Department of Health and Human Services

OFFICE OF
INSPECTOR GENERAL

TRENDS IN THE ASSIGNMENT OF RESOURCE UTILIZATION GROUPS

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ABSTRACT

Based on our analysis of data from January 1999 to December 2002, minimal shifts occurred in the assignment of resource utilization groups corresponding to legislative payment changes to skilled nursing facilities. The rehabilitation category, the largest of the seven resource utilization group categories, remained stable. However, assignment to the rehabilitation subcategories shifted parallel to the reimbursement changes of the Balanced Budget Refinement Act and the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000. In addition, small changes occurred in other categories, including extensive care, special care, and clinically complex. As of October 1, 2002, all temporary payment adjustments ended, and any payment incentives that may have existed concluded at that time.

OBJECTIVE

To identify changes in the proportion of Medicare beneficiaries assigned to each resource utilization group in skilled nursing facilities between January 1999 and December 2002, given legislative changes in reimbursement levels.

BACKGROUND

The Balanced Budget Act of 1997 changed Medicare reimbursement for skilled nursing facilities from a cost based to a prospective payment system (PPS). Under PPS, skilled nursing facilities are required to assign residents to 1 of 44 resource utilization groups (RUGs), which are calculated based on a clinical assessment tool.

In the fall of 1999, Congress enacted the Balanced Budget Refinement Act (BBRA), which included a 4 percent across-the-board increase in payments to skilled nursing facilities for fiscal years 2001 and 2002 and a temporary 20 percent increase to 15 RUGs for resident conditions considered medically complex. These included three individual RUGs in the special rehabilitation category (RMB, RHC, and RMC) as well as all the RUGs in three of the seven RUG categories (clinically complex, special care, and extensive care categories). The changes went into effect on October 1, 2000. In the fall of 2000, Congress further adjusted the payment rates under the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA), which became effective on April 1, 2001.

Congress mandated in Section 314 of BIPA that the Office of Inspector General (OIG) review, no later than October 1, 2001, the Medicare payment structure for services to assess whether payment incentives exist for the delivery of inadequate care. In response, OIG released *Trends in the Assignment of Resource Utilization Groups by Skilled Nursing Facilities* (OEI-02-01-00280) in July 2001, which analyzed the changes in RUG assignments from January 1999 to March 31, 2001. This current inspection analyzes data post-BIPA through December 2002.

This inspection is based on an analysis of the Centers for Medicare & Medicaid Services's National Claims History File. We analyzed the admission RUG code for all residents by quarter from January 1999 to December 2002.

FINDINGS

Minimal shifts occurred in the assignment of resource utilization groups since the prospective payment system (PPS) implementation.

While the overall rehabilitation category has remained largely unchanged, the assignment to rehabilitation subcategories did shift. Nursing homes can classify residents into one of seven categories: rehabilitation, extensive care, special care, clinically complex, cognitively impaired, behavior problems, and reduced physical functions. Since the implementation of PPS in 1999, the mix of residents classified into the rehabilitation RUG category, the largest of all seven categories, remained about the same. In the fourth quarter of 2002, 77 percent of all Medicare residents were assigned to 1 of the 14 rehabilitation RUGs, which was a 0.6 percent increase since the first quarter of 1999. In addition, during that time period, the percentage of nursing home residents assigned to the rehabilitation category fluctuated by only about 1 percent.

While the proportion of Medicare residents assigned to all 14 of the rehabilitation RUGs remained constant, the subcategories within the rehabilitation RUG category shifted at the same time as the reimbursement changes from BBRA and BIPA. The rehabilitation RUGs are broken down into five subcategories based on the number of minutes of physical or occupational therapy required: ultra high, very high, high, medium, and low. The proportion of Medicare residents in the rehabilitation category assigned to the high subgroup steadily increased 8 percent from January 1999 to December 2002. The proportion of residents assigned to the medium subcategory increased until the shift in payment under BIPA in 2001. At the same time, the proportion of residents assigned to the combined ultra high, very high, and low subgroups decreased. After BIPA changes spread out the specific increases from 3 RUGs to all 14 rehabilitation RUGs, the declining trend reversed, and the medium, ultra high, very high, and low subcategories began to increase.

Small changes seen in the other categories, including extensive care, special care, and clinically complex. The proportion of Medicare residents assigned to the remaining three RUG categories affected by BBRA and BIPA (extensive care, special care, and clinically complex)

experienced minimal shifts since PPS was introduced. The extensive care category increased from about 13 percent in the first quarter of 1999 to about 15 percent. Special care and clinically complex each decreased by about 1 percent. The shift in trends for these 3 categories appears to be unrelated to either BBRA or BIPA payment increases because all 3 categories steadily increased or decreased from the first quarter of 1999. In addition, the law did not create payment incentives to code residents in one RUG or RUG category over another, because all were increased uniformly.

Underlying resident demographics do not explain the minimal resource utilization group assignment shifts. We analyzed gender, race, age, and reason for Medicare eligibility from January 1999 to December 2002. We found no substantial shifts in the demographics of Medicare residents in nursing homes assigned to RUGs in that time period.

SUMMARY

The analysis showed that shifts did occur in the proportion of Medicare nursing home residents assigned to RUG categories and subcategories corresponding to payment changes. However, the changes were small in magnitude and focused only in the rehabilitation RUGs. In addition, all payment changes ended on October 1, 2002, and any payment incentives that may have existed concluded at that time. This report fulfills the legislative mandate that the OIG assess whether payment incentives existed for the delivery of inadequate care in skilled nursing facilities.

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OBJECTIVE

To identify changes in the proportion of Medicare beneficiaries assigned to each resource utilization group in skilled nursing facilities between January 1999 and December 2002, given legislative changes in reimbursement levels.

BACKGROUND

Medicare Payments to Skilled Nursing Facilities

Medicare Part A helps pay for skilled nursing facility (SNF) care when a beneficiary meets certain conditions. These conditions include a requirement of daily skilled nursing or rehabilitative services, a prior 3-day consecutive stay in a hospital, admission to a SNF within a short period of time after leaving the hospital, treatment for the same condition that was treated in the hospital, and a medical professional certifying the need for daily skilled nursing or rehabilitative care. Medicare limits the number of covered SNF days to 100 days per benefit period, with a co-payment required for days 21 through 100. After the Medicare 100-day SNF Part A benefit runs out, the Medicare Part B benefit continues to pay for physician services and other Part B covered services.

In order to control escalating nursing home costs, the Balanced Budget Act (BBA) of 1997 changed SNF reimbursement from a cost-based to a prospective payment system (PPS). Beginning with the first cost-reporting period after July 1, 1998, Medicare began paying SNFs through a prospective, case-mix adjusted per-diem payment that covers routine, ancillary, and capital-related costs, including most items and services for which payment was previously made under Medicare Part B. The per-diem payment is based on fiscal year (FY) 1995 Part A and B costs, adjusted using three elements: the SNF market basket index, which reflects changes over time in the prices of an appropriate mix of goods and services included in the covered SNF services; the case-mix from resident assessments; and geographic wage variations.

To determine the case-mix, SNFs classify residents into 1 of 44 resource utilization groups (RUGs). To do this, SNFs must complete the Minimum Data Set (MDS) assessment, a standardized set of clinical and functioning status measures. An interdisciplinary team from the nursing home completes the MDS for each resident by the 5th, 14th, 30th, 60th, and 90th days of his/her stay.

RUGs are divided into seven major categories: special rehabilitation, extensive services, special care, clinically complex, impaired cognition, behavior problems, and reduced physical function. Each RUG is associated with a payment rate that is based on a number of factors, such as the need for therapy and the level of functioning measured in terms of the activities of daily living (ADL). Medicare does not typically reimburse SNFs for residents in the last three categories because the resident usually does not require skilled care (see Appendix A).

Nursing homes assign residents requiring physical or occupational therapy to a RUG in the special rehabilitation category. Each resident is classified in a subcategory depending on the number of therapy minutes required in the last 7 days, as indicated on the MDS. There are 5 special rehabilitation subcategories: ultra-high (over 720 minutes), very high (500 to 719 minutes), high (325 to 499 minutes), medium (150 to 324 minutes), and low (45 to 149 minutes). The nursing home then assigns each resident to a specific RUG within these subcategories depending on the level of self-performance and support needed with four ADLs: eating, bed mobility, toileting, and transfers. The score on the MDS for these four ADLs places the resident into a specific RUG.

Legislative Changes

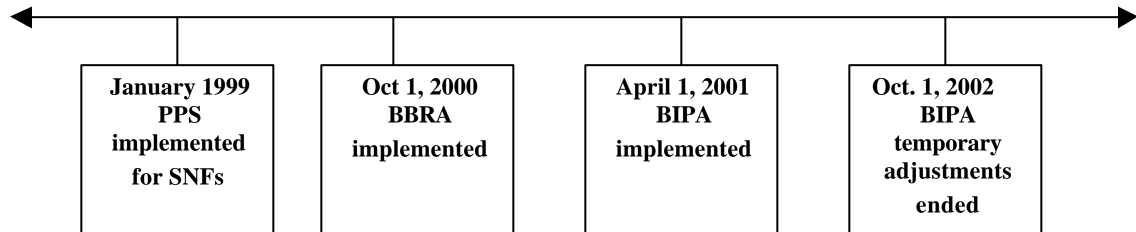
In the fall of 1999, Congress enacted the Balanced Budget Refinement Act (BBRA) in response to providers' concerns that reductions in payment under BBA were too severe. BBRA included a 4 percent across-the-board increase in payments to SNFs for FYs 2001 and 2002 and a temporary 20 percent increase to 15 RUGs for patient conditions considered medically complex. These included all the RUGs in the clinically complex, special care, and extensive care categories as well as three RUGs in the medium and high subcategories of the special rehabilitation category (RMB, RHC, and RMC). In addition, several costly non-therapy ancillary services, including certain ambulance services, prostheses, and chemotherapy drugs, were excluded from PPS and paid for separately. BBRA changes went into effect on October 1, 2000.

In 2000, Congress further adjusted the payment rates under the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA). These changes went into effect on April 1, 2001. BIPA increased the inflation update to the full market basket in FY 2001 and raised the nursing component of the RUGs by 16.6 percent in an effort to improve PPS nursing staff ratios. Additionally, BBRA's 20 percent

increase to the 3 rehabilitation RUGs was spread across all 14 special rehabilitation RUGs as a 6.7 percent increase. The other RUGs affected in the BBRA maintainted the 20 percent increase.

As of October 1, 2002, all payment adjustments ended. (See Figure 1)

Figure 1: Legislative Timeline



Previous OIG Inspections

Congress mandated in Section 314 of BIPA that the Office of Inspector General (OIG) review, no later than October 1, 2001, "the Medicare payment structure for services classified within the rehabilitation RUGs to assess whether payment incentives exist for the delivery of inadequate care." In response, OIG released *Trends in the Assignment of Resource Utilization Groups by Skilled Nursing Facilities* (OEI-02-01-00280) in July 2001, which analyzed the changes in RUG assignments from January 1999 to March 31, 2001. The report found no major changes in RUG assignment since the implementation of PPS. However, since the implementation of PPS in January 1999, small shifts occurred in the proportion of residents assigned to the RUGs within the rehabilitation category. Our analysis in that report was limited because BIPA changes were not implemented until April 2001.

METHODOLOGY

Using the Centers for Medicare & Medicaid Services's (CMS's) National Claims History File, we examined claims processed through March 2003 for *all* Medicare beneficiaries who were admitted to a SNF between January 1, 1999, and December 2002. We reviewed the RUG code generated from the MDS assessment conducted at admission (types 01,

11, 19, 31,and 41) that is on the provider claim.[1] We analyzed the proportion of Medicare beneficiaries in each of the 44 RUG codes and in each of the 7 RUG categories by quarter beginning in 1999.

Second, we examined select characteristics of Medicare beneficiaries in our analysis. We analyzed the CMS enrollment data, including beneficiaries' age, race, gender, and reason for eligibility to assess whether changes in these characteristics are associated with trends in the RUGs.

Data Limitations

The data used in this analysis may change based on additional and adjusted claims submitted over the next several quarters. Data reported in the original report have been updated, and therefore, do not match the numbers in this report. In seven of the nine quarters of original data, the total number of assessments differed by 3 percent or less. In addition, we included admission assessment types 19, 31, and 41 in this analysis to capture all admission assessments where we only analyzed admission assessment types 01 and 11 in the previous report. However, assessment codes 01 and 11 represent 97 percent of all admission codes. Since the first report, we have learned of these three special situation or adjustment codes that are able to replace the 5-day assessment.

Standards

We conducted this inspection in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

[1] 01: 5-day Medicare required assessment/not an admission assessment
11: 5-day Medicare required assessment and admission assessment
19: 5-day assessment: special payment situation
31: Significant change assessment/replaces 5-day assessment
41: Significant correction of prior assessment: replaces 5-day assessment

Minimal shifts occurred in the assignment of resource utilization groups since the prospective payment system (PPS)

While the overall rehabiliatation category has remained largely unchanged, the assignment to rehabilitation subcategories did shift.

Rehabilitation Category. Since the implementation of PPS in 1999, the mix of residents classified into the rehabilitation RUG category remained about the same. Nursing homes can classify residents into one of seven categories: rehabilitation, extensive care, special care, clinically complex, cognitively impaired, behavior problems and reduced physical functions. The last three categories are grouped under custodial care, and Medicare generally does not cover these services because the resident usually does not require skilled care. Medicare reimburses on a hierarchical system with the rehabilitation category being the highest (see Appendix A).

Table 1: Proportion of Medicare Residents in each RUG Category

RUG Category	Jan-Mar 1999	Oct-Dec 2000 (BBRA)	Apr-Jun 2001 (BIPA)	Oct-Dec 2002 (Changes ended)	Percentage Point Change 1999-2002
Rehabilitation	76.3%	76.5%	76.7%	76.9%	0.6%
Extensive Care	12.8	13.4	13.5	14.5	1.7
Special Care	5.6	5.0	4.9	4.2	-1.4
Clinically Complex	3.8	3.3	3.1	2.6	-1.2
Custodial Care	1.4	1.7	1.7	1.8	0.4

Note: Percentages do not add to 100 due to rounding

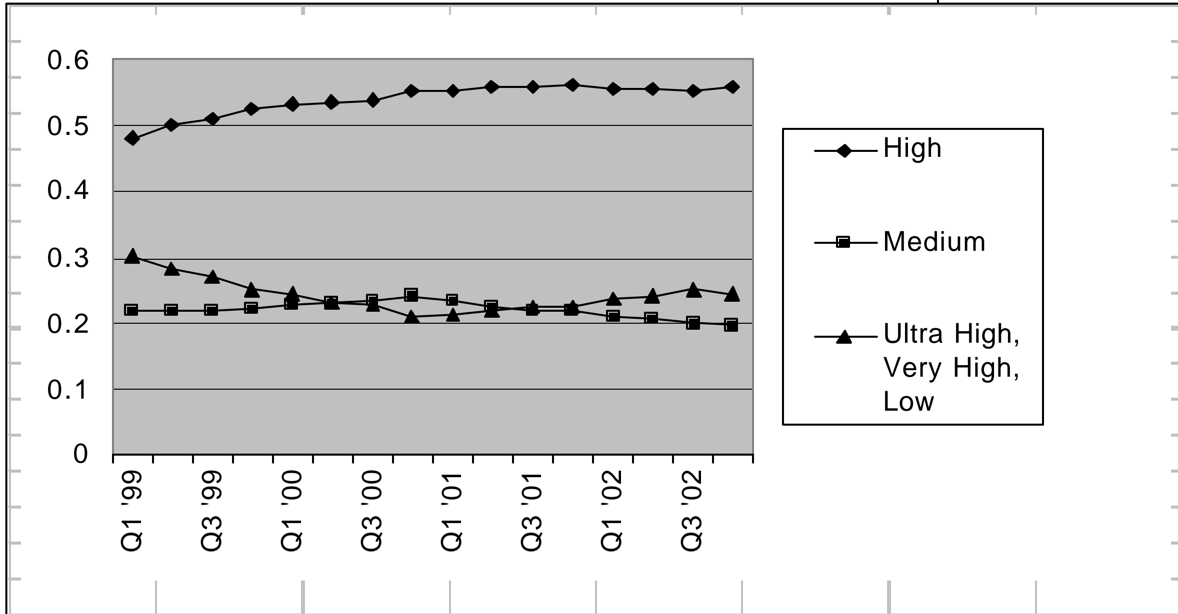
Source: Office of Evaluation and Inspections (OEI) analysis of National Claims History File, July 2003

In the fourth quarter of 2002, 77 percent of all Medicare residents were assigned to 1 of the 14 rehabilitation RUGs, which was a 0.6 percent increase since the first quarter of 1999 (see Table 1). In addition, during that time period, the percentage of nursing home residents assigned to the rehabilitation category fluctuated by only about 1 percent (see Appendix B).

Rehabilitation Subcategories. While the proportion of Medicare residents assigned to all 14 of the rehabilitation RUGs remained constant, the subcategories within the rehabilitation RUG category shifted at the same time as the reimbursement changes from BBRA and BIPA. The rehabilitation RUGs are broken down into five subcategories based on the number of minutes of therapy required: ultra high, very high, high, medium, and low. The proportion of Medicare residents in the rehabilitation category assigned to the high subgroup steadily increased from 48 percent in the first quarter of 1999 to about 56 percent of all rehabilitation RUGs in the second quarter of 2001. At that point the high category remained stable until December 2002. The proportion of residents assigned to the medium subcategory increased until the shift in payment under BIPA in 2001.

At the same time, the proportion of residents assigned to the combined ultra high, very high, and low subgroups decreased (see Chart 1 on the following page). All the individual RUGs in these three subcategories were uniformly adjusted with BBRA and BIPA and follow very similar trends to one another. After BIPA changes spread out the specific increases from 3 RUGs to all 14 rehabilitation RUGs, the declining trend reversed, and the medium, ultra high, very high, and low subcategories began to increase (see Appendix C).

CHART #1
Proportion of Medicare Residents in Rehabilitation Subgroups



Note: BBRA effectiv e 4th quarter 2000 (October 1, 2000) through 2nd quarter 2001 (March 31, 2001). BIPA effective 3rd quarter 2001 (April 1, 2001) through 3rd quarter 2002 (September 30, 2002). All temporary adjustments ended as of October 1, 2002.

Source: OEI analysis of National Claims History File, July 2003

Individual rehabilitation resource utilization groups. The trend for the three RUGs (RMB, RMC, and RHC) whose payment structure was changed by BBRA and BIPA showed shifts that coincide with those reimbursement changes. Twenty percent of all Medicare residents were assigned to RHC (high subcategory) in the fourth quarter of 2002, making it the largest of all 44 RUGs. The proportion of residents coded in RHC increased steadily from 15 percent in the first quarter 1999 to 20 percent in the fourth quarter in 2002. The two RUGs in the medium subcategory, RMB and RMC, followed similar patterns to each other by increasing to hit a peak as BBRA changes went into effect, and then decreasing when BIPA rescinded those increases (see Table 2). (See Appendix D for a complete listing of RUGs by quarter.)

Table 2: Trend in the Proportion of Medicare Residents in 3 RUGs

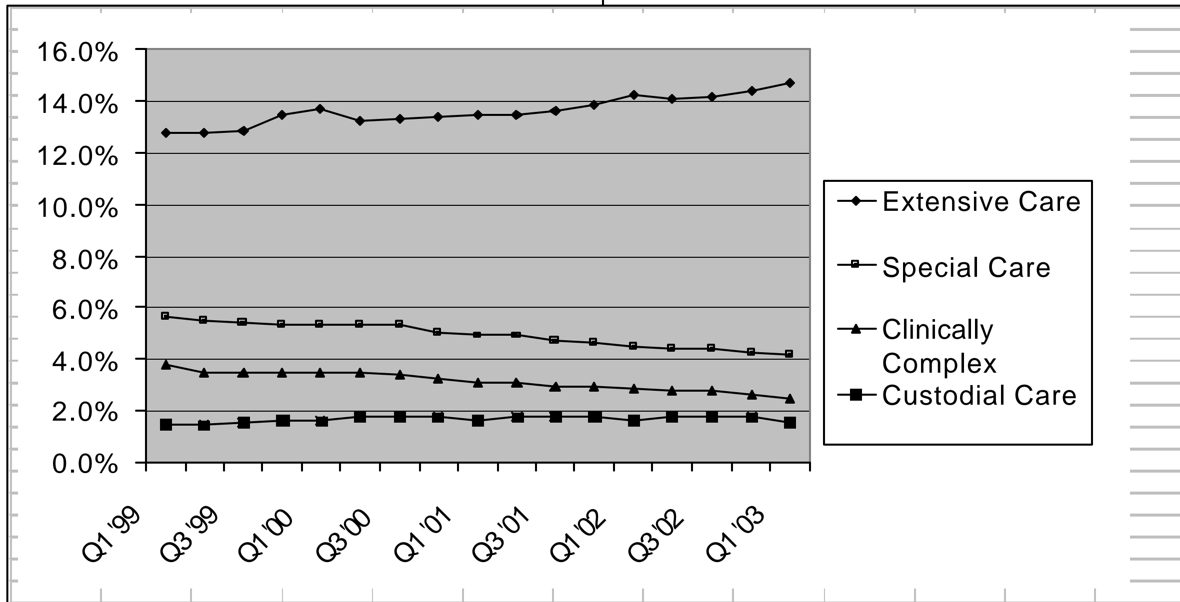
Rehabilitation RUGs	Jan-Mar 1999	Oct-Dec 2000 (BBRA)	Apr-Jun 2001 (BIPA)	Oct-Dec 2002 (Changes ended)
RHC	15.0%	18.9%	18.8%	19.9%
RMB	8.2	9.4	8.7	7.3
RMC	5.0	5.5	5.3	5.0

Source: OEI analysis of National Claims History File, July 2003

Small changes seen in the other catgories including extensive care, special care, and clinically complex.

The proportion of Medicare residents assigned to the remaining three RUG categories affected by BBRA and BIPA (extensive care, special care, and clinically complex) experienced minimal shifts since PPS was introduced. The shift in trends for these three categories appears to be unrelated to either BBRA or BIPA payment increases because all three categories steadily increased or decreased from the first quarter of 1999. In addition, neither law created payment incentives to code residents in one RUG or RUG category over another, because all were increased uniformly. However, the extensive care has always been the most highly reimbursed of the three non-rehabilitative RUG categories, and this may explain some of the gradual increase seen in that category since 1999. The extensive care category had the largest shift in the proportion of residents assigned to those RUGs and increased from about 13 percent in the first quarter of 1999 to about 15 percent. Special care and clinically complex each decreased by about 1 percent (see Chart 2).

CHART #2:
Trend in the Proportion of Medicare Residents in RUG Categories



Note: BBRA effective 4th quarter 2000 (October 1, 2000) through 2nd quarter 2001 (March 31, 2001). BIPA effective 3rd quarter 2001 (April 1, 2001) through 3rd quarter 2002 (September 30, 2002). All temporary adjustments ended as of October 1, 2002.

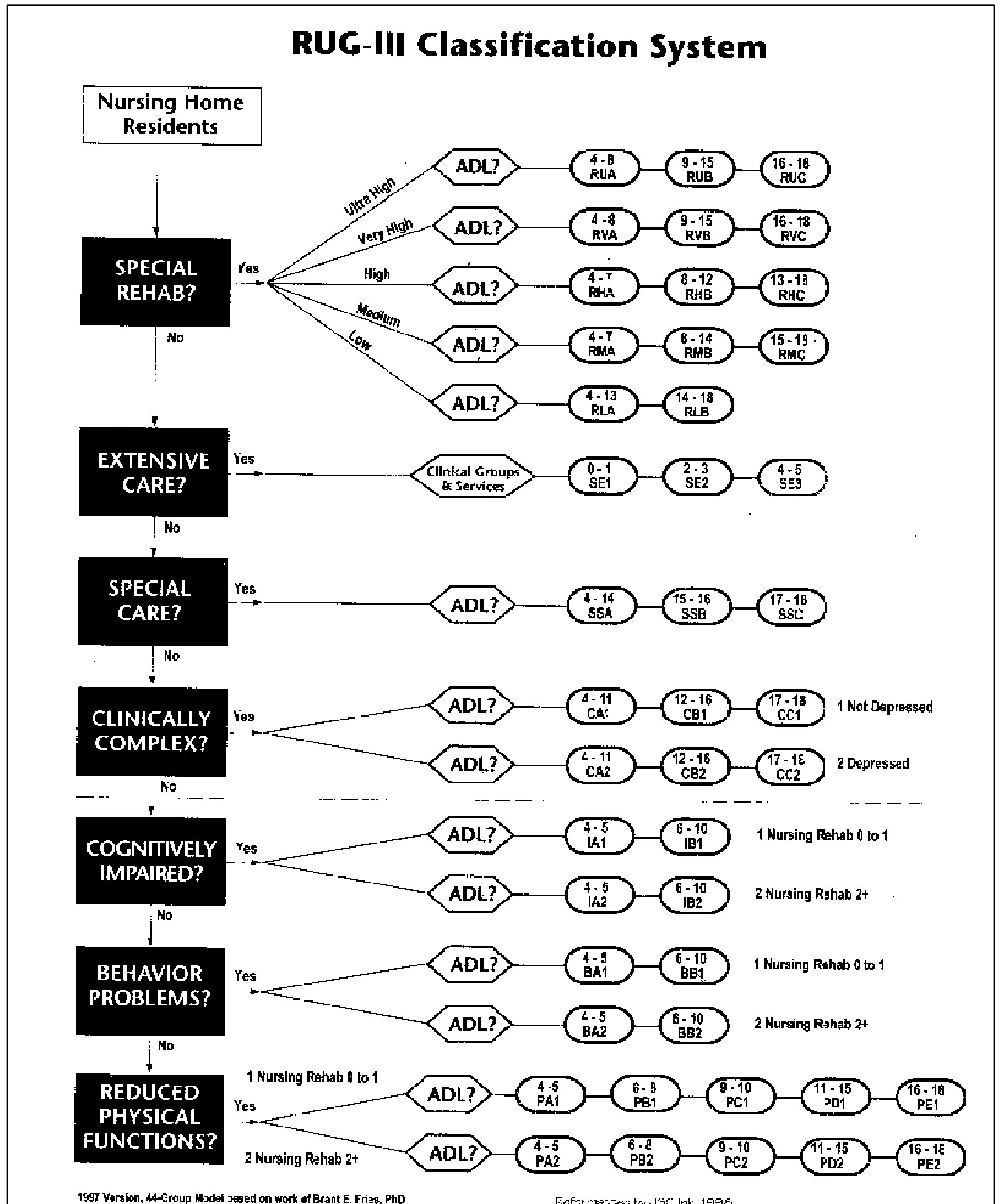
Source: OEI analysis of National Claims History File, July 2003

Underlying resident demographics do not explain the minimal resource utilization group (RUG) assignment.

We analyzed gender, race, age, and reason for Medicare eligibility from January 1999 to December 2002, and found no substantial shifts in the demographics of Medicare residents in nursing homes assigned to RUGs in that time period. For example, the mean age of Medicare residents remained about 80 years with a range of 0.4 years over 16 quarters of data.

SUMMARY

The analysis showed that shifts did occur in the proportion of Medicare nursing home residents assigned to RUG categories and subcategories corresponding to payment changes. However, the changes were small in magnitude and focused only in the rehabilitation RUGs. In addition, all payment changes ended on October 1, 2002, and any payment incentives that may have existed concluded at that time. This report fulfills the legislative mandate that the OIG assess whether payment incentives existed for the delivery of inadequate care in skilled nursing facilities.


RUG-III Classification System
Nursing Home Residents
SPECIAL REHAB?
Yes
No
Ultra High
Very High
High
Medium
Low
ADL?
4 - 8 RUA
9 - 15 RUB
16 - 18 RUC
4 - 8 RVA
9 - 15 RVB
16 - 18 RVC
4 - 7 RHA
8 - 12 RHB
13 - 18 RHC
4 - 7 RMA
8 - 14 RMB
15 - 18 RMC
4 - 13 RLA
14 - 18 RLB
EXTENSIVE CARE?
Clinical Groups & Services
0 - 1 SE1
2 - 3 SE2
4 - 5 SE3
SPECIAL CARE?
4 - 14 SSA
15 - 16 SSB
17 - 18 SSC
CLINICALLY COMPLEX?
4 - 11 CA1
12 - 16 CB1
17 - 18 CC1
1 Not Depressed
4 - 11 CA2
12 - 16 CB2
17 - 18 CC2
2 Depressed
COGNITIVELY IMPAIRED?
4 - 5 IA1
6 - 10 IB1
1 Nursing Rehab 0 to 1
4 - 5 IA2
6 - 10 IB2
2 Nursing Rehab 2+
BEHAVIOR PROBLEMS?
4 - 5 BA1
6 - 10 BB1
1 Nursing Rehab 0 to 1
4 - 5 BA2
6 - 10 BB2
2 Nursing Rehab 2+
REDUCED PHYSICAL FUNCTIONS?
1 Nursing Rehab 0 to 1
2 Nursing Rehab 2+
4 - 5 PA1
6 - 8 PB1
9 - 10 PC1
11 - 15 PD1
16 - 18 PE1
4 - 5 PA2
6 - 8 PB2
9 - 10 PC2
11 - 15 PD2
16 - 18 PE2
1997 Version, 44-Group Model based on work of Brant E. Fries, PhD

ǂ APPENDIX ~ B

The Proportion of Medicare Beneficiaries in Each RUG Category

RUG Category	Q1 '99	Q2 '99	Q3 '99	Q4 '99	Q1 '00	Q2 '00	Q3 '00	Q4 '00
Rehab	76.3%	76.7%	76.8%	76.0%	75.9%	76.0%	76.2%	76.5%
Extensive Care	12.8	12.8	12.8	13.5	13.7	13.3	13.3	13.4
Special Care	5.6	5.4	5.4	5.4	5.3	5.3	5.3	5.0
Clinically Complex	3.8	3.5	3.4	3.4	3.5	3.5	3.4	3.3
Cognitively Impaired	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Behavior Problems	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Reduced Physical Function	1.1	1.1	1.1	1.2	1.1	1.3	1.3	1.3
Total Number of Beneficiaries	427,351	418,258	411,465	427,873	485,122	438,619	428,079	428,467

RUG Category	Q1 '01	Q2 '01	Q3 '01	Q4 '01	Q1 '02	Q2 '02	Q3 '02	Q4 '02
Rehab	76.8%	76.7%	76.8%	76.7%	76.8%	76.9%	76.8%	76.9%
Extensive Care	13.5	13.5	13.6	13.9	14.2	14.1	14.2	14.5
Special Care	4.9	4.9	4.7	4.6	4.4	4.4	4.4	4.2
Clinically Complex	3.1	3.1	2.9	2.9	2.8	2.8	2.7	2.6
Cognitively Impaired	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5
Behavior Problems	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Reduced Physical Function	1.2	1.2	1.2	1.3	1.1	1.2	1.2	1.2
Total Number of Beneficiaries	481,851	459,049	438,031	453,335	507,011	475,821	468,006	522,803

Source: OEI analysis of National Claims History File, July 2003

Proportion of Medicare Beneficiaries in Each Rehabilitation Subcategory

REHAB SUBCATEGORIES	Q1 '99	Q2 '99	Q3 '99	Q4 '99	Q1 '00	Q2 '00	Q3 '00	Q4 '00
Ultra High	8.6%	7.4%	6.6%	5.6%	5.2%	5.1%	4.9%	4.3%
Very High	20.9	20.3	20.1	19.0	18.6	17.7	17.4	16.1
High	48.1	50.0	51.0	52.7	53.1	53.7	54.0	55.2
Medium	21.7	21.7	21.9	22.2	22.6	23.2	23.3	24.0
Low	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.4
Total Number of Rehab Beneficiaries	326,021	321,009	315,852	325,367	368,135	333,495	326,010	327,592

REHAB SUBCATEGORIES	Q1 '01	Q2 '01	Q3 '01	Q4 '01	Q1 '02	Q2 '02	Q3 '02	Q4 '02
Ultra High	4.6%	4.6%	4.9%	4.8%	5.2%	5.3%	5.6%	5.4%
Very High	16.4	16.9	17.2	17.2	18.2	18.5	19.1	18.8
High	55.2	55.7	55.7	56.0	55.4	55.6	55.2	55.9
Medium	23.4	22.5	21.9	21.7	21.0	20.4	19.8	19.6
Low	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2
Total Number of Rehab Beneficiaries	369,957	352,128	336,483	347,693	389,190	366,065	359,615	402,183

Source: OEI analysis of National Claims History File, July 2003

ǂ A P P E N D I X ~ D

The Proportion of Medicare Beneficiaries in Each RUG at Admission by Quarter

	Calendar Year 1999				Calendar Year 2000			
RUG	**Q1 '99**	**Q2 '99**	**Q3 '99**	**Q4 '99**	**Q1 '00**	**Q2 '00**	**Q3 '00**	**Q4 '00**
RUA	1.2%	1.0%	0.9%	0.7%	0.7%	0.6%	0.6%	0.5%
RUB	4.3	3.8	3.3	2.9	2.6	2.5	2.5	2.2
RUC	1.1	0.9	0.8	0.7	0.7	0.7	0.6	0.5
RVA	3.9	3.7	3.6	3.2	3.3	3.2	3.1	2.8
RVB	10.0	10.0	9.9	9.4	9.1	8.7	8.7	8.1
RVC	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.4
RHA	6.0	6.1	6.1	6.0	6.2	6.1	6.0	6.0
RHB	15.7	16.5	16.8	17.2	17.2	17.2	17.3	17.3
RHC	15.0	15.8	16.3	16.9	16.9	17.5	17.8	18.9
RMA	3.4	3.3	3.4	3.3	3.4	3.5	3.4	3.4
RMB	8.2	8.3	8.3	8.4	8.5	8.9	9.1	9.4
RMC	5.0	5.0	5.2	5.2	5.3	5.3	5.3	5.5
RLA	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
RLB	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
SE1	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5
SE2	6.8	6.8	6.9	7.2	7.3	7.1	7.1	7.2
SE3	5.6	5.6	5.5	5.9	6.0	5.7	5.8	5.7
SSA	3.6	3.6	3.6	3.6	3.5	3.7	3.6	3.4
SSB	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0
SSC	0.8	0.7	0.7	0.7	0.7	0.6	0.7	0.6
Total Beneficiaries	427,351	418,258	411,465	427,873	485,122	438,619	428,079	428,467

Source: OEI analysis of National Claims History File, July 2003

	Calendar Year 2001				Calendar Year 2002			
RUG	**Q1 '01**	**Q2 '01**	**Q3 '01**	**Q4 '01**	**Q1 '02**	**Q2 '02**	**Q3 '02**	**Q4 '02**
RUA	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.6%
RUB	2.4	2.4	2.5	2.4%	2.6	2.7	2.9	2.8
RUC	0.6	0.6	0.7	0.7%	0.7	0.7	0.8	0.7
RVA	2.9	2.9	2.9	2.8	3.0	3.0	3.1	2.8
RVB	8.2	8.5	8.6	8.7	9.2	9.4	9.7	9.7
RVC	1.4	1.6	1.7	1.7	1.8	1.8	1.9	2.0
RHA	6.1	6.1	6.0	5.9	6.0	5.9	5.9	5.7
RHB	17.5	17.8	17.9	17.8	17.5	17.6	17.2	17.4
RHC	18.8	18.8	18.9	19.3	19.1	19.2	19.3	19.9
RMA	3.3	3.3	3.3	3.1	3.1	3.0	2.9	2.8
RMB	9.2	8.7	8.4	8.3	8.0	7.8	7.4	7.3
RMC	5.5	5.3	5.1	5.2	5.0	4.9	4.8	5.0
RLA	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
RLB	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SE1	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5
SE2	7.2	7.3	7.4	7.4	7.6	7.5	7.5	7.6
SE3	5.8	5.7	5.8	6.0	6.2	6.1	6.2	6.4
SSA	3.4	3.5	3.4	3.2	3.2	3.2	3.2	3.1
SSB	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7
SSC	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Total Beneficiaries	481,851	459,049	438,031	453,335	507,011	475,821	468,006	522,803

Source: OEI analysis of National Claims History File, July 2003

RUG	Calendar Year 1999 Q1 '99	Q2 '99	Q3 '99	Q4 '99	Calendar Year 2000 Q1 '00	Q2 '00	Q3 '00	Q4 '00
CA1	1.7%	1.5%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%
CB1	1.1	1.0	1.0	1.0	1.0	1.1	1.0	1.0
CC1	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CA2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CB2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CC2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IA1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
IB1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BA1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BB1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PA1	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4
PB1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PC1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PD1	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
PE1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
PA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PC2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PD2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PE2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Beneficiaries	427,351	418,258	411,465	427,873	485,122	438,619	428,079	428,467

Source: OEI analysis of National Claims History File, July 2003

RUG	Calendar Year 2001 Q1 '01	Q2 '01	Q3 '01	Q4 '01	Calendar Year 2002 Q1 '02	Q2 '02	Q3 '02	Q4 '02
CA1	1.3%	1.3%	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%
CB1	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
CC1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CA2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2
CB2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CC2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IA1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IB1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
IA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BA1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BB1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PA1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
PB1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PC1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PD1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
PE1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
PA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PC2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PD2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PE2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Beneficiaries	481,851	459,049	438,031	453,335	507,011	475,821	468,006	522,803

Source: OEI analysis of National Claims History File, July 2003

APPENDIX D

ACKNOWLEDGMENTS

This report was prepared under the direction of Mark R. Yessian, Ph.D., Regional Inspector General for Evaluation and Inspections in the Boston Regional Office, and Joyce M. Greenleaf, M.B.A., Deputy Regional Inspector General. Other principal Office of Evaluation and Inspections staff who contributed include:

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