# Department of Health and Human Services OFFICE OF INSPECTOR GENERAL

# LOW-COST ULTRASOUND EQUIPMENT



# EXECUTIVE SUMMARY

# **PURPOSE**

This report reviews the appropriateness of Medicare reimbursements for tests conducted with low-cost ultrasound equipment.

# **BACKGROUND**

Diagnostic ultrasound tests are covered services under Part B of the Medicare program. Medicare law prescribes certain coverage criteria for ultrasound tests. Primarily, a test must be "reasonable and necessary" for the diagnosis or treatment of a beneficiary's illness or injury. In addition, the test must be conducted or ordered by a physician or performed under the physician's general supervision.

Used chiefly as a diagnostic technique, ultrasound is used in lieu of high-risk invasive procedures to detect internal diseases and abnormalities. A wide range of specialties, such as cardiology, gynecology, and vascular surgery, use ultrasound as a diagnostic tool. Ultrasound devices send soundwaves into the body producing echoes as they encounter differences in tissue structures. The data produced by the echoes can be transmitted into an image which can be recorded in color as well as black and white.

Low-cost ultrasound equipment has gained more prominence in the medical marketplace in the past 20 years. Our recent report on noninvasive, diagnostic testing (Quality Assurance in Independent Physiological Laboratories, OAI-03-88-01400), identified a number of concerns regarding this equipment. Primarily, these concerns center on the lack of regulation and oversight of these kinds of medical equipment devices.

# **METHODOLOGY**

We obtained information about the capabilities of ultrasound equipment from a variety of sources including medical diagnosticians, manufacturers, and technical publications. We reviewed data concerning specific ultrasound services and corresponding procedure codes from Medicare Part B payment records.

# **MAJOR FINDINGS**

# A Variety of Ultrasound Equipment Exists

An extensive array of ultrasound equipment exists in the medical marketplace. Equipment ranges from small, hand-held devices, popularly known as "Pocket Dopplers," to complex equipment which can perform a variety of tests. Costs range from \$200 for a Pocket Doppler to more than \$300,000 for state-of-the-art equipment.

# Medicare Codes Fail to Distinguish Between Test Types or Results

Medicare procedure codes do not differentiate between the extent of a test or the nature of test results.

# There are Strong Incentives for Excessive Use of Pocket Dopplers

A 5-minute scan by a \$300 Pocket Doppler can yield a payment of over \$100. Thus, excessive payments can be claimed for a relatively simple screening test based on a comparatively modest investment.

# The HCFA is Vulnerable to Inappropriate Billings

Medicare carriers lack sufficient safeguards to detect ultrasound billings based on inferior test results.

# A Precedent Exists to Deny Payment for Pocket Doppler Tests

In a previous decision regarding small diagnostic equipment, HCFA ruled that a portable hand-held x-ray instrument - a device comparable to the Pocket Doppler - "should be reimbursed as part of the physician's professional service, and no additional charge should be allowed."

# RECOMMENDATIONS

The HCFA should (1) prohibit payment for tests conducted with Pocket Dopplers, and (2) advocate revisions in procedure codes and reimbursement rates to reflect the different levels of sophistication and quality of diagnostic information provided in ultrasonic vascular testing.

# COMMENTS and OIG RESPONSE

The HCFA concurred with our recommendation to prohibit payment for tests conducted with Pocket Dopplers. In the future, such tests will be paid as part of the physician's professional service, and no additional charge will be allowed.

The HCFA disagreed with our recommendation to revise procedure codes and reimbursement rates to reflect the different levels of sophistication and quality provided in ultrasound tests. They indicated they may base payments on "the level of treatment delivery," rather than acquisition costs.

Our report recommends that payment be based on different levels of sophistication and diagnostic quality, not equipment acquisition costs. If we interpret HCFA's response correctly to mean that the codes should encompass the nature and the quality of diagnostic testing, we believe our recommendation mirrors HCFA's intentions to base payments on "the level of treatment delivery."

We continue to believe that HCFA should advocate revisions in procedure codes reflecting the various levels of sophistication and quality of diagnostic information provided in ultrasound tests. This effort, combined with adjusted reimbursement rates, should result in more equitable reimbursement for these tests. We have modified our recommendation to give HCFA greater flexibility in achieving this result.

We understand HCFA has encouraged procedure code revisions in vascular tests during recent contacts with the American Medical Association's editorial board. We support such efforts and encourage continued attempts until appropriate changes have been implemented.

We recently issued a Management Advisory Report quantifying Medicare reimbursements and potential savings on Pocket Dopplers. We also plan to issue a related second report providing HCFA with information on "Zero-Crossing" devices - ultrasound equipment similar to Pocket Dopplers.

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# INTRODUCTION

# **PURPOSE**

This report reviews the appropriateness of Medicare reimbursements for tests conducted with low-cost ultrasound equipment.

#### **BACKGROUND**

Diagnostic ultrasound tests are covered services under Part B of the Medicare program. The Health Care Financing Administration (HCFA) has issued guidelines in Medicare Carriers Manual Section 50-7 which states: "The use of the ultrasound technique is sufficiently developed that it can be considered essential to good patient care in diagnosing a wide variety of conditions."

Under Medicare law, diagnostic tests, such as ultrasound, must meet certain coverage criteria. Primarily, a test must be "reasonable and necessary" for the diagnosis or treatment of a beneficiary's illness or injury. Further, the test must be conducted or ordered by a physician or performed under the physician's personal supervision. Typically, ultrasound tests are conducted in a physician's office, independent laboratory, or outpatient hospital facility.

The HCFA requires Medicare carriers to apply safeguards against unnecessary utilization of services furnished by physicians and other providers of services. Carriers conduct prepayment and postpayment reviews designed to detect inappropriate, noncovered, or excessive services. Measures used to correct abuses include overpayment recoveries and remedial counseling.

Ultrasound is one of the most important developments in medical science in the last 40 years. Primarily used as a diagnostic technique, ultrasound is used in lieu of high-risk invasive procedures to detect internal diseases and abnormalities.

A wide range of specialties, such as cardiology, gynecology, and vascular surgery, use ultrasound as a diagnostic tool. Ultrasound devices send high-frequency soundwaves into the body producing echoes as they encounter differences in tissue structures. The data produced by the echoes can be transmitted into an image which can be recorded in color as well as black and white. Typically, the tests are conducted by specially trained individuals known as ultrasonographers or, more commonly, sonographers.

Ultrasound equipment has evolved into different levels of technological sophistication with corresponding price ranges. In particular, low-cost ultrasound equipment has gained more prominence in the medical marketplace in the past 20 years. Our recent report on noninvasive, diagnostic testing (Quality Assurance in Independent

Physiological Laboratories, OAI-03-88-01400), identified a number of concerns regarding this equipment. Primarily, these concerns center on the lack of regulation and oversight of these kinds of medical equipment devices.

The Food and Drug Administration (FDA) has never established performance standards for any medical devices, including low-cost ultrasound equipment. In accordance with the 1976 amendments to the Federal Food, Drug, and Cosmetics Act, FDA clears a new device for marketing if it has the same intended use or is substantially equivalent to a preenactment device. Low-cost ultrasound equipment met this requirement. However, even though performance standards have not been developed, FDA uses its own draft guidance instructions to manufacturers and voluntary standards to evaluate the performance of ultrasound devices.

A comparison of 1987 and 1988 Medicare payment records reveals a marked increase in diagnostic ultrasound tests. Allowed charges for abdominal ultrasound tests reflect a 14 percent increase from 1987 to 1988. Five commonly performed ultrasound tests related to vascular diseases increased by approximately 25 percent from 1987 to 1988. Allowed amounts for the 5 tests exceeded \$97 million, an increase of more than 34 percent.

# **METHODOLOGY**

We obtained information about the capabilities of ultrasound equipment from a variety of sources. These sources included medical diagnosticians, equipment manufacturers, equipment evaluation organizations, and physiological laboratories. We selected respondents based on recommendations provided by experts in physiological testing. Our analysis focused on information presented in technical journals and periodicals on the performance characteristics of different levels of ultrasound devices. We studied materials obtained from equipment manufacturers which detailed technical specifications and principles of operation for their equipment. We contacted 15 Medicare carriers to determine if they had any special policies regarding tests conducted with Pocket Dopplers. In addition, independent diagnostic centers and hospital physiological laboratories sent us internal manuals describing step-by-step applications of ultrasound instrumentation in various tests. We also solicited and reviewed publications and materials submitted by industry associations.

We obtained pertinent statistical information concerning ultrasound services and corresponding procedure codes from HCFA's Part B payment data system.

# FINDINGS

# A VARIETY OF ULTRASOUND EQUIPMENT EXISTS

An extensive array of ultrasound equipment exists in the medical marketplace. The gamut of equipment extends from small, hand-held devices, popularly know as "Pocket Dopplers," to complex, state-of-the-art equipment which can perform a variety of intricate tests. Equipment costs range from \$200 for a Pocket Doppler to more than \$300,000 for state-of-the-art equipment.

The Pocket Doppler is a relatively unsophisticated and inexpensive instrument to operate. A hand-held device, often shaped like a ballpoint pen, the typical Pocket Doppler works on a rechargeable 9-volt battery. It transmits a high frequency soundwave into the tissues. Soundwaves reflected from internal organs or the flow of blood shift in frequency by an amount proportional to blood flow velocity. The reflected sound is received and processed as an audible signal or recordable waveform. Typically, the Pocket Doppler is nondirectional (i.e., it is incapable of determining the direction of blood flow), and produces audio signals only. These devices are marketed as ultrasound equipment and generally cost between \$200 - \$600.

The two principal methods of documenting test results are analog waveform analysis and spectral waveform analysis. Analog waveform analysis provides a single frequency display of the soundwave whereas spectral analysis records multiple quantitative frequencies. The less costly analog system has been likened to recording the average speed of all the cars on a highway while the spectral device records the individual speed of each car.

Manufacturers market Pocket Dopplers to many specialties for a variety of uses. Since it is designed primarily to detect a pulse or the flow of blood, its principal uses are in obstetrics and vascular diseases. Obstetricians use Pocket Dopplers to detect and monitor fetal heartbeats. Vascular surgeons and other practitioners, who treat diseases of the veins and arteries, employ these instruments to determine abnormalities in blood flow. Other specialties who frequently use Pocket Dopplers include internists, anesthesiologists, and podiatrists. They are also used in special situations, such as at the scene of an accident, in an emergency room, and as an adjunct to more complex ultrasound equipment.

Clinicians who want to use a device more sophisticated than the Pocket Doppler, but still relatively inexpensive, have a variety of equipment to consider. Typically, these devices are bidirectional (capable of determining the direction of blood flow), and produce objective evidence such as a strip-chart record or graph. Some types come with interchangeable probes and optional accessories depending on the depth and sensitivity of the tissues examined. Generally, devices in this category cost between \$600 - \$5,000.

Diagnostic ultrasound tests are usually conducted using "mid-level" equipment. This equipment costs from \$15,000 to \$60,000 and offers a wide range of sophisticated options, such as remote control, selectable frequency ranges, and video spectrum analysis of blood flow measurements. More expensive equipment offers two-dimensional displays, computerized analysis, and color-flow imaging. Devices equipped with color-flow imaging produce video pictures of blood flow velocities in combinations of red, blue, and green. Changes in the intensity of color and blood flow velocity can indicate an irregularity, such as a blockage.

State-of-the-art equipment may exceed \$300,000 depending on the manufacturer, the technological sophistication of the device, and the number of options available. Although still in the experimental stage, some devices are capable of producing three-dimensional pictures of clogged arteries and cross-section images of damaged blood vessels.

# MEDICARE CODES FAIL TO DISTINGUISH BETWEEN TEST TYPES OR RESULTS

Medicare reimbursements for diagnostic ultrasound tests are linked to a procedure code system known as the Health Care Financing Administration Common Procedure Coding System (HCPCS). Under HCPCS, physician services are reported as five-digit codes defined in the American Medical Association's *Current Procedural Terminology* (CPT). The physician or diagnostic laboratory conducting a test requests payment by submitting a claim form to the servicing Medicare carrier indicating the appropriate HCPCS code.

Under the HCPCS system, however, there is no differentiation between the extent of the test or the nature of test results. Thus, reimbursement for any particular ultrasound test is paid at the same rate without regard to the extensiveness of the test or the quality of the data produced. For example, procedure code 93910 (noninvasive studies of the lower limbs), cites five possible elements of this test. (See Appendix A for CPT definitions of procedure codes used in ultrasound tests.) If a practitioner performs any one of the elements, he is legitimately entitled to claim the same reimbursement level as someone who conducts an exhaustive test producing more sophisticated results. "The codes do not distinguish the differences in testing," one expert said.

The chart below compares the claims processing results of the same test conducted with different levels of equipment and yielding, as a result, dissimilar levels of diagnostic evidence.

VASCULAR TEST OF LOWER LIMBS			
Type of Equipment	Pocket Doppler	Automated imaging system with 2-dimensional and color doppler capability	
Price of Equipment	\$200-\$600	\$60,000 - \$100,000	
Data Analysis	Audio Signals Only	Computer-enhance high-resolution color image of blood flow, anatomical parts and pathology	
Extent of Test	1 Artery	Multiple Arteries	
Length of Test	5 - 10 minutes	45 — 60 minutes	
HCPCS Code	93910	93910	
Average Charge	<b>\$135</b>	<b>\$135</b>	
Average Allowance	\$97	\$97	

# There are Strong Incentives for Excessive Use of Pocket Dopplers

As the chart above indicates, a 5-minute scan by a Pocket Doppler results in the same reimbursement as a 1-hour scrutiny of multiple arteries using sophisticated, state-of-the-art equipment costing \$100,000. As a result, excessive payments can be claimed for a relatively simple screening test based on a comparatively modest investment.

One interviewee who had attended a demonstration of Pocket Dopplers given by a manufacturer described the event as, "reimbursement selling." The manufacturer, he noted, continually stressed the financial benefits the device would bring in relation to the time and expertise required to operate it. Another manufacturer routinely included procedure code descriptions and corresponding payment ranges in its sales brochures.

# The HCFA is Vulnerable to Inappropriate Billings

Medicare carriers do not have sufficient systemic and utilization safeguards to detect ultrasound billings based on unsophisticated or inferior test results. However, although HCFA does not require carriers to determine the type of equipment used to perform vascular tests, some carriers have initiated efforts to ascertain this information. Most carriers do not have the means or the resources to capture this information or to investigate each claim.

In an attempt to quantify the extent of Medicare billings involving low-cost equipment, we obtained sales figures from equipment manufacturers. According to these sources, at least 100,000 Pocket Doppler units are in active use in the medical community. Approximately 20,000 new units were sold in 1990. The most frequent purchasers include hospitals, obstetricians, vascular specialists, and podiatrists. We have released a Management Advisory Report quantifying the monetary effects of prohibiting distinct coverage for Pocket Dopplers.

# A Precedent Exists to Deny Payment for Pocket Doppler Tests

The HCFA previously established a precedent regarding the coverage of small diagnostic instruments. Medicare Carriers Manual section 50-48 (Coverage Issues - Diagnostic Services) details the usage of a portable hand-held x-ray instrument, a device we consider comparable to the Pocket Doppler. This section states: "The use of the portable hand-held x-ray instrument as an imaging device is covered under Medicare. It should be reimbursed as part of the physician's professional service, and no additional charge should be allowed."

Some carriers have taken action to prevent inappropriate payments. Eight of the 15 carriers we contacted deny payment for ultrasound tests if they know Pocket Dopplers were used to conduct the tests. Some carriers, through prior utilization contacts, have compiled lists of the kinds of equipment providers use in their service areas. One carrier utilization review representative contacts providers during claims processing if there is any question concerning the type of equipment used.

Several carriers have instituted written policy changes designed to curb unwarranted reimbursements. A written policy implemented by Blue Shield of Alabama was typical of carriers which decided to deny payment for Pocket Doppler usage. The policy states: "No reimbursement is allowed for a simple hand-held doppler device as this is considered to be a part of the physical examination of the vascular system."

Pennsylvania Blue Shield implemented a policy change effective March 1, 1990, preventing payment for Pocket Dopplers. For vascular tests to be reimbursable, the policy requires that equipment: (1) must produce a hard-copy report for objective review, and (2) must be bidirectional or capable of determining blood flow direction. The carrier plans to conduct postpayment reviews to monitor adherence to its policy.

Four carrier representatives stated that Pocket Doppler examinations should be considered part of the office visit. "It's just an extension of the doctor's service," one medical director said. Another representative compared the Pocket Doppler to a mechanical device used by a chiropractor. "Medicare only pays a chiropractor if he uses his hands to do a manual manipulation. There is no extra payment if he uses a mechanical device."

# RECOMMENDATIONS

# The HCFA should

- prohibit payment for tests conducted with Pocket Dopplers, and
- advocate revisions in procedure codes and reimbursement rates to reflect the different levels of sophistication and quality of diagnostic information provided in ultrasonic vascular testing.

# SUMMARY OF RECOMMENDATIONS AND AGENCY COMMENTS

The HCFA concurred with our recommendation to prohibit coverage for tests conducted with Pocket Dopplers. They plan to issue a claims manual instruction treating Pocket Doppler tests in a manner similar to portable hand-held x-ray instruments (Medicare Claims Manual section 50-48, Coverage Issues - Diagnostic Services).

The HCFA disagreed with our recommendation to revise procedure codes and payment rates to reflect different levels of sophistication and diagnostic quality provided in ultrasound tests. According to HCFA, it is not a good idea to base payments totally on equipment acquisition costs. Instead, HCFA, which compared vascular testing to radiation therapy services, intends to base payments on "the level of treatment delivery."

Our report recommends that payment be based on different levels of sophistication and diagnostic quality, not equipment acquisition costs. We believe our recommendation--if we interpret HCFA's response correctly to mean that the codes should encompass the nature and the quality of diagnostic testing--mirrors HCFA's intentions to base payments on "the level of treatment delivery."

We continue to believe that HCFA should advocate revisions in procedure codes reflecting the various levels of sophistication and quality of diagnostic information provided in ultrasound tests. This effort, combined with adjusted reimbursement rates, would result in a more equitable reimbursement system for these tests. We have modified our recommendation to give HCFA greater flexibility in achieving this result.

We understand HCFA has encouraged procedure code revisions in vascular tests during recent contacts with the American Medical Association's editorial board. We support such efforts and encourage continued attempts until appropriate changes have been implemented.

The Assistant Secretary for Management and Budget provided comments supporting our findings and recommendations. The full text of these comments, as well as HCFA's comments, are contained in Appendix B.

In addition to the Management Advisory Report on Pocket Dopplers, we will soon issue a related second report providing HCFA with information regarding "zero-crossing" devices--ultrasound equipment similar to Pocket Dopplers.

# APPENDIX A

# CPT DEFINITIONS OF PROCEDURE CODES USED IN ULTRASOUND TESTS

(Note: Pocket Dopplers are capable of performing only those elements shown in boldface.)

# Cerebrovascular Arterial Studies

- Non-invasive studies of cerebral arteries other than carotid (e.g., periorbital flow direction with arterial compression, periorbital photoplethysmography with arterial compression, ocular plethysmography with brachial blood pressure, ocular and ear pulse wave timing, vertebral arteries flow direction measurement)
- Non-invasive studies of carotid arteries, non-imaging (e.g., phonoangiography with or without spectrum analysis, flow velocity pattern evaluation, analog velocity wave form analysis, diastolic flow evaluation)
- Non-invasive studies of carotid arteries, imaging (e.g., flow imaging by ultrasonic arteriography, high resolution B-scan with or without pulsed Doppler flow evaluation, Doppler flow or duplex scan with spectrum analysis)

#### Limb Arterial Studies

- Non-invasive studies of upper extremity arteries (e.g., segmental blood pressure measurements, continuous wave Doppler analog wave form analysis, evocative pressure response to exercise or reactive hyperemia, photoplethysmographic or pulse volume digit wave form analysis, flow velocity signals)
- Non-invasive studies of lower extremity arteries (e.g., segmental blood pressure measurements, continuous wave Doppler analog wave form analysis, evocative pressure response to exercise or reactive hyperemia, photoplethysmography or pulse volume digit wave form analysis, flow velocity signals)

# Venous Studies

Non-invasive studies of extremity veins (e.g., Doppler studies with evaluation of venous flow patterns and responses to compression and other maneuvers, phleborheography, impedance plethysmography)

93960 Quantitative venous flow studies (e.g., capacitance and outflow measurement of calf, measurement of calf venous reflux, quantitative photoplethysmography) Other Diagnostic Ultrasound Tests Commonly Performed 76805 Echography, pregnant uterus, B-scan and/or real time with image documentation; complete (complete fetal and maternal evaluation) 76815 Limited (gestational age, heart beat, placental location, fetal position, or emergency in delivery room) 76816 Follow-up or repeat (see 76815) 76830 Echography, transvaginal 76855 Echography, pelvic area (Doppler) 76870 Echography, scrotum and contents 76925 Echography, peripheral vascular system (e.g., B-scan, Doppler or realtime scan)

Echography, head and trunk, vascular system (e.g., duplex Doppler)

76926

# APPENDIX B

# **COMMENTS**



# DEPARTMENT OF HEALTH & HUMAN SERVICES

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DATE SENT

**FILLY** 

Health Care

Financing Administration

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EX SEC

Memorandum

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Date

Administrator al

Health Care Financing Administration

From

OIG Draft Report: "Low-Cost Ultrasound Equipment," OEI-03-88-01401

Subject

The Inspector General Office of the Secretary

То

Thank you for the opportunity to comment on the above referenced draft report discussing the appropriateness of Medicare payment for certain types of ultrasound equipment.

We concur with the recommendation that HCFA should prohibit payment for tests conducted with Pocket Dopplers under the Medicare program. We recently presented this issue to our Coverage/Payment Technical Advisory Group and the members advised us that Pocket Dopplers are part of the physician's armamentarium and, like ordinary stethoscopes, should not qualify for separate payment under the program. Accordingly, we are preparing a manual instruction that will limit Medicare payment for tests conducted with the Pocket Doppler in a manner similar to the way in which we limited payment for portable hand-held x-ray units in section 50-48 of the Coverage Issues Manual: They will be paid for as part of the physician's professional service with no additional charge allowed.

We disagree with the recommendation that HCFA revise procedure codes and payment rates to reflect the different levels of sophistication and quality of diagnostic information provided in ultrasound tests. As far as the hand-held devices are concerned, we do not believe that revised procedure codes or payment levels are needed, since such procedures should be payable through visit or other physicians' service codes, and ultrasound codes should never be billed. However, we should make clear that the codes for ultrasound procedures do not apply to the hand-held device.

With respect to the mid-level and upper-level equipment, it is not clear that any action is needed. Further, we do not believe it is a good idea to base payments totally on the acquisition costs of the equipment used in providing the service. We are facing a similar problem with regard to radiation therapy services furnished in ambulatory settings. In such situations, the state-of-

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the-art equipment can deliver treatments at all levels, and we intend to base payments at the level of treatment delivery rather than the acquisition costs of the equipment.

Since your office is completing a follow-up study to determine the extent to which carriers are paying doctors for ultrasound tests conducted with Pocket Dopplers, we request that you defer a determination of potential savings until that study is completed.

Attached are additional comments on technical aspects of this report. Please advise us whether you agree with our position on the report's recommendations at your earliest convenience.

Gail R. Wilensky, Ph.D.

Attachment

# Health Care Financing Administration Comments on Office of the Inspector General Draft Report - "Low Cost Ultrasound Equipment" (OEI-03-88-01401)

#### Procedure Codes

In specifying which Common Procedural Terminology (CPT-4) codes met the definition of "radiology services" for purposes of payment under the fee schedules for radiologist services, 42 CFR 405.530(c)(1) included those ultrasound services in the CPT-4 70000 series and excluded those in the 90000 series. The American College of Radiology has indicated that, for the subgroup of procedures classified as ultrasound procedures, the relative value scale it developed for purposes of payment under the fee schedules for radiologist services reduced the values assigned to ultrasound procedures by 2 percent. This reduction affected procedures furnished by fee schedule physicians on or after April 1, 1989.

Effective for services furnished on or after April 1, 1990, the prevailing charges for CPT-4 codes 76925 and 76426 were limited by the radiologist fee schedule amounts in those localities in which carriers recognized specialty differentials. Further, section 4102(c) of the Omnibus Budget Reconciliation Act (OBRA) of 1990 establishes the radiologist fee schedule amounts in individual localities as limits on prevailing charges for all 70000 series procedures, including ultrasound procedures, effective for services furnished on or after January 1, 1991.

As is the case with nearly all diagnostic procedures, ultrasound procedures have both a professional and a technical component. If the second recommendation relates only to the equipment costs of mid-level and upper-level equipment, we believe that the recommendation should specify that it applies only to the technical component of ultrasound procedures. In this regard, we would point out that section 4108 of OBRA 1990 provides that the reasonable charge for the technical component of certain high-volume diagnostic tests (including the applicable portion of the global service) may not exceed the national median of such charges for all localities. Reasonable charge allowances below the national median are not raised to the national median level. CPT-4 procedure codes 93850, 93860, 93870, 93910, and 93950 are subject to this limitation effective for services furnished on or after January 1, 1991.

As far as radiologist fee schedule payments are concerned, we have seen no evidence to indicate that technical component payment levels for ultrasound procedures are out of line. For example, code 76855 has a technical component relative value of 4.10. Using the 1990 weighted average conversion factor of \$13.20, the fee schedule amount for the technical component of the procedure is \$54.12. This amount would be payable regardless of the type of ultrasound equipment used to furnish the service and would seem to pale in comparison with technical component payments of \$200 for Computerized Axial Tomography (CT) procedures and over \$400 for Magnetic Resonance Imaging (MRI) procedures.

# Billings for Pocket Dopplers

It is not possible to determine the extent of billings for the use of Pocket Dopplers from existing Medicare Part B Service Data System (BMAD) data. Billings can be determined by place of service, but cannot be used to determine what device was used to perform the diagnostic test. The information presented in the report that the largest provider of ambulatory ultrasound services in the country estimated that 10-20 percent of in-office ultrasound tests were conducted with Pocket Dopplers is also not very helpful. OIG's estimate of \$18 million in Medicare expenditures for the use of Pocket Dopplers needs further study and refinement.



# DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Secretary

Washington, D.C. 20201

JAN 28 1991

MEMORANDUM TO:

Richard P. Kusserow

Inspector general

FROM

Kevin E. Moley
Assistant Secretary for Management of Budget

SUBJECT

OIG Draft Report: "Low-Cost Ultrasound

Equipment" 03-88-01401

I have reviewed the OIG draft inspection report entitled "Low-Cost Ultrasound Equipment" and I enthusiastically support the report findings and recommendations.

I would hope that HCFA would take action as soon as feasible to implement the report recommendations and prohibit payment for tests conducted with Pocket Dopplers. Additionally, HCFA should begin to revise current procedure codes and reimbursement rates to reflect the varying levels of the ultrasound devices being used.

I commend the Office of the Inspector General on their excellent work in this area.

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# OFFICE OF INSPECTOR GENERAL

The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services' (HHS) programs as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by three OIG operating components: the Office of Audit Services, the Office of Investigations, and the Office of Evaluation and Inspections. The OIG also informs the Secretary of HHS of program and management problems and recommends courses to correct them.

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The OIG's Office of Evaluation and Inspections (OEI) conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public. The findings and recommendations contained in these inspection reports generate rapid, accurate, and up-to-date information on the efficiency, vulnerability, and effectiveness of departmental programs.

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