

The Advocacy Research Working Group of Medical Imaging and Technology Alliance (MITA)

Imaging Patients Custom Analytic Report

June 1, 2007 – June 30, 2011



MITA

MEDICAL IMAGING
& TECHNOLOGY ALLIANCE

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Executive Summary

The Advocacy Research Working Group of the Medical Imaging and Technology Alliance (MITA) produced a custom analytic report with the Patient Advocate Foundation (PAF), a national non-profit organization that provides professional case management services to Americans with chronic, life threatening, and/or debilitating conditions who need assistance with accessing the healthcare system, following an alarming increase in patient cases involving coverage denials for imaging procedures. The objective of the analysis was to determine patterns in denials of coverage, the rationale behind denials and what and how resolutions were met on behalf of PAF patients. An analysis of PAF patient data on imaging access from June 1, 2007 to June 30, 2011 for a total of 4,360 cases is reflected in this report.

Summary of Findings

- Analysis of PAF data showed just over 90 percent of the imaging case denials that were reversed involved insurance denials for imaging services that were covered within the patient's health plan, yet patient cases were forced into lengthy appeal processes.
- Resolving issues for PAF patients required an average of 15.4 points of contact per case, meaning a trained case worker had to call the insurer or communicate via email or fax more than 15 times before reaching resolution of the case. The majority of these cases involve patients with cancer. Without PAF assistance, these acutely ill patients would have had to make repeated contact with their insurer more than 15 times on average to reach resolution.
- Eighty-one percent of the insurance denials for imaging procedures were due to prior authorization programs, stating reasons ranging from "not medically necessary" to "benefit exclusion" to "necessary prior authorization needed to be obtained."

Conclusion

Given that 90 percent of the imaging case denials reversed involved insurance denials for imaging services that were covered within the patient's health plan, these findings should prompt further examination of insurer compliance on delivery of health plan benefits. Recent changes to public policies that reduce reimbursement for imaging services, restrict utilization and encumber

patient's abilities to have more than one diagnostic procedure per day are counter-intuitive and disruptive to the process of diagnosing, staging and initiating the management of disease. Artificial barriers to access to diagnostic imaging tests can lead to unnecessary confusion, worry and frustration as patients are forced to seek help analyzing and battling their insurance companies for their prescribed care when they are experiencing the debilitating effects of their disease and time matters most.

Introduction

The PAF Patient Services Division was established in 1996 to provide individualized assistance nationwide to these patients in navigating the healthcare system. Through the Patient Services Division, PAF provides comprehensive case management services, education, and other resources to patients in need. PAF's case management team relies on a customized database that collects 260 unique data fields to house information on each patient served. The data fields include an unlimited number of unique patient issues, patient diagnoses, treatment protocols, insurance status, employment status, and comprehensive demographic information.

After an increasing trend in patient calls regarding barriers to coverage for diagnostic imaging tests, PAF retained Dobson DaVanzo & Associates, LLC (Dobson | DaVanzo), an independent health economics and policy consulting firm based in the Washington, D.C. metropolitan area to review and validate underlying data from June 1, 2007 to June 30, 2011. The following analysis reflects the findings of this report.

Perspective

According to the New England Journal of Medicine, medical imaging is one of the top developments that “changed the face of clinical medicine” during the last millennium. In 2011, the American Society of Clinical Oncology (ASCO) cited computed tomography (CT) chest scans as a potential early detection screen for lung cancer in its annual report. A national screening trial of more than 50,000 current and former heavy smokers found that three annual low-dose CT scans was associated with a reduced risk of dying from lung cancer by 20 percent compared with those who were screened with three annual chest x-rays.¹

¹ Vogelzang NJ, Benowitz SI, Adams S et al. (2012). Clinical cancer advances 2011: annual report on progress against cancer from the American Society of Clinical Oncology. JCO 30(1): 88-109.

Beyond the life-saving impact of medical imaging, researchers have also found that it can reduce health care expenditures in the long-run. Every \$1 spent on inpatient imaging correlates to approximately \$3 in total savings,² and according to researchers at Harvard Medical School, every \$385 spent on imaging decreases a patient's hospital stay by one day, saving approximately \$3,000 per patient.³

Access to medical imaging is important for patients in order to receive timely diagnosis and treatment of illness, prevent downstream complications, and reduce out-of-pocket health care expenses.

Overview of PAF Imaging Cases

From June 1, 2007 to June 30, 2011, PAF case managers assisted patients with a total of 4,360 cases involving barriers to access to imaging procedures. PAF required an average of 15.4 points of contact per case to resolve the imaging issue, meaning the case worker had to call the insurer or communicate via email or fax more than 15 times before reaching resolution of the case. These also included calls back to the physician's office for more information.

From June 2007 through June 2011, overall PAF imaging cases grew steadily. The annual caseload from 2007 totaled 953 and throughout the last year of the study PAF case managers assisted in 1,592 cases.

² Beinfeld MT, Gazelle GS. (2005). Diagnostic imaging costs: are they driving up the costs of hospital care? *Radiology*: 235, 934-939.

³ Machlin SR, Carper K. (2007). Expenses for hospital inpatient stays – 2004. AHRQ – Statistical Brief #164: 2.

Demographics

Gender

Approximately two-thirds of PAF imaging cases involved female patients (64.5 percent) and approximately one-third involved male patients (35.5 percent), comparable to PAF's overall patient population.

Age

The age distribution of PAF patients with imaging issues remained fairly consistent from June 2007 through June 2011 with nearly two-thirds of imaging cases reported by the age 46 to 65 range, nearly 15 percent were aged 36 to 45 and nearly 12% of those over 65 years old reported barriers to imaging tests.

Race

The following chart illustrates the breakdown of PAF imaging cases during this period by race, again in a distribution similar to the overall PAF population, and reveals possible disparities in the ability of minorities to receive PAF services due to a lack of provider or other patient advocate referral.

Ethnicity Breakdown of PAF Imaging Patients June 1, 2007 – June 30, 2011	
Caucasian	74.32%
African American	15.06%
Hispanic/Latino	7.17%
Asian	1.23%
American Indian/Alaska Native	0.68%
Blended Race	0.58%
Middle Eastern	0.55%
Caribbean Islander	0.30%
Native Hawaiian/Other Pacific Islander	0.11%

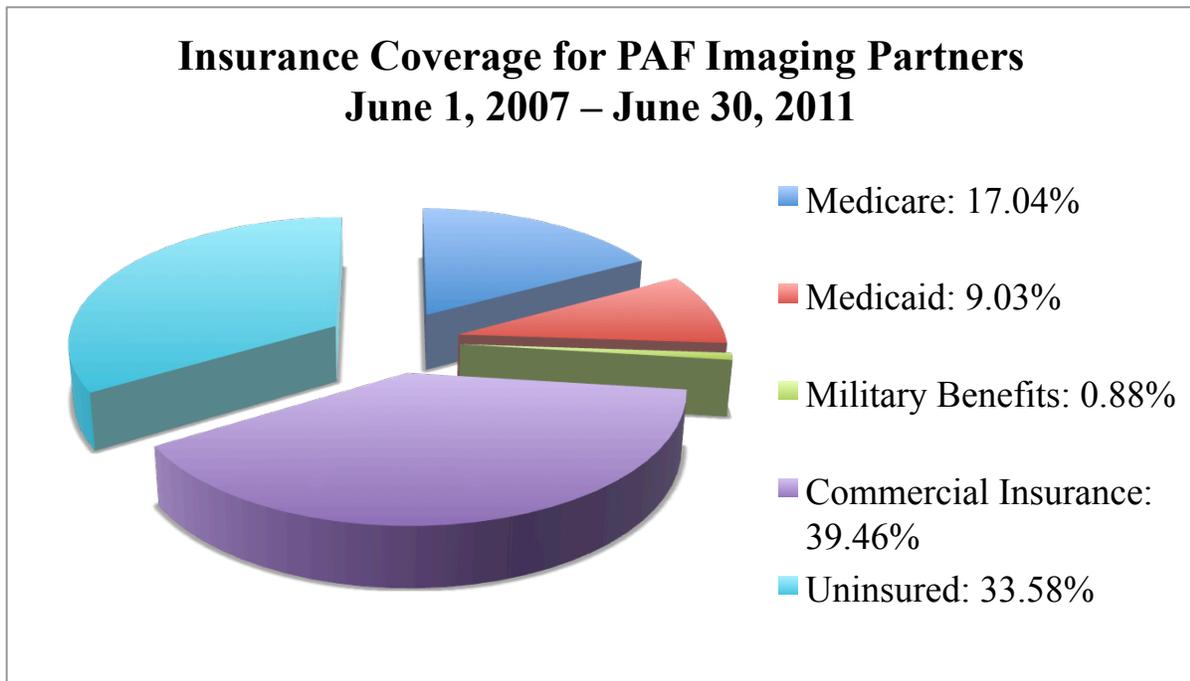
Income

Income distribution for imaging patient cases included in this report reflected here indicates the predominantly low-income population of those experiencing imaging access issues.

Income Breakdown of PAF Imaging Patients June 1, 2007 – June 30, 2011	
Less than \$11,000	30.89%
\$12,000 - \$23,000	29.97%
\$24,000 - \$35,000	17.57%
\$36,000 - \$47,000	7.87%
\$48,000 - \$59,000	5.05%
\$60,000 - \$71,000	3.40%
\$72,000 - \$83,000	2.12%
\$84,000 - \$95,000	0.96%
\$96,000 - \$107,000	0.84%
\$108,000 - \$119,000	0.29%
\$120,000 or More	1.05%

Insurance Coverage for PAF Imaging Patients

Approximately one-third (33.6 percent) of PAF imaging cases involved uninsured patients, and another third (39.5 percent) of PAF imaging cases involved patients covered by commercial insurance. PAF imaging cases of uninsured patients nearly doubled during the four-year period.



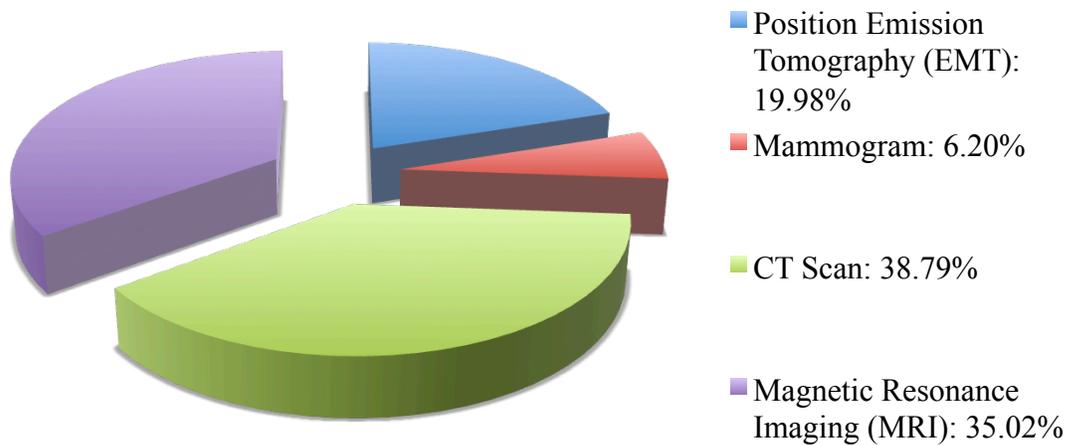
Clinical Characteristics

The majority of PAF imaging cases had a primary diagnosis of cancer (80.4 percent), followed by 8.0 percent for screening for symptoms, and 5.1 percent for chronic/debilitating conditions. Cancer diagnoses are overrepresented in imaging cases. In the overall PAF patient population, 71.2 percent of cases involve cancer as a primary diagnosis.

Of the PAF imaging cases reported by patients with cancer, 74.0 percent of cases involved one of the 11 top primary cancer diagnoses. The top three most prevalent cancer diagnoses for these PAF imaging cases were breast cancer (31.6 percent), lung cancer (17.6 percent), and colorectal cancer (13.9 percent). The top imaging procedures performed were CT scan with 38.8 percent, MRI with 35.0 percent and PET with 20.0 percent. Mammograms made up 6.2 percent of imaging procedures reported to PAF.

Imaging Procedures by Primary Diagnoses June 1, 2007 – June 30, 2011				
	CT Scan	Magnetic Resonance Imaging (MRI)	Position Emission Tomography (PET)	Mammogram
Cancers	83.71%	70.45%	92.36%	44.76%
Cardiovascular Conditions	1.12%	1.29%	0.00%	0.00%
Autoimmune Disease	0.90%	1.94%	0.00%	0.00%
Organ Transplantation	0.11%	0.13%	0.00%	0.00%
Nervous System Conditions	1.80%	8.26%	1.03%	0.00%
Pediatric Conditions	0.34%	0.90%	0.21%	0.00%
Kidney Diseases	0.00%	0.26%	0.21%	0.00%
Chronic and/or Debilitating Conditions	4.27%	6.32%	0.62%	0.70%
Screening for Symptoms	7.75%	10.45%	5.58%	54.55%

Imaging Procedures Reported by PAF Patients June 1, 2007 – June 30, 2011



PAF cases with cancer as the primary diagnosis comprise the vast majority of cases reporting difficulties in accessing medical imaging. PAF imaging cases involving cancer represented 92.4 percent of PET cases, followed by 83.7 percent of CT scan cases, and 75.0 percent of MRI cases. However, the primary diagnosis of screening for symptoms represented over half of the mammogram cases (54.6 percent), where cancer diagnoses only represented 44.8 percent

Imaging Issues and Resolutions

Analysis of PAF data showed just over 90 percent of the imaging case denials that were reversed involved insurance denials for imaging services that were covered within the patient's health plan. Eighty-one percent of the insurance denials for imaging procedures were due to prior authorization programs, stating reasons ranging from "not medically necessary" to "benefit exclusion" to "necessary prior authorization needed to be obtained." The top 5 resolutions for PAF imaging cases reporting denied claims and services can be seen in the chart below.

Resolutions for PAF Imaging Patients with Denied Claims/Services Issues June 1, 2007 – June 30, 2011	
Analyzed benefit coverage & initiated appropriate action	38.19%
Mediated the appeals process for successful overturn of denial	26.86%
Appealed/overturned benefit exclusion/maximum	10.03%
Reconciled coding and billing errors	8.41%
Successfully reinstated lost coverage	1.29%

Conclusion

It is clear from the findings of MITA's analysis that recent changes to public policies that reduce reimbursement for imaging services, restrict utilization and encumber patient's abilities to have more than one diagnostic procedure per day are counter-intuitive and disruptive to the process of diagnosing, staging and initiating the management of disease.

Preauthorization in imaging can lead to unnecessary confusion, worry and frustration as patients are forced to seek help analyzing and battling their insurance companies for their prescribed care. Worse still, the use of these arcane coverage policies and non-medical gatekeepers can steal precious time and prevent physicians from readily determining the appropriate course of medical treatment when time can matter most.

Data Methodology

Introduction:

The data used within the Custom Analytics Report is collected by the Patient Advocate Foundation and held with the utmost concern to security and patient confidentiality.

This report provides an overview of the Custom Analytics Report data methodology.

Methodology:

Data collected within internal databases are queried to yield needed statistics. Captured server log files are parsed to produce needed counts. External resources and data are gathered, checked, and calculated.

Due to rounding constraints the provided charts and graphs may have variance of 0.03%.

Data rows on charts and tables are listed in descending order, from most frequent to least reported.

Data Sources:

The data collected for the Custom Analytics Report is stored in a variety of places internal and external to Patient Advocate Foundation. Various internal databases yield the majority of patient data and demographics used to produce annual reporting. Server logging provides Patient Advocate Foundation with the ability to capture needed electronic statistics and for analysis and trending. Reported data is collected through database entry by Patient Advocate Foundation's Patient Services Division. Reputable external Federal and State government sources, such as the US Census Bureau, are also referenced in determining demographical calculations.

Summary of Sources:

1. Internal databases
2. Server logs (WWW, SMTP)
3. External Federal and State Government resources

Adjustments:

The following data adjustments have been made: None

Availability of Data:

Data contained within Patient Advocate Foundation's Custom Analytics Report is confidential and proprietary to the organization. Patient Advocate Foundation must be cited as the source of all data.