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INDEPENDENT STATE AUDITOR'S REPORT ON CERTAIN ACTIVITIES OF THE OFFICE OF MEDICAID AS ADMINISTERED BY MASSHEALTH IN THE MANAGEMENT OF ADVANCED IMAGING PROCEDURES

OFFICIAL AUDIT REPORT

SEPTEMBER 1, 2010

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MassHealth, within the Executive Office of Health and Human Services (EOHHS), administers the Medicaid program, which provides comprehensive health insurance or help in paying for private health insurance to approximately 1.2 million Massachusetts children, families, seniors, and people with disabilities. In fiscal year 2009, MassHealth paid approximately $6.7 billion on approximately 65 million claims to 30,000 providers, of which 50%[1] was federally funded. The Medicaid program represents approximately 30% of the Commonwealth's annual budget. In fiscal year 2009, MassHealth paid in excess of $94 million on approximately 2.5 million claims to 660 providers for radiology services. Within radiology, there are three particular imaging modalities we have collectively termed "advanced imaging:" computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography (PET). In fiscal year 2009, MassHealth paid in excess of $30 million on approximately 582,000 claims for advanced imaging services. Advanced imaging services accounted for 22.7% of the quantity and 32.7% of the total radiology claims paid. For the period fiscal year 2004 to fiscal year 2009, the amount paid for advanced imaging claims increased 35% and the quantity of advanced imaging claims paid increased 75.4%. Claims for all services covered by MassHealth increased at a much lesser rate; the amount paid increased by 10.8% and the quantity of claims paid increased 38.9%.

The volume of advanced imaging services provided to consumers has increased dramatically over the past decade. Many experts attribute this growth to the increased utilization of advanced imaging in expanded procedures for both diagnostic and medical treatments. In response to rapid and sustained growth in the volume of advanced imaging services, there is concern by federal and state governments about potential over-utilization, and they are responding with regulatory initiatives. Of particular concern is physician self-referral of a patient to a specialized medical facility performing advanced imaging services in which the referring physician has a financial interest. To discourage and regulate physician self-referral, the federal government enacted the Ethics in Patients Referrals Act, also known as the Stark Law,[2] in 1989. However, this law does contain a number of exceptions which makes the law less effective, unless states adopt provisions to limit or eliminate these exceptions. There is also a federal anti-kickback statute[3] that makes it illegal for physicians to accept bribes or other compensation in return for generating Medicare, Medicaid, or other federal healthcare program business. A physician also cannot offer anything of value to induce federal healthcare program business. The statute includes numerous permitted "safe harbors," such as investments in group practices.[4]

Many states regulate self-referral to prohibit or at least disclose self-referrals to patients. Massachusetts requires disclosure for physical therapy service referrals, if the referring

[1] The American Recovery and Reinvestment Act (ARRA) provided a temporary increase in the federal matching percentage (FMAP) for Medicaid from October 1, 2008 through December 31, 2010. The FMAP was increased to 58.8% for Massachusetts.

[2] Section 1877 of the Social Security Act

[3] The Medicare and Medicaid Patient Protection Act of 1987, Section 1128B(b) of the Social Security Act [42 U.S.C. 1320a-7b(b)]

[4] "Report of the Special Commission on Ambulatory Surgical Centers & Medical Diagnostic Services," July 1, 2007, pg. 33

physician has a financial interest. However, there is not a similar requirement for radiology services. In 2006, Massachusetts established the 16-member Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services[5] to investigate and study the impact of medical diagnostic services, specifically MRI, on health insurance, Medicaid, and uncompensated care costs. On July 1, 2007, the Commission submitted its report,[6] along with recommendations laying out principles and direction for future legislation and possible regulatory changes. The report indicated that, unlike other states, Massachusetts does not have certain prohibitions against self-referrals, which could potentially result in significant negative consequences. Among the future legislation and possible regulatory changes, the Committee recommended that the Legislature act to address potential self-referral issues with respect to state payers by piggybacking the provisions of both the Stark Law and the anti-kickback statute, including all exceptions and safe harbors, in state law.

In further response to the growth in utilization for advanced imaging services paid by Medicare, the federal government reduced reimbursement rates for advanced imaging services in 2006 and 2007. In excess of $1.5 billion was saved by Medicare in 2007, more than three times the level anticipated by Congress.[7] As a result of the rate reduction, the growth in Medicare-covered advanced imaging services has slowed. More restrictive requirements for advanced imaging are proposed in the 2010 federal budget.

Adjustments to Medicare reimbursement rates can have a direct and immediate impact on MassHealth's costs if MassHealth does not match the rate reductions in a timely manner. An individual who is covered by both Medicare and Medicaid is known as a dual eligible beneficiary. If a dual eligible beneficiary[8] has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount.[9] The differential amount is termed a Medicare crossover claim and payment. Nationally, the more than eight million adults who are dually eligible represent approximately 18% of the Medicaid population, but account for 46% of the program's costs, due to their complex array of medical, behavioral, and long-term care needs. In Massachusetts, there were approximately 230,000 MassHealth members with dual eligibility in fiscal year 2009, or approximately 20% of the Medicaid population.

MassHealth makes payments for all in-state non-institutional providers in accordance with the methodology established by the Division of Health Care Finance and Policy (DHCFP) in EOHHS,[10] subject to federal payment limitations.[11] The DHCFP adjusted MassHealth's reimbursement rates for advanced imaging services four times beginning in July 2006. Twice the rates were increased, and twice they were reduced.

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor conducted an audit on advanced imaging within the MassHealth radiology program. Our audit was conducted in accordance with applicable generally

[5] Established by Section 105 of Chapter 139 of the Acts of 2006
[6] "Report of the Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services," July 1, 2007
[7] Ilyse Schuman, "Saving Lives and Money," Imaging Economics, April 2009
[8] A dual eligible beneficiary is an individual who is covered by both Medicare and Medicaid.
[9] 130 CMR 450.318 (C) The Division's crossover liability will not exceed: (1) the coinsurance and deductible amounts as reported on the explanation of benefits or remittance advice from Medicare; (2) the Division's maximum allowed amount for the service; (3) the Medicare approved amount; or (4) the Division's established rate for crossover payment.
[10] 130 Code of Massachusetts Regulations 450.232: Rates of Payment to In-State Providers
[11] 42 Code of Federal Regulations 447.304

accepted government auditing standards. The objectives of the audit were to determine: (1) whether industry and regulatory developments will or have affected Medicaid expenditures at MassHealth; (2) whether non-radiologist physicians have a direct or indirect financial interest in the imaging equipment or facility to which they have referred patients for advanced imaging procedures; (3) whether there is a potential for noncompliance with the Stark Law or self-referrals; and (4) the extent of advanced imaging within the radiology program and its change during the period fiscal years 2004 to 2009.

Our review found that (a) unlike many states, Massachusetts does not regulate self-referral for advanced imaging services to prohibit or, at least, disclose self-referrals to patients, which could potentially result in significant negative consequences,[12] and (b) increases in MassHealth's reimbursement rate and the rate-setting methodology for advanced imaging services may have caused potential lost savings of $8,587,612 in Medicare crossover payments[13] in fiscal years 2007 through 2009.

The Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services report indicated that, unlike other states, Massachusetts does not have certain prohibitions against self-referrals, which could potentially result in significant negative consequences. The Commission reported the following:

> *Physicians who have an ownership stake in medical diagnostic services face a potential conflict of interest when referring their patients to use those services. Self-referral arrangements tend to result in increased utilization of services, some of which may not be medically necessary. This is a significant concern because increased utilization is a major driver of escalating health insurance premiums and rising health care expenditures. . . . Massachusetts does not have a set of safeguards similar to the federal rules or these other states.*

Among the future legislation and possible regulatory changes, the Commission recommended that the Legislature act to address potential self-referral issues with respect to state payers by piggybacking the provisions of both the Stark Law and the anti-kickback statute, including all exceptions and safe harbors, in state law:

> *The legislature should act to address potential self-referral issues with respect to state payers (MassHealth, Commonwealth Care, and the Group Insurance*

[12] "Report of the Special Commission on Ambulatory Surgical Centers & Medical Diagnostic Services," July 1, 2007, pg. 33

[13] If a dual eligible beneficiary has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount. The differential amount is termed a Medicare crossover claim and payment. A dual eligible beneficiary is an individual who is covered by both Medicare and Medicaid. In FY 2009, approximately 20% of MassHealth members were dual beneficiaries.

Commission). The best way to accomplish this is to piggyback the provisions of both the Stark law and the anti-kickback statute, including all exceptions and safe harbors, in state law. The attorney general should be charged with enforcement of these provisions.

This will allow the state provisions to stay flexible, and will not require frequent amendments as these laws are changed at the federal level. However, with [Centers for Medicare and Medicaid Services] CMS[12] delaying the publication of its new regulations on the subject, the Commission feels that the potential problem of improper leasing arrangements should be immediately addressed by the state. Therefore, the legislature should apply all self-referral preclusions to physician leased, as well as physician owned facilities.

Additionally, the Commission recommended that:

Medical diagnostic equipment should be required to meet current technology standards and maintenance requirements. DPH [the Department of Public Health] should draft regulations that will provide for the credentialing of those who calibrate and maintain such equipment.

However, the Commission's recommendations have not been implemented, resulting in potential conflicts of interest between providers of advanced imaging services and providers referring patients for the procedures. Such self-referrals may have increased utilization and driven up health care costs. In addition, no action has been taken regarding medical diagnostic equipment technology standards and maintenance requirements.

MassHealth responded that they would support the enactment of a Massachusetts Stark-type law should one be filed.

b. Increases in MassHealth's Reimbursement Rate and the Rate-Setting Methodology May Have Caused Potential Lost Savings of $8,587,612 **24**

The Medicare reimbursement rates for advanced imaging as set by CMS have been reduced multiple times in recent years, and more restrictive requirements for advanced imaging are proposed in the 2010 federal budget. The Medicare reimbursement rates are expected to continue to be adjusted periodically, not only in reaction to the growth of these services, but also due to technological advances in imaging equipment and productivity gains in both the technical and professional components of the procedures. MassHealth has had a net increase in reimbursement rates for advanced imaging services in recent years, and DHCFP sets the reimbursement rates for MassHealth using a different methodology than CMS does for Medicare. As a result of this constraint, and the increased rates set by DHCFP, potential savings of $8,587,612 in Medicare crossover payments[14] were not realized in fiscal years 2007 through 2009.

MassHealth responded that it disputes that increases in MassHealth's reimbursement rate and rate setting resulted in potential lost savings of $8,587,612 in Medicare crossover

[14] If a dual eligible beneficiary has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount. The differential amount is termed a Medicare crossover claim and payment. A dual eligible beneficiary is an individual who is covered by both Medicare and Medicaid. In FY 2009, approximately 20% of MassHealth members were dual beneficiaries.

payments. MassHealth believes increased Medicare liability and Medicare payment policy changes are the primary causes of increased advanced imaging crossover payments. With respect to the Office of the State Auditor's recommendation that MassHealth re-examine the approach to setting payment rates for advanced imaging, it was noted that MassHealth is exploring the potential use of Medicare's Outpatient Prospective Payment (OPPS) system's approach as it applies to the method of payment.

INTRODUCTION

Background

In accordance with Chapter 118E of the Massachusetts General Laws, MassHealth, within the Executive Office of Health and Human Services (EOHHS), administers the Medicaid program, which provides comprehensive health insurance or help in paying for private health insurance to approximately 1.2 million Massachusetts children, families, seniors, and people with disabilities. In fiscal year 2009, MassHealth paid approximately $6.7 billion on approximately 65 million claims to 30,000 providers, of which 50%[15] was federally funded. The Medicaid program represents approximately 30% of the Commonwealth's annual budget.

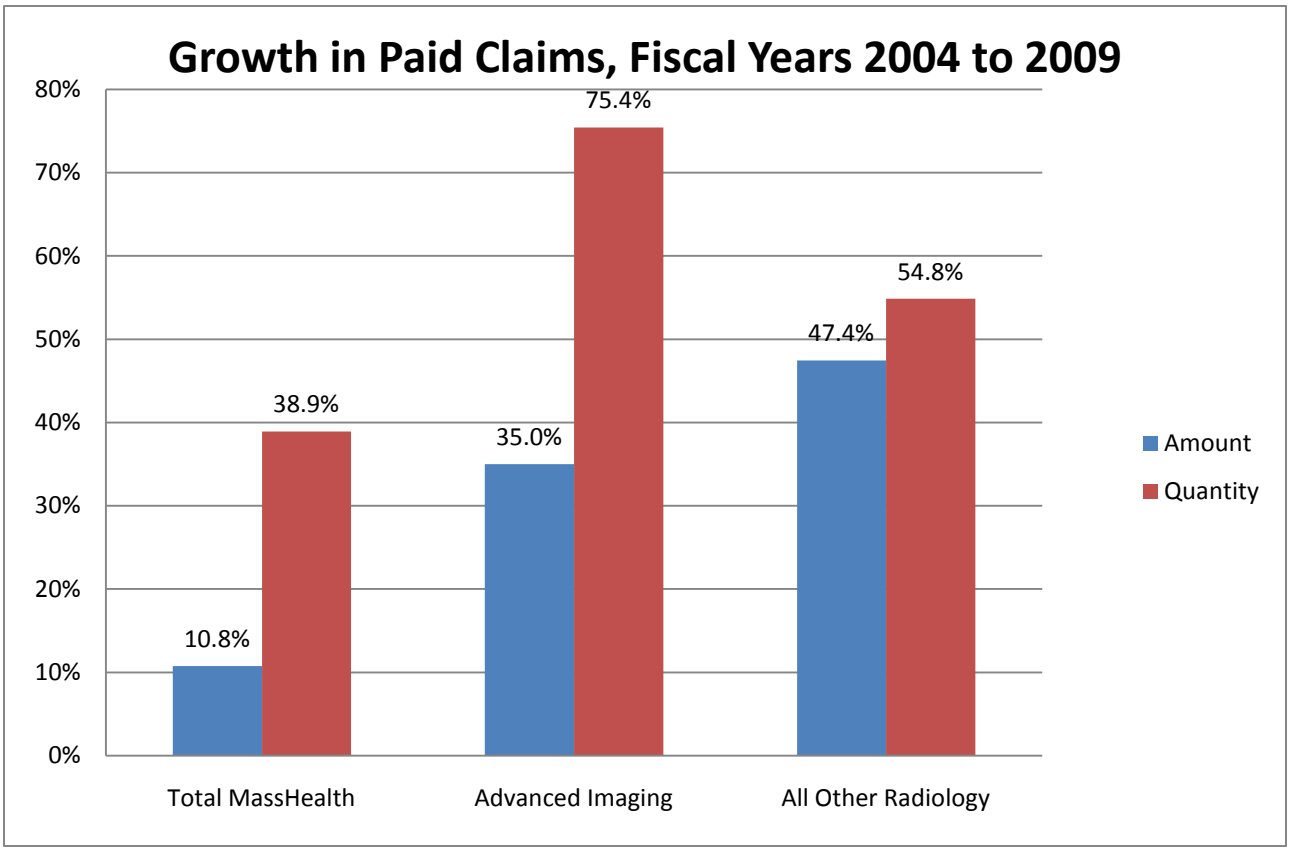
MassHealth's radiology program grants reimbursement to its members for radiology services provided for the assessment or treatment of a medical condition, injury, or illness. In fiscal year 2009, MassHealth paid in excess of $94 million on approximately 2.6 million claims to 660 providers for radiology services. Within radiology, there are three particular imaging modalities we have collectively termed "advanced imaging": computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography (PET). In fiscal year 2009, MassHealth paid in excess of $30 million on approximately 582,000 claims for advanced imaging services. Advanced imaging services accounted for 22.7% of the quantity and 32.7% of the total radiology claims paid.

The volume of advanced imaging services provided to consumers has increased dramatically over the past decade. Many experts attribute this growth to the increased utilization of advanced imaging in expanded procedures for both diagnostic and medical treatments. In response to rapid and sustained growth in the volume of advanced imaging services, there is concern by federal and state governments about potential over-utilization, and they are responding with regulatory initiatives. Of particular concern is physician self-referral of a patient to a specialized medical facility performing advanced imaging services in which the referring physician has a financial interest.

For the period fiscal year 2004 to fiscal year 2009, the amount paid for all claims by MassHealth increased by 10.8% and the quantity of paid claims increased 38.9%. Radiology and, in particular, advanced imaging's, rate of growth significantly exceeded that of MassHealth's total. The amount

[15] The American Recovery and Reinvestment Act (ARRA) provided a temporary increase in the federal matching percentage (FMAP) for Medicaid from October 1, 2008 through December 31, 2010. The FMAP was increased to 58.8% for Massachusetts.

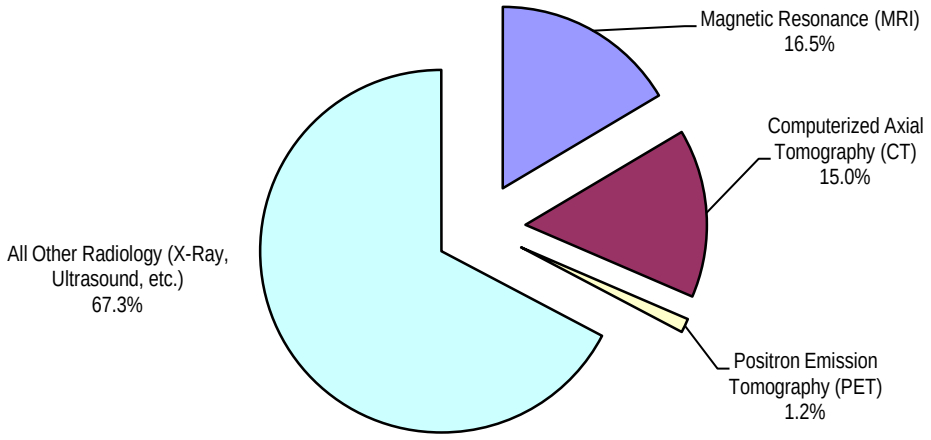
paid for advanced imaging claims increased 35%, and the quantity of advanced imaging claims paid increased 75.4%. The amount paid for all other radiology claims increased 47.4% and the quantity of claims paid increased 54.8%, as shown in the following charts.



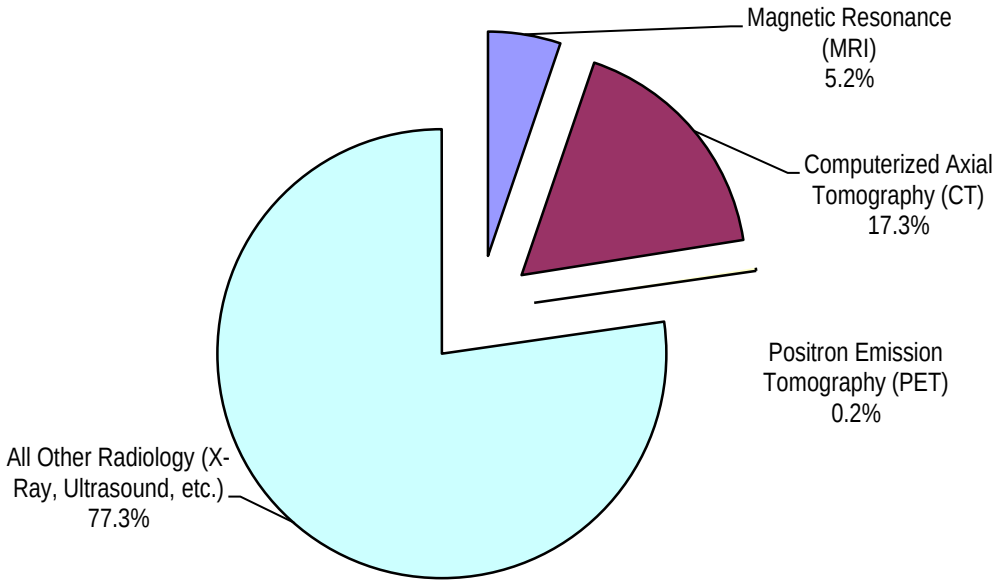
RADIOLOGY PAID CLAIMS

	Fiscal Year 2004		Fiscal Year 2009		% Change	
	Amount	Quantity	Amount	Quantity	Amount	Quantity
Advanced Imaging						
MRI	$12,565,062	89,787	$15,539,539	134,186	23.7%	49.4%
CT	10,078,909	241,909	14,148,137	442,018	40.4%	82.7%
PET	217,251	59	1,177,445	5,761	442.0%	9664.4%
Total Advanced Imaging	$22,861,222	331,755	$30,865,121	581,965	35.0%	75.4%
Percent of Total Radiology	34.7%	20.6%	32.7%	22.7%		
All Other Radiology	$43,052,593	1,277,869	$63,479,440	1,978,762	47.4%	54.8%
Total Radiology	$65,913,815	1,609,624	$94,344,561	2,560,727	43.1%	59.1%
Total MassHealth Claims	$6,004,835,672	46,687,372	$6,650,682,186	64,860,415	10.8%	38.9%

Radiology Amount of Claims Paid in Fiscal Year 2009



Radiology Quantity of Claims Paid in Fiscal Year 2009



MRI

MRI is a noninvasive medical test that helps physicians diagnose and treat medical conditions. MRI uses a powerful magnetic field, radio frequency pulses and a computer to produce detailed pictures of organs, soft tissues, bone and virtually all other internal body structures. The images can then be examined on a computer monitor, printed or copied to CD. MRI does not use ionizing radiation (x-rays). . . . Instead, while in the magnet, radio waves redirect the axes of spinning protons, which are the nuclei of hydrogen atoms, in a strong magnetic field. The magnetic field is produced by passing an electric current through wire coils in most MRI units. Other coils, located in the machine and in some cases, placed around the part of the body being imaged, send and receive radio waves, producing signals that are detected by the coils. A

computer then processes the signals and generates a series of images each of which shows a thin slice of the body. The interpreting physician can then study the images from different angles. . . . Detailed MRIs allow physicians to better evaluate various parts of the body and certain diseases that may not be assessed adequately with other imaging methods such as x-ray, ultrasound or CT scanning. [16]

MASSHEALTH MRI PAID CLAIMS

	Fiscal Year 2004	Fiscal Year 2009	% Change
Quantity	89,787	134,186	49.4%
Amount	$12,565,062	$15,539,539	23.7%
Cost Per Claim	$140	$116	-17.2%

CT

CT scanning, sometimes called CAT scanning, is a noninvasive medical test that helps physicians diagnose and treat medical conditions. CT scanning combines special x-ray equipment with sophisticated computers to produce multiple images or pictures of the inside of the body. These cross-sectional images of the area being studied can then be examined on a computer monitor or printed. CT scans of internal organs, bone, soft tissue and blood vessels provide greater clarity and reveal more details than regular x-ray exams. Using specialized equipment and expertise to create and interpret CT scans of the body, physicians can more easily diagnose problems such as cancers, cardiovascular disease, infectious disease, trauma and musculoskeletal disorders. . . . CT imaging is sometimes compared to looking into a loaf of bread by cutting the loaf into thin slices. When the image slices are reassembled by computer software, the result is a very detailed multidimensional view of the body's interior. [17]

MASSHEALTH CT PAID CLAIMS

	Fiscal Year 2004	Fiscal Year 2009	% Change
Quantity	241,909	442,018	82.7%
Amount	$10,078,909	$14,148,137	40.4%
Cost Per Claim	$42	$32	-23.2%

PET

PET imaging, or a PET scan, is a type of noninvasive nuclear medicine imaging that uses small amounts of radioactive material termed radiopharmaceuticals or radiotracers to diagnose or treat a variety of diseases, including many types of cancers, heart disease and certain other abnormalities within the body. . . . Depending on the type of nuclear medicine exam performed, the radiotracer is either injected into a vein, swallowed or inhaled as a gas and eventually accumulates in the organ or area of your body being examined, where it gives off energy in the

[16] Radiological Society of North America, Inc., www.radiologyinfo.org
[17] Radiological Society of North America, Inc., www.radiologyinfo.org

> *form of gamma rays. A device called a gamma camera, a PET scanner and/or probe detects this energy. These devices work together with a computer to measure the amount of radiotracer absorbed by your body and to produce special pictures offering details on both the structure and function of organs and tissues. In some centers, nuclear medicine images can be superimposed with a CT scan or MRI to produce special views, a practice known as image fusion or co-registration. These views allow the information from two different studies to be correlated and interpreted on one image, leading to more precise information and accurate diagnoses. . . . A PET scan measures important body functions, such as blood flow, oxygen use, and sugar (glucose metabolism, to help doctors evaluate how well organs and tissues are functioning. . . . Today, most PET scans are performed on instruments that are combined PET and CT scanners. The combined PET/CT scans provide images that pinpoint the location of abnormal metabolic activity within the body. The combined scans have been shown to provide more accurate diagnoses than the two scans performed separately.*[18]

Due to PET's benefits in clinical oncology (the medical imaging of tumors), the Centers for Medicare and Medicaid Services (CMS) issued, on April 6, 2009, a final national coverage determination (NCD) to expand coverage for initial testing with PET for Medicare beneficiaries who are diagnosed with and treated for most solid tumor cancers.[19]

MASSHEALTH PET PAID CLAIMS

	Fiscal Year 2004	Fiscal Year 2009	% Change[20]
Quantity	59	5,761	9,664.4%
Amount	$217,251	$1,177,445	442.0%
Cost Per Claim	$3,682	$204	-94.4%

Radiology Claim Components

The component of a service or procedure representing the cost of rent, equipment, utilities, supplies, administrative and technical salaries and benefits, and other overhead expenses of the service or procedure is termed the technical component (TC) of the claim. The component of a service or procedure representing the physician's work interpreting or performing the service or procedure is termed the professional component (PC) of the claim. The technical component is typically billed at a higher rate than the professional component. These two components can be billed separately; however, the physician providing the PC may submit a "global bill" that includes both the technical and professional components. In that instance, the provider who submitted the claim will receive

[18] Radiological Society of North America, Inc., www.radiologyinfo.org

[19] "Medicare Expands Coverage of PET Scans As Cancer Diagnostic Tool," April 06, 2009, CMS Office of Public Affairs

[20] Due to the small quantity and amount of paid claims in 2004, a year-to-year comparison might not be meaningful.

total payment from MassHealth and reimburse the other provider for the respective component of the service performed.

A SAMPLE OF SELECTED PROCEDURE CODES FROM THE RADIOLOGY DHCFP FEE SCHEDULE[21]

Procedure Code	Global Fee[22]	PC Fee	TC Fee	Description
70450	$188.69	$32.71	$155.99	Computed tomography, head or brain; without contrast material
70490	$216.38	$49.36	$167.02	Computed tomography, soft tissue neck; without contrast material
70544	$450.78	$46.32	$404.46	Magnetic resonance angiography, head; without contrast material(s)
70547	$450.46	$45.99	$404.46	Magnetic resonance angiography, neck; without contrast material(s)
78811	$1,160.04	$60.74	$1,094.25	Tumor imaging, positron emission tomography (PET); limited area (e.g., chest, head/neck)
78813	$1,912.08	$78.10	$1,827.13	Tumor imaging, positron emission tomography (PET); whole body

A prescribing or referring physician causes the initial activity that results in an imaging procedure being performed. In some instances, the prescribing or referring physician must request prior authorization on behalf of the member from MassHealth before the imaging procedure can take place.[23] Upon approval, the prescribing/referring provider will either perform the procedure in-house or refer the member to a technical component provider. The technical component service provider could be an independent diagnostic testing facility (IDTF), hospital, group practice organization, or the prescribing/referring physician. Because the technical component is typically billed at a higher rate than the professional component, there is an incentive for the prescribing/referring physician to purchase advanced imaging equipment for in-office use. Also, technological advances over the past decade have resulted in a reduction in both the size and cost of the equipment used for advanced imaging, furthering the incentive to purchase in-office equipment. Additionally, some physicians may have a financial interest in an IDTF. Thus, there is a growing national concern about over-utilization due to physician self-referral and its potential as a conflict of interest.

[21] Division of Health Care Finance and Policy, 14.3 CMR 18.00, effective July 1, 20009
[22] The global fee is a set rate and not necessarily the total of the professional and technical components.
[23] 130 CMR 433.408(A)(1)

Physician Self-Referrals for Imaging Services

Physician self-referral is the referral of a patient to a specialized medical facility in which the referring physician has a financial interest. To discourage and regulate physician self-referral, the federal government enacted the Ethics in Patient Referrals Act, also known as the Stark Law,[24] in 1989. There have been numerous amendments that have expanded the law and made it more applicable to the advanced imaging industry. At the same time, it has become more complex. The Stark Law provides for a number of exceptions, including physicians who are hospital-based employees or members of a nonprofit group practice. In addition, the Stark Law's in-office ancillary services exception sets forth an exception for certain services (including advanced imaging) that are provided ancillary to medical services provided by a physician or group practice and that meet certain conditions. Among other things, the exception allows patients of a sole practitioner or physician in a group practice to receive ancillary services in the same building in which the referring physician or his or her group practice furnishes medical services. The in-office ancillary services exception can potentially be exploited through business models in which physicians lease the equipment and are employees of an imaging center at the time of service, thus holding no technical ownership in the practice.

The federal anti-kickback statute[25] makes it illegal for physicians to accept bribes or other compensation in return for generating Medicare, Medicaid, or other federal healthcare program business. Also, a physician cannot offer anything of value to induce federal healthcare program business. The statute includes numerous permitted "safe harbors," such as investments in group practices.[26]

On December 4, 2007, the Annals of Internal Medicine published the results of a survey performed by the Massachusetts General Hospital Institute for Health Policy (MGHIHP). From November 2003 to June 2004, MGHIHP mailed a survey to 3,504 U.S. internists, family practitioners, pediatricians, surgeons, cardiologists, and anesthesiologists and received 1,662 responses. The survey asked respondents whether they agreed with specific statements about the fair distribution of limited resources, improvement of health care access and quality, management of interests, and self-

[24] Section 1877 of the Social Security Act
[25] The Medicare and Medicaid Patient Protection Act of 1987, Section 1128B(b) of the Social Security Act [42 U.S.C. 1320a-7b(b)]
[26] "Report of the Special Commission on Ambulatory Surgical Centers & Medical Diagnostic Services," July 1, 2007, pg. 33

regulation by physicians. The Kaiser Daily Health Policy Report[27] quoted the lead author of the study as saying, "We found large gaps between physicians' espoused attitudes and what they do in actual practice."

Some of those questions in the study are pertinent to self-referral and conflicts of interest, as follows:

A majority of respondents said that they would refer patients to a medical imaging facility in which they had financial ties, although only 24% would inform patients of their financial ties.

96% of respondents said that physicians should place the welfare of their patients above their financial interests.

36% of respondents said that they would order an unnecessary MRI for patients with back pain, although most said that they oppose unnecessary use of medical resources.

The Boston Globe reported[28] on the study, as follows:

> *The lead author of the study was struck by the idea that virtually all physicians believe doctors shouldn't waste scarce resources. Yet 36 percent of doctors surveyed said they would order an MRI for a patient with low back pain who demanded the test, even if a doctor believed the test was useless. Several physicians, however, said that today's emphasis on patient satisfaction often puts doctors in a no-win situation when a patient insists on a test that is unnecessary. The physician must either waste resources or risk an unhappy patient. This dilemma can be especially difficult for a doctor whose employer uses patient satisfaction surveys to help evaluate their work. The director of the health policy institute and an author of the study said he did not expect doctors to always live up to their beliefs. But he was surprised that 25 percent said they would refer patients to an imaging facility in which the doctor had a financial interest, because doing so is usually illegal.*

A bill[29] before the United States House of Representatives would, if enacted, prohibit in-office self-referral of advanced imaging modalities and negate some of the in-office ancillary services exceptions in the Stark Law.[30] The advanced diagnostic imaging services in this legislation include diagnostic MRI, CT, and PET but exclude x-ray, ultrasound, and fluoroscopy, and do not include imaging services performed for purposes of radiation therapy treatment planning or in conjunction with an interventional radiological procedure or nuclear medicine other than PET.[31] The bill has

[27] Kaiser Daily Health Policy Report, Coverage & Access | Physicians Often Do Not Follow Professional Standards, Study Finds [Dec 04, 2007]
[28] Liz Kowalczyk, "Doctors Don't Report Colleagues, Errors," The Boston Globe, December 4, 2007
[29] The Integrity in Medicare Advanced Diagnostic Imaging Act of 2009 (HR 2962)
[30] "Bill Would Ban In-Office Self-Referral of Several Imaging Modalities," AdvaMed SmartBrief, July 6, 2009
[31] The American College of Radiology (ACR) reports that Representative Jackie Speier (D-CA) has introduced HR 2962, the "Integrity in Medicare Advanced Diagnostic Imaging Act of 2009".

been forwarded to the House Energy and Commerce Committee and the House Ways and Means Committee.

Many states regulate self-referral to prohibit or at least disclose self-referrals to patients. (See Appendix - American College of Radiology: State-by-State Comparison of Physician Self-Referral Laws). Massachusetts requires disclosure for physical therapy service referrals, if the referring physician has a financial interest. Each patient must receive a written notice that states, "The referring licensee maintains an ownership interest in the facility to which you are being referred for physical therapy service. Physical therapy services may be available elsewhere in the community." There is not a similar requirement for radiology services. Some states, such as California and New York, apply a structure that is similar to the Stark Law, whereas others have different rules for disclosure and penalties. Each state can be unique in its application and implementation of Stark-type laws, and self-referral exceptions vary greatly from state to state. The states enforce their laws with professional discipline (suspension, probation, or license revocation), civil penalties, and criminal penalties.

In 2005, a bill[32] was put forth in the Massachusetts House of Representatives that, if enacted, would have restricted advanced imaging modalities to hospital-based physicians and prevented physicians from referring patients for imaging services in their own practices or practices where they have a financial interest. However, the bill, which exempted radiologists and physicians employed by a hospital, hospital affiliate, or any other facility providing advanced imaging services, was defeated.

In 2006, Massachusetts established the 16-member Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services[33] to investigate and study the impact of medical diagnostic services, specifically MRI, on the cost of health insurance, Medicaid costs, and uncompensated care. The Commission was formed in response to testimony before the House Ways and Means Committee in 2005 by the Medicare Payment Advisory Commission (MedPAC)[34] indicating the volume of imaging services, between 1999 and 2003, grew by 45%, double the growth rate of all other physicians' services (22%).

The statute mandated the foundation of a diverse and experienced commission, as follows:

[32] Massachusetts House Bill 2711
[33] Established by Section 105 of Chapter 139 of the Acts of 2006
[34] An independent Congressional agency established by the Balanced Budget Act of 1997 (P.L. 105-33) to advise the U.S. Congress on issues affecting the Medicare program.

> *The commission shall consist of 16 members, 1 of whom shall be the secretary of health and human services or his designee, 1 of whom shall be the commissioner of the department of public health or his designee, 1 of whom shall be the director of the office of Medicaid or his designee, 1 of whom shall be the senate chair of the joint committee on health care financing, 1 of whom shall be the house chair of the joint committee on health care financing, 1 representative from the Massachusetts Hospital Association, 1 representative from the Massachusetts Association (sic) of Community Hospitals, 1 representative from the Massachusetts Medical Society, 1 representative from the Massachusetts Radiological Society, 1 representative of the Massachusetts Association of Ambulatory Surgical Centers, 1 of whom shall represent Fallon Clinic, 1 of whom shall represent Harvard Vanguard Medical Associates, 1 representative from the Massachusetts Association of Health Plans, 1 representative from Blue Cross Blue Shield of Massachusetts, a health care economist appointed by the speaker of the house of representatives and a health care economist appointed by the president of the senate. The commission shall be co-chaired by the senate and house chairpersons of the joint committee on health care financing.*

On July 1, 2007, the Commission submitted its report,[35] along with recommendations laying out principles and direction for future legislation and possible regulatory changes. The report indicated that, unlike other states, Massachusetts does not have certain prohibitions against self-referrals, which could potentially result in significant negative consequences, as follows:

> *Physicians who have an ownership stake in medical diagnostic services face a potential conflict of interest when referring their patients to use those services. Self-referral arrangements tend to result in increased utilization of services, some of which may not be medically necessary. This is a significant concern because increased utilization is a major driver of escalating health insurance premiums and rising health care expenditures. . . . Massachusetts does not have a set of safeguards similar to the federal rules or these other states.*

Among the future legislation and possible regulatory changes, the Committee recommended that the Legislature act to address potential self-referral issues with respect to state payers by piggybacking the provisions of both the Stark Law and the anti-kickback statute, including all exceptions and safe harbors, in state law:

> *The legislature should act to address potential self-referral issues with respect to state payers (MassHealth, Commonwealth Care, and the Group Insurance Commission). The best way to accomplish this is to piggyback the provisions of both the Stark law and the anti-kickback statute, including all exceptions and safe harbors, in state law. The attorney general should be charged with enforcement of these provisions. This will allow the state provisions to stay flexible, and will not require frequent amendments as these laws are changed at the federal level. However, with CMS delaying the publication of its new regulations on the subject, the Commission feels that the potential problem of improper leasing arrangements should be immediately addressed by the state. Therefore, the legislature should apply all self-referral preclusions to physician leased, as well as physician owned facilities.*

Additionally, the Commission recommended that:

[35] "Report of the Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services," July 1, 2007

Medical diagnostic equipment should be required to meet current technology standards and maintenance requirements. Department of Public Health (DPH) should draft regulations that will provide for the credentialing of those who calibrate and maintain such equipment. The Board of Registration in Medicine should draft regulations that will provide for the credentialing for those who read and interpret such results. In addition, MGL 111, §5Q(b), which currently regulates mammography facilities, should be amended to apply to all imaging technology, including but not limited to MRI, CT and PET.

In 2007, the Institute for Technology Assessment, Massachusetts General Hospital, and the Department of Health Policy and Management, Harvard School of Public Health, published a report for the Radiological Society of North America titled, "Utilization of Diagnostic Medical Imaging: Comparison of Radiologist Referral versus Same-Specialty Referral." The following is an abstract from the report:

Purpose: To retrospectively compare the frequency with which patients underwent diagnostic medical imaging procedures during episodes of outpatient medical care according to whether their physicians referred patients for imaging to themselves and/or physicians in their same specialty or to radiologists.

Results: For the conditions evaluated, physicians who referred patients to themselves or to other same-specialty physicians for diagnostic imaging used imaging between 1.12 and 2.29 times as often, per episode of care, as physicians who referred patients to radiologists. Adjusting for patient age and comorbidity,[36] the likelihood of imaging was 1.196–3.228 times greater for patients cared for by same-specialty–referring physicians.

Conclusion: Same-specialty–referring physicians tend to utilize imaging more frequently than do physicians who refer their patients to radiologists. These results cannot be explained by differences in case mix (because analyses were performed within six specific conditions of interest), patient age, or comorbidity.

In June 2008, the United States Government Accountability Office (GAO) submitted a report[37] to Congressional requesters. GAO was asked to provide information to help the Congress evaluate imaging services in Medicare. The GAO reported the following:

From 2000 through 2006, Medicare spending for imaging services paid for under the physician fee schedule more than doubled—increasing to about $14 billion. Spending on advanced imaging, such as CT scans, MRIs, and nuclear medicine, rose substantially faster than other imaging services such as ultrasound, X-ray, and other standard imaging.

This represented an average annual growth rate of 13%, compared to 8.2% for all Medicare physician-billed services during that same period. Although spending increased each year since 2000, the rate of growth slowed in 2006 because, that year, CMS implemented a payment change for

[36] The simultaneous presence of two or more morbid conditions or diseases in the same patient, which may complicate a patient's hospital stay

[37] Medicare Part B Imaging Services: Rapid Spending Growth and Shift to Physician Offices Indicate Need for CMS to Consider Additional Management Practices - GAO-08-452 June 13, 2008

imaging that reduced physician fees by 25% for additional imaging services involving contiguous body parts imaged during the same session. Overall, approximately 80% of the spending growth for imaging services was associated with the growth in volume and complexity of imaging services rather than other factors, such as changes in physician fees or beneficiary population increases. Expenditures for advanced imaging increased from approximately $3 billion to approximately $7.6 billion, with MRI services accounting for nearly half of the increase. Expenditures for CT scans, MRIs, and nuclear medicine grew at a 17% annual rate:

> *GAO's analysis of the 6-year period showed certain trends linking spending growth to the provision of imaging services in physician offices. The proportion of Medicare spending on imaging services performed in-office rose from 58 percent to 64 percent. Physicians also obtained an increasing share of their Medicare revenue from imaging services. In addition, in-office imaging spending per beneficiary varied substantially across geographic regions of the country, suggesting that not all utilization was necessary or appropriate. By 2006, in-office imaging spending per beneficiary varied almost eight-fold across the states—from $62 in Vermont to $472 in Florida.*

As a result, physicians obtained an increasing share of their Medicare revenue from imaging services. For example, in 2006 cardiologists obtained 36% of their total Medicare revenue from in-office imaging, compared with 23% in 2000.

The GAO report included a review of 17 private health plans and found the following:

> *Plan officials reported significant decreases in utilization after implementing a prior authorization program. For example, several of the plan officials we interviewed reported that annual growth rates were reduced to less than 5 percent after prior authorization; these annual growth rates had ranged for these plans from 10 percent to more than 20 percent before prior authorization programs were implemented. The biggest utilization decreases occurred immediately after implementation. One plan's medical director said that prior authorization was the plan's most effective utilization control measure, because it requires physicians to attest to the value of ordering a particular service based on clinical need.*

The GAO recommended that CMS consider prior authorization for imaging services in an effort to discourage physicians from ordering tests for personal profit rather than patient benefit:

> *To address the rapid growth in Medicare Part B[38] spending on imaging services, GAO recommends that CMS examine the feasibility of expanding its payment safeguard mechanisms*

[38] Medicare Part B covers physician and other outpatient services. Spending totals did not include the technical component when the image examination was performed in an inpatient hospital or other institutional setting, as an examination performed in these settings is paid for under Medicare Part A. In addition, spending totals did not include the technical component when an examination was performed in a hospital outpatient department setting, as an examination performed in this setting is paid for under Medicare's hospital outpatient prospective payment system (OPPS).

by adding more front-end approaches, such as prior authorization. HHS[39] stated that it would need to examine the applicability of prior authorization for Medicare.

The U.S. Department of Health and Human Services Office of the Inspector General (HHS/OIG) issued two separate but related reports on advanced imaging under the Medicare Physician Fee Schedule (MPFS)[40] in October 2007 and September 2008, respectively. The 2007 report[41] revealed the extent and nature of growth in advanced imaging paid under the MPFS from 1995 to 2005, using Medicare Part B[42] claims and enrollment data. Advanced imaging paid under the MPFS, which represented 25% of all advanced imaging services paid by Medicare Part B claims in 2005, grew 18% annually from 1995 to 2005, resulting in an increase in the quantity of services performed from 1.4 million to 6.2 million. The quantity of advanced imaging services billed per 1,000 beneficiaries grew in every state. The median state's utilization rate increased 334% from 29 to 126 services per 1,000 beneficiaries, an annual growth rate of approximately 18%. Massachusetts experienced a 287% growth in utilization rate, from 32 services per 1,000 beneficiaries in 1995 to 124 services per 1,000 beneficiaries in 2005.

In September 2008, HHS/OIG issued a report,[43] the objective of which was to determine: (1) how MRI services paid under the MPFS were provided and (2) whether there was a relationship between utilization levels of services and how they were provided. The report delineated the complexity of relationships between providers, as follows:

When multiple parties are involved in a service episode, they may be connected to one another through medical practice relationships and/or other business relationships . . . a medical practice relationship exists when parties share membership in a medical practice or when one party is a member of the other. An example of the former is a relationship in which the ordering and billing doctors are members of the same group practice (two individuals who own or are otherwise related to a third entity). An example of the latter is a relationship in which a group practice is a member of a larger health system. An entire service episode could occur within a single group practice: different practice members might play the roles of orderer, performer, and reader, with the practice serving as the biller and payee.

For purposes of this report, a business relationship exists when two parties have a shared business interest, such as shared investments or contracts with one another. For example, a radiology group and an orthopedic group may operate an imaging center through a joint venture. Alternatively, the radiologists within a multi-specialty group practice might co-own the MR[I]

[39] U.S. Department of Health and Human Services
[40] The MPFS is for services provided by non-institutional providers, such as physicians and IDTFs.
[41] "Growth in Advanced Imaging Paid Under the Medicare Physician Fee Schedule" (OEI-01-06-00260)
[42] Medicare Part B covers physician and other outpatient services. An examination performed in an inpatient hospital or other institutional setting is paid for under Medicare Part A.
[43] "Provider Relationships and the Use of Magnetic Resonance Under the Medicare Physician Fee Schedule" (OEI-01-06-00261)

equipment used by the practice and lease it to the medical practice. Contracts may include lease arrangements, whereby a provider leases space, equipment, and/or staff from an imaging center. An example is a block lease, whereby the payee leases a block of time from an imaging center during which the imaging center performs services on behalf of the payee.

All parties must ensure that their relationships for providing MR[I] services comply with Federal prohibitions on self-referral, kickbacks, and the markup of tests purchased from other providers.[44] *These prohibitions are in place to protect the Medicare program and its beneficiaries from unnecessary and inappropriate use of services. Medicare claims readily identify the orderer, biller, and payee for each service. The performer of the service and underlying arrangements between providers of MR[I] services, such as leases or co-ownership, may not be evident from the claims. As a result, and because there are many ways that providers can work together, it is difficult to identify all of the parties and relationships involved in providing each MR[I] service.*

The HHS/OIG described a connected service as when the referring physician who prescribes or orders an MRI service was connected, either through a medical practice or other business relationship, to the performer, biller, payee, lessor, or co-owner. Of MRI services paid under the MPFS in 2005, 25% were connected services.

The HHS/OIG reported the following:

Connected services were associated with high use. . . . High users of MR[I] ordered 55 percent of connected services, compared to 33 percent of services that were not connected. . . .

The complexity and limited transparency with which these services are provided warrants continued attention to ensure that services are reasonable, necessary, and compliant with Medicare statutes and regulations.

Federal Initiatives

As of January 1, 2006, the Medicare reimbursement rate was reduced for the technical component of physician fees when additional imaging services involving contiguous body parts are imaged during the same session. Physicians receive the full fee for the highest-paid imaging service in a visit, but fees for additional imaging services were reduced by 25 percent. The GAO reported that:

In recent years, CMS has implemented two payment changes to the way Medicare pays for imaging services under the physician fee schedule. Starting January 1, 2006, CMS reduced physician payments when multiple images are taken on contiguous body parts during the same visit. CMS adopted a recommendation made by MedPAC in 2005 as a way to ensure that fee schedule payments took into account efficiencies, such as savings from technical preparation and supplies, which occur when multiple imaging services are furnished sequentially. Physicians

[44] Social Security Act § 1128B(b), 42 U.S.C. § 1320a-7b(b); Social Security Act § 1877, 42 U.S.C. § 1395nn; Social Security Act § 1842(b)(6), 42 U.S.C. § 1395u(b)(6)

receive the full fee for the highest paid imaging service in a visit, but fees for additional imaging services are reduced by 25 percent. The reduction is applied only to the technical component.[45]

In response to the growth in utilization for advanced imaging services paid by Medicare, the Deficit Reduction Act of 2005 (DRA) included a provision that substantially reduced the reimbursement rates for MRI services as of January 1, 2007. More than $1.5 billion was saved by Medicare in 2007, more than three times the level anticipated by Congress.[46] As a result of the rate reduction, the growth in services has slowed. A 2009 MedPAC report[47] noted that annual Medicare Part B imaging growth slowed but continued to grow faster than other physician services. According to MedPAC, the overall imaging growth rate from 2006 to 2007 was 3.8%, but that increase was still considerably higher than the 2.9% growth rate for all physician services for that same period. The MedPAC chairman focused on rising imaging costs in a March 2009 testimony before the House Ways and Means Subcommittee on Health, in which he recommended that Congress change the formula for calculating reimbursement rates to lessen the incentive for healthcare providers to buy the machines and use them as often as possible. The Congressional Budget Office estimated the change could save more than $2 billion over the next decade. According to the President of the Association for Quality Imaging, the change in rate would translate into a 4% to 8% rate cut for imaging providers.[48]

In July 2008, the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) was approved by Congress and became law. MIPPA requires accreditation of providers of the technical component for advanced diagnostic imaging services (MRI, CT, and nuclear medicine/PET) by an entity identified by the Secretary of Health and Human Services prior to January 1, 2012 to be eligible for the technical component payment. The Secretary of Health and Human Services must designate accrediting organizations by January 1, 2010, and the accreditation organizations must have criteria to evaluate medical personnel, medical directors, supervising physicians, equipment, safety procedures, and quality assurance programs. MIPPA also establishes a two-year voluntary demonstration program to test the use of appropriateness criteria for advanced diagnostic imaging services by January 1, 2010. The Secretary may not allow prior authorization to be used under the demonstration program.

[45] Medicare Part B Imaging Services: Rapid Spending Growth and Shift to Physician Offices Indicate Need for CMS to Consider Additional Management Practices – GAO-08-452 June 13, 2008

[46] Ilyse Schuman, "Saving Lives and Money," Imaging Economics, April 2009

[47] MedPAC Report to the Congress: Improving Incentives in the Medicare Program, June 2009, Chapter 4 "Impact of physician self-referral on use of imaging services within an episode"

[48] H.A. Abella, "Alliance challenges plans to regulate medical imaging: AMIC study suggests that feds have exaggerated growth of Medicare spending on advanced scans," Diagnostic Imaging, May 1, 2009

The federal 2010 budget proposes the controversial[49] use of radiology benefit managers (RBMs) to evaluate individual physician orders for high-tech outpatient imaging covered by Medicare in the same way RBMs have been employed by private healthcare insurers. The requirement of prior authorization from RBMs for the use and payment of advanced imaging services is extremely unpopular with physicians, but the current administration estimates that it could save Medicare $260 million over 10 years.[50]

Reimbursement Rates for Advanced Imaging

MassHealth makes payments for all in-state non-institutional providers in accordance with the methodology established by the Division of Health Care Finance and Policy (DHCFP) in EOHHS,[51] subject to federal payment limitations.[52] DHCFP is mandated under Chapter 118G of the Massachusetts General Laws to establish the rates paid to providers of health care services by governmental units. The MassHealth program is the largest state-run program for which the DHCFP sets payment rates. Chapter 118G, Section 7, of the Massachusetts General Laws also sets forth the criteria to be used in establishing rates of payment to providers of services, as follows:

> *DHCFP shall control rate increases and shall impose such methods and standards as are necessary to ensure reimbursement for those costs which must be incurred by efficiently and economically operated facilities and providers. Such methods and standards may include, but are not limited to the following: peer group cost analyses; ceilings on capital and operating costs; productivity standards; caps or other limitations on the utilization of temporary nursing or other personnel services; use of national or regional indices to measure increases or decreases in reasonable costs; limits on administrative costs associated with the use of management companies; the availability of discounts for large volume purchasers; the revision of existing historical cost bases, where applicable, to reflect norms or models of efficient service delivery; and other means to encourage the cost-efficient delivery of services. Rates produced using these methods and standards shall be in conformance with Title XIX,[53] including the upper limit on provider payments.*

DHCFP often adopts, or uses as a guideline, the federal Medicare reimbursement rate for like services and procedures. The fee for service rates, developed by DHCFP, used to pay for radiology services are based on Medicare's resource-based relative value scale (RBRVS):

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[49] The American College of Radiology (ACR) opposes prior authorization by RBMs, believing it removes medical decisions from the hands of physicians, may delay or deny lifesaving imaging care to those who need it, and would likely result in longer waiting times for patients to receive care. ACR Response to GAO Imaging Report: No RBMs Needed," American College of Radiology, July 15, 2008

[50] H.A. Abella, "Alliance challenges plans to regulate medical imaging: AMIC study suggests that feds have exaggerated growth of Medicare spending on advanced scans," Diagnostic Imaging, May 1, 2009

[51] 130 Code of Massachusetts Regulations 450.232: Rates of Payment to In-State Providers

[52] 42 Code of Federal Regulations 447.304

[53] Title XIX: GRANTS TO STATES FOR MEDICAL ASSISTANCE PROGRAMS of the Social Security Act is administered by the Centers for Medicare and Medicaid Services.

> *In 1992, Medicare significantly changed the way it pays for physicians' services. Instead of basing payments on charges, the federal government established a standardized physician payment schedule based on a resource-based relative value scale (RBRVS). In the RBRVS system, payments for services are determined by the resource costs needed to provide them. The cost of providing each service is divided into three components: physician work, practice expense and professional liability insurance. Payments are calculated by multiplying the combined costs of a service by a conversion factor (a monetary amount that is determined by the Centers for Medicare and Medicaid Services). Payments are also adjusted for geographical differences in resource costs.*[54]

The Medicare reimbursement rates for advanced imaging services were reduced on January 1, 2006 and January 1, 2007, and more restrictive requirements for advanced imaging are proposed in the 2010 federal budget. Due to technological and production gains in imaging equipment and procedures, rate adjustments can be expected to continue indefinitely. The DHCFP adjusted MassHealth's reimbursement rates for advanced imaging services four times since July 2006. Twice the rates were increased and twice they were reduced.

Reimbursement Rate Adjustments for Advanced Imaging Services

	Medicare	MassHealth
January 2006	Decrease	
July 2006		Increase
January 2007	Decrease	
July 2007		Decrease
July 2008		Increase
December 2008		Decrease

The DHCFP increased rates in July 2006 (fiscal year 2007) to comply with a legislative mandate under the health care reform legislation to add $13.5 million to the MassHealth physician rates. Section 128 of Chapter 58 of the Acts of 2006[55] required that 15% of $90 million in rate increases be allocated to rate increases for physicians. The legislation did not specifically require an increase in rates paid for radiology services and, more specifically, advanced imaging services. The Office of the State Auditor (OSA) inquired about this and DHCFP/MassHealth combined the following response:

> *The legislature's directive to raise rates for physician services was broad. Accordingly, we analyzed the regulatory rates that govern services rendered by physicians: 114.3 CMR 16.00: Surgery and Anesthesia Services; 114.3 CMR 17.00: Medicine; and 114.3 CMR 18.00 Radiology.*

[54] American Medical Association, http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/overview-of-rbrvs.shtml

[55] An Act Providing Access To Affordable, Quality, Accountable Health Care

The legislation did not specifically enumerate any physician services for inclusion or exclusion in the rate increase. We believe we appropriately exercised the discretion granted in the Health Care Reform Legislation.

The adjustments in the reimbursement rates made by DHCFP in 2007 and 2008 were not mandated by legislation.

Adjustments to Medicare reimbursement rates can have a direct and immediate impact on MassHealth's costs if MassHealth does not match its rate reductions in a timely manner. An individual who is covered by both Medicare and Medicaid is known as a dual eligible beneficiary. If a dual eligible beneficiary has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount.[56] The differential amount is termed a Medicare crossover claim and payment. Nationally, the more than eight million adults who are dually eligible represent approximately 18% of the Medicaid population, but account for 46% of the program's costs, due to their complex array of medical, behavioral, and long-term care needs. In Massachusetts, there were approximately 230,000 MassHealth members with dual eligibility in fiscal year 2009, approximately 20% of the Medicaid population.

Audit Scope, Objectives, and Methodology

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the OSA conducted an audit on advanced imaging within the MassHealth radiology program. Our audit was conducted in accordance with applicable generally accepted government auditing standards. The objectives of the audit were to determine: (1) whether industry and regulatory developments will or have affected Medicaid expenditures at MassHealth; (2) whether non-radiologist physicians have a direct or indirect financial interest in the imaging equipment or facility to which they have referred patients for advanced imaging procedures; (3) whether there is a potential for noncompliance with the Stark Law or self-referrals; and (4) the extent of advanced imaging within the radiology program and its change in the period from fiscal years 2004 to 2009. Our audit included a written survey of 90 providers: 40 were providers of advanced imaging services and 50 were providers who referred patients to providers of advanced imaging services. The 40 providers of advanced imaging services surveyed included independent diagnostic testing facilities (14), hospitals (3), and group practice

[56] 130 CMR 450.318 (C) The Division's crossover liability will not exceed: (1) the coinsurance and deductible amounts as reported on the explanation of benefits or remittance advice from Medicare; (2) the Division's maximum allowed amount for the service; (3) the Medicare approved amount; or (4) the Division's established rate for crossover payment.

organizations (23). The 50 referring providers surveyed included physicians (10), community health centers (10), acute outpatient hospitals (10), hospital licensed community centers (10), and group practice organizations (10). The survey inquired of the relationships that providers of advanced imaging services have with the referring or prescribing entities ordering the procedures. If relationships did exist between the servicing and referring parties, the providers were asked to include a separate enclosure identifying and explaining the nature of the relationship. The survey also inquired about ownership of the advanced imaging equipment. Providers were asked to indicate whether the machines were exclusively owned or leased, and where the machines were located. Additionally, the providers were asked to provide the manufacturer, model name/number, and year of manufacture for the machines used in advanced imaging. We read numerous private and governmental reports, studies, and investigations pertaining to advanced imaging and its effect on healthcare costs. We developed and analyzed reports utilizing the data warehouse of the Medicaid Management Information System. The OSA conducted meetings with various management and personnel of MassHealth and EOHHS, and reviewed applicable state and federal laws, rules, and regulations, as well as applicable MassHealth and EOHHS policies and procedures.

AUDIT RESULTS

MASSHEALTH SHOULD SCRUTINIZE ITS POLICIES, REGULATIONS, AND PRICING FOR ADVANCED IMAGING SERVICES FOR POTENTIAL IMPROVEMENTS AND SAVINGS

Our review found that (a) unlike many states, Massachusetts does not regulate self-referral for advanced imaging services to prohibit or, at least, disclose self-referrals to patients, which could potentially result in significant negative consequences,[57] and (b) increases in MassHealth's reimbursement rate and the rate-setting methodology for advanced imaging services may have caused potential lost savings of $8,587,612 in Medicare crossover payments[58] in fiscal years 2007 through 2009.

a. Massachusetts Does Not Have a Set of Safeguards to Control Potential Conflicts of Interest Physicians May Have in the Provision of Advanced Imaging Procedures and Regulatory Control over Medical Diagnostic Equipment Standards and Maintenance

The Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Service's report[59] indicated that unlike other states, [60] Massachusetts does not have certain prohibitions against self-referrals, which could potentially result in significant negative consequences:

> *Physicians who have an ownership stake in medical diagnostic services face a potential conflict of interest when referring their patients to use those services. Self-referral arrangements tend to result in increased utilization of services, some of which may not be medically necessary. This is a significant concern because increased utilization is a major driver of escalating health insurance premiums and rising health care expenditures. . . . Massachusetts does not have a set of safeguards similar to the federal rules or these other states. . . .*
>
> *The federal Stark law generally prohibits physicians from referring Medicare patients to imaging facilities in which they hold an ownership stake. However, the law provides for a number of exceptions. Physicians who are hospital-based employees or members of a non-profit group practice are not subject to the Stark prohibitions. The in-office ancillary services exception allows for self-referral if the service is provided as part of the physician's practice. This loophole can potentially be exploited through business models in which doctors ostensibly lease the equipment and employees of an imaging center at the time of service, thus holding no technical ownership in the practice. There is evidence of such leasing arrangements in Massachusetts.*

[57] "Report of the Special Commission on Ambulatory Surgical Centers & Medical Diagnostic Services," July 1, 2007, pg. 33

[58] If a dual eligible beneficiary has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount. The differential amount is termed a Medicare crossover claim and payment. A dual eligible beneficiary is an individual who is covered by both Medicare and Medicaid. In FY 2009, approximately 20% of MassHealth members were dual beneficiaries.

[59] "Report of the Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services", July 1, 2007

[60] See Appendix - American College of Radiology: State-by-State Comparison of Physician Self-Referral Laws.

Among the future legislation and possible regulatory changes, the Commission recommended that the Legislature act to address potential self-referral issues with respect to state payers by piggybacking the provisions of both the Stark Law and the anti-kickback statute, including all exceptions and safe harbors, in state law:

> *The legislature should act to address potential self-referral issues with respect to state payers (MassHealth, Commonwealth Care, and the Group Insurance Commission). The best way to accomplish this is to piggyback the provisions of both the Stark law and the anti-kickback statute, including all exceptions and safe harbors, in state law. The attorney general should be charged with enforcement of these provisions. This will allow the state provisions to stay flexible, and will not require frequent amendments as these laws are changed at the federal level. However, with [Centers for Medicare and Medicaid Services] CMS delaying the publication of its new regulations on the subject, the Commission feels that the potential problem of improper leasing arrangements should be immediately addressed by the state. Therefore, the legislature should apply all self-referral preclusions to physician leased, as well as physician owned facilities.*

Additionally, the Commission recommended that:

> *Medical diagnostic equipment should be required to meet current technology standards and maintenance requirements. Department of Public Health (DPH) should draft regulations that will provide for the credentialing of those who calibrate and maintain such equipment. The Board of Registration in Medicine should draft regulations that will provide for the credentialing for those who read and interpret such results. In addition, MGL 111, §5Q(b), which currently regulates mammography facilities, should be amended to apply to all imaging technology, including but not limited to MRI, CT and PET.*

DPH responded as follows:

> *[DPH] would need enabling legislation in order to credential those who calibrate and maintain MRI technology. The legislation would authorize the creation of a board, which would develop and promulgate the standards. DPH is unaware of evidence that calibration and maintenances are problems that require this particular solution. MR[I] results are read and interpreted by radiologists. The American Academy of Radiology already accredits radiologists who meet the academy's standards. This section [mammography facilities] of the MGL is concerned with the regulation of technology that emits ionizing radiation. MR[I] technology differs fundamentally from technology that uses ionizing radiation.*

The Board of Registration in Medicine responded:

> *Specialty-specific or procedure-specific credentialing criteria are best left to the various national specialty boards, and to individual health care facilities. The practice of medicine is broad, complex and dynamic, and does not lend itself to static, minute regulatory definitions such as specific credentialing for advanced imaging.*

Federal officials may differ on the need for accreditation of providers. In July 2008, the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) was approved by

Congress and became law. MIPPA requires accreditation of providers of the technical component for advanced diagnostic imaging services (MRI, CT, and nuclear medicine/PET) by an entity identified by the Secretary of Health and Human Services prior to January 1, 2012 to be eligible for the technical component payment. The Secretary of Health and Human Services must designate accrediting organizations by January 1, 2010. The accreditation organizations must have criteria to evaluate medical personnel, medical directors, supervising physicians, equipment, safety procedures, and quality assurance programs.

The American College of Radiology would differ with the DPH's opinion that MRI results are read and interpreted by radiologists. In an article titled, "Turf Wars in Radiology: The Overutilization of Imaging Resulting from Self-Referral,"[61] the authors[62] express their concern about non-radiologists performing the interpretation or professional component of advanced imaging services, as follows:

> *How much is self-referral for imaging costing our health care system? The 2001 Medicare Part B database showed that Part B payments (primarily the professional component) for noninvasive diagnostic imaging were approximately $6.699 billion, of which $2.686 billion went to non-radiologists. The data . . . suggests that self-referring non-radiologist physicians perform approximately two to eight times as many imaging studies in a given clinical circumstance as physicians who refer their patients to radiologists.*

The authors speculated that, because Medicare accounts for approximately one-third of all imaging in the United States, approximately $8 billion is paid to non-radiologists for the professional components, $4 billion of which may be for unnecessary services.

Our survey[63] of providers regarding any financial or contractual relationships between the referring providers and the providers performing the imaging procedures found that the relationships could be quite complicated. The most common contractual relationship reported was a physician agreement to provide the professional component. In most of these cases, the servicing provider had contractual relationships with hospitals and ITDFs to perform the professional component for advanced imaging scans. Some hospitals operate as both a technical servicing provider of imaging as well as a referrer of advanced imaging services. None of the

[61] Journal of the American College of Radiology 2004; 1:169-172. Copyright © 2004 American College of Radiology

[62] David C. Levin, MD, Department of Radiology, Thomas Jefferson Hospital and Jefferson Medical College, Philadelphia, PA and Vijay M. Rao, MD, HealthHelp Networks, Inc., Houston, TX

[63] Of the 90 providers surveyed, 73 (81%) responded: 34 of 50 (68%) referring providers and 39 of 40 (98%) providers of advanced imaging services.

providers surveyed indicated a financial interest in another provider. We found that the majority of the imaging equipment in Massachusetts is under lease rather than owned.

Recommendation

Because the financial incentive of self referral has increased utilization and health care costs, we support the Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services[64] recommendation that Massachusetts enact a Stark-type Law piggybacking the provisions of both the federal Stark Law and the anti-kickback statute, including all exceptions and safe harbors. The legislation should apply all self-referral preclusions to physician-leased, as well as physician-owned, facilities.

We also support the Commission's recommendation that medical diagnostic equipment should be required to meet current technology standards and maintenance requirements. Those regulations should also provide for the credentialing of those who calibrate and maintain such equipment. Additional regulations should be drafted that will provide for the credentialing for non-radiologists who read and interpret imaging results. In addition, laws that currently regulate mammography facilities should be amended to apply to all imaging technology, including, but not limited to, advanced imaging.

Auditee's Response

We support the enactment of a Massachusetts Stark-type law should one be filed. We would also note there are some state laws already in place that generally address the concerns raised… These are criminal statutes, which are enforced by the Office of the Attorney General.

With respect to the credentialing issue, we believe that the concerns raised regarding equipment calibration and maintenance are already being met and note that DPH credentials radiologic technologists to take images, but not to read or interpret them. Physicians in Massachusetts are authorized to read and interpret imaging results depending in specific credentialing of the hospital or other facility in which they practice. We do not support credentialing non-radiologists to read and interpret results. The cited basis for the credentialing recommendation was the accreditation requirements for Medicare set forth at Section 135 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). All independent diagnostic testing facilities and hospitals, as a condition of participation in MassHealth, are required to be Medicare certified. Also, MassHealth believes that most, if not all, MassHealth physicians performing advanced imaging services are Medicare certified. Thus, compliance with MIPPA section 135 is already required for most, if not all, MassHealth providers performing advanced imaging services, In addition, the Department of Public Health, through the Radiation control

[64] Established by Section 105 of Chapter 139 of the Acts of 2006

Program currently licenses radiologic technologists (see 105 CMR 125.00) and the Determination of Need program regulates the opening of imaging centers.

Auditor's Reply

We are pleased that MassHealth will support a Stark-type law. With respect to the credentialing issue, we repeat our endorsement of recommendations made by the Special Commission on Ambulatory Surgical Centers and Medical Diagnostic Services, which was comprised of representatives from the EOHHS, DPH, Office of Medicaid, Massachusetts Association of Ambulatory Surgical Centers, Massachusetts Hospital Association, Massachusetts Association of Health Plans, Massachusetts Council of Community Hospitals, Massachusetts Medical Society, Massachusetts Radiological Society, Fallon Clinic, Harvard Vanguard Medical Associates, Blue Cross Blue Shield of Massachusetts, and two health care economists.

Section 135 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) provides that suppliers of advanced diagnostic imaging services who bill for the technical component of the services must become accredited by a CMS-designated accreditation organization. It does not address the professional or interpretation component of advanced imaging by non-radiologists, which is the concern of the American College of Radiology. We reiterate our recommendation that regulations should be drafted that will provide for the credentialing for non-radiologists who read and interpret imaging results.

b. Increases in MassHealth's Reimbursement Rate and the Rate-Setting Methodology May Have Caused Potential Lost Savings of $8,587,612

Medicare reimbursement rates for advanced imaging as set by CMS have been reduced multiple times in recent years, and more restrictive requirements for advanced imaging are proposed in the 2010 federal budget. Medicare reimbursement rates are expected to continue to be adjusted periodically, not only in reaction to the growth of these services, but also due to technological advances in imaging equipment and productivity gains in both the technical and professional components of the procedures. MassHealth has had a net increase in reimbursement rates for advanced imaging services in recent years, and DHCFP sets the reimbursement rates for MassHealth using a different methodology than CMS does for Medicare. As a result of this

constraint, and the increased rates set by DHCFP, potential savings of $8,587,612 in Medicare crossover payments[65] were not realized in fiscal years 2007 through 2009.

Medicare Crossover Claims Paid for All Advanced Imaging Services

State Fiscal Year	Medicare Crossover Amount Paid	Medicare Crossover Quantity of Paid Claims	Cost Per Claim
2006	$410,911	161,758	$2.54
2007	$4,066,263	191,090	$21.28
2008	$2,914,320	198,052	$14.71
2009	$3,369,375	278,228	$12.11

Potential Savings for Medicare Crossover Claims Paid for All Advanced Imaging Services, if Cost Per Claim Remained at 2006 Level

State Fiscal Year	Medicare Crossover Quantity of Paid Claims	Medicare Crossover Amount Paid If Cost Per Claim Was Equal to 2006	Actual Medicare Crossover Amount Paid	Potential Savings
2006	161,758	$ 410,911	$ 410,911	$ 0
2007	191,090	507,322	4,066,263	3,558,941
2008	198,052	533,298	2,914,320	2,381,022
2009	278,228	721,726	3,369,375	2,647,649
Totals	829,128	$2,173,257	$10,760,869	$8,587,612

Effective January 1, 2006, the Medicare rates for reimbursement on certain imaging services were reduced. Then, in July 2006, MassHealth increased the reimbursement rates[66] for most advanced imaging services by approximately 6%, resulting in a significant increase in Medicare crossover payments for fiscal year 2007. Effective January 1, 2007, the Medicare rates were reduced again. In July 2007, MassHealth reduced its rates in response to these reductions, but not to the pre-July 2006 level. In July 2008, MassHealth increased its rates, essentially canceling

[65] If a dual eligible beneficiary has a service that is covered by Medicare; MassHealth pays the lesser of the difference between the MassHealth rate less the Medicare payment, or the co-insurance and deductible amount. The differential amount is termed a Medicare crossover claim and payment. A dual eligible beneficiary is an individual who is covered by both Medicare and Medicaid. In fiscal year 2009, approximately 20% of MassHealth members were dual beneficiaries.

[66] The DHCFP increased rates in July 2006 (for FY 2007) to comply with a legislative mandate under the health care reform legislation to add $13.5 million to the MassHealth physician rates. See Section 128 of Chapter 58 of the Acts of 2006 - An Act Providing Access To Affordable, Quality, Accountable Health Care. The legislation did not specifically require an increase in rates paid for radiology services and, more specifically, advanced imaging services.

out the savings made by the 2007 decrease. Then, in December 2008, the July 2008 increase was rescinded.[67] The net result of MassHealth's rate adjustments is that they are considerably higher than Medicare's were during the same period. A reduction in the MassHealth's reimbursement rates to the fiscal year 2006 level would have negated the significant increase in Medicare crossover payments that are continuing in fiscal year 2010.

Medicare spending on imaging services increased each year from 2000 to 2005; however, the rate of growth slowed in 2006. In that year, CMS implemented a payment change for imaging that reduced physician fees by 25% for additional imaging services involving contiguous body parts imaged during the same session. MassHealth and DHCFP did not respond with a similar reduction for imaging services involving contiguous body parts. Beginning January 1, 2007, CMS established a cap on the physician fee schedule payments for certain imaging services at the payment levels established in Medicare's Outpatient Prospective Payment (OPPS) system. The cap requires that payment for the technical component of an image in the physician's office does not exceed what Medicare pays for the technical component of the same service performed in a hospital outpatient department. For example, in 2006, Medicare paid $903 under the physician fee schedule for an MRI of the brain, yet paid $506 for the same test under OPPS. Under this change, in 2007, Medicare paid the lesser amount for this examination, regardless of whether it was performed in a hospital outpatient department or in a physician's office.

Under the federal Social Security Act, the Medicaid program functions under a separate regulatory framework from the Medicare program and, therefore, a state is free to set its own Medicaid rates. MassHealth, EOHHS, and DHCFP responded that they did not match the Medicare reductions because:

> *It should be noted that the differences in MassHealth's acute hospital outpatient payment methodology and Medicare's fee for service OPPS rate methodology make it impossible for MassHealth to establish a similar imaging payment cap rule. MassHealth pays for its acute outpatient hospital services using an all inclusive payment rate called the Payment Amount Per Episode (PAPE). The PAPE is a single all-inclusive rate for all of the services provided by the hospital on a given date of service or episode, with the exception of professional services and laboratory services which are paid on a fee for service basis. Additionally, MassHealth establishes hospital-specific PAPE rates and each hospital's outpatient department has its own PAPE rate, which is developed, based on the types of outpatient services it provides. Since MassHealth pays its outpatient hospitals an overall*

[67] DHCFP rescinded the July 1, 2008 rate increases through an amendment that was adopted on November 21, 2008 on an emergency basis in order to implement budget reductions in accordance with M.G.L. c. 29, § 9C. The amendment had an effective date of December 1, 2008.

average single all-inclusive rate for all the services it provides, a rule capping the technical component of certain imaging services provided by physicians to an all inclusive outpatient PAPE payments is not feasible.

Regarding a reduction in the payment of the technical component for imaging services involving contiguous body parts, MassHealth responded:

MassHealth pays for radiology services in accordance with Division of Health Care Finance and Policy regulations as set forth in 114.3 CMR 18.00. It should be noted that the majority of the technical component of these procedures are done in the outpatient hospital where the reimbursement methodology is based on the Payment Amount Per Episode (PAPE) . . . .

MassHealth responded on the rationale for not changing the methodology as follows:

MassHealth's current outpatient payment methodology—the Payment Amount Per Episode or PAPE—is an all-inclusive episodic rate. As such, the PAPE applies to a wide range of services that may be provided on an outpatient basis and the methodology accounts for services across the cost spectrum. The PAPE methodology has a built in limit structure inherent in the method, in that it pays 100% of the highest weighted procedure and 50% of the next highest and so on. The underlying weights then are used to establish an average payment per episode. Accordingly, the PAPE methodology limits payments in a different manner than suggested in the question. Therefore, we believe that the PAPE methodology incorporates the same goal as a targeted cap under the Medicare methodology.

Because of the differing rate-setting methodologies used by CMS and DHCFP, MassHealth indicated that it is not feasible for it to exactly match Medicare's reductions. As a result of this constraint, and the increased rates set by DHCFP, potential savings of $8,587,612 in Medicare crossover payments were not realized in fiscal years 2007 through 2009.

The following details the increases in Medicaid crossover payments by advanced imaging modalities:

Medicare Crossover Claims Paid for MRI Services

State Fiscal Year	Medicare Crossover Amount Paid	Medicare Crossover Quantity of Paid Claims	Cost Per Claim
2006	$136,560	39,181	$3.49
2007	$1,547,902	49,876	$31.04
2008	$1,571,904	51,883	$30.30
2009	$1,634,934	58,517	$27.94

Potential Savings for Medicare Crossover Claims Paid for MRI Services, If Cost Per Claim Remained at 2006 Level

State Fiscal Year	Cost Per Claim at 2006 Amount	Medicare Crossover Quantity of Paid Claims	Medicare Crossover Amount Paid If Cost Per Claim Was Equal to 2006	Actual Medicare Crossover Amount Paid	Potential Savings
2006	$3.49	39,181	$136,560	$ 136,560	$ 0.00
2007	$3.49	49,876	173,836	1,547,902	1,374,066
2008	$3.49	51,883	180,831	1,571,904	1,391,073
2009	$3.49	58,517	203,953	1,634,934	1,430,981
Totals		199,457	$695,180	$4,891,300	$4,196,120

MassHealth's Payments for MRI crossover claims increased substantially from fiscal year 2006 to fiscal year 2009. If MassHealth and DHCFP matched Medicare's reduction in the reimbursement rates for MRI services, the potential savings would have been $4,196,120 over the three-year period.

Medicare Crossover Claims Paid for CT Services

State Fiscal Year	Medicare Crossover Amount Paid	Medicare Crossover Quantity of Paid Claims	Cost Per Claim
2006	$231,744	121,170	$1.91
2007	$2,358,154	138,979	$16.97
2008	$1,089,371	143,599	$7.59
2009	$1,568,709	216,272	$7.25

Potential Savings for Medicare Crossover Claims Paid for CT Services, If Cost Per Claim Remained at 2006 Level

State Fiscal Year	Cost Per Claim at 2006 Amount	Medicare Crossover Quantity of Paid Claims	Medicare Crossover Amount Paid If Cost Per Claim Was Equal to 2006	Actual Medicare Crossover Amount Paid	Potential Savings
2006	$1.91	121,170	$ 231,744	$ 231,744	$ 0.00
2007	$1.91	138,979	265,805	2,358,154	2,092,349
2008	$1.91	143,599	274,641	1,089,371	814,730
2009	$1.91	216,272	413,632	1,568,709	1,155,077
Totals		620,020	$1,185,822	$5,247,978	$4,062,156

MassHealth's Payments for CT crossover claims increased substantially from fiscal year 2006 to fiscal year 2009. If MassHealth and DHCFP matched Medicare's reduction in the reimbursement rates for CT services, the potential savings would have been $4,062,156 over the three-year period.

Medicare Crossover Claims Paid for PET Services

State Fiscal Year	Medicare Crossover Amount Paid	Medicare Crossover Quantity of Paid Claims	Cost Per Claim
2006	$42,607	1,407	$30.28
2007	$160,207	2,235	$71.68
2008	$253,045	2,570	$98.46
2009	$165,732	3,439	$48.19

Potential Savings for Medicare Crossover Claims Paid for PET Services, If Cost Per Claim Remained at 2006 Level

State Fiscal Year	Cost Per Claim at 2006 Amount	Medicare Crossover Quantity of Paid Claims	Medicare Crossover Amount Paid If Cost Per Claim Was Equal to 2006	Actual Medicare Crossover Amount Paid	Potential Savings
2006	$30.28	1,407	$ 42,607	$ 42,607	$ 0.00
2007	$30.28	2,235	67,681	160,207	92,526
2008	$30.28	2,570	77,826	253,045	175,219
2009	$30.28	3,439	104,141	165,732	61,591
Totals		9,651	$292,255	$621,591	$329,336

MassHealth's Payments for PET crossover claims increased substantially from fiscal year 2006 to fiscal year 2009. If MassHealth and DHCFP matched Medicare's reduction in the reimbursement rates for PET services, the potential savings would have been $329,336 over the three-year period.

Recommendation

MassHealth and DHCFP should re-examine their methodologies in setting advanced imaging reimbursement rates compared to those of Medicare in order to find a means to incorporate

reductions that Medicare utilizes to lower the federal costs, thereby lowering MassHealth's Medicare crossover payments. Additionally, MassHealth and DHCFP should closely monitor current and future federal initiatives pertaining to advanced imaging and, in as timely a manner as possible, make rate adjustments that will avoid substantial increases in Medicare crossover payments.

Auditee's Response

> *…We dispute the draft audit report's finding that increases in MassHealth's reimbursement rate and rate-setting resulted in potential lost savings of $8,587,612 for crossover payments. We find the two tables on page 25 oversimplify the cost saving conclusion amount as if it is self-evident that if rates remain static, costs would not increase. Furthermore, MassHealth believes increased Medicare liability and Medicare payment policy changes are the primary causes of increased advanced imaging crossover payments from FY 2004 through FY 2009… Medicare Part B deductibles have increased regularly from 2004 through 2009, which we believe has had the greatest impact on MassHealth crossover payment liability.*
>
> *…Medicare's 2007 professional services payment policy change, which limited the Medicare allowable payment amounts for certain services to the lesser of the technical component or global professional rate and the prevailing rate paid to an outpatient hospital under the OPPS system, also had a significant impact on MassHealth crossover payment liability.*
>
> *…MassHealth and DHCFP determined that a payment policy change similar to CMS OPPS payment cap could not be followed… Furthermore, even if MassHealth mirrored CMS OPPS payment cap and paid its providers up to the CMS OPPS rate, it would not have impacted crossover payments. MassHealth …regulation …states that coinsurance and deductible charges will be paid for crossover claims up to the lesser of the Medicare and MassHealth rate on file. Even if MassHealth had reduced its rate to the CMS OPPS rate on file, it would have no impact on crossover payments since MassHealth and Medicare allowable charges would be the same. The increase in the crossover claim reimbursement was not a result of MassHealth payment changes, but rather a combination of increased Medicare patient liability and Medicare's OPPS payment cap methodology change.*
>
> *With respect to the draft report's suggestion that MassHealth and DHCFP re-examine the approach to setting payment rates for advanced imaging, we note that we are exploring the potential use of the OPPS approach as it applies to our method of payment.*

Auditor's Reply

We believe that MassHealth's and DHCFP's efforts to explore new methods of payment may result in substantial savings on amounts paid in Medicare crossover claims for advanced imaging. We concur that increased Medicare patient liability and Medicare policy changes are some of the primary causes of increased advanced imaging crossover payments. Consequently, we restate our recommendation that MassHealth and DHCFP examine their methodologies in setting advanced imaging reimbursement rates compared to those of Medicare in order to find a means

to incorporate reductions that Medicare utilizes to lower the federal costs, thereby lowering MassHealth's Medicare crossover payments.

APPENDIX

American College of Radiology: State-by-State Comparison of Physician Self-Referral Laws

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity Cases | AG Op.		Related Statutes
Alabama	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Alaska	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Arizona	Ariz. Rev. Stat. § 32-1401(25)(ff) [Licensing]	Doctors and surgeons.	1998	Makes it unprofessional conduct for doctor to knowingly fail to disclose direct financial interest when referring patients.	None.	Yes	Referrals within a group of doctors practicing together.	None.	None.	Ariz. Rev. Stat. § 32-1854(35): similar provision for osteopaths
Arkansas	None.	Arkansas' only self-referral law applies only for home intravenous drug therapy services. Ark. Code Ann. 20-77804.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
California	Cal Bus. & Prof. Code § 650.01 - 02	Licensees in Healing Arts.	1993	Prohibits referrals if licensee or immediate family has financial interest.	Referrals for radiation oncology or diagnostic imaging specifically included.	None.	Numerous, including an exception for certain requests by radiologists and radiation oncologists, and for any service performed within, or for goods supplied by, a licensee's office or the office of a group practice. See Overview.	None.	Yes.	Cal. Bus. & Prof. Code § 2426: requires licensees to report interests to the Board.

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity Cases	Enforcement Activity AG Op.	Related Statutes
California	Cal. Bus. & Prof. Code § 654.2	Licensees in Healing Arts.	1984	Prohibits referrals unless licensee first discloses the interest in writing and advises that patient that s/he may choose another entity.	None.	Yes.	§ 654.2(f)(2) says this section does not apply to relationships governed by other provisions of this article.	None.	Yes.	
	Cal. Lab. Code § 139.3 - .31	Workers' compensation; applies to physicians.	1993	Prohibits referrals if physician or immediate family has financial interest.	Referrals for radiation oncology or diagnostic imaging specifically included; also, certain exceptions apply to diagnostic imaging services.	None.	Numerous, including exceptions that apply to diagnostic imaging services and for any service performed within, or goods supplied by, a physician's office, or the office of a group practice. See Overview.	Yes.	Yes.	
	Cal. Health & Saf. Code § 1323(c)	Health facilities.	1985	Prohibits referrals to other health facilities in which the health facility has a significant beneficial interest unless written disclosure that patient may choose another facility.	None.	Yes.	Yes. See Overview.	None.	None	
	Cal. Wel. & Isnt. Code § 14022	Medi-Cal (Medicaid).	1980	Prohibits payments by Medi-Cal to providers for services rendered in connection with a referral.	None.	Yes, to qualify for an exception.	Exception for interests that have been disclosed to the Director and the Advisory Health Council.	None.	None.	
Colorado	Colo. Rev. Stat. § 26-4-410.5	Physicians enrolled in the Medical Assistance (Medicaid) program	1996	Prohibits referrals if physician or immediate family member has a financial relationship with the entity.	Subsection (2) lists "radiology and other diagnostic services" and "Radiation therapy services" as among the entities for which self-referrals are prohibited	Entities must disclose to state all physicians/family members who have an ownership or investment	Numerous, including for services provided by another physician in the same group practice as the referring physician, and for in-office ancillary services.	None.	None.	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Connecticut	Conn. Gen. Stat. § 20-7a(c)	Practitioners of the healing arts.	1973	Requires disclosure of ownership or investment interest prior to referring to entity for diagnostic or therapeutic services, and requires practitioner to provide reasonable referral alternatives	The definition of therapeutic services in § 207a(c) includes radiation therapy	Yes.	Does not apply to in-office ancillary services.	None.	None.	
Delaware	CDR 24-1700.15.1.11 [Licensing]	Licensed and unlicensed physicians and applicants practicing medicine in the state.	Not provided.	Makes it unprofessional and dishonorable conduct to willfully fail to disclose a financial interest in an ancillary testing or treatment facility outside of the physician's office.	None.	Yes.	None.	None.	None.	
District of Columbia	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Florida	Fla. Stat. § 456.053	Health care providers.	1992	Prohibits referring a patient for health care services or items to an entity in which the provider is an investor or has an investment interest.	Numerous- see Overview.	Yes, pursuant to § 456.052	Many, including (1) referrals by a radiologist for diagnostic-imaging services; (2) referrals by a physician specializing in the provision of radiation therapy services for such services; and (3) referrals by a health care provider who is (a) a sole provider or member of a group practice (b) for designated health services that are prescribed solely for the referring provider's or group practice's own patients, and (c) that are provided by or under the direct supervision of the referring provider or group practice. However, there are conditions on the provider or group's acceptance of outside referrals for diagnostic imaging services. See Overview.	Yes.	None.	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Georgia	O.C.G.A. § 421B-1 et seq.	Health care providers.	1993	Prohibits referring a patient for the provision of designated health services to an entity in which the health care provider has an investment interest.	The definition of "referral" in § 43-1B-3(10) states that referrals do not include orders, recommendations and plans of care made by a radiologist for diagnostic imaging services, or by a health care provider specializing in the provision of radiation therapy services.	Yes, pursuant to § 43-!1b-5	Numerous. See "References to Referrals by Radiologists." There is also an exception for referrals within a group practice. See Overview.	None.	None.	
Hawaii	Haw. Rev. Stat. § 431:10C-308.7(c)	Health care providers for treatments paid for by a motor vehicle insurance policy.	1992	Prohibits self-referral without disclosure for any service or treatment authorized under the chapter.	None.	Yes.	Definition of "financial interest" does not include certain HMO arrangements. See Overview.	None.	None.	
Idaho	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Illinois	225 I.L.C.S. 47/1 et seq.	Health care workers.	1992	Prohibits self-referrals and self-referral arrangements to an entity outside the health care worker's office or group practice	None.	Yes, to qualify for an exception.	Numerous, including for referrals within the health care worker's office or group practice See Overview.	Yes.	None.	The provision is implemented by 77 Ill. Admin. Code 1235 et seq., and the Department of Professional Regulation is given disciplinary authority under 225 I.L.C.S. 60/22.
Indiana	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Iowa	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Kansas	Kan. Stat. Ann. § 65-2837(b)(29)	All persons with a license, permit or special permit issued under Kan. Stat. Ann. § 65-28.	1957	Makes it unprofessional conduct to self-refer when there is a significant interest, unless the licensee informs the patient in writing of the interest and that the patient may obtain such services elsewhere.	None.	Yes.	Self-referrals not prohibited if the referred services are provided in the physician's office, or if the investment interest is less than 10%.	None.	None.	
Kentucky	None.	Kentucky does not have a self-referral prohibition, but in the workers' compensation context Kentucky requires self-referrals to be disclosed to the patient, the workers' compensation commissioner and the employer's insurer. See K.R.S. § 342.020(9).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	K.R.S. § 205.8477(1) requires Medicaid providers to annually report who holds a 5% or greater ownership interest, and to identify any other Medicaid-participating providers with which the provider conducts significant business.
Louisiana	La. Rev. Stat. Ann. § 37:1744	Health care providers.	1993	Self-referrals outside the same practice group as the referring provider, where the provider or a member of that provider's immediate family, has a financial interest that will be served by the referral.	None.	Yes.	This prohibition only applies to referrals outside the practitioner's group practice. An exception exists where the health care provider, in advance, informs the patient in writing of the financial interest.	None.	None.	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Louisiana	La. Admin. Code tit. 46, § 4211	Physicians.	1994	Self-referrals outside the physician's group practice when there is a financial interest.	None.	Yes.	This prohibition only applies to referrals outside the practitioner's group practice. An exception exists for advance disclosure in writing. There is also an exception for ownership or investment interests that do not meet the definition of a "significant financial interest."	None.	None.	
	La. Admin. Code tit. 46, § 4213	Physicians.	1994	Arrangements or schemes which the physician knows or should know have a principal purpose of inducing referrals in violation of La. Admin. Code tit. 46, § 4211.	None.	None.	None.	None.	None.	
Maine	Me. Rev. Stat. Ann. tit. 22, §§ 2081 *et seq.*	Health care practitioners.	1993	Self-referrals to an outside facility in which the referring practitioner is an investor.	None.	Yes.	This prohibition only applies to referrals outside the health care practitioner's office or group practice. Numerous exceptions are set forth within the statute.	None.	None.	
	Code Me. R. § 02-031-870	Health care practitioners.	1998	Self-referrals to an outside facility in which the referring practitioner is an investor.	None.	Yes.	This prohibition only applies to referrals outside the health care practitioner's office or group practice. In addition, there is an exception for facilities that meet requirements regarding community need, investment nondiscrimination, nonexclusivity, etc.	None.	None.	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Maryland	Md. Code Ann. §§ 1-301 *et seq.*	Health care practitioners.	1993	Referrals to a health care entity in which the practitioner or his/her immediate family owns a beneficial interest or has a compensation arrangement.	Yes. In-office ancillary services definition excludes imaging services unless provided by radiologists.	Yes.	Numerous exceptions are set forth within the statute, including group practice and in-office ancillary services exceptions.	None.	Yes.	
Massachusetts	N/A	Massachusetts' self-referral law applies only to physical therapy services.	N/A	N/A	N/A	N/A (physical therapy only)	N/A	N/A	N/A	Mass. Ann. Laws ch. 111 § 70E entitles hospital patients to an explanation, upon request, of a treating physician's financial interest in other health care facilities to which the patient is referred.
Michigan	Mich. Comp. Laws § 333.16221(e)	Physicians	1986	Stark and its regulations are specifically incorporated into Michigan law, making a physician subject to discipline if he or she self-refers in violation of Stark. Unprofessional conduct also includes directing or requiring an individual to purchase or secure a drug, device, treatment, procedure, or service from another person, place, facility or business in which the licensee has a financial interest.	None.	None.	The exceptions in 42 U.S.C. § 1395nn, including the group practice and in-office ancillary services exceptions, are incorporated by reference.	None.	Yes.	

State	Physician Self-Referral Statute	Scope	Effective Date	Prohibited Activities (i.e. ownership, leasing, compensation arrangements)	References to Referrals By Radiologists/Radiation Oncologists	Disclosure Requirements	Exceptions	Enforcement Activity		Related Statutes
								Cases	AG Op.	
Minnesota	Minn. Stat. § 147.091	Physicians.	1971	Referrals to a health care provider in which the referring physician has a significant financial interest.	None.	Yes.	An exception exists where the physician has disclosed his or her own financial interest. In addition, a financial interest does not include (1) the ownership of a building by a physician where space is leased to an individual or organization at the prevailing rate in a straight lease agreement; or (2) any interest held by a physician in a publicly traded stock.	None.	None.	

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Minnesota	2004 Minn. ALS 198 (S.B. 2080)	Health care providers.	2004	No health care provider with a financial or economic interest in an outpatient surgical center or diagnostic imaging center may refer a patient to that facility unless, prior to the self-referral, the provider discloses the financial interest in writing. Employment or contractual arrangements that limit referrals to outpatient surgical centers, diagnostic imaging facilities, or hospitals must also be disclosed to patients in writing. A financial interest includes membership, a proprietary interest, or co-ownership with an individual, group, or organization to which patients, clients, or customers are referred.	Yes--references to diagnostic imaging facilities.	Yes.	Exceptions exist where health care providers disclose financial interests or employment/contractual arrangements in writing, in advance.	None.	None.	
Mississippi	None.	N/A	N/A	N/A	None.	None.	None.	None.	None.	
Missouri	N/A	Missouri's self-referral law applies only to physical therapy services.	N/A	N/A	N/A	N/A (physical therapy only)	N/A	N/A	N/A	
Montana	Mont. Code Ann. § 39-71-315	Workers' compensation	1993	Referring a workers' compensation eligible patient to a facility owned by the provider.	None.	Yes.	This provision does not apply if the provider informs the worker of the ownership interest and provides the name and address of alternate facilities, if any exist. There is also an	None.	None.	

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Montana							exception where medical services are provided to an injured worker by a treating physician with an ownership interest in a managed care organization that has been certified by the Montana Department of Labor and Industry.			
Montana	Mont. Code Ann. § 39-71-1108	Workers' compensation	1993	Referring a workers' compensation eligible patient to a facility where the provider has an investment interest.	None.	None.	Where there is a demonstrated need in the community and alternative financing is not available. In addition, this provision does not apply to care or services provided directly to an injured worker by a treating physician with a certified ownership interest in a managed care organization.	None.	None.	
	Mont. Code Ann. § 37-2-103	Montana also has a pharmacy ownership law which prohibits medical practitioners from owning a community pharmacy.	N/A	N/A	None.	None.	N/A	N/A	N/A	
Nebraska	None.	N/A	N/A	N/A	None.	None.	None.	None.	None.	
Nevada	Nev. Rev. Stat. 429B.425	Health care practitioners.	1993	Referrals for services or goods in which the practitioner has a financial interest.	Yes.	None.	There are numerous exceptions set forth within the statute, including a group practice exception.	None.	None.	
	Nev. Rev. Stat. 630.305	Physicians.	1983	Referrals to facilities in which the licensee has a financial interest.	None.	Yes.	None.	None.	None.	

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New Hampshire	N.H. Rev. Stat. Ann. § 125:25b	Health care practitioners.	1993	Referrals to diagnostic or therapeutic entities in which the practitioner has a financial interest.	Yes.	Yes.	Self-referral is permitted if the health care practitioner	None.	None.	
	N.H. Rev. Stat. Ann. § 125:25c	Health care practitioners.	1993	Referrals to diagnostic or therapeutic entities in which the practitioner has an ownership interest or from which the practitioner receives remuneration.	Yes.	Yes.	Self-referral is permitted if the health care practitioner discloses his or her financial interest. The disclosure requirement does not apply to in-office ancillary services.	None.	None.	
	N.H. Rev. Stat. Ann. § 281A:23	Workers' compensation.	1988	Referrals of injured workers to providers or entities in which the referring provider has a financial or ownership interest.	None.	None.	Exceptions for emergency situations, referrals from a specialist to a subspecialist, referrals from a health care provider to a specialist in another field, or referrals from a primary care practitioner to a specialist. There is also an exception where the referral is ethically appropriate and medically indicated.	None.	None.	
New Jersey	N.J. Stat. Ann. §§ 45:9-22.4 *et seq.*	Practitioners.	1989	Referrals to a health care service in which the practitioner has a significant beneficial interest.	Yes.	Yes.	Exceptions exist for services provided at the practitioner's medical office and billed directly by the practitioner, and for radiation therapy pursuant to oncological protocol, lithotripsy and renal dialysis.	Yes.	None.	
	N.J. Admin. Code § 13:35-6.17	Practitioners	1992	Referrals to a health care service in which the practitioner has a significant beneficial interest.	Yes.	Yes.	Exceptions exist for services provided at the practitioner's medical office and billed	Yes.	None.	

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							directly by the practitioner, and for radiation therapy pursuant to oncological protocol, lithotripsy and renal dialysis.			
New Mexico	N.M. Stat. Ann. § 24-1-5.8	Physician owners of hospitals and health care providers with financial interests in hospitals.	2003	Referrals by a physician owner of an acute-care hospital, a general hospital or a limited services hospital to the hospital in which he or she has a financial interest. Health care providers with a financial interest in such hospitals must also disclose the financial interest before referring a patient to the hospital.	None.	Yes.	Self-referrals are permitted so long as the physician or health care provider discloses his or her financial interest to the patient.	None.	None.	
New York	N.Y. Soc. Serv. Law § 238-a	Health care practitioners.	1992	Referrals for clinical laboratory, pharmacy, radiation therapy, x-ray, imaging, or physical therapy services where the referring practitioner has a financial relationship with the provider or entity.	Yes.	Yes.	Numerous exceptions are set forth within the statute, including group practice and in-office ancillary services exceptions.	Yes.	None.	
	10 NYCRR § 34.1 *et seq.*	Health care practitioners.	1993	Referrals for clinical laboratory, pharmacy, radiation therapy, x-ray, imaging, or physical therapy services where the referring practitioner has a financial relationship with the provider or entity.	Yes.	Yes.	A referral does not include an arrangement whereby a treating practitioner makes arrangements with another covering practitioner's patients for services routinely provided by the treating practitioner when the treating practitioner is unavailable to treat patients.	None.	None.	

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North Carolina	N.C. Gen. Stat. Sec. § 90-405 -409	Health care providers.	1993	Prohibits health care providers from making any referral of any patient to an entity in which the health care provider or group practice or any member of the group practice is an investor.	None.	Yes.	• Self-referral is permitted for any designated health care service provided by, or provided under the personal supervision of, a sole health care provider or by a member of a group practice to the patients of that health care provider or group practice. • Exception exists when a referral is made in a medically underserved area.	None.	Yes.	
North Dakota	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ohio	ORC Ann. § 4731.66	Physicians.	1977	Ownership, investment interest, or compensation arrangement with the person to whom the patient is referred.	None.	None.	Various, including services performed by physicians in the same group practice and in-office ancillary services.	None.	None.	ORC Ann. §§ 4731.67 and 68
Oklahoma	59 Okl. St. Ann. §725.4	Healing Arts.	1992	Non-disclosure of financial interest or remuneration.	None.	Yes.	When referred service is ancillary, where provider supervises referred services, or where referred facility is not a separate entity.	None.	None.	
Oregon	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Pennsylvania	35 Pa. Stat. § 449.22	Healing Arts.	1988	Non-disclosure of financial interest or ownership interest in referred facility.	None.	Yes.	None.	None.	None.	
	77 Pa. Stat. § 531	Workers' Compensation.	1996	Financial interest in referred facility.	Specifically includes referrals for radiation oncology and diagnostic imaging.	None.	None.	None.	None.	
	34 Pa. Code § 127.301	Workers' Compensation.	Unknown	Financial Interest in referred entity.	Referrals for radiation oncology and diagnostic imaging.	None.	Arrangements permitted by 42 U.S.C.A. § 1320-a-7(b)(1), 42 CFR 1001.952, and 42 U.S.C.A. § 1395nn.	None.	None.	77 Pa. Stat. § 531
Rhode Island	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
South Carolina	S.C. Code Ann. § 44-113-30	Health Care Providers.	1993	Investment or having an investment interest in the referred entity.	None.	Yes.	Various, including where the referring physician directly provides services in the referred entity.	None.	Yes.	
South Dakota	S.D. Codified Laws § 36-2-19	Practitioners of Healing Arts.	1994	Financial interest in referred unaffiliated health care facility.	Definition of "unaffiliated health care facility" includes imaging centers.	Yes.	None.	None.	None.	S.D. Codified Laws § 36-2-18
Tennessee	Tenn. Code Ann. § 63-6-502	Medicine and Surgery.	1991	Non-disclosure of ownership interest in referred facility.	None.	Yes.	When there is no significant conflict of interest	None.	Yes.	
	Tenn. Code Ann. § 63-6-602	Medicine and Surgery.	1993	Ownership Interest in referred entity.	None.	Yes; pursuant to § 63-6-502	When the physician performs the services, when the referrals are made to health care facilities that rent premises or equipment leased by the physician, when there is a demonstrated community need.	None.	None.	Tenn. Code Ann. § 63-6-502
	Tenn. Code Ann. § 63-6-604	Medicine and Surgery.	1993	Cross-referral arrangements that would violate § 63-6-602.	None.	Yes; pursuant to § 63-6-502	None.	None.	None.	Tenn. Code Ann. § 63-6-502
Texas	Tex. Health & Saf. Code § 142.019	Physicians	1999	Referrals to home and community support services that would violate 42 U.S.C. § 1395nn.	None.	None.	None.	None.	None.	42 U.S.C. § 1395nn

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Utah	Utah Code Ann. § 58-67-801	Health Professions.	1996	Financial relationship in a defined facility, as defined and described by 42 U.S.C. § 1395nn.	Specifically includes referrals to radiology services	Yes.	None.	None.	None.	
Vermont	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Virginia	Va. Code Ann. § 54.1-2410 through 2414	Practitioners.	1993	Personal or family investment in the referred entity.	None.	No.	Virginia Board of Health Professions may grant an exception if there is demonstrated need and it conforms to other requirements, or it is a publicly traded entity; practitioner directly provides health services; or referral made pursuant to HMO contract.	None.	Yes.	18 VAC 75-20-60 through 18 VAC 75-20-100; Va. Code Ann. §54.12964 (Disclosure requirement)
Washington	Rev. Code Wash. § 19.68.010(2)	Healing Professions	2004	Ownership of a financial interest in an referred diagnostic entity.	None.	Yes.	Physician partnerships and employment arrangements.	Yes.	Yes.	
	Rev. Code Wash. § 74.09.240(3)	Medicaid Program.	1979	Financial relationship in the referred entity.	None.	No.	42 U.S.C.A. § 1395nn arrangements, and discounts that are reflected in charges to Medicaid	None.	None.	
West Virginia	W. Va. Code § 30-3-14(7)	Physicians.	1980	Proprietary Interest in the referred pharmacy or laboratory.	None.	Yes.	None.	None.	None.	
Wisconsin	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Wyoming	None.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	