Imaging Services for Nursing Home Patients:
Medical Necessity
OFFICE OF INSPECTOR GENERAL

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The Office of Evaluation and Inspections (OEI) is one of several components of the Office of Inspector General. It conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public. The inspection reports provide findings and recommendations on the efficiency, vulnerability, and effectiveness of departmental programs.

OEI's San Francisco Regional Office prepared this report under the direction of Kaye D. Kidwell, Regional Inspector General, and Paul A. Gottlober, Deputy Regional Inspector General. Principal OEI staff included:

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To obtain a copy of this report, call the San Francisco Regional Office at 415-437-7900.
EXECUTIVE SUMMARY

PURPOSE

This inspection determined the medical necessity of imaging services provided to residents of nursing homes and paid by Medicare.

BACKGROUND

Nursing homes arrange for ancillary services—such as x-rays and electrocardiograms (EKGs)—for patients who require them. In some instances, firms known as portable x-ray suppliers provide x-ray and EKG services in nursing homes. According to Medicare regulations, all imaging services must be ordered by a physician. To assess the medical necessity of imaging services, we reviewed 729 imaging services that nursing home patients received in 1994.

FINDINGS

Less than 2 percent of chest x-rays provided to nursing home patients in 1994 were medically unnecessary or undocumented

Of the $120 million that Medicare paid for chest x-rays during 1994, it paid less than $1 million for medically unnecessary and undocumented services. The quality of portable chest x-ray images is acceptable in more than 90 percent of cases.

In contrast to chest x-rays, 25 percent of EKGs provided to nursing home patients in 1994 were medically unnecessary or undocumented

In 1994, approximately 12 percent of EKGs were medically unnecessary, and in more than 13 percent of cases, documentation was inadequate. Medicare paid almost $32 million for EKGs for nursing home patients in 1994. This included paying $8.4 million for 194,000 medically unnecessary or undocumented EKGs. High volume physicians and suppliers comprise a very small proportion of providers in general, but they accounted for approximately 9 percent of all medically unnecessary and undocumented EKGs in 1994. Portable suppliers are much more likely to be paid for undocumented EKGs than non-portable suppliers.

* For purposes of this inspection, nursing homes refers to skilled nursing, Medicaid nursing, board and care, assisted living, and retirement facilities.

** Other options for nursing facilities include providing the service with their own equipment or transporting patients to hospital outpatient departments, imaging centers, physician offices, or other facilities.
RECOMMENDATION

The HCFA should require that Medicare contractors profile high volume EKG suppliers and physicians to determine if they routinely bill for medically unnecessary and undocumented EKGs.

AGENCY COMMENTS

We received comments on the draft report from HCFA and the Assistant Secretary for Planning and Evaluation. Both HCFA and the Assistant Secretary for Planning and Evaluation concurred with our recommendation. We have made minor clarifications in the report in response to technical comments made by these agencies.
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INTRODUCTION

PURPOSE

This inspection determined the medical necessity of imaging services provided to residents of nursing homes and paid by Medicare.

BACKGROUND

Medicare (Parts A and B)

Congress enacted Medicare in 1965 to provide health services to the elderly and disabled. The program consists of two distinct parts. The first part is hospital insurance or Part A. Part A covers services furnished by providers, i.e., hospitals, home health agencies, and skilled nursing facilities. The second part, supplementary medical insurance or Part B, covers a wide range of medical services and supplies. These include physician services, outpatient hospital services, diagnostic laboratory tests, x-rays, ambulance services, and durable medical equipment.

The Health Care Financing Administration (HCFA) administers Medicare and contracts with private insurance companies to process and pay claims. Contractors that process Part A claims are referred to as fiscal intermediaries. Contractors that process Part B claims are called carriers.¹ Some companies have both fiscal intermediary and carrier contracts.

The HCFA provides substantial guidance to fiscal intermediaries and carriers on applicable laws, regulations, national policies, fee schedules, and other requirements. In some areas, federal law and HCFA allow the fiscal intermediaries and carriers latitude in determining both coverage and reimbursement.

Skilled Nursing Facilities and Other Extended Care Facilities

The Medicare program provides coverage under Part A for skilled nursing services but not for custodial care. The skilled nursing benefit includes:

- nursing care,
- bed and board,
- physical, occupational, and speech therapy,
- medical social services, and
- drugs, biologicals, supplies, appliances, and equipment for use in the facility.

¹ An exception to this general rule is that fiscal intermediaries process Part B claims submitted by hospitals (for inpatient and outpatient services), home health agencies, and skilled nursing facilities.
Medicare law stipulates that beneficiaries are eligible for skilled nursing benefits if they are transferred to the skilled nursing facility after a minimum 3-day covered stay in an acute hospital. The patient must require skilled nursing care, and a physician must order the services. Part A covers skilled nursing services for up to 100 days per "spell of illness."

In addition to skilled nursing facilities, other facilities offer varying levels of care for Medicare beneficiaries. These include Medicaid nursing, board and care, assisted living, and retirement facilities. We have included all of these facilities in the scope of this inspection and refer to them collectively as "nursing homes."

**Imaging services to nursing home residents**

Nursing homes frequently provide directly or arrange for ancillary services—such as x-rays—for their patients who require them. Imaging services include radiography (x-ray), magnetic resonance imaging (MRI), computerized axial tomography (CAT scan), echography (ultrasound), and cardiac catheterization. For purposes of this inspection, electrocardiographic (EKG) services are included as imaging services.

In some instances, firms known as *portable x-ray suppliers* provide x-rays and EKGs to nursing home residents.² Medicare’s portable x-ray benefit covers skeletal films of the arms, legs, pelvis, vertebral column, and skull as well as chest and abdominal films that do not use contrast media. Medicare also covers EKGs under the portable benefit, if they are medically necessary and are performed by certified portable x-ray suppliers. All of these services must be diagnostic rather than therapeutic. Portable x-ray suppliers must meet HCFA’s conditions of participation. These conditions require, among other things, that suppliers comply with State and local laws, which may provide for the licensing and regulation of portable suppliers.

**Billing for imaging services**

Imaging services provided to nursing home patients are billed to the fiscal intermediary or the carrier depending on which entity provides the service and whether there is any financial arrangement between the service provider and a skilled nursing facility. In all cases, a physician may bill the Part B carrier for interpreting an imaging procedure. For a full discussion of billing options and practices, see the companion report "Portable Imaging Services: A Costly Option" (OEI-09-95-00090).

**Operation Restore Trust**

In May 1995, President Clinton and Health and Human Services Secretary Donna Shalala announced the kickoff of Operation Restore Trust (ORT), a new health care anti-fraud

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² Other options for nursing facilities include providing the service with their own equipment or transporting patients to hospital outpatient departments, imaging centers, physician offices, or other facilities.
initiative. The ORT is a crackdown on Medicare and Medicaid fraud, waste, and abuse in home health agencies, nursing homes, and durable medical equipment suppliers. The ORT focuses on the five states—California, New York, Florida, Texas, and Illinois—that account for 40 percent of the nation’s Medicare beneficiaries and program expenditures.

The ORT includes Federal and State agencies in collaboration with the private sector and beneficiaries. The federal agencies involved include the Office of Inspector General (OIG), HCFA, and the Administration on Aging. The OIG has undertaken a number of national program inspections aimed at identifying and eliminating systemic weaknesses that allow fraud, waste, and abuse to occur in the areas of home health, nursing homes, and durable medical equipment. This inspection was conducted as part of ORT.

This report is the last in a series of three reports prepared by the OIG on imaging services for nursing home patients. The first report, "Portable Imaging Services: A Costly Option" (OEI-09-95-00090), determined how different billing practices, financial arrangements, and clinical settings affect the cost of imaging services for the Medicare program and its beneficiaries. The second report, "Portable Imaging Services: Nursing Home Perspectives" (OEI-09-95-00091), determined when, how, and why nursing homes use portable imaging services for their patients.

METHODOLOGY

Sample Selection

From a 1 percent Common Working File database, we extracted data on all beneficiaries who were in a nursing home at any time during 1994. We then extracted claims data on all imaging services provided to these beneficiaries.

We identified nursing home residents through a number of indicators in the claims data. These indicators included place of service, hospital discharge destination, skilled nursing claims, and HCFA Common Procedure Coding System (HCPCS) codes that are likely to correspond to a nursing home resident (such as transportation of portable x-ray equipment). Based on a pre-test of this approach, we estimate that our database included more than 95 percent of all nursing home residents who received imaging services. From this database, we selected a stratified sample:
<table>
<thead>
<tr>
<th>Stratum</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest x-rays (HCPCS = 71010 through 71035)</td>
<td></td>
</tr>
<tr>
<td>All or part billed by skilled nursing facility</td>
<td>ORT States</td>
</tr>
<tr>
<td></td>
<td>Non-ORT States</td>
</tr>
<tr>
<td>Billed directly by supplier or other service provider</td>
<td>ORT States</td>
</tr>
<tr>
<td></td>
<td>Non-ORT States</td>
</tr>
<tr>
<td>EKGs (HCPCS = 93000 through 93010)</td>
<td>ORT States</td>
</tr>
<tr>
<td></td>
<td>Non-ORT States</td>
</tr>
<tr>
<td>CAT scans and MRIs (numerous HCPCS codes)</td>
<td>ORT States</td>
</tr>
<tr>
<td></td>
<td>Non-ORT States</td>
</tr>
</tbody>
</table>

When there was no skilled nursing facility claim that could be associated with an imaging service, we verified that the beneficiary was a nursing home resident by contacting physicians, portable suppliers, and nursing homes. We excluded beneficiaries from the sample who did not reside in skilled nursing, Medicaid nursing, board and care, assisted living, or retirement facilities when the service was rendered.

**Medical Record Request**

For all claims, we requested medical records and original x-rays, EKGs, MRIs, and CAT scans. We requested information from all entities involved in providing the service. These included nursing homes, physicians, hospitals, portable x-ray suppliers, and independent laboratories. We specifically requested:

- the physician's order for the procedure, including documentation of the need for portable x-ray or EKG services (if applicable);
- the original x-ray, MRI or CAT scan film, or EKG;
- the written interpretation of the procedure;
- the patient's history; and
- any other progress notes, nurses' assessments, and medication records for the week up to and including the date of the procedure.

**Medical Review Screening Instrument**

With the assistance of a medical review contractor, we developed screening instruments based on appropriateness criteria from the American College of Radiology and the American College of Cardiology. We developed separate screening instruments for each imaging procedure. Only those procedures that failed to meet the screening instrument criteria were sent to the medical review contractor for further analysis.
In no instances did OIG reviewers determine that a case was medically unnecessary. Appendix A contains the screening criteria for chest x-rays and EKGs.

**Medical Review Process**

The contractor developed its own medical review protocol. Depending on the result of the OIG screening, the type of imaging service, and the setting in which it was provided, the review included (1) medical necessity and appropriateness, (2) quality of care, (3) assessment of the need for portable services, and/or (4) assessment of chest x-ray film quality.

Initially, this inspection included MRIs and CAT scans. We discontinued the medical review of these procedures after the medical review contractor determined that, based on a sample of cases, almost all of these services were medically necessary. Continued medical review would have been costly and unproductive.
FINDINGS

Less than 2 percent of chest x-rays provided to nursing home patients in 1994 were medically unnecessary or undocumented.

Of the $120 million that Medicare paid for chest x-rays during 1994, it paid less than $1 million for medically unnecessary and undocumented chest x-rays.

Chest x-rays are a routine diagnostic procedure used by physicians to rule out or diagnose numerous conditions in elderly patients. Physicians can justify ordering a chest x-ray when a nursing home patient has a respiratory problem that might be considered minor for the general population. The results of our medical review confirm this. As the following table shows, based on our projections, almost all chest x-rays rendered in 1994 were determined to be medically necessary:

The High Percentage of Medically Necessary Chest X-rays Illustrates Its Acceptance and Use as a Diagnostic Tool

<table>
<thead>
<tr>
<th>Total number of chest x-rays in 1994</th>
<th>1,677,530</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Medically Necessary per Screening Instrument Criteria</td>
<td>40.9</td>
</tr>
<tr>
<td>Percent Medically Necessary per Medical Review Contractor</td>
<td>57.8</td>
</tr>
<tr>
<td>Percent Medically Unnecessary</td>
<td>1.0</td>
</tr>
<tr>
<td>Percent Inadequate Documentation</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Approximately 41 percent of chest x-rays met the screening instrument criteria for medical necessity. In 58 percent of cases, information in patients' medical records did not meet the basic criteria, but medical reviewers determined that the services were necessary and appropriate. In these cases, beneficiaries exhibited different or less severe symptoms than those that were determined to be medically necessary via the screening instrument. The medical reviewers also determined that beneficiaries who received multiple chest x-rays in a short period of time received appropriate services.

Overall, carriers and our medical review contractor agreed that chest x-rays are appropriate for diagnosing numerous conditions. One carrier manual lists four pages of diagnoses that would justify the need for a chest x-ray. The list includes numerous cardiovascular and respiratory conditions as well as common nursing home patient problems such as cancer, stroke, asthma, diabetes, difficulty swallowing, senile degeneration, and weight loss.
The quality of portable chest x-ray images is acceptable in more than 90 percent of cases

Some critics have questioned the quality of portable chest x-ray images because of the difficulty of positioning bed-ridden patients. In our companion reports on portable imaging services, we noted that using a portable supplier for non-emergency chest x-rays and EKGs has become routine for sampled nursing homes. Portable suppliers provide more than 60 percent of all chest x-rays for nursing home patients.

Film quality was acceptable for almost all portable chest x-rays. In most of the cases where the medical reviewer deemed the quality unacceptable, the technician had failed to include left and right markers on the image. There were almost no cases where the image was unreadable.

| In contrast to chest x-rays, 25 percent of EKGs provided to nursing home patients in 1994 were medically unnecessary or undocumented |

In 1994, approximately 12 percent of EKGs were medically unnecessary, and in more than 13 percent of cases, documentation was inadequate

In 1994, Medicare paid almost $32 million for EKGs for nursing home patients. This included paying $8.4 million for 194,000 medically unnecessary or undocumented EKGs. Medicare paid for these services because EKGs are not a costly procedure and are a low priority for medical review. The table below summarizes the medical review findings projected nationally:

**EKGs Are Frequently Questionable**

<table>
<thead>
<tr>
<th>Total number of EKGs in 1994</th>
<th>772,836</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Medically Necessary per Screening Instrument Criteria</td>
<td>24.2</td>
</tr>
<tr>
<td>Percent Medically Necessary per Medical Review Contractor</td>
<td>50.7</td>
</tr>
<tr>
<td>Percent Medically Unnecessary</td>
<td>11.9</td>
</tr>
<tr>
<td>Percent Inadequate Documentation</td>
<td>13.3</td>
</tr>
</tbody>
</table>

In the medically unnecessary cases, the medical review contractor determined that the EKG served no useful diagnostic purpose. The table on the following page illustrates a few typical cases. It shows that nursing homes, physicians, and/or suppliers (1) falsify or miscode diagnosis codes, (2) do not have adequate documentation to support providing the service, or (3) inappropriately provide EKGs.
Medical Review Shows the Nature of Medically Unnecessary EKGs

<table>
<thead>
<tr>
<th>Patient</th>
<th>Diagnosis on Claim</th>
<th>Medical Review Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Hyperlipidemia</td>
<td>EKG was done to evaluate hyperlipidemia. EKG is not a test for hyperlipidemia.</td>
</tr>
<tr>
<td>#2</td>
<td>Premature Beats</td>
<td>Nothing in the medical record indicates that rhythm was a problem.</td>
</tr>
<tr>
<td>#3</td>
<td>Cardiac Arrest</td>
<td>Patient was deceased—EKG was a flatline.</td>
</tr>
<tr>
<td>#4</td>
<td>Cerebrovascular Accident</td>
<td>No reason for EKG. Recently discharged from hospital where EKG was probably done.</td>
</tr>
<tr>
<td>#5</td>
<td>Congestive Heart Failure</td>
<td>Medical record shows no rationale for requesting an EKG.</td>
</tr>
<tr>
<td>#6</td>
<td>Acute Cystitis</td>
<td>No reasons listed in medical record for an EKG.</td>
</tr>
</tbody>
</table>

Physicians and portable suppliers who provide more EKGs per beneficiary than other providers are far more likely to provide medically unnecessary EKGs

Physicians or suppliers who bill for more than four EKGs per beneficiary per year comprise a very small proportion of providers in general, but they accounted for approximately 9 percent of all medically unnecessary and undocumented EKGs in 1994. On average, most physicians and portable suppliers who provide and interpret EKGs do so for beneficiaries who receive one or two EKGs per year. Some physicians and portable suppliers, however, provide or interpret far more per beneficiary. One supplier, for example, provided an average of 27 EKGs for each of its beneficiaries in 1994. While bi-weekly EKGs might be appropriate in special instances, this average is extreme.

One carrier recouped thousands of dollars that it had paid a physician in our sample for ordering and interpreting routine EKGs. As a result of this inspection, we referred a physician and a portable supplier to the Office of Investigations.

Portable suppliers are much more likely to be paid for undocumented EKGs than non-portable suppliers

In 1994, more than 28 percent of portable EKGs were not justified in the medical records, while only 3 percent performed by non-portable suppliers lacked appropriate documentation. The rates of medically unnecessary EKGs were similar for both portable and non-portable suppliers. Portable suppliers provided more than one-third of EKGs for nursing home patients in 1994.

We found no significant difference in the rates of medically unnecessary or undocumented EKGs between the five Operation Restore Trust States and the rest of the country.
RECOMMENDATION

The HCFA should require that Medicare contractors profile high volume EKG suppliers and physicians to determine if they routinely bill for medically unnecessary and undocumented EKGs.

Suppliers and physicians who provide an average of more than four EKGs per beneficiary annually are more likely to be providing medically unnecessary or undocumented services than suppliers and physicians who provide one or two EKGs per beneficiary. Eliminating inappropriate billing by these providers would save Medicare less than $1 million annually, but it would reduce or eliminate payments to providers who routinely bill for medically unnecessary EKGs.

AGENCY COMMENTS

We received comments on the draft report from HCFA and the Assistant Secretary for Planning and Evaluation. Both HCFA and the Assistant Secretary for Planning and Evaluation concurred with our recommendation that Medicare contractors profile high volume EKG suppliers and physicians. In addition, HCFA noted that it has eliminated coverage and payment for EKGs under the portable x-ray benefit and now requires that all Medicare tests be ordered by the patient's treating physician.

Both HCFA and the Assistant Secretary for Planning and Evaluation commented that the use of the term "nursing facility" in the draft report was confusing. In response, we have revised the report to refer to sampled facilities as "nursing homes." These include skilled nursing, Medicaid nursing, board and care, assisted living, or retirement facilities. Where appropriate, we differentiate between skilled nursing facilities and other nursing homes included in the study.

The HCFA commented that our discussion of the skilled nursing benefit was too vague. Since neither of our findings pertains specifically to skilled nursing facilities, the purpose of describing these facilities in the background was simply to establish that they are defined specifically in the Medicare law. The companion reports "Portable Imaging Services: A Costly Option" (OEI-09-95-00090) and "Portable Imaging Services: Nursing Home Perspectives" (OEI-09-95-00091) contain a more detailed description of the skilled nursing benefit.

See appendix C for the full text of the agencies' comments.
APPENDIX A

OIG MEDICAL REVIEW CRITERIA

Diagnoses/symptoms necessary for OIG reviewer to deem CHEST X-RAYS medically necessary:

Cardiovascular

Angina
Aortic valve disease or injury
Arrhythmia
Atrial fibrillation
Atrial tachycardia
Cardiac disease
Cardiovascular system symptoms
Chest pain
Heart disease
Ischemic heart disease
Myocardial infarction

Pulmonary

Bronchopneumonia
Cancer
Cough with hemorrhage
Emphysema
Lung abscess
Shortness of breath
Tuberculosis
Upper respiratory infection

OTHER

Cerebrovascular accident
Choking
Coma
Diabetes
Fracture of clavicle, collarbone, coronoid process, larynx, rib, scapula, shoulder blade, sternum
Hernia
Malignant neoplasm (any)
Scoliosis
Septicemia
Stroke
Syncope

Other criteria that must be met in addition to diagnoses/symptoms:

- Service does not appear to be a routine preoperative screen.
- Service does not appear to be a follow-up, performed less than 14 days after another chest x-ray.
- Service is a follow-up, less than 14 days after prior chest x-ray, but beneficiary is on ventilator or has congestive heart failure, pneumonia, or pulmonary congestion, and beneficiary is experiencing new symptoms.
Diagnoses/symptoms necessary for OIG reviewer to deem EKGs medically necessary:

- Arrhythmia
- Angina
- Arteriosclerosis
- Atrial fibrillation or flutter
- Bradycardia
- Cerebrovascular accident
- Complication of pacemaker
- Congestive heart failure
- Coronary artery embolism, sclerosis, or rupture
- Heart disease
- Myocardial infarction
- Permanent pacemaker
- Respiratory failure
- Syncope
- Tachycardia

Other criteria that must be met in addition to diagnoses/symptoms:

- Service was not a follow-up EKG performed less than 14 days after another EKG.
- Service was a follow-up EKG performed less than 14 days after another EKG, but beneficiary was experiencing new symptoms.
The following tables show the point estimates and 95 percent confidence intervals for selected statistics in the order they appear in the report.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Point estimate</th>
<th>95 percent confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of nursing home residents’ 1994 chest x-rays that were medically unnecessary or undocumented</td>
<td>1.3 percent</td>
<td>0.2 percent - 2.5 percent</td>
</tr>
<tr>
<td>Amount Medicare paid for chest x-rays provided to nursing home residents during 1994</td>
<td>$119,843,868</td>
<td>$98,572,561 - $141,115,174</td>
</tr>
<tr>
<td>Amount Medicare paid for medically unnecessary or undocumented chest x-rays provided to nursing home residents during 1994</td>
<td>$957,736</td>
<td>$35,271 - $1,880,200</td>
</tr>
<tr>
<td>Total number of chest x-rays provided to nursing home residents during 1994</td>
<td>1,677,530</td>
<td>1,531,153 - 1,823,906</td>
</tr>
<tr>
<td>Percent of nursing home residents’ 1994 portable chest x-rays that had an acceptable quality image</td>
<td>92.0 percent</td>
<td>85.6 percent - 98.5 percent</td>
</tr>
<tr>
<td>Percent of nursing home residents’ 1994 chest x-rays that were portable</td>
<td>61.6 percent</td>
<td>52.8 percent - 70.4 percent</td>
</tr>
<tr>
<td>Percent of nursing home residents’ 1994 EKGs that were medically unnecessary or undocumented</td>
<td>25.1 percent</td>
<td>16.5 percent - 33.8 percent</td>
</tr>
<tr>
<td>Percent of nursing home residents’ 1994 EKGs that were medically unnecessary</td>
<td>11.9 percent</td>
<td>5.7 percent - 18.1 percent</td>
</tr>
<tr>
<td>Percent of nursing home residents’ 1994 EKGs that were undocumented</td>
<td>13.3 percent</td>
<td>6.6 percent - 19.9 percent</td>
</tr>
<tr>
<td>Amount Medicare paid for EKGs provided to nursing home residents during 1994</td>
<td>$31,764,242</td>
<td>$23,294,925 - $40,233,559</td>
</tr>
<tr>
<td>Statistic</td>
<td>Point estimate</td>
<td>95 percent confidence interval</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Amount Medicare paid for medically unnecessary or undocumented EKGs provided to nursing home residents during 1994</td>
<td>$8,362,146</td>
<td>$4,564,525 - $12,159,766</td>
</tr>
<tr>
<td>Total number of medically unnecessary or undocumented EKGs provided to nursing home residents during 1994</td>
<td>194,234</td>
<td>127,246 - 261,221</td>
</tr>
<tr>
<td>Total number of EKGs provided to nursing home residents during 1994</td>
<td>772,836</td>
<td>651,801 - 893,871</td>
</tr>
<tr>
<td>Percent of medically unnecessary or undocumented EKGs that were provided by physicians and suppliers with an average of 4 or more EKGs per beneficiary during 1994</td>
<td>9.4 percent</td>
<td>1.0 percent - 17.9 percent</td>
</tr>
<tr>
<td>Percent of portable EKGs that were undocumented</td>
<td>28.2 percent</td>
<td>12.7 percent - 43.6 percent</td>
</tr>
<tr>
<td>Percent of non-portable EKGs that were undocumented</td>
<td>3.3 percent</td>
<td>0.4 percent - 6.2 percent</td>
</tr>
<tr>
<td>Percent of nursing home residents' 1994 EKGs that were portable</td>
<td>35.3 percent</td>
<td>25.1 percent - 45.5 percent</td>
</tr>
<tr>
<td>Percent of EKGs provided to nursing home residents in ORT States in 1994 that were medically unnecessary or undocumented</td>
<td>26.6 percent</td>
<td>17.0 percent - 36.2 percent</td>
</tr>
<tr>
<td>Percent of EKGs provided to nursing home residents in non-ORT States in 1994 that were medically unnecessary or undocumented</td>
<td>24.2 percent</td>
<td>11.5 percent - 36.9 percent</td>
</tr>
</tbody>
</table>
Memorandum

DATE:               JUN 27 1997

TO:                June Gibbs Brown
                   Inspector General

FROM:              Bruce C. Vladeck
                   Administrator


We reviewed the above-referenced report concerning the medical necessity of imaging services provided to residents of nursing facilities and paid by Medicare.

Our detailed comments are attached for your consideration. Thank you for the opportunity to review and comment on this report.

Attachment
OIG Recommendation

HCFA should require that Medicare contractors profile high volume electrocardiogram (EKG) suppliers and physicians to determine if they routinely bill for medically unnecessary and undocumented EKGs.

HCFA Response

We concur. This recommendation appears to be useful assuming that Medicare contractors have the medical review and budget resources to carry it out in a cost-effective manner. We believe that two recent regulation changes implemented by HCFA effective January 1, will have the effect of reducing the dimensions of the problem of Medicare paying for medically unnecessary and undocumented EKG services—especially for those furnished by portable x-ray suppliers. The first change involved the elimination of coverage and payment for EKGs under the portable x-ray benefit. The second change was the establishment of the requirement that in order to be considered medically necessary all Medicare tests (including EKGs) must be ordered by the patient's treating physician. Since these two improvements in the Medicare regulations have only been in effect for a short period of time, it is too early to know how helpful they will be in reducing the problem OIG identified. However, we believe the long-run impact of these recent HCFA actions will be very favorable.

HCFA's goals are to ensure high quality health care, and to pay for services that are reasonable and medically necessary. HCFA has taken appropriate steps to target vulnerable areas in the Medicare program. Medicare contractors conduct focused medical review (FMR) on an ongoing basis to ensure that services paid for by Medicare are reasonable and appropriate. The FMR process allows contractors to perform data analysis that allows them to identify aberrant patterns in data that assist in targeting high volume suppliers and physicians that are possibly billing routinely for services that are medically unnecessary. The contractors use system edits, internal medical review guidelines, or medical review policies to target and limit abusive behavior. Currently, approximately 46 Medicare contractors have edits in place with set parameters relating to EKG services.

Medicare contractors are also currently using Provider Audit Listings (PAL) that profile providers that have been flagged for submitting erroneous or inappropriate claims on a continual basis. Claims submitted by these providers are automatically suspended in order to allow the contractor an opportunity to conduct medical review and make a
payment determination. Use of the PAL in conjunction with FMR have resulted in
dramatic savings to the Medicare program. As a result, our current data shows a
4 percent increase in claim denials, 6 percent decrease in Medicare reimbursement,
6 percent decrease in allowed charges, and a 7 percent decrease in allowed services. We
believe the contractors have been very effective in using these mechanisms to identify
Medicare dollars at risk, and target high volume physicians and suppliers.

Additional Comments
The term nursing facility utilized throughout this report is misleading. Current Federal
regulations distinguish between two types of long-term care (LTC) facilities: a nursing
facility (NF) under the Medicaid program and a skilled nursing facility (SNF) under the
Medicare program. We suggest that the term LTC facility replace the words nursing
facility throughout this report when referring to a generic nursing home. If a policy or
concern specifically relates to a Medicare SNF or a Medicaid NF, it should be so noted.

The definition of the SNF benefit that appears in the Background is too general. We
suggest that it be more specific. The SNF benefit is referred to as post-hospital extended
care services. It is designed to assist persons who have had a 3-day qualifying hospital
stay and require skilled services on a daily basis to recuperate from an acute episode.
Coverage, if approved, is limited to a total of 100 days per benefit period. On the 21st
day the beneficiary becomes responsible for a daily coinsurance amount equal to one-
eighth of the inpatient hospital deductible, as prescribed by law.
TO:       June Gibbs Brown
  Inspector General

FROM:    David F Garrison
  Principal Deputy Assistant Secretary
  for Planning and Evaluation

SUBJECT:  OIG Draft Report on Imaging Services for Nursing Home Residents —
           CONCUR WITH COMMENT  051-09-95-00092

MAY 19 1997

The OIG draft report presents findings on their study on the extent to which x-rays and EKGs provided to "nursing home" patients were found to be medically necessary. It is unclear whether the scope of the IG study includes Medicare beneficiaries in Medicaid, Medicare, and/or private nursing homes. The methodology (e.g., reliance on Medicare claims data) suggests that the study was limited to Medicare skilled nursing facility residents who received these ancillary services. However, the description of the study refers to nursing homes as nursing facilities — a term that applies to Medicaid nursing homes. We recommend the report clarify the type(s) of nursing homes included in this study (i.e., Medicaid nursing facilities, Medicare skilled nursing facilities, and/or private nursing homes).