NATIONAL DRG VALIDATION STUDY: SHORT HOSPITALIZATIONS

RICHARD P. KUSSEROW
INSPECTOR GENERAL

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EXECUTIVE SUMMARY

PURPOSE

This study examined short hospital stays of 1, 2, or 3 days to ascertain the extent of short stays, whether short-stay patients were being admitted and discharged appropriately, and whether the quality of care they received was adequate. This report is one in a series of reports developed from the *National Diagnosis Related Group (DRG) Validation Study* undertaken by the Office of Inspector General (OIG).

BACKGROUND

In October 1983, a new prospective payment system for Medicare hospital stays was introduced to encourage hospitals, through appropriate financial incentives, to implement economies and efficiencies to help curb escalating health care costs. Conversely, these same financial incentives might induce some physicians and hospitals to admit patients who do not need acute hospital care, in order to obtain payment for treatment that could have been given on an outpatient basis. At the other extreme, needed hospital services might be withheld and the patient discharged prematurely, thereby increasing profits while placing beneficiaries at risk.

METHODOLOGY

Short hospitalizations were identified by analyzing a random OIG sample of 7,045 Medicare discharges from 239 hospitals between October 1984 and March 1985. Comparisons were made of the characteristics of short hospitalizations to those of longer stays, and to the entire OIG sample.

FINDINGS

- Of the 7,045 discharges reviewed, 18 percent were short hospitalizations.
- The short hospitalization subsample had a 20 percent unnecessary admission rate.
- Short stay unnecessary admissions cost the program approximately $217 million in Fiscal Year (FY) 1985.
- The DRGs identified most often as unnecessary admissions were: Cataract Surgery (39), Digestive Disorders (182), Heart Failure and Shock (127), Chemotherapy (410), Bronchitis and Asthma (96), and Medical Back Problems (243).
- Most patients admitted unnecessarily needed outpatient care.
- The rates of premature discharges and poor quality of care for short hospitalizations were reflective of the entire sample.

RECOMMENDATIONS

Our findings on short stays reinforce the recommendations contained in the previous OIG report, *National DRG Validation Study: Unnecessary Admissions to Hospitals,* (OAI-09-88-00880), which addressed the unnecessary admissions found in the entire sample. Our previous report recommended that the Health Care Financing Administration (HCFA) improve the peer review organizations' (PROs') identification of unnecessary admissions. In their comments to that report, HCFA agreed that to achieve the best return on investment, they should focus review efforts on those cases which are the most problematic. They propose pilot studies in several States that will focus on short hospitalizations and DRGs that are frequently unnecessary. This report on short stays provides an approach to improve identification of unnecessary admissions. Should HCFA implement the following recommendations, denials of unnecessary hospitalizations for the DRGs listed below should result in net program recoupments of approximately $183 million, based on FY 1987 data.

Based on our analysis of problematic DRGs appearing in the unnecessary admission study and the short hospitalization study, we recommend that HCFA include in their proposed PRO pilot studies:

- admission reviews of the following DRGs: Respiratory Neoplasms (82), Bone Cancer (239), Medical Back Problems (243), Bone Infection (244), and Enlarged Prostate (348); and
- admission reviews of 1-, 2- or 3-day hospitalizations with the following DRGs: Eye Disorders (47), Ear, Nose and Throat Diagnoses (73), Anal Surgery (158), Urinary Tract Infections (320), and Acute Adjustment Reaction (425).

Unnecessary admission rates, per DRG, resulting from these pilot studies and others conducted by the PROs, should be calculated and the results compared to the OIG study findings. If the results of these pilot studies verify that unnecessary admission rates are higher in short hospital stays, and that scrutiny leads to a higher return per medical review resources invested, HCFA should:

- instruct all PROs to target certain DRGs determined to give the highest return on investment of review resources, and *consider* relaxing the PRO responsibility for applying admission screens or criteria to all reviewed cases; and
- require PROs to perform random, periodic reviews of short hospitalizations (1 to 5 days) to uncover any hospital circumvention of established PRO sampling criteria.

The HCFA responded to our draft report by indicating they would seriously consider the DRGs suggested for inclusion in pilot projects to be developed. Their comments can be found in appendix F of the report.

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INTRODUCTION

BACKGROUND

On October 1, 1983, the Health Care Financing Administration (HCFA), the agency responsible for administering the Medicare program, replaced most of its hospital cost-based reimbursement system with the prospective payment system (PPS). Congress mandated this change because of the rapid increase in Medicare payments for inpatient expenses. Under the new system, hospitals currently receive a pre-established payment for each discharge based upon an assigned diagnosis related group (DRG). Each of the 475 DRGs results in an associated payment that represents an average cost for patients having similar diagnoses. Some patient hospital stays consume more services (i.e., cost more than the payment) while others use less. The hospital retains any surplus from stays costing less than their DRG payment and must absorb any losses on stays consuming more services than the payment. In addition to the DRG payment, a hospital may receive additional payment from HCFA for atypical cases referred to as day or cost outliers. These cases are atypical with respect to a beneficiary's lengthy inpatient hospital stay or extraordinary costs incurred by the hospital while caring for a beneficiary.

Congress assumed that a fixed payment per discharge would encourage hospitals to reduce waste and unnecessary services. At the same time, the total payments to the hospitals would provide the same essential resources for patients as the cost-based system. While the intent of Congress was to reduce health care costs, it was also concerned that the quality of care not diminish under this new system. To protect the integrity of PPS and maintain quality of care, Congress established peer review organizations (PROs) to monitor PPS activities.

PREVIOUS OIG STUDIES

With the advent of prospective payment, the Office of Inspector General (OIG) evaluated PPS and its potential effects on utilization and provider behavior in order to detect and prevent program fraud, abuse and waste. In analyzing vulnerabilities that could result in "gaming" or manipulating PPS, the OIG identified several major concerns. Among these were "upcoding" the DRGs to obtain higher reimbursement, admitting patients not in need of acute hospital care to maximize DRG payments, and inappropriately or prematurely discharging patients before hospital expenditures exceeded the DRG payment. Deliberate underutilization of hospital resources and inappropriate transfers between acute care hospitals and exempt units were also areas of concern.

Based on these concerns, OIG completed three validation studies of DRG 14, Specific Cerebrovascular Disorder Except Transient Ischemic Attack; DRG 82, Respiratory Neoplasms; and DRG 88, Chronic Obstructive Pulmonary Disease. A review of PRO activity in identifying and handling cases of inappropriate discharges and transfers was also completed early in 1986, along with a study regarding beneficiary rights under the new payment system. An ongoing study of hospital Medicare profits is being conducted by the OIG.

In addition, a major initiative, the *National DRG Validation Study*, was undertaken to survey the accuracy of DRG coding and quality of care performed by hospitals under PPS. Based on data from this national study and additional data from other sources, several reports have been or will be issued by the Inspector General regarding quality of care, as well as identified areas of manipulation and PRO performance in monitoring PPS activities.

We have released *National DRG Validation Study: Unnecessary Admission to Hospitals* (OAI-09-88-00880). Our findings regarding unnecessary admissions in the short-stay subsample reinforce the findings in this report. The HCFA, in their response to the unnecessary admissions report, proposed pilot studies in several States to focus on DRGs associated with frequent unnecessary admissions and on short hospitalizations. *National DRG Validation Study: Short Hospitalizations* discusses short hospital stays of 1, 2 or 3 days. Our recommendations recognize HCFA's proposed pilot studies and offer an approach to improve identification of unnecessary admissions.

OBJECTIVES

A short hospitalization does not necessarily mean the patient received inappropriate treatment, was discharged too soon, or should never have been hospitalized. However, hospitals can manipulate PPS by admitting patients who do not need acute care or prematurely discharging patients still in need of therapy or treatment. Either way, the hospital stands to gain financially by underutilizing services while receiving the same payment.

This study was conducted to ascertain the extent of short stays, whether short-stay patients were being admitted and discharged appropriately, and whether the quality of care they received was adequate. We also analyzed the characteristics of hospitals associated with short-stay hospitalizations in the *National DRG Validation Study* sample.

METHODOLOGY

Using a two-stage cluster design, the OIG sampled 7,045 complete medical records from 239 hospitals stratified by size. These cases were drawn from hospital discharges occurring during October 1984 through March 1985. The OIG contracted with the Health Data Institute of Lexington, Massachusetts for medical records specialists to reabstract the diagnoses, and for physicians and nurses to assess the appropriateness of the care. A comprehensive system of reviews and referrals verified the accuracy of this process. Further information regarding sampling and review methodology can be found in appendix A.

In assessing appropriateness of care, the patient's condition was evaluated during three points in time. The first reference was upon admission. Unnecessary admissions were identified at this time. The second evaluation of care concerned the treatment of the patient during his or her hospital stay. Determinations of poor quality of care, unneeded procedures, etc., were then made. Finally, a decision regarding the appropriateness of discharge was reached. Registered nurses initially screened the medical records for incidents relating to the appropriateness of ad-

mission, quality of care, and appropriateness of discharge. If potential inadequacies were found, the medical record was referred to a physician for review. If confirmed, the physician prepared a narrative summary describing the nature of the deficiencies noted.

The reviewers were instructed to ignore marginal problems or cases involving honest differences in medical judgment about appropriate case management and subsequent discharges. An OIG medical officer evaluated all narrative summaries and quality of comments and found them to be adequate and consistent.

For the purposes of this inspection, hospitalizations shorter than 24 hours were counted as 1-day stays. For example, patients who died within 24 hours after admission were considered to have been hospitalized for 1 day.

FINDINGS

HOSPITAL CHARACTERISTICS

FINDING: *Of The 7,045 Discharges Reviewed, 18 Percent Were Short Hospitalizations.*

From the original sample of 7,045 discharges, we identified a subsample of 1,254 (18 percent) short hospitalizations of 1, 2 or 3 days.

The 1-3 day subsample represented discharges from 237 of the 239 sampled hospitals. We reviewed approximately 30 cases from each sampled hospital. The number of short stays identified per hospital ranged from 1 to 14. The average number of short stays in small hospitals was 6.1; in medium-sized hospitals, 4.7; and in large hospitals, 5.

The geographic location of the hospital did not appear to be a significant factor. Geographic representation of short-stay hospitals was similar to the overall sample.

Small, rural hospitals had a slightly higher percentage of short stays than larger, urban hospitals. Teaching status did not appear to have an effect on the numbers of short stays. More detailed information regarding hospital characteristics can be found in appendix B.

UNNECESSARY ADMISSIONS

FINDING: *Short Hospitalizations Had A Much Higher Unnecessary Admission Rate Than Did Hospital Stays Of 4 Days Or More.*

In the 1-3 day subsample of 1,254 hospitalizations, 252 (20 percent) were unnecessary admissions. Of the remaining 5,791 discharges, where patients were hospitalized for 4 or more days, 488 (8 percent) were unnecessary admissions. In the entire sample of 7,045 discharges, 10 percent of the admissions were deemed by the physician reviewers to be unnecessary.

UNNECESSARY ADMISSIONS

	1-3 Day Subsample	4+ Day Subsample	Entire Sample	PRO Sample
Sample Discharges	1,254	5,791	7,045	8 million
Unnecessary Admissions	252	488	740	206,821
Percent of Sample	(20.1%)	(8.4%)	(10.5%)	(2.6%)

These figures contrast with those from a non-random sample of 8 million cases the PROs reviewed during a time period (July 1984 through September 1986) which included the timeframe of the OIG sample (October 1984 through March 1985). Using different methods and standards for identifying unnecessary admissions, the PROs denied 3 percent, or approximately 207,000 cases, as unnecessary admissions.

FINDING: *Short Stay Unnecessary Admissions Cost The Programs Approximately $217 Million In Fiscal Year (FY) 1985.*

Although the overall unnecessary admission rate in the entire sample is higher than the rate reported by the PROs, comparison of the two subsamples shows that the rate for short stays (20 percent) is substantially higher than the rate we found for hospitalizations of 4 days or more. This indicates that a review of short hospital stays of 1, 2 or 3 days may result in more unnecessary admission determinations and subsequent program recoupments.

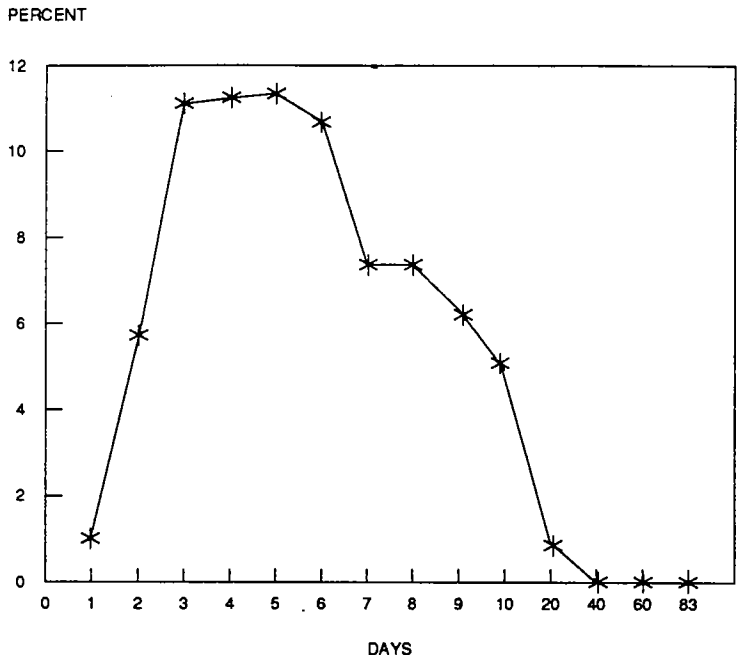
We projected that hospitals received approximately $411 million in FY 1985 for unnecessary admissions that were 1-, 2- or 3-day hospitalizations. However, the net loss to the Medicare program is about one-half of this amount. Taking into consideration the cost of providing necessary outpatient care needed by the inappropriately admitted hospital patients, we estimate the net program loss to be approximately $217 million. (See appendix A for more detail regarding these projections.)

FINDING: *The Longer The Patients' Stay In The Hospital, The Lower The Rate Of Unnecessary Admissions.*

For the entire sample, the average length of stay (LOS) was 7 days. The average LOS for unnecessary admissions in the entire sample was 5 days. To better understand the significance of these statistics in terms of short hospitalizations, we have graphically depicted the percent of the sample discharges falling into actual LOS categories ranging from 1 day to 83 days, and the percent of those cases that were unnecessary admissions.

As the following graph indicates, a larger percent of sampled discharges fell into the 3-, 4-, 5- or 6-day category. To a lesser extent, hospitalizations of 7, 8, 9, and 10 days were also well represented.

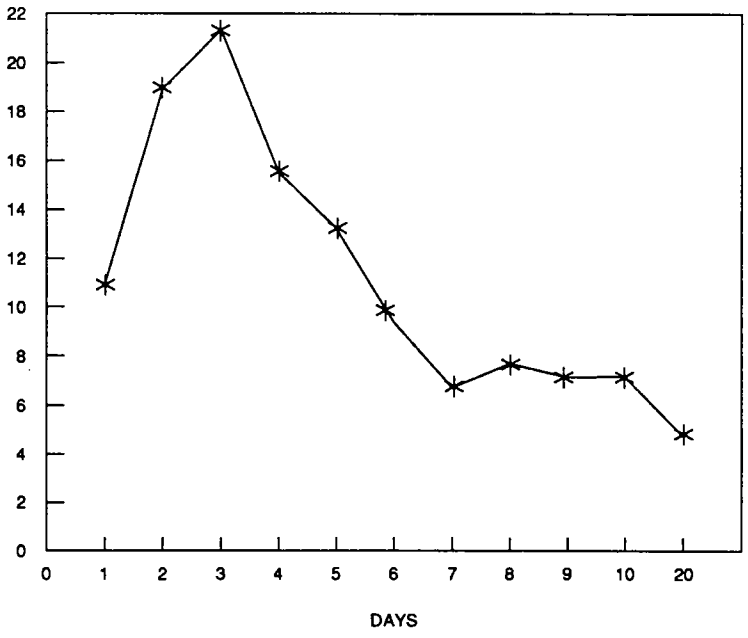
ENTIRE SAMPLE DISCHARGES
BY LENGTH OF STAY



N= 7,045

However, when the rates of unnecessary admissions are graphically depicted by actual LOS categories, as shown in the graph below, we see a sharp drop in unnecessary admission rates following hospitalizations of 3 days. This downward trend generally continues the longer the patient stays in the hospital. For example, in the entire sample, 3-day hospitalizations had an unnecessary admission rate of 21 percent, while 5-day hospitalizations had a rate of 13 percent. The unnecessary admission rate fell to 7 percent for hospitalizations of 10 days.

UNNECESSARY ADMISSIONS
BY LENGTH OF STAY



FINDING: *The DRGs Identified Most Often As Being Unnecessary Admissions Were: Cataract Surgery (39), Digestive Disorders (182), Heart Failure and Shock (127), Chemotherapy (410), Bronchitis and Asthma (96), and Medical Back Problems (243).*

The following table compares the 19 DRGs that represented the most frequently identified unnecessary admissions found in the short-stay subsample. Cataract surgery was the procedure identified most often as being an unnecessary hospital admission. However, HCFA statistics indicate that since the timeframes of our review, DRG 39 is no longer in the top 25 DRGs paid in the country. This procedure has shifted primarily to outpatient settings.

FREQUENCY OF UNNECESSARY ADMISSIONS IN 1-3 DAY SUBSAMPLE BY DRG

DESCRIPTION	DRG	# of Unnecessary Admissions in 1-3 Day Subsample	% of Total Unnecessary Admissions
Cataract Surgery	39	53	21.0
Digestive Disorders	182	16	6.3
Heart Failure & Shock	127	6	2.4
Chemotherapy	410	6	2.4
Bronchitis & Asthma	96	5	2.0
Medical Back Problems	243	5	2.0
Dizziness	65	4	1.6
Metabolic Disorders	296	4	1.6
Seizure & Headache	24	3	1.2
Eye Disorders	47	3	1.2
Ear, Nose, Throat Diagnoses	73	3	1.2
Anal Surgery	157	3	1.2
Anal Surgery	158	3	1.2
Bone Infection	244	3	1.2
Urinary Tract Infections	320	3	1.2
Urinary Tract Disorders	325	3	1.2
Enlarged Prostate	348	3	1.2
Red Blood Cell Disorders	395	3	1.2
Acute Adjustment Reaction	425	3	1.2
Other	120		47.5
TOTAL		252	100.0

We also analyzed the rate of unnecessary admissions within each of the 19 DRGs appearing in the above table.

RATE OF UNNECESSARY ADMISSIONS WITHIN DRG CATEGORY IN 1-3 DAY SUBSAMPLE

DESCRIPTION	DRG	Total # of DRGs in 1-3 Day Subsample	# of Unnecessary Admissions Within 1-3 Day Subsample	Rate of Unnecessary Admissions Within DRG
Eye Disorders	47	3	3	100.00
Cataract Surgery	39	64	53	82.81
Anal Surgery	158	4	3	75.00
Acute Adjustment Reaction	425	4	3	75.00
Ear, Nose, Throat Diagnoses	73	5	3	60.00
Dizziness	65	7	4	57.14
Bone Infection	244	7	3	42.86
Enlarged Prostate	348	7	3	42.86
Urinary Tract Infections	320	8	3	37.50
Urinary Tract Disorders	325	8	3	37.50
Medical Back Problems	243	14	5	35.71
Digestive Disorders	82	52	16	30.77
Anal Surgery	157	11	3	27.27
Bronchitis & Asthma	96	21	5	23.81
Red Blood Cell Disorders	395	15	3	20.00
Chemotherapy	410	31	6	19.35
Seizure & Headache	24	17	3	17.65
Heart Failure & Shock	127	39	6	15.38
Metabolic Disorders	296	27	4	14.81
Other		910	120	13.19
Total		1254	252	

As the table on page 7 indicates, the six DRGs with the highest occurrence of unnecessary admissions in the short-stay subsample were Cataract Surgery (39); Digestive Disorders (182), Heart Failure and Shock (127); Chemotherapy (410); Bronchitis and Asthma (96); and Medical Back Problems (243).

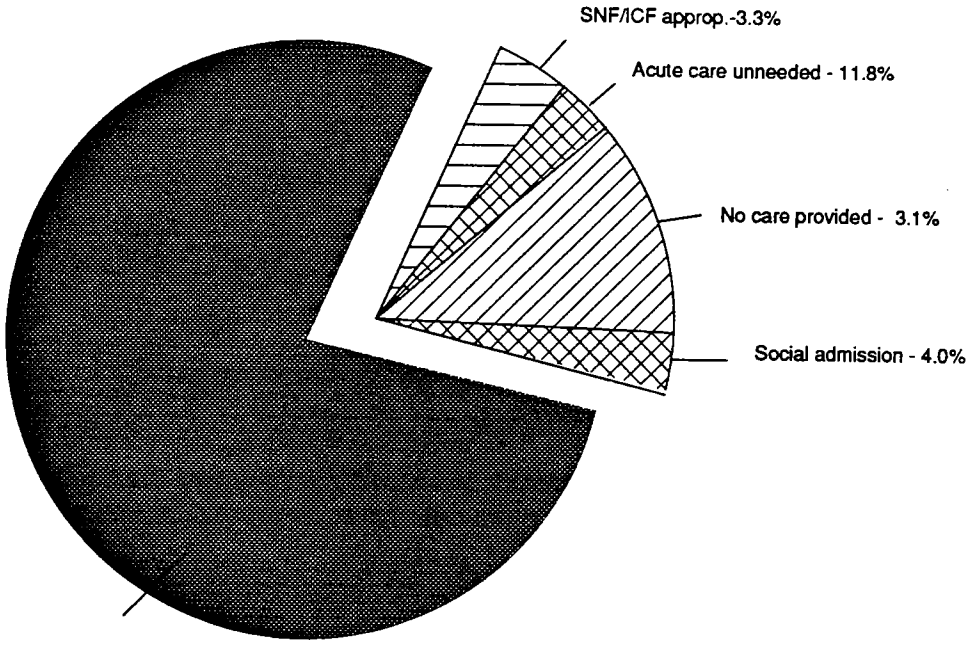
While these DRGs had the highest frequencies of unnecessary admission, other DRGs had a greater chance of being an unnecessary admission. For instance, as demonstrated in the above chart, DRG 47, Eye Disorders, was found to be an unnecessary admission 100 percent of the time.

Admissions for cataract surgery, the most frequently noted unnecessary admission, were found to be unnecessary 83 percent of the time. Anal surgery and acute adjustment reaction were unnecessary 75 percent of the time; followed by ear, nose, throat diagnoses (60 percent) and dizziness (57 percent).

FINDING: *Most Patients Admitted Unnecessarily Needed Outpatient Care.*

Most of the identified patients admitted unnecessarily in both the entire sample and the short-stay subsample needed medical attention, but not in an acute care setting. As the following graph indicates, reasons for unnecessary admissions fell into five categories. In the short-stay subsample, 80 percent of the unnecessary admissions should have been more appropriately treated in an outpatient setting. Approximately 12 percent of the unnecessarily admitted did not need acute care. Social admissions accounted for about 2 percent of the unnecessary admissions identified in the short-stay subsample. The percentages for the entire sample were very similar: outpatient, 78 percent; acute care not needed, 12 percent; and social admissions, 4 percent.

REASONS FOR UNNECESSARY ADMISSIONS
N=749



PREMATURE DISCHARGES, QUALITY OF CARE CONCERNS AND NOSOCOMIAL INFECTIONS

FINDING: *The Rates Of Premature Discharges And Poor Quality Of Care Were Reflective Of The Entire Sample.*

As previously mentioned, hospitals may increase profits by prematurely discharging patients.

If hospitals were routinely discharging patients inappropriately, we might expect to see a number of occurrences in our short-stay sample. We did not. The following chart displays the number of premature discharges appearing in the entire sample, the short-stay subsample and the 4+ day subsample.

PREMATURE DISCHARGES

	1-3 Day Subsample	4+ Day Subsample	Entire Sample
Sample Size	1,229	5,716	6,945*
Premature Discharges	10	64	74
Percent	8	1.1	1.1

**In 100 cases, reviewers did not comment on whether the discharge was appropriate or premature.*

The following chart shows that quality of care issues were identified as often in cases of short hospitalizations as in cases where the patient was hospitalized for a longer period of time.

QUALITY OF CARE

	1-3 Day Subsample	4+ Day Subsample	Entire Sample
Sample Size	1,254	5,791	7,045
Quality of Care Discharges	92	372	464
Percent	7.3	6.4	6.6

FINDING: *Nosocomial Infections Occurred Less Frequently In Short Hospitalizations*

Nosocomial infections--infections acquired by the patient while in the hospital--occurred less frequently during short hospitalizations. This is expected since the patients were exposed to a potentially infectious environment for a shorter period of time.

NOSOCOMIAL INFECTIONS

	1-3 Day Subsample	4+ Day Subsample	Entire Sample
Sample Size	1,201	5,560	6,761*
Nosocomial Infections	22	375	397
Percent	1.8	6.7	5.9

**Presence or absence of a nosocomial infection was not commented on by reviewers in 284 of the 7,045 cases.*

CODING ERRORS

FINDING: *DRG Coding Errors Were Found In The Short-stay Subsample As Often As In The Entire Sample.*

Under PPS, the accuracy of DRG coding is critical in determining fair and accurate payment. Using the *International Classification of Diseases, 9th Revision, Clinical Modification* codes, hospitals must list in correct sequence the appropriate diagnoses and procedures of a patient's case. This is necessary for the fiscal intermediary to assign the correct DRG and make appropriate payment.

The short-stay subsample closely mirrors the entire sample in percent of coding errors found. The effect of coding errors in both samples tends to favor the hospitals. In the entire sample of 7,045 discharges, 20 percent of the DRGs were changed by the reviewers. When recoded correctly, 61 percent of the miscoded cases resulted in a lower-weighted DRG, and in 39 percent of the cases the correct DRG had a higher weight. In our short-stay subsample, 18 percent (229) of the 1,254 cases were miscoded. When correctly coded, 60 percent of the 229 miscoded cases resulted in a lower-weighted DRG, and 40 percent resulted in a higher-weighted DRG.

Of the 237 hospitals in the short-stay subsample, 129 (54 percent) had a least 1 miscoded case. The average number of miscoded cases was 1.8, the statistical mean and mode was 1. The following chart indicates the number of coding errors resulting in a DRG change per hospital:

FREQUENCY OF CODING ERRORS IN 1-3 DAY SUBSAMPLE

Number of Coding Errors	Number of Hospitals by Bed Size			Total Hospitals
	d	100-299	300+	
1	20	26	25	71
2	15	9	8	32
3	8	5	0	13
4	7	3	1	11
5	1	0	0	1
6	1	0	0	1
TOTALS	52	43	34	129

As in the entire sample, coding errors of short hospital stays were found most often in small hospitals. Two-day hospital stays were miscoded 25 percent of the time, compared to a coding error rate of 15 percent for hospitalizations of 1 and 3 days. See appendix B for additional information. The most often miscoded DRGs identified in short hospitalizations were as follows:

MISCODED DRGs IN 1-3 DAY SUBSAMPLE

DRG	Relative Weights	Description	Frequency	Percent
140	0.7470	Angina Pectoris	9	3.9
132	0.9087	Atherosclerosis	8	3.5
182	0.6121	Digestive Disorders	7	3.1
87	1.5368	Pulmonary Edema & Resp. Failure	6	2.6
89	1.0914	Simple Pneumonia & Pleurisy	6	2.6
127	1.0300	Heart Failure & Shock	6	2.6
14	1.3386	Strokes Except Transient Ischemic Attacks	5	2.2
180	0.8112	G.I. Obstruction	5	2.2
294	0.8003	Diabetes	5	2.2
296	0.8886	Metabolic Disorders	5	2.2
Other			167	72.9
Totals			229	100.0

RECOMMENDATIONS

Our previous study entitled *National DRG Validation Study: Unnecessary Admissions to Hospitals*, specifically addressed unnecessary admissions found in the entire sample. Our inspection of short hospitalizations contains information regarding unnecessary admissions found in the 1,254 discharges of the short-stay subsample. Our findings reinforce the recommendations contained in the above-cited report on unnecessary admissions, but go further in providing an approach to improve identification of unnecessary admissions.

We recommended in our previous report that HCFA improve the PROs' identification of unnecessary admissions. In their comments on that report, HCFA agreed that to achieve the best return on investment, they should focus review efforts on those cases which are the most problematic. They proposed pilot studies in several States that would focus on short hospitalizations and DRGs that are frequently unnecessary. Based on our analysis of problematic DRGs appearing in the unnecessary admission study and the short-hospitalization study, we recommend that HCFA include in their proposed PRO pilot studies:

- admission reviews of the following DRGs: Respiratory Neoplasms (82), Bone Cancer (239), Medical Back Problems (243), Bone Infection (244), and Enlarged Prostate (348); and

- admission reviews of 1-, 2- or 3-day hospitalizations with the following DRGs: Eye Disorders (47), Ear Nose and Throat Diagnoses (73), Anal Surgery (158), Urinary Tract Infections (320), and Acute Adjustment Reaction (425).

We believe scrutiny of these DRGs will yield the highest return in identifying inappropriate program payments, while efficiently using medical review resources. Our rationale for selecting these DRGs appears on pages 14-16 of the report. Alternative options regarding which DRGs to review are also presented.

Unnecessary admission rates, per DRG, resulting from these pilot studies and others conducted by the PROs, should be calculated and the results compared to the OIG study findings. If the results of these pilot studies verify that unnecessary admission rates are higher in short hospital stays and that scrutiny of certain DRGs yield a higher return per medical review resources invested, HCFA should:

- instruct all PROs to target certain DRGs determined to give the highest return on investment of review resources, and *consider* relaxing the PROs' responsibility for applying admission screens or criteria to all reviewed cases; and

- require PROs to perform random, periodic reviews of short hospitalizations (1 to 5 days) to uncover any hospital circumvention of PRO sampling criteria.

Once the hospitals become aware of which DRGs are being scrutinized, some may seek to circumvent the screens by manipulating other DRGs and increasing the length of unnecessary hospitalization; e.g., discharging patients on the fourth or fifth day of hospitalization for non-targeted DRGs. Periodic sampling of 1- to 5-day hospitalizations will guard against such manipulation, particularly since unnecessary admissions appear to drop off dramatically after the fourth day of hospitalization.

Rationale For Targeting DRGs For Review

In recommending specific DRGs to be reviewed, we focused on identifying unnecessary admissions in a way to maximize recoupment of program funds. We included DRG or case characteristics, such as length of hospital stay, number of unnecessary admissions found during review, and the rate or likelihood of a DRG to be an unnecessary admission. We also considered the relative impact on the existing PRO workloads, in terms of minimum case sample size for review and incremental cost to the PRO for reviewing these cases.

The table in appendix D displays the 27 DRGs identified in our studies as being the most problematic. Using HCFA's FY 1987 payment statistics, and DRG unnecessary admission rates identified in both the unnecessary admission and the short-stay hospitalization studies, we have projected the number of discharges per DRG the PROs would be required to review, and the estimated program dollars that could be recouped by targeting a specific DRG. We also calculated the return on investment (ROI), in terms of overpayment identified per claim reviewed. (The inappropriate payments were not adjusted to reflect the difference in cost between the hospital stay and more appropriate outpatient care, nor to reflect any waiver provisions that might apply.) Calculations include projections based on review of all claims submitted in FY 1987 per DRG, and projections per DRG for hospitalizations of 1, 2, or 3 days.

The DRGs with the highest ROIs (dollar recoupment per claim reviewed) identified in our unnecessary admission study are not the same DRGs identified in our short hospitalization study. Short-stay DRGs have relatively higher ROIs because they have a greater likelihood of being an unnecessary admission, while at the same time having a smaller universe of claims to review. Review of other DRGs may result in a larger dollar recoupment, but because the universe of claims to review is larger, 100 percent review of these DRGs is more resource intensive, hence a lower ROI.

There are a number of options HCFA may choose in selecting DRGs for targeted review. Identification of inappropriate payments will be directly tied to the type of DRGs selected and the number of claims reviewed. Based on our study of discharges occurring from October 1984 through March 1985, we recommend that HCFA target for review five problematic DRGs that appeared in the entire sample and had the highest computed ROI values, and five problematic DRGs that appear in the short-stay subsample with the highest computed ROI values.

Should HCFA implement this recommendation by requiring mandatory review of the DRGs listed in the table below, we project, based on FY 1987 data, that the program could realize net recoupments estimated at $183 million, taking into consideration a corresponding increase of approximately 15 percent in the PROs' medical review workloads.

INAPPROPRIATE PROGRAM PAYMENTS RESULTING FROM TARGETED DRG REVIEW

DESCRIPTION	DRG	# OF CLAIMS REVIEWED	INAPPROPRIATE PROGRAM PAYMENTS	ROI (AVERAGE RETURN)	% OF PRO WORKLOAD
Respiratory Neoplasms	82	83,254	$ 54,930,989	$ 660	3.78
Medical Back Problems	243	130,545	59,115,926	453	5.93
Bone Cancer	239	56,330	48,180,445	855	2.56
Bone Infection	244	17,644	12,131,567	688	.80
Enlarged Prostate	348	9,439	7,178,360	761	.43
SUBTOTAL		297,212	$181,537,287	$ 611	13.50
Urinary Tract Infections	320*	11,669	9,901,708	849	.53
Ear, Nose, Throat Diagnoses	73*	5,333	5,064,809	950	.24
Acute Adjustment Reaction	425*	3,797	4,118,105	1,085	.17
Anal Surgery	158*	3,629	3,301,665	910	.16
Eye Disorders	47*	2,377	$ 2,250,782	$ 947	.11
SUBTOTAL		26,804	$ 24,637,069	$ 919	1.21
TOTAL		324,016	$206,174,356	$ 636	14.71

**short-stay DRGs*

ESTIMATED PROGRAM RECOUPMENTS BASED ON FY 1987 DATA

FY 1987 PRO Expenditures	$154.0 million
Increase in Medical Review Workload	x 15 percent
	$ 23.1 million
Estimated Program Recoupments Based on Review of Above Cited DRGs	$206.0 million
Less Increase in Medical Review Workload	- 23.1 million
Estimated Net Recoupments	$182.9 million

Another option HCFA might select would be mandatory review of those DRGs appearing most often in our short-stay study as an unnecessary admission. Review of 1-3 day hospitalizations for bronchitis and asthma (96) heart failure and shock (127), digestive disor-

ders (182), medical back problems (243) and chemotherapy (410) would yield approximately $82 million in inappropriate payments, and increase the PROs' workload by approximately $13.9 million. This would result in net recoupments of approximately $68.1 million.

Assuming a good return on investment resulting from the proposed pilot studies, HCFA may want to consider increasing PRO budgets, allowing for more of this type of activity. However, if increasing the PROs' budgets is not feasible, HCFA might *consider* relaxing PRO requirements to review all cases for appropriateness of admission, thus freeing up, to some extent, medical review resources that could be redirected toward targeted review of specific DRGs. Alternatively, HCFA may want to consider eliminating other less productive PRO activities in order to allow PRO staff to focus more medical resources on these targeted reviews, thus keeping PRO workloads constant.

COMMENTS

HCFA Comments And OIG Response

The HCFA responded to our draft report by indicating they would seriously consider the DRGs suggested for inclusion in pilot projects to be developed. However, they were concerned that we had not adequately considered the increase costs associated with medical review of the targeted DRGs. Therefore, in the final report, we have included the dollar amount of the 15 percent increase in medical review costs and reduced our program recoupment estimates accordingly.

The full text of HCFA's comments can be found in appendix F.

APPENDIX A

SAMPLING AND METHODOLOGY

The *National DRG Validation Study* used a stratified two-stage sampling design based on hospitals. The sample divided the population of hospitals meeting the study's eligibility criteria (outlined below) into three groups based on bed size: less than 100 beds, 100 to 299 beds, or 300 or more beds.

The first stage used simple random sampling without replacement to select 80 hospitals within each group for a total sample size of 240 hospitals. First, it included only acute care, short-stay facilities. This test also excluded specialty institutions such as children's hospitals. Second, as of October 1, 1983, a waiver provision exempted New York, New Jersey, Massachusetts and Maryland from PPS. Therefore, the sample excluded facilities in these states. Third, the facility had to have contributed data to the construction of the initial relative weights assigned to DRG categories at the start of PPS. These initial relative weights derived from a 20 percent sample of Medicare discharges from facilities participating in the program in 1981. To be included in the sampling frame, a facility had to both contribute discharges to the construction of the initial relative weights and to participate as a provider at the beginning of PPS, October 1, 1983.

The effective universe of hospitals available for study numbered 4,913. Of the initial sample of 240 hospitals, 1 facility terminated its Medicare eligibility between the sampling time frame and the actual collection of medical records. The first-stage sample therefore included 239 (4.9 percent) randomly selected, short-term, acute care facilities eligible under the Medicare program since at least 1981 and not located in a waiver State.

The second stage of the design employed systematic random sampling to select 30 Medicare discharges from each of the 239 hospitals. The HCFA's Bureau of Data Management and Strategy supplied a list of all final bills they received from the fiscal intermediaries through April 30, 1985. Each bill represented one Part A Medicare discharge for the time period October 1, 1984 to March 31, 1985. If a facility had less than 30 discharges during the applicable period, the design selected all its available Medicare discharges.

RECORD COLLECTION

In mid-1986, OIG sent registered letters to the selected hospitals requesting copies of the complete medical record for each of the sampled discharges. Administrative subpoenas compelled the participation of a few institutions. Of the 222,396 records available from the 239 hospitals, the sample design requested 7,076 (3.2 percent). The study ultimately received and reviewed 7,045 (99.6 percent) medical records. The hospitals could not locate the remaining 31 records.

MEDICAL REVIEW

Registered nurses initially screened the medical records for incidents relating to the appropriateness of admission, quality of care and premature discharge. If the inadequacies were found, the medical record was referred to a physician experienced in chart review. Upon confirming a case of unnecessary admission, poor quality of care, or premature discharge, the physician dictated a narrative summary describing the nature of the deficiencies and citing supporting evidence from the patient chart. This methodology paralleled the process used in local peer review and by the PROs. The reviewers had instructions to ignore marginal problems or cases involving honest differences in medical judgment about appropriate case management.

Medical experts reviewed records presenting specialty care issues. Physician panels convened to decide difficult cases. The bulk of reviewing physicians had appropriate board certification, committee experience and recent patient care responsibility. An OIG physician reviewed the clarity and consistency of each medical reviewer's conclusions.

STATISTICAL ANALYSIS

Because of the two-stage sample design, this report evaluated its data by hospitals rather than by discharges. It calculated proportions of events as the number of events over the total number of discharges reviewed within each bed size group.

Post-stratification analysis followed HCFA practices for classifying hospitals by their demographic characteristics--urban versus rural location and teaching status. Urban versus rural status depended on whether the hospital's location fell within the boundaries of a standard metropolitan area as defined by the Census Bureau. The HCFA considered a hospital to have teaching status if it has an accredited residency program. Profit versus not-for-profit status was provided by the American Hospital Association's (AHA) directory which in turn was furnished to the AHA by the hospitals.

FISCAL PROJECTIONS

- First, projections were made using the actual dollars paid for the 1,254 Medicare patients in the 1- to 3-day subsample (derived from HCFA PATBILL files). We multiplied the number patient discharges in each bed size category by the average cost per discharge in bed size categories for a total in rounded figures. Calculations show the total dollars paid to the 1- to 3-day subsampled hospitals in the three bed size categories. Small hospitals, for example, were paid $.7 million for 483 discharges at an average cost of $1,445.

Admissions in 1-3 Day Subsample (n = 1,254):	**Small**	**Medium**	**Large**
# Patient Discharges	483	373	398
Average Cost/Discharge	$1,445	$2,170	$2,818
Total Dollars (in millions)	$0.7	$0.81	$1.12

Next, using the same mathematical approach, projections were made for the costs of 1- to 3-day unnecessary admissions by the three bed size categories. For example, small hospitals were paid $120,00 for 84 unnecessary admissions at an average cost of $1,442 per patient.

Unnecessary Admissions (n = 252):	**Small**	**Medium**	**Large**
# Patient Discharges	84	86	82
Average Cost/Discharge	$1,442	$2,110	$2,787
Total Dollars	$120,000	$180,000	$230,000

- Dividing the dollars paid to hospitals for 1- to 3-day unnecessary admissions by the dollars paid for all 1- to 3-day admissions in the subsample by bed size category yields the 1- to 3-day percentage of dollars spent on unnecessary admissions.

	Small	**Medium**	**Large**
Percent of Dollars for 1-3 Day Unnecessary Admissions	1.8	1.7	1.2

- We adjusted for the higher volume of discharges that occur in large hospitals, using FY 1985 data. Summing the projections for each bed size category yields a total projected amount of nearly $411 million paid by the Medicare program for 1- to 3-day unnecessary admissions.

PPS 1-3 Day Admissions (FY 1985)	Small	Medium	Large
# Discharges (in Millions)	1.52	3.11	3.65
Multiplied by Average Cost/ 1-3 Day Discharge	x $2,186	x $3,222	x $3,999
Yields Dollars Paid (in Millions)	$3,323	$10,020	$14,596
Times Percentage of Sample Dollars for 1-3 Day Unnecessary Admissions	x 1.8	x 1.7	x 1.2
Yields Dollars for 1-3 Day Unnecessary Admissions (in Millions)	60.0	168.8	182.3
Total Dollars (in Millions) Spent on Unnecessary Admissions:			$411.1

- Finally, we estimated Medicare dollars which would have been spent for the care of 1- to 3-day unnecessary admissions in other medical settings. Analyzing a subsample of the 740 unnecessary admissions identified in the entire OIG sample, we compared actual acute care costs with an estimate of costs for specific medical treatment in an alternative setting. Projections were made to the universe for patients with short hospitalizations requiring medical attention.

	Small	Medium	Large	Total
Hospital Costs For 1-3 Day Unnecessary Admissions (in Millions)	$60.0	$168.8	$182.3	$411.1
Costs for 1-3 Day Patient Care in Other Medical Settings (in Millions)	27.0	79.3	87.6	193.9
Difference Between Acute and Non-Acute Medical Settings for 1-3 Day Hospitalizations (in Millions)	$33.1	$89.5	$94.8	$217.3

APPENDIX B

HOSPITAL AND DISCHARGE CHARACTERISTICS

CHARACTERISTICS			HOSPITALS				DISCHARGES			
TEACHING STATUS	URBAN/ RURAL STATUS	BED SIZE	ENTIRE SAMPLE HOSPITALS	1-3 DAY SAMPLE HOSPITALS	UNNECESSARY ADMISSION SAMPLE HOSPITALS	CODING ERROR SAMPLE HOSPITALS	OIG SAMPLE DISCHARGES	1-3 DAY SAMPLE DISCHARGES	UNNECESSARY ADMISSION SAMPLE DISCHARGES	CODING ERROR SAMPLE DISCHARGES
TEACH-ING	URBAN	d	2	2	2	2	59	13	4	3
		100-299	15	15	6	7	449	72	9	17
		300+	44	44	28	20	1345	232	41	27
SUBTOTAL			61	61	36	29	1853	317	54	47
NON/ TEACH-ING	URBAN	d	14	14	9	7	393	70	15	19
		100-299	41	40	28	23	1226	187	52	32
		300+	31	30	20	11	898	139	32	15
SUBTOTAL			86	84	57	41	2517	396	99	66
NON/ TEACH-ING	RURAL	d	63	63	35	43	1821	400	65	91
		100-299	24	24	18	13	712	114	25	22
		300+	5	5	4	3	142	27	9	3
SUBTOTAL			92	92	57	59	2675	541	99	116
TOTAL			239	237	150	129	7045	1254	252	229

APPENDIX C

DISCHARGE FREQUENCY BY MDC

MAJOR DIAGNOSTIC CATEGORY (MDC) Code and Definition	ENTIRE SAMPLE (#)	ENTIRE SAMPLE (%)	1-2-3 DAY SUBSAMPLE (#)	1-2-3 DAY SUBSAMPLE (%)	UNNECESSARY ADMISSIONS in 1-2-3 DAY SUBSAMPLE (#)	UNNECESSARY ADMISSIONS in 1-2-3 DAY SUBSAMPLE (%)
01: Diseases & Disorders of the Nervous System	601	(8.53)	112	(8.93)	12	(4.76)
02: Diseases & Disorders of the Eye	106	(1.50)	75	(5.98)	59	(23.41)
03: Diseases & Disorders of the Ear, Nose & Throat	129	(1.83)	40	(3.19)	12	(4.76)
04: Diseases & Disorders of the Respiratory System	1091	(15.49)	106	(8.45)	14	(5.56)
05: Diseases & Disorders of the Circulatory System	1660	(23.56)	337	(26.87)	19	(7.54)
06: Diseases & Disorders of the Digestive System	870	(12.35)	164	(13.08)	35	(13.89)
07: Diseases & Disorders of the Hepatobiliary System & Pancreas	197	(2.80)	22	(1.75)	3	(1.19)
08: Diseases & Disorders of the Musculoskeletal System & Connective Tissue	628	(8.91)	86	(6.86)	22	(8.73)
09: Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	180	(2.56)	29	(2.31)	10	(3.97)
10: Endocrine, Nutritional & Metabolic Diseases & Disorders	342	(4.85)	46	(3.67)	8	(3.17)
11: Diseases & Disorders of the Kidney and Urinary Tract	346	(4.91)	62	(4.94)	17	(6.75)
12: Diseases & Disorders of the Male Reproductive System	185	(2.63)	30	(2.39)	10	(3.97)
13: Diseases & Disorders of the Female Reproductive System	77	(1.09)	14	(1.12)	6	(2.38)
14: Pregnancy, Child Birth & the Puerperium	0		0		0	
15: Newborns & Other Neonates with Conditions Originating in the Perinatal Period	1	(0.01)	0		0	
16: Blood, Blood Forming Organs - Immunological Diseases & Disorders	75	(1.06)	18	(1.44)	3	(1.19)
17: Myeloproliferative Diseases & Poorly Differentiated Neoplasms	122	(1.73)	41	(3.27)	6	(2.38)
18: Infectious & Parasitic Diseases (Systemic or Unspecified Sites)	112	(1.59)	13	(1.04)	3	(1.19)
19: Mental Diseases & Disorders	104	(1.48)	19	(1.52)	5	(1.98)
20: Substance Use & Substance Induced Organic Mental Disorders	30	(0.43)	3	(0.24)	0	
21: Injury, Poisoning & Toxic Effects of Drugs	85	(1.21)	21	(1.67)	4	(1.59)
22: Burns	5	(0.07)	0		0	
23: Factors influencing Health Status & Other Contacts with Health Services	33	(0.47)	11	(0.88)	3	(1.19)
NOT SPECIFIED (DRG 468)	66	(0.94)	5	(0.40)	1	(0.40)
TOTAL	**7045**		**1254**		**252**	

APPENDIX D

INAPPROPRIATE PROGRAM PAYMENTS, RETURN ON INVESTMENT AND INCREASE IN MEDICAL REVIEW WORKLOADS

The following table displays the DRGs identified in our unnecessary admission and short-hospitalization studies as being the most problematic in terms of unnecessary admissions. Using HCFA's FY 1987 payment data and DRG unnecessary admission rates identified in our studies, we have calculated, for each DRG and for short hospitalizations coded with that DRG, the estimated inappropriate program payments that could be identified from targeted reviews. In addition, we have calculated the ROI in terms of inappropriate payments per claim reviewed.

The HCFA has indicated that on the average, PROs review approximately 25 percent of all claims submitted for payment under PPS. Therefore, in FY 1987, they reviewed approximately 2.2 million claims for appropriateness of hospital admission (8,934,149 claims submitted times 25 percent). Using this figure, we computed the increase in workload that would result from target review of these DRGs.

For instance, as displayed in the following table, should HCFA mandate review of all DRG 425s paid under PPS in FY 1987, PROs would have to review 14,240 claims. Assuming an unnecessary admission rate of 46.667 percent, we would expect them to identify 6,645 unnecessary admissions. At an average cost of $1,446 per hospitalization, these inappropriate admissions cost the program approximately $9,609,221. For each DRG 425 reviewed, the program could realize recoupments of $675. Targeted review of DRG 425 would increase the PROs' PPS workload by approximately .65 percent.

Should targeted review of only DRG 425s with corresponding hospitalizations of 1, 2 or 3 days be conducted, 3,797 claims would be reviewed. Assuming an inappropriate admission rate of 75 percent, 2,848 of these would be identified as inappropriate admissions for a total cost of $4,118,105 to the program. We could expect to receive a return in misspent dollars of $1,085 per short-stay DRG 425 claim reviewed. The PROs' PPS workload would be negligibly increased. (3,797 DRG 425 claims / 2,200,000 PRO workload = .0017 or .17 percent.)

INAPPROPRIATE PROGRAM PAYMENTS PER DRG FOR FY 1987
ALL DRGs VERSUS SHORT-STAY DRGs

	ALL DRG									SHORT-STAY DRG					
DRG	1987 UNIVERSE	UA ERROR RATE	# OF UA CLAIMS 2 x 3	AVERAGE COST PER CLAIM	INAPPROPRIATE PROGRAM PAYMENTS 4 x 5	ROI	% OF PRO WORKLOAD	DRG WEIGHT	% SHORT STAY	# SHORT STAYS 2 x 10	ERROR RATE	# UA CLAIMS 11 x 12	INAPPROPRIATE PROGRAM PAYMENTS 5 x 13	ROI	% OF PRO WORKLOAD
15	144,333	0.08904	12851	1482.00	19045790	132	0.0656	0.6241	0.23970	34597	0.06	1977	2929796	85	0.0157
24	56,400	0.08182	4615	2054.00	9478255	168	0.0256	0.7642	0.38636	21791	0.17650	3846	7899806	363	0.0099
47	3,169	0.75000	2377	947.00	2250782	710	0.0014	0.4187	0.75000	2377	1.00000	2377	2250782	947	0.0011
65	30,011	0.37500	11254	888.00	9993663	333	0.0136	0.4500	0.29166	8753	0.57143	5002	4441538	507	0.0040
68	15,391	0.23810	3665	1330.00	4873914	317	0.0070	0.6088	0.09523	1466	0.00000	0	0	0	0.0007
73	8,532	0.37500	3200	1583.00	5064809	594	0.0039	0.6045	0.62500	5333	0.60000	3200	5064809	950	0.0024
82	83,254	0.20000	16651	3299.00	54930989	660	0.0378	1.1258	0.10000	8325	0.28571	2379	7847166	943	0.0038
88	110,913	0.10000	11091	3008.00	33362630	301	0.0504	1.0768	0.12307	13650	0.06250	853	2566212	188	0.0062
89	327,645	0.03989	13070	3105.00	40581602	124	0.1489	1.1657	0.07407	24269	0.38460	9334	28981227	1194	0.0110
96	200,368	0.11173	22387	2139.00	47886042	239	0.0911	0.8446	0.11731	23505	0.23810	5597	11971087	509	0.0107
127	473,688	0.04639	21974	2767.00	60803127	128	0.2153	1.0098	0.10051	47610	0.15385	7325	20267880	426	0.0216
157	34,114	0.28000	9552	1898.00	18129544	531	0.0155	0.7302	0.44000	15010	0.26272	3943	7484705	499	0.0068
158	9,073	0.33340	3025	1213.00	3669250	404	0.0041	0.5511	0.40000	3629	0.75000	2722	3301665	910	0.0016
174	143,391	0.08850	12690	2384.00	30253207	211	0.0652	0.9073	0.15044	21572	0.11764	2538	6049876	280	0.0098
182	269,306	0.18776	50565	1416.00	71599891	266	0.1224	0.6032	0.21224	57158	0.30769	17587	24902899	436	0.0260
183	33,057	0.30303	10017	1051.00	10528143	318	0.0150	0.5104	0.42424	14024	0.14285	2003	2105513	150	0.0064
239	56,330	0.33333	18776	2566.00	48180445	855	0.0256	0.9268	0.08888	5007	0.25000	1252	3211741	642	0.0023
243	130,545	0.30089	39280	1505.00	59115926	453	0.0593	0.6840	0.12389	16173	0.35714	5776	8693036	537	0.0074
244	17,644	0.42105	7429	1633.00	12131567	688	0.0080	0.6742	0.36842	6500	0.42860	2786	4549656	700	0.0030
294	94,967	0.22314	21191	1877.00	39775388	419	0.0432	0.7454	0.09917	9418	0.25000	2354	4419339	469	0.0043
296	205,038	0.06936	14221	2224.00	31628473	154	0.0932	0.8271	0.15606	31998	0.14815	4741	10542956	329	0.0145
320	156,072	0.10280	16044	2263.00	36308028	233	0.0709	0.8626	0.07476	11668	0.37500	4375	9901708	849	0.0053
325	16,443	0.27272	4484	1655.00	7421574	451	0.0075	0.6503	0.36363	5979	0.37500	2242	3710821	621	0.0027
348	9,439	0.50000	4720	1521.00	7178360	761	0.0043	0.6257	0.70000	6607	0.42860	2832	4307303	652	0.0030
395	69,457	0.13333	9261	1878.00	17391989	250	0.0316	0.7153	0.25000	17364	0.20000	3473	6522012	376	0.0079
410	113,286	0.12069	13672	1365.00	18662945	165	0.0515	0.4284	0.53448	60549	0.19350	11716	15992683	264	0.0275
425	14,240	0.46667	6645	1446.00	9609221	675	0.0065	0.6090	0.26666	3797	0.75000	2848	4118105	1085	0.0017
TOTAL	2826106		364708		709855555		1.2846			478129		115077	214034319		0.2173

APPENDIX E

DISCHARGE DESTINATIONS

DISCHARGE DESTINATIONS	ENTIRE SAMPLE		1-3-DAY SUBSAMPLE							
	Complete Sample	%	Short Stay Subsample	%	1-Day Stays #	1-Day Stays %	2-Day Stays #	2-Day Stays %	3-Day Stays #	3-Day Stays %
1-Home	5,071	72	946	75.4	26	34.7	276	70.2	644	81.9
2-Another Acute Hospital	158	2.2	49	3.9	6	8.0	23	5.9	20	2.5
3-Skilled Nursing Facility	131	1.9	3	0.2	--	--	--	--	3	0.4
4-Intermediate Care Facility	670	9.5	54	4.3	1	1.3	9	2.3	44	5.6
5-Other Inst.	119	1.7	21	1.7	2	2.7	12	3.1	7	0.9
6-Home Health Agency	390	5.5	20	1.6	--	--	6	1.5	14	1.8
7-Left Against Medical Advice	28	0.4	12	1.0	1	1.3	8	2.0	3	0.4
8-Expired	442	6.3	147	11.7	39	52.0	59	15.0	49	6.2
9-Still a Patient	36	0.5	2	0.2	--	--	--	--	2	0.3
TOTAL	7,045	100	1,254	100	75	100	393	100	786	100

APPENDIX F

DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care
Financing Administration

Memorandum

Date FEB 10 1989

From William L. Roper, M.D.
for Administrator

Subject OIG Draft Report: National DRG Validation Review - Short Hospitalizations
OAI-05-88-00730

To The Inspector General
Office of the Secretary

We have reviewed the OIG draft report which examines the extent of short hospital stays, whether short stays are appropriate and whether short-stay patients receive an adequate quality of care.

We generally agree with the OIG recommendations regarding pilot studies. As we stated in our previous response on this subject, we believe that pilot projects in this area should be undertaken. However, these pilot projects have unfortunately been delayed due to other priorities. We will seriously consider the DRGs suggested by the OIG for inclusion in our pilot projects when they are developed.

The report states that the program could realize recoupments estimated at $206 million, with a corresponding increase of approximately 15 percent in the PROs' medical review workloads. The OIG's analysis does not adequately consider the costs that would be incurred in accomplishing the necessary increased review of the short-stay admissions. Therefore, we believe the savings estimate in the report is inflated.

In closing, we want to mention, as we have in our responses to several previous reports, that the OIG has once again identified "coding" problems that were actually physician documentation problems. A number of the DRGs identified in this report with coding problems resulted in actuality from inaccurate or vague physician documentation. We have held training sessions across the country for all PROs and instructed them to educate hospitals in correct coding principles. Additionally, outside groups such as the American Medical Record Association and the American Hospital Association have put considerable emphasis on correct coding and conducted training and published numerous articles to educate coders.

Thank you for giving us the opportunity to comment on this draft report.