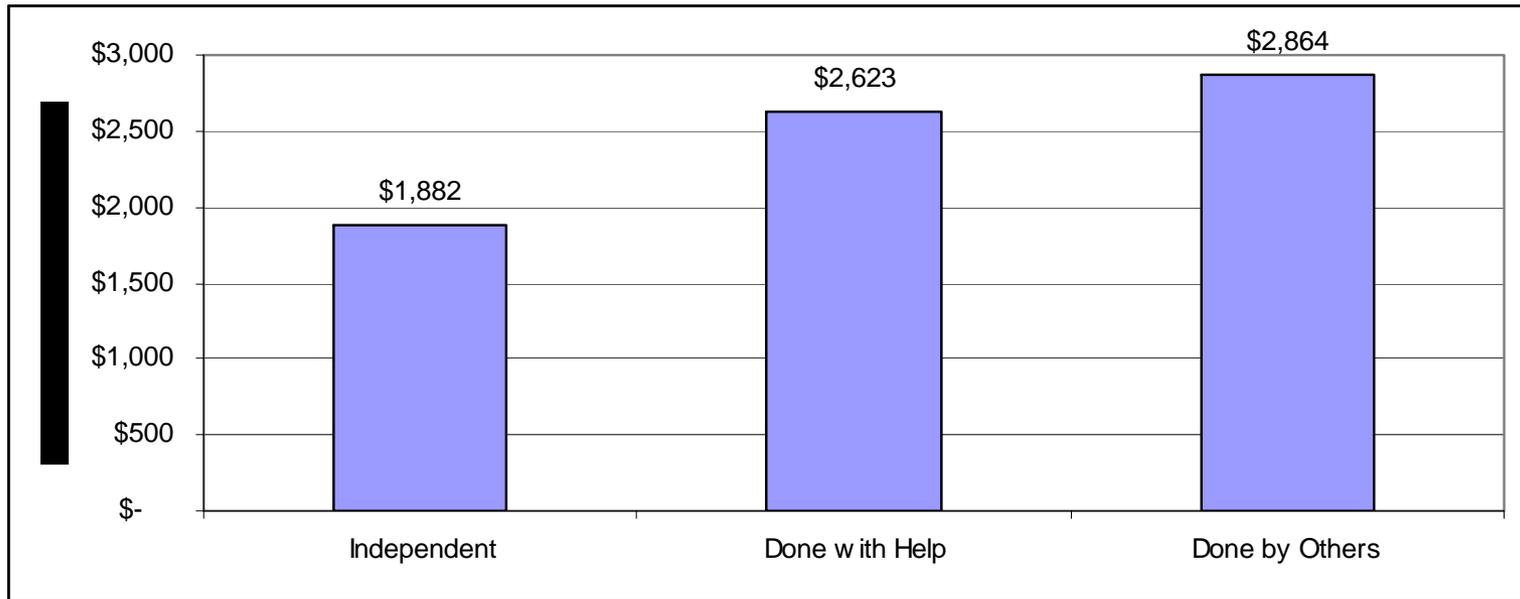
EATING



HCBS CASE RATE ANALYSIS

AVERAGE COST BY IADL SCORE

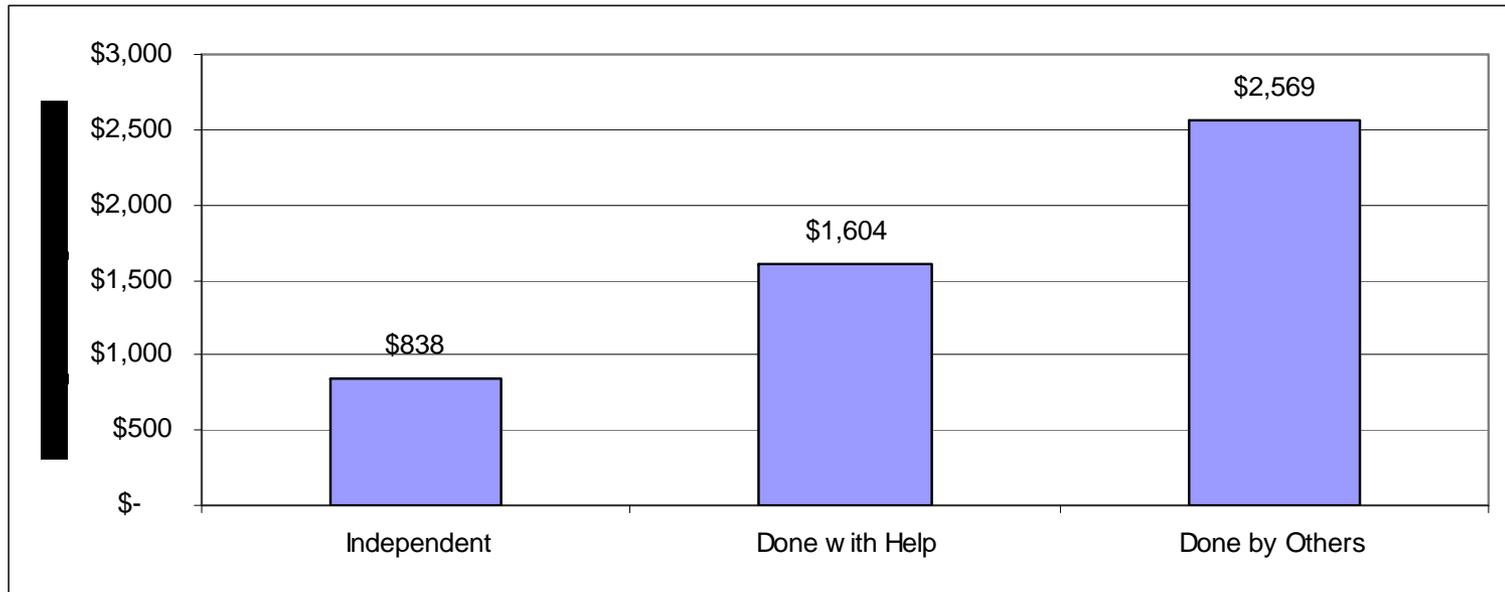
PHONE USE



HCBS CASE RATE ANALYSIS

AVERAGE COST BY IADL SCORE

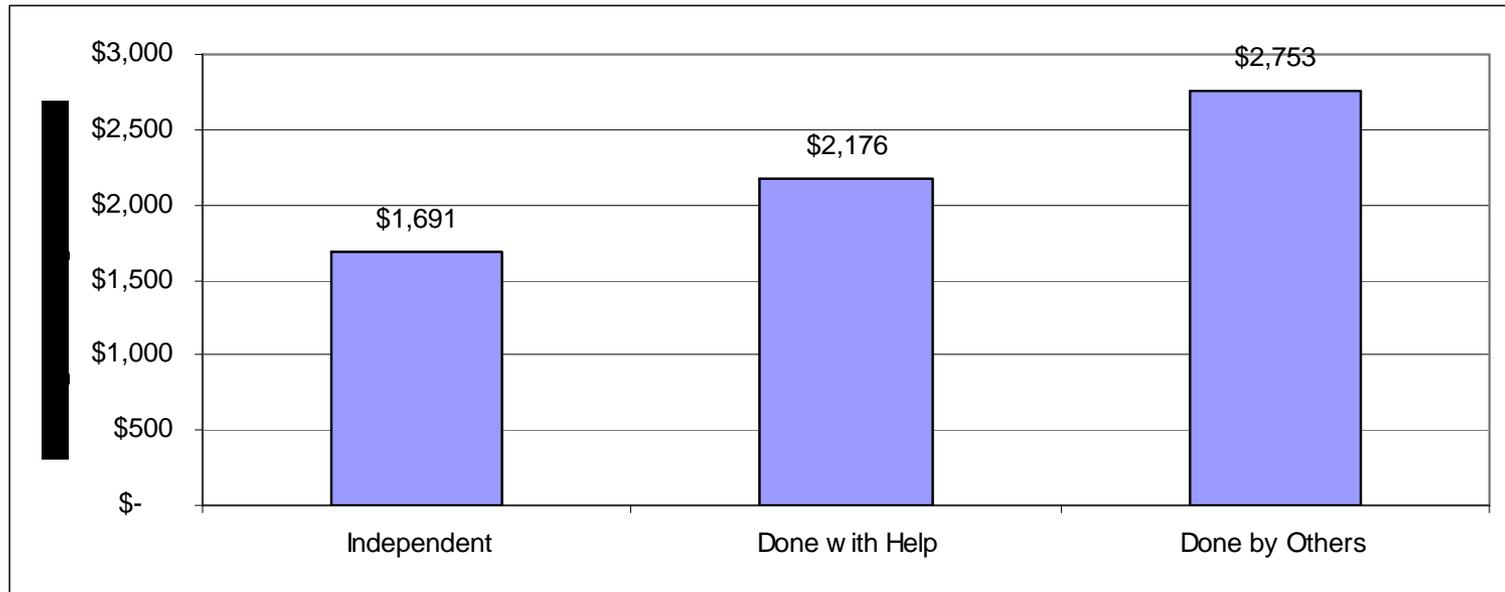
MEAL PREPARATION



HCBS CASE RATE ANALYSIS

AVERAGE COST BY IADL SCORE

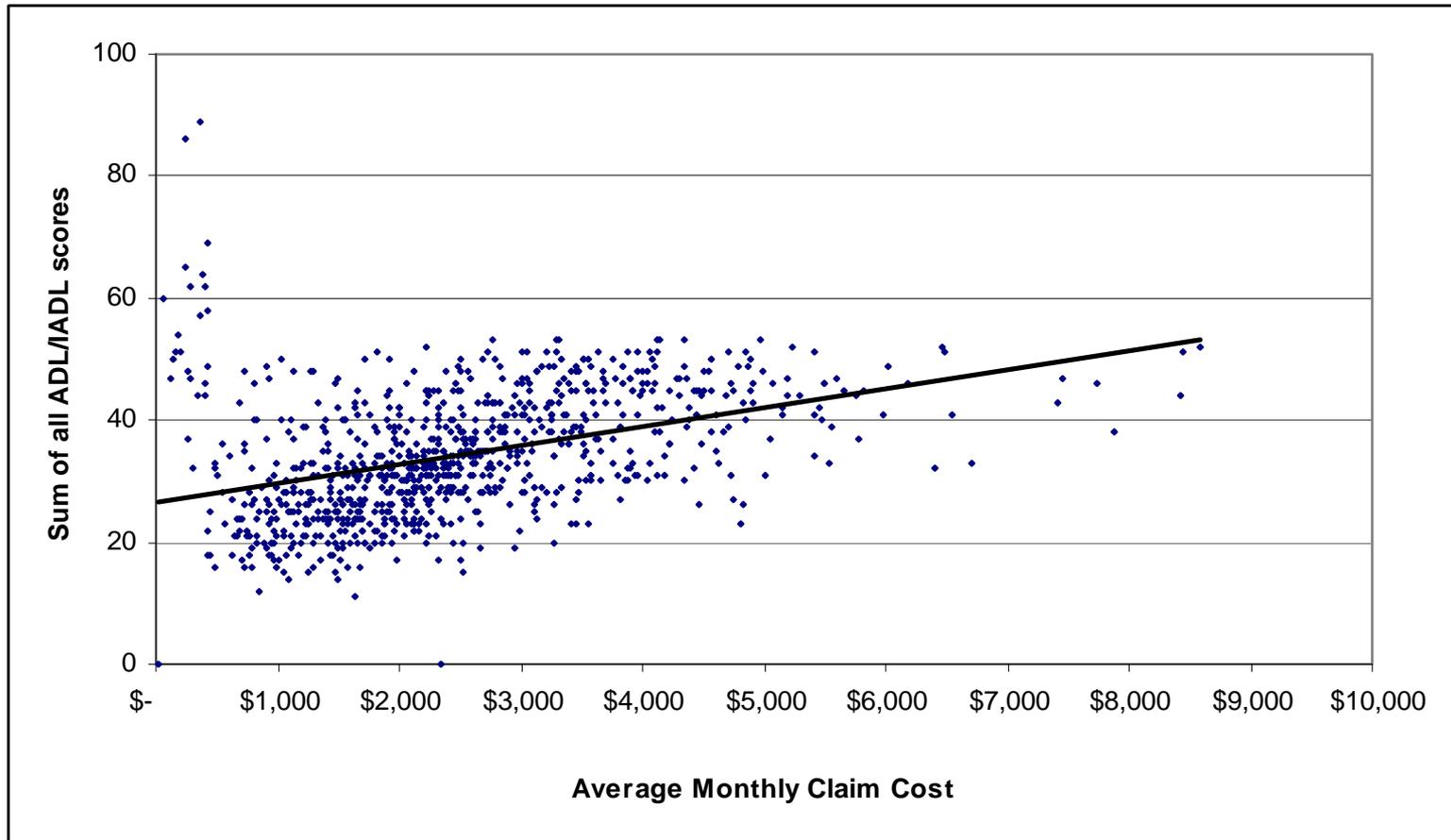
MEDICATIONS



HCBS CASE RATE ANALYSIS

CORRELATION: ALL ADLs/IADLs

Scatter diagram of all 880 cases based on relationship between sum of all ADL/IADL scores and monthly claim cost



HCBS CASE RATE ANALYSIS

POTENTIAL VARIABLES FOR CASE RATE GROUPING

Cognitive/Behavior

- ✓ Orientation to year
- ✓ Memory for information use
- ✓ Global confusion
- ✓ Verbal communication
- ✓ Behaviors – daily frequency

Health-Related

- ✓ Quadriplegia
- ✓ Incontinence frequency (bowel)

ADL/IADL

- ✓ Dressing
- ✓ Bathing
- ✓ Personal Hygiene
- ✓ Bed Mobility
- ✓ Toileting
- ✓ Adaptive Devices
- ✓ Transferring
- ✓ Mobility
- ✓ Phone Use
- ✓ Meal Preparation
- ✓ Medications

HCBS CASE RATE ANALYSIS

CASE RATE ADVANTAGES/ISSUES

Potential Advantages

- Represents first step toward development of an integrated delivery model
- Providers will have greater flexibility to deliver the most appropriate mix of services
- Prospective payment offers cash flow advantage to providers
- Eliminates need for providers to file service-specific claims

Potential Issues

- Will require more intensive utilization/quality management by the state to ensure appropriate provision of services
- Must determine how to address consumer-directed care, including who will manage
- Will require an outlier payment methodology

HCBS CASE RATE ANALYSIS

NEXT STEPS

If proceeding, next steps include:

- Performance of multi-variate analysis to further refine case rate grouping methodology (includes selecting strongest of overlapping variables, e.g., cognitive items)
- Selection of appropriate case rate ranges
- Selection of triggers/thresholds for each case rate group
- Development of strategy for consumer-directed cases