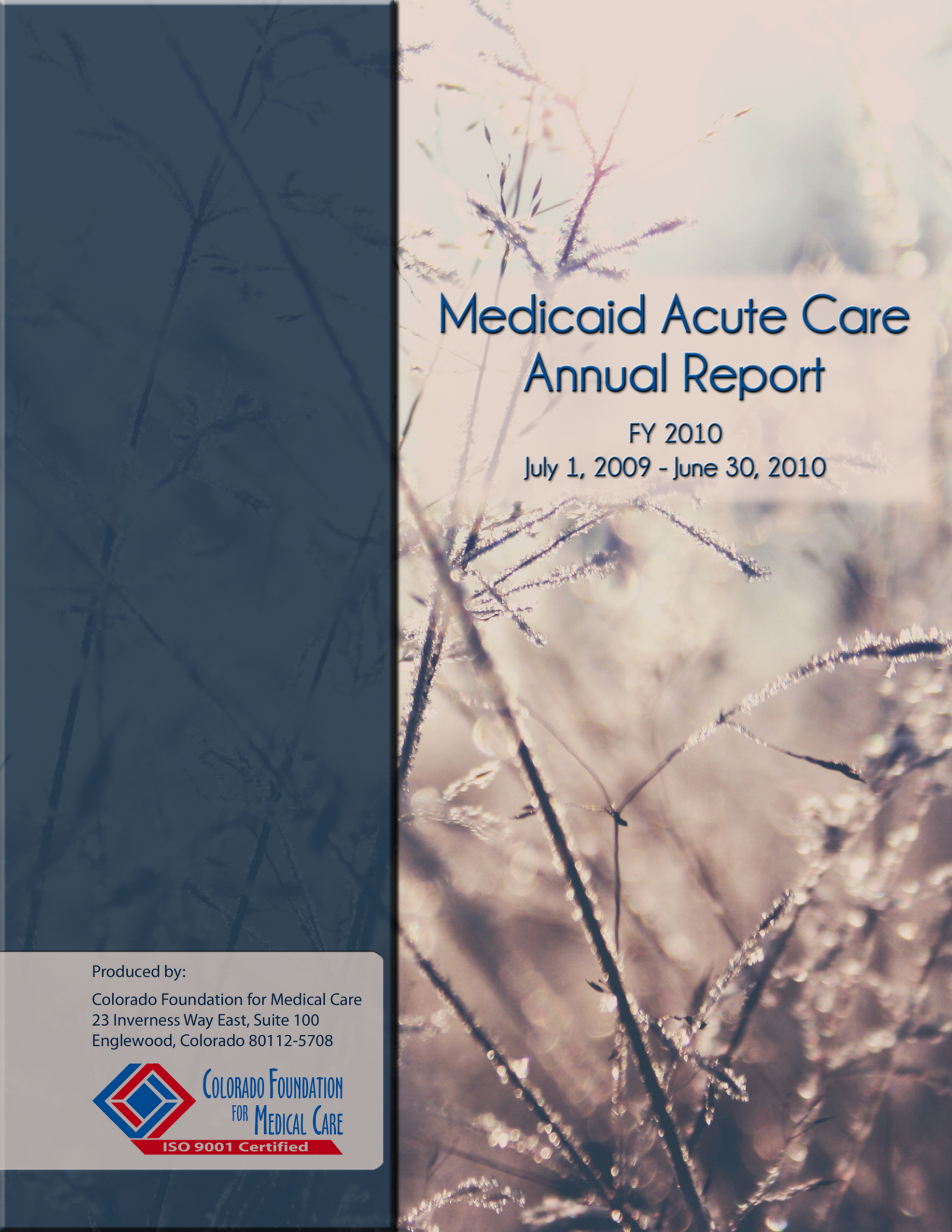

Medicaid Acute Care Annual Report

FY 2010
July 1, 2009 - June 30, 2010

Produced by:

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Colorado Foundation for Medical Care
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CHAPTER 1

EXECUTIVE SUMMARY

During fiscal year 2010 (FY 10) CFMC's acute care review services program conducted 27,851 reviews for the Colorado Department of Health Care Policy and Financing (the Department). These activities prevented inappropriate and unnecessary medical expenditures totaling $16,841,812. This translates into a net savings of $15,386,814 for FY 10, after factoring in the contract cost for review activities.

CFMC, working in partnership with the Department, conducted two types of reviews, prospective and retrospective. Prospective reviews occur prior to the delivery of services. CFMC's nurse reviewers used nationally accepted, evidence-based, annually updated, medical necessity screening criteria, in addition to their clinical experience, to ensure requested services were medically necessary and appropriate. Our established network of more than 100 credentialed physician reviewers, representing most medical specialties, reviewed cases that did not meet the screening criteria. The denial of inappropriate prospective requests discourages potential abuse of the system while minimizing duplication of services.

CFMC began accepting prior authorization requests (PARs) electronically through CFMC's Web portal on August 1, 2009. In October 2009, CFMC surveyed providers submitting electronic PARs. Providers were asked for comments and suggestions on CFMC's Web portal enhancements that would encourage a more user-friendly system. Based on survey feedback, CFMC made a number of changes to enhance its portal. Changes were made throughout the year and providers now have access to the following enhancements:

- View outcomes of requested services
- View the State assigned "C" number used for billing an approved service
- Maintain a list of clients and providers for use in PAR entry
- Submit electronic documentation files in PDF or Word formats
- Update PAR contact information

Electronic submission greatly increases efficiency and enables providers to check the status of requests at any time.

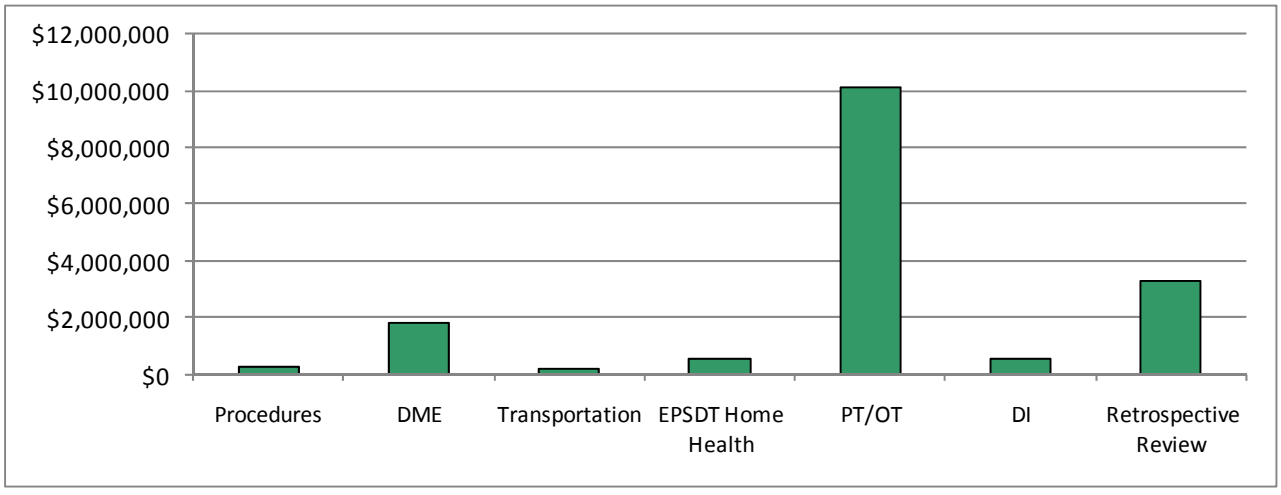
CFMC reviewed 23,851 prior authorization requests in FY 10, almost twice the number of the previous year. Almost half the increase (46%) was due to the addition of non-emergent diagnostic imaging reviews. Effective August 1, 2009, physician offices, free-standing radiology centers, and agencies that bill using the 837P transaction or the Colorado 1500 paper claim form, were required to obtain prior authorization for all Positron Emission Tomography (PET) scans and non-emergent Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) scans. Requests in the other categories were up 46%, led by a 54% increase in Physical Therapy (PT)/Occupation Therapy (OT) requests, up from 7,067 in FY 09 to 10,895 in FY 10. While the Department's Budget Caseload Report showed a 20% increase in the caseload, up from 381,877 clients in July 2009 to 457,118 in June 2010, the increased size of the Medicaid population does not fully explain the increase.

Using reimbursement figures provided by the Department, CFMC estimated that denial of inappropriate requests, across the 10 review categories, prevented $13,540,733 worth of unnecessary care and services, an 18% increase over FY 09. These "costs avoided" do not represent savings that can be passed back to Colorado's general budget and do not take into consideration any item or service that may have been provided in lieu of the denied request.

CFMC also conducted retrospective reviews of inpatient stays after the hospital claims were paid. Examining paid claims against the medical record ensures that the care paid for was medically necessary, required acute level of care, and was coded and billed correctly. CFMC also reviewed these records for quality issues. The majority of cases were selected using criteria that targeted specific types of cases known to, or expected to contain a large percentage of errors. We found no errors in 89% of the 4,000 cases reviewed, but the potential financial impact of the other 11% was substantial. The Department is entitled to recover the funds paid to a facility in error. Errors include medically unnecessary admissions, cases billed or coded incorrectly, and when the facility fails to comply with record requests. In instances of an identified error or DRG change, the Department worked with the provider and the fiscal agent to recover funds. Retrospective review activities identified $3,301,079 in unsubstantiated payments, a 3% increase over the previous fiscal year. These figures are based on CFMC review determinations and do not reflect later administrative payment determinations by the Department or fiscal agent.

Figure 1.1 illustrates the financial impact of both prospective and retrospective reviews. CFMC activities in FY 10 prevented medically unnecessary spending totaling an estimated $16,841,812. Prospective review of PT/OT services accounted for 60% ($10,076,027) of the total. Taken together, prospective reviews accounted for 80% of the impact, a slightly higher percentage than previous years due to the addition of diagnostic imaging reviews.

FIGURE 1.1 – TOTAL COSTS AVOIDED BY PROGRAM



After factoring in the cost of CFMC's FY 10 contract for review activities, the Department netted $15,386,814 in savings, a 14% increase. Return on investment is one way to assess value of a program. For each dollar spent on CFMC's acute care activities in FY 10, reviews prevented

$11.58 in inappropriate spending. While the Department shares the cost of providing services with federal agencies, Colorado dollars pay only 25% of the contract costs. As a result, the Department paid $363,750 to fund activities that saved $8,420,906, a return on investment of $23.15 for every dollar spent.

In addition to review activities, this report discusses CFMC's role in administrative law judge hearings, special service requests, fraud and abuse prevention, and the Colorado Medicaid telephone triage program. CFMC offers recommendations in this report intended to increase both the quality and cost-effectiveness of health care.

Please Note:
The figures on the next page provide a one-page reference for general information concerning review volumes, approval rates, and fiscal impact. Detailed explanations of the figures follow below. After reading the entire report, the reader may find this page a valuable tool for locating numbers quickly.

TABLE 1.1 – FISCAL YEAR 2010 KEY TABLES

Total Review Volumes	
Prospective Reviews	23,851
Retrospective Reviews	4,000
Total Reviews	**27,851**

Total Costs Avoided	
Prospective	$13,540,733
Retrospective	$3,301,079
Costs Avoided	**$16,841,812**

Prospective Review Volumes	
Transplants	76
Select Procedures	1,268
Out-of-state Admissions	48
Mental Health Services	3
Substance Abuse	60
DME	5,255
Transportation	1,121
EPSDT Home Health	130
PT/OT	10,895
Diagnostic Imaging	4,995
Total Reviews	**23,851**

Prospective Review Approval Rates	
Transplants	97%
Select Procedures	62%
Out-of-state Admissions	63%
Mental Health Services	0%
Substance Abuse	97%
DME	79%
Transportation	88%
EPSDT Home Health	85%
PT/OT	83%
Diagnostic Imaging	58%
Total Reviews	**76%**

Retrospective Review Selection Rates	
Provider Focus	1,764
DRG Focus	1,092
Readmissions	533
Focused Inliers	373
Random Selection	231
Rehabilitation Readmission	6
DRG Outlier Focus	1
Total Reviews	**4,000**

Retrospective Review Outcomes	
Approved	89%
Admission Denial	1%
Technical Denial	1%
Billing Error Denial	9%
Total	**100%**

Net Costs Avoided	
Gross Costs Avoided	$16,841,812
Cost of Review Activity	($1,454,998)
Net Savings	**$15,386,814**

Colorado Net Costs Avoided	
Gross Costs Avoided	$8,420,906
Cost of Review Activity	($363,750)
Net Savings	**$8,057,156**

Return on Investment	
Colorado Funds	$23.15
Federal Funds	$7.72
Total Return	**$11.58**

Net Costs Avoided Per Review	
Colorado Funds	$289
Federal Funds	$263
Per Review	**$552**

CHAPTER 2

REVIEW ACTIVITY OVERVIEW

CFMC's Medicaid medical care review program conducted two forms of review during FY 10:

- Prospective reviews – Reviews conducted prior to performance of services
- Retrospective reviews – Reviews conducted following payment for services rendered

Most reviews conducted by CFMC nurse reviewers use nationally recognized Milliman Care Guidelines. Milliman Care Guidelines are evidenced-based criteria for providing the right care, at the right time, in the right setting in a high quality and resource efficient manner. Milliman Care Guidelines are updated annually by specialists familiar with the latest medical research. Milliman Care Guidelines also include reference material to support each guideline material used to support the reviewer's decision in the case of an appeal.

Milliman Care Guidelines are currently not available for all types of medical products and services. CFMC incorporates other resources in the review process to determine medical necessity, appropriateness of care, and cost effectiveness of care. These resources include, but are not limited to, Medicare Guidelines and criteria provided by the Department.

Internal Monitoring Process

To ensure high quality standards, CFMC has established an internal quality management policy consistent with CFMC's ISO 9001 certification. ISO 9001 certification is an international quality management standard published by the International Organization for Standardization. This certification represents an international consensus on what constitutes quality management practices that help organizations provide appropriate products or services and meet client requirements. This ongoing process measures quality standards and provides training and educational opportunities. Process improvements and/or individual guidance and instruction address identified deviations in standards.

CFMC maintains certification by a nationally recognized quality accreditation body, the Utilization Review Accredited Commission (URAC). The URAC Health Utilization Management standards establish consistency in processes. The standards ensure that appropriately trained clinical personnel conduct and oversee the utilization review process, that a reasonable and timely appeals process is in place, and that decisions use valid clinical criteria.

CFMC's internal quality control process monitors the inter-rater reliability for clinical reviews on a monthly basis. Each month, we review randomly selected cases for outcome validity and process reliability. From these reviews, CFMC has been able to identify opportunities for improvement, plan educational sessions, and revise systems and processes using the plan/do/study/act quality improvement principles. Inter-rater reliability remained high during FY 10. Outcome agreement for prior authorization reviews was 98.0% with a process reliability of 98.3%. For retrospective reviews, inter-rater reliability was 97.8%, with a process accuracy of 96.4%.

CHAPTER 3

PROSPECTIVE REVIEW HIGHLIGHTS

CFMC began accepting prior authorization requests electronically via a secured Web portal on August 1, 2009. Electronic submission greatly increases efficiency and enables providers to check the status of requests at any time. While providers may still request prior authorization by fax, we continue to enhance the Web portal and promote its use.

CFMC reviewed 23,851 prior authorization requests, from 10 different service categories, to ensure that each request was a covered Medicaid benefit and that the request was medically necessary and appropriate based on the established criteria. This is almost double the review volume of FY 09. Review activities prevented $13,540,733 in inappropriate spending during FY 10, an 18% increase. We estimated fiscal impact for the Department using the average cost of the item or service during the review period. Other items or services received by the client not requiring prior authorization, or authorized by the fiscal agent, are unknown to CFMC and do not figure into our cost avoidance calculations. The information that follows is a brief overview of the different prior authorization programs.

The number of requests increased in most categories, but 46% of the increase was due to new requirements for the prior authorization of diagnostic imaging. Effective August 1, 2009, physician offices, free-standing radiology enters, and agencies that bill using the 837P transaction or the Colorado 1500 paper claim form, were required to obtain prior authorization for all Positron Emission Tomography (PET) scans and non-emergent Computed Tomography (CT) and Magnetic Resonance Imaging (MRIs) scans. Emergency rooms and hospitals are exempt from the prospective review requirement. CFMC received 4,995 requests for diagnostic imaging, 42% failed to meet medical necessity criteria, conserving $578,260.

Review of outpatient physical and occupational therapy (PT/OT) prior authorization requests continues to produce the greatest impact of the prospective review program. While the number of PT/OT reviews increased 54% in FY 10 to 10,895, cost avoidance from these reviews increased 18% to $10,076,027. PT/OT reviews continue to account for 75% of the prospective review fiscal impact. The Department, with assistance from CFMC, attempted to reduce the number of unnecessary PT/OT reviews by clarifying on the prior authorization requirements in the January 2010, *Provider Bulletin*.

Durable medical equipment (DME) reviews totaled 5,255, an increase of 40%. While the number of requests for power wheelchairs, typically the most expensive DME, was up 4%, requests for communication and respiratory devices were up 68% and 61%, respectively. Total DME costs conserved were $1,846,587, a 17% increase. Dollars conserved for respiratory device reviews increased 269%, negating the increased number of requests. Requests for orthotics/prosthetics were up 37%, while costs conserved were down 16%, suggesting both an increase in demand and the appropriateness of requests.

Transplant reviews in FY 10 conserved less than half the FY 09 total. However, one bone marrow/stem cell transplant conserved $219,237. Requests for other select procedures were up 35%, but dollars conserved increased nearly twice that rate (67%).

The number of select non-emergent medical transportation service reviews was up 33%. Recipient lodging and meal services led the increase, up 110% and 130% respectively. The majority of these additional requests were not medically justified, conserving $59,730. Denied escort lodging ($104,101) and escort meals ($38,533) accounted for 70% of the total program savings.

Prospective authorization is required for inpatient mental health services beyond 45 days. Of the three requests CFMC received in FY 10, two did not require prior authorization. The third received a technical denial. The number of inpatient substance abuse rehabilitation requests declined from 68 in FY 09 to 60 in FY 10. Two were technical denials and 58 were approved.

The number of Early and Periodic Screening, Diagnosis and Treatment (EPSDT) home health service reviews continues to fluctuate based on the number of the clients and individual needs. The number of clients receiving services during FY 10 totaled 73, up from 60 in FY 09. The number of service units requested subsequently increased 36%.

TABLE 3.1 – NUMBER OF PROSPECTIVE REVIEWS

Prospective Request	FY 08	FY 09	FY 10
Transplants	61	67	76
Select Procedures[1]	658	940	1,268
Out-of-state Elective Admissions	56	39	48
Inpatient Mental Health Services	1	5	3
Inpatient Substance Abuse Rehabilitation	66	68	60
Durable Medical Equipment	3,377	3,764	5,255
Select Non-emergent Medical Transportation	683	843	1,121
EPSDT Home Health Services	99	112	130
Physical & Occupational Therapy	6,007	7,067	10,895
Diagnostic Imaging	NA	NA	4,995
Total Prospective Reviews	**11,008**	**12,905**	**23,851**

1. Selected procedures broken out by type in discussion below.

TABLE 3.2 – PROSPECTIVE REVIEW OUTCOMES

Prospective Request	Approved	Partially Approved	Medical Denial	Technical Denial	Not Reviewed	Total	Approval Rate[1]
Transplants	74	0	0	1	1	76	97%
Select Procedures	777	7	7	175	302	1,268	62%
Out-of-state Elective Admissions	30	0	6	12	0	48	63%
Inpatient Mental Health Services	0	0	0	1	2	3	0%
Inpatient Substance Abuse Rehabilitation	58	0	0	2	0	60	97%
Durable Medical Equipment	3,941	221	8	1,019	66	5,255	79%
Select Non-emergent Medical Transportation	991	1	0	107	22	1,121	88%
EPSDT Home Health Services	111	0	0	15	4	130	85%
Physical & Occupational Therapy	8,479	580	5	1,793	38	10,895	83%
Diagnostic Imaging	2,899	22	82	1,354	638	4,995	58%
Totals	**17,360**	**831**	**108**	**4,479**	**1,073**	**23,851**	**76%**

1. Percentage of requests approved or modified.

TABLE 3.3 – PROSPECTIVE REVIEW TOTAL COSTS AVOIDED

Prospective Request	FY 07	FY 08	FY 09	FY 10
Transplants	$603,529	$1,134,067	$515,562	$219,237
Select Procedures	$52,016	$12,858	$27,631	$46,178
Inpatient Mental Health Services[1]	$0	$0	$0	$0
Inpatient Substance Abuse Rehabilitation	$9,137	$0	$0	$2,909
Durable Medical Equipment	$1,731,545	$1,306,215	$1,584,267	$1,846,587
Select Non-emergent Medical Transportation	$35,378	$78,998	$169,861	$204,017
EPSDT Home Health Services	$234,882	$412,203	$621,106	$567,518
Physical & Occupational Therapy	$5,822,073	$8,238,256	$8,534,410	$10,076,027
Diagnostic Imaging	NA	NA	NA	$578,260
Total Costs Avoided	**$8,488,560**	**$11,182,597**	**$11,452,837**	**$13,540,733**

1. The one client denied was ineligible for the program, thus not included in the impact calculations.

TABLE 3.4 – PROSPECTIVE REVIEW COST RATIOS

Key Prospective Review Ratios	FY 07	FY 08	FY 09	FY 10
Costs Avoided Per Review	**$842**	**$1,016**	**$887**	**$568**

Prospective Review – Discussion

CFMC conducted prospective reviews prior to the delivery of services. By requiring a prior authorization request (PAR), the Department is able to ensure that clients receive medically necessary services and equipment. CFMC reviews each request to verify that it is a covered benefit and that the request is medically appropriate. Prospective review ensures high quality service is being provided to Medicaid clients while conserving limited resources and eliminating unnecessary costs by denying inappropriate requests, discouraging potential abuse of the system, and minimizing duplication of services. CFMC notifies the Department of any trends or other concerns about provider quality or consistency we identify. The positive working relationship CFMC has with the Department has produced a refined review process that provides clients with the services they need in a timely manner while eliminating unnecessary costs.

The CFMC review team works continually to improve both the process and timeliness of prior authorization review. In FY 09, CFMC collaborated with the fiscal agent and the Department to implement electronic transmission of completed prospective reviews, eliminating the need to forward hardcopy review summaries for manual data entry by the fiscal agent. On August 1, 2009, CFMC began accepting prior authorization requests electronically via a secured Web portal. These processes greatly increase efficiency and enable providers to check the status of requests online, at any time. Despite efforts to encourage the use of the electronic submission portal, some providers were reluctant to adopt the new option. In October 2009, CFMC asked providers to comment on, and make suggestions for the Web portal. Based on survey feedback, CFMC made a number of changes to make the system a more user-friendly system. Providers submitting electronic PARs now have access to the following enhancements:

- View outcomes of requested services
- View missing component document requests
- View the Department assigned ‘C’ number used for billing an approved service
- Maintain a list of clients and providers for ease of PAR entry
- Submit electronic documentation files in PDF or Word formats
- Update PAR contact information

Prior to the survey, providers submitted only about 17% of authorization requests electronically. Use of the Web portal steadily improved following the enhancements, reaching 30% by the end of the fiscal year. CFMC continues to enhance the Web portal and promote its use, including a reminder in the Department’s July 2010 *Provider Bulletin*.

The Review Process

The Department contracted with CFMC to conduct prospective reviews for services that are either high cost or high volume. Registered nurse review coordinators review requests from providers to ensure that the request is a covered Medicaid benefit and that the request is medically necessary and appropriate given established criteria. Milliman Care Guidelines are used for the prospective review of diagnostic imaging and surgical procedures, including transplants, and inpatient mental health admissions. We also use criteria provided by the Department to review requests for other DME requests, physical and occupational therapy

services, and inpatient substance abuse rehabilitation disorder treatment. CFMC reviews prospective authorization requests for the following Medicaid benefits:

- Organ and bone marrow/stem cell transplantation
- Select inpatient and outpatient surgical procedures
- Out-of-state elective inpatient hospital admissions
- Inpatient mental health services
- Inpatient substance abuse rehabilitation
- Durable medical equipment – both adult and EPSDT programs
- Select non-emergent medical transportation services
- Home health services for EPSDT
- Physical & occupational therapy
- Diagnostic imaging

Our first step is to review requests to ensure that all demographic information complies with new regulatory transmission requirements. If the PAR request is incomplete, we issue a technical denial and return the PAR to the provider for completion. This step ensures that all review documentation complies with the strict formatting rules of the X12N 278 Health Care Services Review Standard. Compliance with the new data exchange format allows direct transmission of the PAR outcome to the fiscal agent.

If clinical information supporting the request is missing, CFMC generates a document-tracking letter requesting the missing clinical information from the provider using an automated fax system. The provider has ten working days to submit the information. Typically, providers return the required information promptly and the review is completed. Failure to provide the clinical information within this period results in a technical denial. The review process enables CFMC reviewers to identify quickly previous denials and duplicate requests, saving both time and money. Although the clinical reviewer has ten working days to determine whether the request meets all criteria, in most instances we complete reviews in a much shorter time when the provider supplies all documents needed to complete the review. The exceptions are the inpatient mental health and inpatient substance abuse admission reviews that we complete within 48 hours. If the review coordinator cannot establish medical necessity, we refer the request to a CFMC physician reviewer for a final decision. Upon medical necessity determination by the physician, we send authorization to the fiscal agent who notifies the provider and client.

Impact Calculation Methodology

Prospective reviews preserve funds by preventing inappropriate and unnecessary expenditures before they occur. “Costs avoided” through prospective review do not represent savings that pass back to Colorado’s general budget. However, by eliminating unnecessary and inappropriate expenses, the Department is able to address the medical needs of a larger number of Medicaid clients.

We must estimate the true financial benefits of prior authorization reviews. While CFMC has continually refined its impact analysis processes to provide the most accurate projections possible, the reduction in expenditures for the Department cost avoidance figures are only estimates.

Because of differences in billing for the various programs requiring prospective review, CFMC uses different methodologies to calculate the fiscal impact of each category of review.

The diagnosis related group (DRG) payment system reimburses providers for both transplants and inpatient surgical procedures. The DRG classification system allows inpatient providers to categorize patients by diagnoses, treatment, and resource consumption. Under this system, providers receive a predetermined, fixed payment based on the DRG for each admission. We estimate the costs avoided from a denial of one of these procedures by multiplying the hospital's base rate by the weight of the DRG expected for the denied procedure. The Department supplies the hospital base rates and DRG weights used for this calculation. The DRGs used in these calculations assume an otherwise healthy individual with no complicating conditions. A case involving complications or co-morbid conditions can be much more expensive than the costs estimated by CFMC.

We estimate outpatient procedures and durable medical equipment costs by calculating the average Medicaid payment during the year for each particular procedure or unit of equipment. We use the fee schedule allowed for each unit of the services denied to estimate costs avoided through transportation, EPSDT home health, and physical and occupational therapy reviews. Similarly, we estimate inpatient mental health treatment costs by multiplying the facility's per diem rate by 14, the maximum number of days reviewed at one time. We are unable to calculate out-of-state elective admission costs because payment data from other states is not available.

CFMC may receive prior authorization requests for items or services that do not require prior authorization. We route these requests to either the fiscal agent or the appropriate program. We deny these requests and include the count in the review volume calculations, but use a special code to ensure they do not affect our impact calculations. As expected with any new program, CFMC received a large number of unnecessary Diagnostic Imaging requests during FY 10 (see Table 3.5). CFMC and the Department are working together to educate providers and clarify prospective authorization requirements.

TABLE 3.5 – PROSPECTIVE REVIEW REQUESTS NOT REQUIRING REVIEW

Prospective Request	FY 08	FY 09	FY 10
Admission/Treatment/Procedures	78	165	305
Durable Medical Equipment	206	143	66
Transportation	8	19	22
Physical & Occupational Therapy	11	17	38
EPSDT/Home Health	19	12	4
Diagnostic Imaging	NA	NA	638
Total Requests	**322**	**356**	**1,073**

Prospective Review Activity Outcome Discussion

Organ and Bone Marrow / Stem Cell Transplants

The Department requires facilities to receive prospective authorization types of organ and bone marrow/stem cell transplants. Many highly specialized procedures are available only at National Centers of Excellence facilities outside of Colorado. CFMC reviews all requests for out-of-state procedures, including transplants, using specialty-matched physician reviewers for determination. The physician determines medical necessity, verifies that the procedure is not investigational or experimental, and confirms that the procedure is not available within Colorado.

CFMC approves in-state transplant requests if they are on the approved transplant list established by the Department and either meets Milliman Care Guidelines are approved by a specialty-matched physician reviewer. If they are not on the Department approved transplant list, a CFMC specialty-matched physician reviewer determines medical necessity and verifies that the procedure is not experimental or investigational. We forward the physician reviewer's determination to the Department for consideration. The Department makes the final decision on whether to approve or deny the transplant procedure.

Submission of requests for transplant authorization typically occurs well in advance of the actual procedure. In fact, approval of a request does not necessarily mean that a transplant will take place. Many factors ultimately determine if a transplant takes place, including the client's overall health and the availability of organs. Sometimes these factors cause a facility to cancel a request before CFMC is able to make a determination.

Outcomes

The number of prospective transplant reviews conducted during a given year varies due to the volume and type of transplant requests (see Table 3.6).

TABLE 3.6 – PROSPECTIVE TRANSPLANT REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	56	60	74
Medical Denial	2	1	0
Technical Denial	6	6	1
Modified	0	0	0
Not Reviewed	0	0	1
Total Reviewed	**64**	**67**	**76**

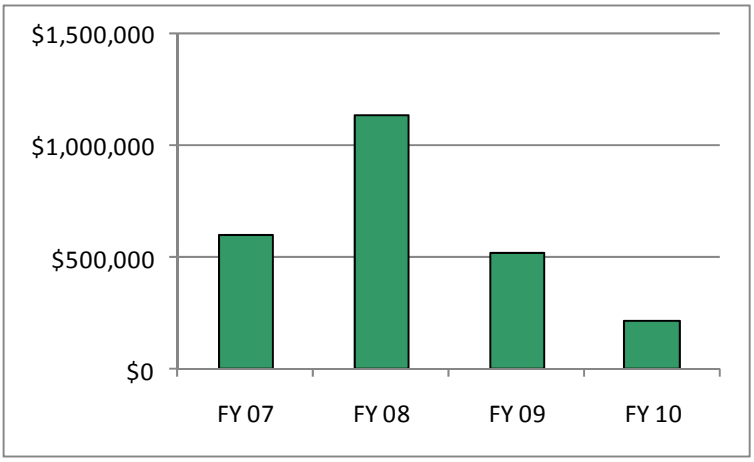
Bone marrow/stem cell transplant authorizations combine to be the most frequently requested type of transplant (see Table 3.7). Liver transplants, historically the second most frequently requested, increased from 11 in FY 09 to 21 in FY 10. As transplants have become more widely available with improved outcomes, the expectation is for continued modest increases in number of requests.

TABLE 3.7 – PROSPECTIVE TRANSPLANT REVIEW OUTCOMES

Type of Request	Approved	Medical Denial	Technical Denial	Modified	Not Reviewed	Total
In-state Transplants	**70**	**0**	**1**	**0**	**0**	**71**
Liver	21	0	0	0	0	21
Bone/Stem Allo	19	0	1	0	0	20
Bone/Stem Auto	17	0	0	0	0	17
Heart	7	0	0	0	0	7
Lung	4	0	0	0	0	4
Liver/Kidney	1	0	0	0	0	1
Kidney/Pancreas	1	0	0	0	0	1
Out-of-state Transplants	**4**	**0**	**0**	**0**	**1**	**5**
Lung	1	0	0	0	0	1
Kidney	1	0	0	0	1	2
Liver/Kidney	1	0	0	0	0	1
Liver/Small Bowel/Pancreas	1	0	0	0	0	1
Totals	**74**	**0**	**1**	**0**	**1**	**76**

The figures in this report visually represent the costs avoided for each of the programs. Figure 3.1 highlights the variable nature of the prospective transplant review program. The one denial in FY 10 conserved $219,237, less than half of the FY 09 total. However, this represents almost $3,000 in avoided costs per transplant review.

FIGURE 3.1
COSTS AVOIDED – PROSPECTIVE TRANSPLANT REVIEW



Select Procedures

The Department requires a prospective authorization review for a select group of inpatient and ambulatory procedures. CFMC nurse reviewers apply Milliman Care Guidelines for medical necessity and level of care. A CFMC specialty-matched physician reviewer reviews procedures that do not meet Milliman Care Guidelines to determine medical necessity. Among the procedures requiring prospective approval are mammoplasty, septoplasty, gastroplasty, and gastric bypass. Review of these procedures ensures that the procedures meet medical necessity guidelines and are not strictly cosmetic.

Outcomes

The number of prospective select procedure requests conducted has increased each of the past three fiscal years (see Table 3.8).

TABLE 3.8 – PROSPECTIVE SELECT PROCEDURE REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	466	657	777
Medical Denial	8	4	7
Technical Denial	67	100	175
Modified	41	16	7
Not Reviewed	77	163	302
Total Reviewed	**659**	**940**	**1,268**

While the number of requests increased 35%, the number of units approved increased just 18%, from 657 in FY 09 to 777 in FY 10. The increase in requests was driven by increases in the number of gastric (from 140 to 261) and dermatological (from 22 to 48) procedures. Further inquiry identified one facility responsible for the increases.

TABLE 3.9 – PROSPECTIVE SELECT PROCEDURE REVIEW OUTCOMES

Type of Procedure	Approved	Medical Denial	Technical Denial	Modified	Not Reviewed	Total
Breast	222	4	30	6	43	305
Nasal	263	0	28	0	2	293
Gastric	242	2	7	0	10	261
Dermatological	35	1	12	0	0	48
Ear Implant	10	0	5	1	6	22
Genital & Intersex	2	0	1	0	0	3
Ventricular Device	3	0	0	0	0	3
Other	0	0	92	0	241	333
Totals	**777**	**7**	**175**	**7**	**302**	**1,268**

Analysis

With an approval rate of 62%, select procedures continues to have one of the lowest approval rates of all prospective authorization reviews (see Table 3.2 on page 8). Despite a new breast procedure prospective authorization policy implemented in FY 09, CFMC continued to receive a large number of requests. Requests for procedures that do not require a prior authorization is responsible for more than half of the denial rate. If these were excluded from the totals, the approval rate would have been 81%, consistent with other programs.

To provide insight into the types of services routinely denied, CFMC identified the ten most frequently requested services with the highest denial rates. Although these services are listed on PARs submitted to CFMC, the service may not require prior authorization by CFMC (see Table 3.10).

TABLE 3.10 – TOP TEN ADMISSION/TREATMENT/PROCEDURE DENIALS BY PROCEDURE CODE

Service	Number Requested	Units Denied	Denial Rate	Average Unit Cost	Total Cost
Speech/Hearing Therapy	381	381	100%	$59.21	$22,558
Orthoptic/Pleoptic Training	298	298	100%	$27.00	$8,045
Oral Function Therapy	250	250	100%	$24.08	$6,020
Incision of Urethra	104	104	100%	$79.32	$8,249
Apply Neurostimulator	78	78	100%	$12.89	$1,005
Office Consultation	68	68	100%	$106.98	$7,274
Checkout for Orthotic/Prosthetic Use	56	56	100%	$18.59	$1,041
Psychotherapy – In Office	40	40	100%	$59.29	$2,372
Range of Motion Measurements	30	30	100%	$10.70	$321
Strapping of Knee	25	25	100%	$13.22	$331
Totals	**1,330**	**1,330**	**100%**	**NA**	**$57,216**

Out-of-state Elective Admissions

CFMC reviews out-of-state elective inpatient admissions to determine medical necessity as well as to determine whether the procedure is experimental, whether the procedure is a covered Medicaid benefit, and whether the requested care is available within Colorado. A CFMC physician reviewer reviews all prospective out-of-state requests.

The number of out-of-state elective admissions has historically accounted for less than 1% of the prospective reviews requested each year (see Table 3.11).

TABLE 3.11 – PROSPECTIVE OUT-OF-STATE ELECTIVE ADMISSION REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	43	31	30
Medical Denial	4	0	6
Technical Denial	9	7	12
Modified	0	0	0
Not Reviewed	0	1	0
Total Reviewed	**56**	**39**	**48**

Clients living in border communities frequently receive care at hospitals located in one of Colorado's neighboring states. The Department's Border Hospital program allows Colorado clients to receive services at one of these facilities without prior authorization. These admissions only become problematic when one of the rural facilities needs to transfer a client to an urban facility with greater resources and expertise.

Inpatient Mental Health Services

CFMC conducts a review of mental health services for clients excluded from the Colorado Medicaid Community Mental Health program that are under the age of 21 and who may be eligible for additional mental health services. Services beyond the limit for clients enrolled in fee for service must be prior authorized by CFMC, the acute care utilization review contractor for the Department. Regulations limit the number of days a client can spend in an inpatient psychiatric hospital to 45 days per fiscal year. Prospective authorization is required for inpatient mental health services beyond 45 days. Some requests may be the result of a court order, but CFMC has no way of determining whether a court initiated a particular request unless the medical record mentions the order.

Outcomes

As a program designed to assist clients with extended inpatient mental health treatment needs, the number of prospective mental health reviews is expected to be small (see Table 3.12).

TABLE 3.12 – PROSPECTIVE INPATIENT MENTAL HEALTH REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	0	4	0
Medical Denial	0	0	0
Technical Denial	0	0	1
Modified	0	0	0
Not Reviewed	1	1	2
Total Reviewed	**1**	**5**	**3**

Analysis

This program targets clients with specific needs requiring services that are more extensive. The original 45 days of allotted inpatient services meets the needs of most clients. Then they transition to outpatient care.

Inpatient Substance Abuse Rehabilitation Services

To qualify for the inpatient substance abuse rehabilitative program clients must be under age 21, have a history of substance abuse, and an aggravating physical or mental illness that necessitates treatment in an intensive setting. Reviewers with specialized mental health experience and training conduct both substance abuse rehabilitation and mental health service reviews. The Department developed the admission criteria we use to establish medical necessity.

Outcomes

The number of requests was down, from 68 in FY 09 to 60 in FY 10 (see Table 3.13).

TABLE 3.13 – PROSPECTIVE INPATIENT SUBSTANCE ABUSE REHABILITATION REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	66	68	58
Medical Denial	0	0	0
Technical Denial	0	0	2
Modified	0	0	0
Not Reviewed	0	0	0
Total Reviewed	**66**	**68**	**60**

Analysis

Two requests in FY 10 were denied because they were incomplete. The Department may wish to assess the cost effectiveness of continuing these reviews.

Durable Medical Equipment – All Programs

Durable medical equipment (DME) are devices that assist persons to function normally outside a medical facility, can withstand repeated use, and have a defined medical purpose. DME enables clients to remain outside an institutional setting by promoting, maintaining, or restoring health, or by minimizing the effects of illness, disability, or handicapping condition. DME is a Medicaid benefit for eligible clients when ordered by a physician and is part of a comprehensive treatment plan.

CFMC reviews requests for DME that are highly complex or expensive to provide, such as power wheelchairs, power scooters, rehabilitation equipment, respiratory devises, augmentative communication devices, and certain orthotics and prosthetics. Review of these items is complex because each request often includes requests for numerous components and additional accessories. Each item must be reviewed to determine whether the item was prescribed by a physician, is in accordance with current medical standards of practice, is appropriate for the client's clinical condition, and that appropriate alternatives either do not exist or do not meet the client's treatment requirements. CFMC uses a combination of Milliman Care Guidelines and criteria provided by the Department. We review requests to determine medical necessity, but the nurse reviewer cannot deny a DME request. We forward requests that do not meet criteria to physician review to determine medical necessity.

CFMC participates in the monthly DME Advisory Board meeting with the Department in order to continue to interface with providers and the Department, keep abreast of changes, and provide information as needed. Effective FY 10, the Department eliminated prospective authorization requirements for 66 wheelchair repair procedure codes, provided they did not exceed quantity limitations. Repairs for wheelchairs owned by Medicaid clients living in nursing facilities continue to require prior authorization.

Outcomes

CFMC reviewed a record number of prospective DME requests in FY 10. The 5,255 reviews in FY 10 represent a 40% increase, following an 11% increase in FY 09 (see Table 3.14). CFMC

may approve, modify, or deny a request. The entire request is approved if all the equipment requested meets guidelines. If some of the items requested are not medically necessary, we deny those items while approving the necessary items. We refer to this as a modified approval. We deny the entire request if none of the equipment is medically necessary. CFMC will frequently receive a prior authorization request for a device or service that does not require prior authorization or is a fiscal agent review. In FY 10, CFMC recognized 66 prior authorization requests that fell into one of these categories.

TABLE 3.14 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REVIEWS - TOTAL

Review Outcome	FY 08	FY 09	FY 10
Approved	2,587	2,988	3,941
Modified	140	111	221
Medical Denial	7	5	8
Technical Denial	437	516	1,019
Not Reviewed	206	144	66
Total Reviewed	**3,377**	**3,764**	**5,255**
Approval Rate[1]	**77%**	**82%**	**79%**

1. Percentage of requests approved or modified.

We categorize prospective DME requests according to the primary piece of equipment requested. The four primary categories are power wheelchairs, power scooters, orthotics/prosthetics, and communication devices. We place requests that do not fall under one of these categories into the "Other" category. Items such as wheelchair parts and labor, respiratory devices, and rehabilitation equipment fall into this category. Table 3.15 summarizes the number and outcome of the prospective requests conducted during FY 10.

TABLE 3.15 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REQUEST OUTCOMES – TOTAL

DME Category	Approved	Modified	Medical Denial	Technical Denial	Not Reviewed	Total	Approval Rate[1]
Power Wheelchairs	554	129	5	148	4	840	81%
Power Scooters	7	0	0	4	0	11	64%
Orthotics/Prosthetics	2,480	49	0	357	34	2,920	87%
Communication Device	377	12	2	89	4	484	80%
Other[2]	523	31	1	421	24	1,000	55%
Totals	**3,941**	**221**	**8**	**1,019**	**66**	**5,255**	**79%**

1. Percentage of requests approved or modified.
2. Other reviews include requests for wheelchair parts and labor, respiratory devices, and rehab equipment other than orthotics/prosthetics.

Table 3.16 shows the distribution of the requests in FY 10. Requests for power wheelchairs were up slightly, 4%, following a 3% increase in FY 09. Requests for orthotics/prosthetics were up 37%, while costs conserved were down 16%, suggesting both an increase in demand and the appropriateness of requests. Requests for communication devices were up 68% and requests for "Other" DME were up 93% for unknown reasons. The number of power scooter requests continues to be low.

TABLE 3.16 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT ITEM REQUESTS – TOTAL

DME Category	FY 08	FY 09	FY 10
Power Wheelchair	784	809	840
Power Scooter	36	12	11
Orthotics/Prosthetics	1,820	2,136	2,920
Communication Device	276	288	484
Other[1]	461	519	1,000
Totals	**3,377**	**3,764**	**5,255**

1. Other reviews include requests for wheelchair parts and labor, respiratory devices, and rehab equipment other than orthotics/prosthetics.

DME requests usually include more than one unit within each prospective authorization request. Tracking the number and types of equipment requested is useful. For example, an augmentative communication device may include a series of switches, a keyboard mounting system, component software, and a carrying case. Despite a 40% increase in the number of requests (see Table 3.16), the number of individual units requested increased just 13% (see Table 3.17).

TABLE 3.17 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES – TOTAL

Review Outcome	FY 08	FY 09	FY 10
Units Approved	19,661	19,569	22,730
Units Denied	5,126	6,294	6,538
Total Units Reviewed	**24,787**	**25,863**	**29,268**
Percent Approved	**79%**	**76%**	**78%**

Table 3.18 summarizes the types of equipment requested, the number of each, and the review outcome. We review each unit independently and approve or deny each unit.

TABLE 3.18 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES BY CATEGORY – TOTAL

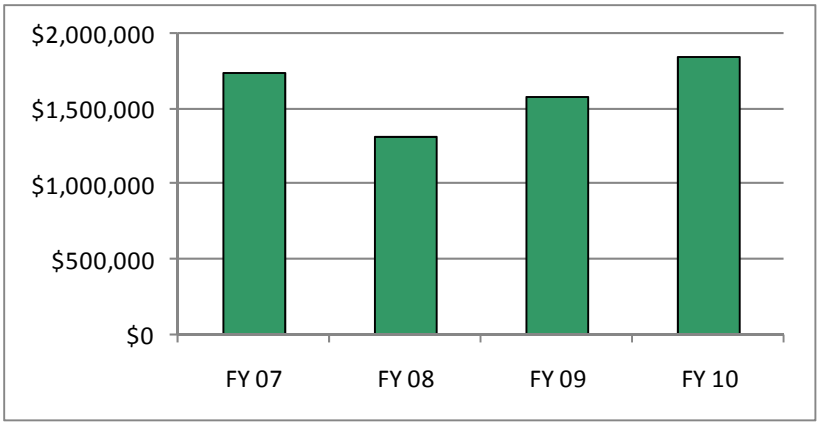
Type of Equipment	Units Approved	Units Denied	Total Units Reviewed	Percentage Approval
Wheelchair Accessory	9,993	2,382	12,375	81%
Labor/Service[1]	4,930	1,757	6,687	74%
Orthotics/Prosthetics	5,178	1,173	6,351	82%
Communication Device	1,419	354	1,773	80%
Power Wheelchair	710	175	885	80%
Respiratory Device	418	270	688	61%
Back-up Manual Wheelchair	3	15	18	17%
Power Scooter	7	4	11	64%
Rehabilitation Equipment	1	1	2	50%
Miscellaneous[2]	71	407	478	15%
Totals	**22,730**	**6,538**	**29,268**	**78%**

1. Service charge for assembly/delivery of power wheelchair.
2. Miscellaneous items are those products, such as safety equipment, that do not fit into an established category.

Impact

CFMC's prospective review of complex DME requests conserved $1,846,587 on items not meeting medical necessity criteria. This 17% increase is a result of the 268% increase in dollars conserved from respiratory device reviews ($671,694 in FY 10). The fiscal impact of the remaining DME categories decreased 16%. The average cost avoided per unit denied declined from $421 in FY 09 to $282 in FY 10. CFMC bases the estimated reduced expenditure for the Department on the average cost of the denied item and does not take into consideration items not requiring prior authorization that may have been provided in lieu of the denied item.

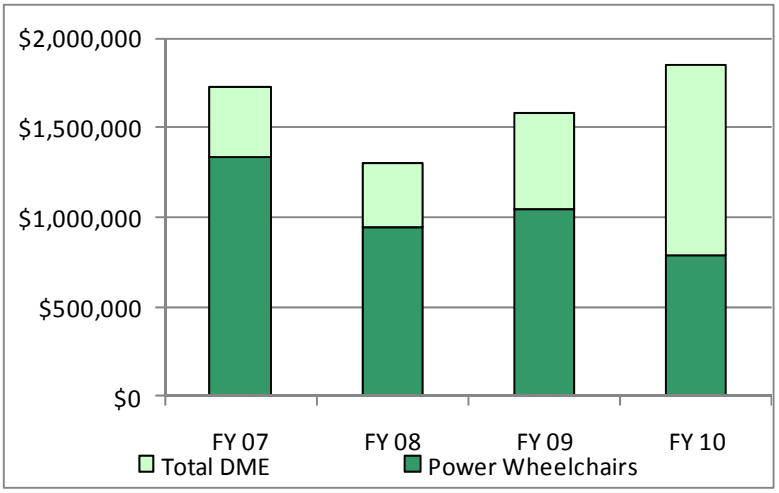
FIGURE 3.2
DOLLARS CONSERVED – PROSPECTIVE DME REVIEW



Power Wheelchairs

Because the costs of basic power wheelchair models start around $3,000, and can surpass $25,000, the Department has been interested in the review of the power wheelchair requests. Historically, cost avoidance from unnecessary power wheelchairs and wheelchair accessories has accounted for at least half the total reduced expenditure for the Department through prospective DME reviews (see Figure 3.3). Of the $1,846,587 in DME costs avoided during FY 10, 43% ($790,875) relate directly to reviews of power wheelchair and power wheelchair accessories. Costs conserved from wheelchair accessories declined by half in FY 10. The number of units denied was essentially unchanged, suggesting that the units were less expensive.

FIGURE 3.3
DOLLARS CONSERVED – POWER WHEELCHAIR REVIEW



Respiratory Devices

Like power wheelchairs, respiratory devices, such as mechanical high frequency chest wall therapy vests, are expensive items with strict clinical criteria. A total of 688 devices were requested in FY 10, just five more than the previous year (see Table 3.19). Of the requests, however, only 61% met review criteria. Denial of the other 270 devices conserved $671,694, almost $2,500 per device. This is five-times the average cost of a declined device in FY 09. This is reflected in the sharp increase illustrated in Figure 3.4.

FIGURE 3.4
DOLLARS CONSERVED – RESPIRATORY DEVICE REVIEW

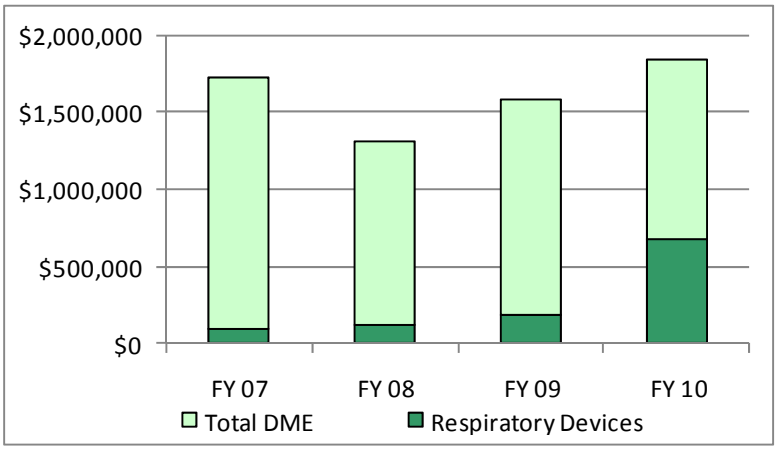


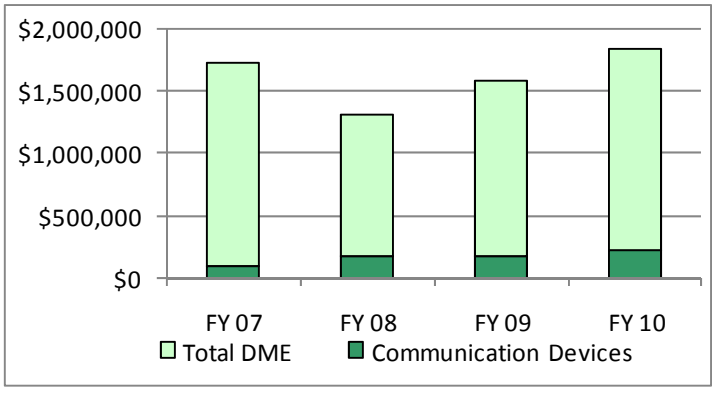
TABLE 3.19 – PROSPECTIVE RESPIRATORY DEVICE REQUEST OUTCOMES – TOTAL

Review Outcome	FY 08	FY 09	FY 10
Units Approved	218	279	270
Units Denied	122	404	418
Total Units Reviewed	**340**	**683**	**688**
Percent Approved	**64%**	**41%**	**61%**

Communication Devices

The number of communication devices reviewed was up 59% in FY 10, but the approval rate declined from 85% in FY 09 to 80% in FY 10. The net result was a slight increase in the dollars conserved, from $164,654 in FY 09 to $222,339 in FY 10. As Figure 3.5 illustrates, the fiscal impact of communication device reviews has been increasing the past several years.

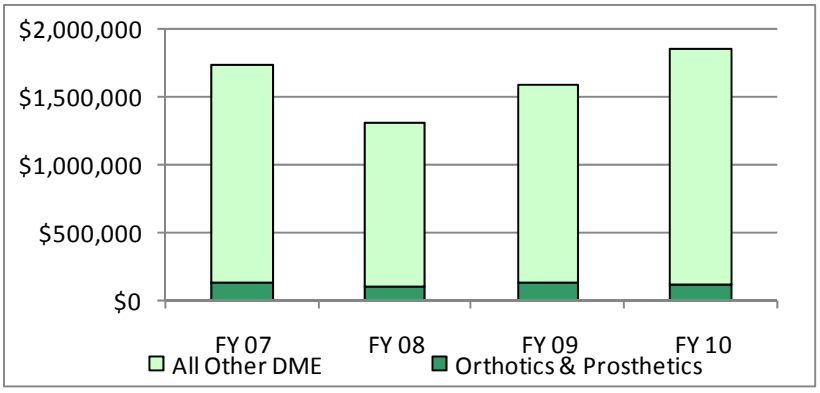
FIGURE 3.5
DOLLARS CONSERVED – COMMUNICATION DEVICES



Orthotics and Prosthetics

Dollars conserved from the prospective review of certain orthotic and prosthetic equipment was down 16% in FY 10, totaling $107,017. The categories of respiratory aids and communication devices greatly surpassed orthotics and prosthetics in terms of dollars conserved. The remaining three categories of DME review (power scooters, labor/service, and "Other" DME) conserved a combined total of $54,662, down 16% following a 16% increase from FY 08 to FY 09.

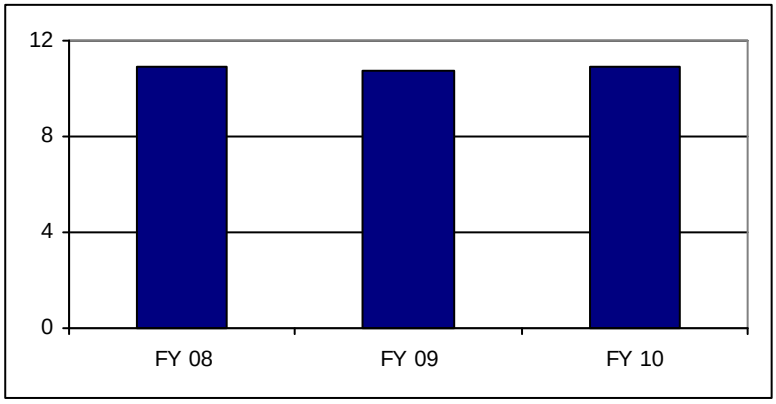
FIGURE 3.6
DOLLARS CONSERVED – ORTHOTIC/PROSTHETIC REVIEW



Analysis

DME requests are complex, often requiring a large number of accessories designed to meet specific needs of individual clients. Several years ago, CFMC noted an increase in the number of units requested for each wheelchair. While these items may improve the health and well-being of the user, CFMC doubled the diligence of its review processes given the increasing number of fraud and abuse cases nationally. Since this time, however, the average number of accessories requested with power wheelchairs has remained essentially unchanged. (see Figure 3.7). The approval rate for power wheelchair accessories remains high (81%), an indication that the additional accessories are medically necessary.

FIGURE 3.7
AVERAGE UNITS REQUESTED PER POWER WHEELCHAIR



To provide insight into the types of services routinely denied, CFMC identified the ten most frequently requested items with the highest denial rates. Although these services are listed on PARs submitted to CFMC, the service may not require prior authorization by CFMC (see Table 3.20).

TABLE 3.20 – TOP TEN DURABLE MEDICAL EQUIPMENT DENIALS BY PROCEDURE CODE

Requested Item	Number Requested	Units Denied	Denial Rate	Average Unit Cost	Total Cost
Enteral Formula	7,884	7,884	100%	$1.54	$12,141
Urinary Catheter Insertion Supplies	1,080	1,080	100%	$6.67	$7,204
Blood Glucose Test Strips	820	820	100%	$31.57	$25,890
Large Absorptive Dressing	720	720	100%	$3.11	$2,239
Infusion Set for External Insulin Pump	571	571	100%	$0.64	$366
Home Infusion Supplies for PICC	366	366	100%	$3,205.04	$1,173,044
Conforming Bandage	360	360	100%	$0.30	$108
Gauze	360	360	100%	$0.05	$18
Lancets	301	301	100%	$10.00	$3,010
Large Gauze	300	300	100%	$0.43	$129
Totals	**12,762**	**12,762**	**100%**	**NA**	**$1,224,149**

CFMC captures the diagnosis codes used for power wheelchair requests. Tracking diagnosis codes enables CFMC to monitor requests for indications of inappropriate activities. Table 3.21 lists the most frequent diagnosis codes and number of clients in each diagnosis code.

TABLE 3.21 – MOST FREQUENT DIAGNOSES FOR POWER WHEELCHAIR REQUESTS

Diagnosis	FY 08	FY 09	FY 10
Cerebral Palsy	102	104	103
Multiple Sclerosis	59	52	63
Chronic Airway Obstruction	33	38	43
Paraplegia	24	22	35
Cerebral Vascular Accident	21	13	24
Progressive Muscular Dystrophy	15	19	21
Quadriplegia C1-C4 – Complete	20	19	21
Quadriplegia – Unspecified	17	7	20
Brain Injury	12	13	15
Osteoarthrosis – Unspecified	15	19	12

Durable Medical Equipment - Adult

CFMC reviews DME prior authorization requests for eligible clients: adult and EPSDT. While the figures in the previous section represented a cumulative total of both programs, the following figures represent the reviews conducted for the adult DME program only. A total of 2,843 adult prospective DME reviews were requested during FY 10 (see Table 3.22).

TABLE 3.22 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REQUEST OUTCOMES – ADULT

DME Category	Approved	Modified	Medical Denial	Technical Denial	Not Reviewed	Total	Approval Rate[1]
Power Wheelchairs	469	94	5	135	4	707	80%
Power Scooters	4	0	0	4	0	8	50%
Orthotics/Prosthetics	1,105	32	0	236	26	1,399	81%
Communication Device	70	1	0	26	0	97	73%
Other[2]	277	26	1	310	18	632	48%
Totals	**1,925**	**153**	**6**	**711**	**48**	**2,843**	**73%**

1. Percentage of requests approved or modified.
2. Other reviews include requests for wheelchair parts and service, respiratory devices, and rehab equipment other than orthotics/prosthetics.

The total number of reviews in FY 10 was up 34% from FY 09 (see Table 3.23). Table 3.23 illustrates that while 27% of requests were either denied or not reviewed, only six of the denials were due to a lack of medical necessity. Review of each item in a DME request also allows for modification or line item denials of accessories or items not medically necessary while allowing approval of the equipment. The objective of the review is always to provide what is medically necessary for the client.

TABLE 3.23 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REVIEWS – ADULT

Review Outcome	FY 08	FY 09	FY 10
Approved	1,338	1,557	1,925
Modified	88	79	153
Medical Denial	4	2	6
Technical Denial	309	383	711
Not Reviewed	130	97	48
Total Reviewed	**1,869**	**2,118**	**2,843**
Approval Rate	**72%**	**77%**	**73%**

As noted previously, a single review may contain requests for more than one accessory or unit on a piece of equipment. The mean number of units per request for the adult program in FY 10 was 6.5, down from 8.3 in FY 09. The average for EPSDT program was 4.5 units.

TABLE 3.24 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES BY CATEGORY – ADULT

DME Category	Units Approved	Units Denied	Total Units Reviewed	Percentage Approval
Wheelchair Accessory	7,062	1,910	8,972	79%
Labor/Service/Repair	3,320	1,379	4,699	71%
Orthotics/Prosthetics	2,508	815	3,323	75%
Power Wheelchair	583	161	744	78%
Communication Device	216	70	286	76%
Respiratory Device	93	157	250	37%
Back-up Manual Wheelchair	3	10	13	23%
Power Scooter	4	4	8	50%
Rehabilitation Equipment	0	0	0	NA
Miscellaneous[1]	36	113	149	24%
Totals	**13,825**	**4,619**	**18,444**	**75%**

1. Miscellaneous items are those products, such as safety equipment, that do not fit into an established category.

The 37% approval rate of respiratory devices in the adult program, representing clients age 21 and over, was half the rate for the EPSDT program, representing clients under age 21, (74%). An investigation identified one provider that requested 84 items, none approved. This represents an opportunity for provider education.

TABLE 3.25 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES – ADULT

Review Outcome	FY 08	FY 09	FY 10
Units Approved	12,160	12,571	13,825
Units Denied	3,563	5,090	4,619
Total Units Reviewed	**15,723**	**17,661**	**18,444**
Percent Approved	**77%**	**71%**	**75%**

Durable Medical Equipment - EPSDT

EPSDT is a preventive program to assist clients under the age of 21 years. This federally mandated program provides clients with equipment and supplies necessary for the treatment, prevention, and alleviation of an illness, injury, condition, or disability. The most common conditions associated with the need for DME equipment are neuromuscular conditions, with cerebral palsy being the most common diagnosis. Table 3.26 highlights both review volume and review outcomes for the EPSDT program during FY 10.

TABLE 3.26 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REQUEST OUTCOMES – EPSDT

DME Category	Approved	Modified	Medical Denial	Technical Denied	Not Reviewed	Total	Approval Rate[1]
Power Wheelchairs	85	35	0	13	0	133	90%
Power Scooters	3	0	0	0	0	3	100%
Orthotics/Prosthetics	1,375	17	0	121	8	1,521	92%
Communication Device	307	11	2	63	4	387	82%
Other[2]	246	5	0	111	6	368	68%
Totals	**2,016**	**68**	**2**	**308**	**18**	**2,412**	**86%**

1. Percentage of requests approved or modified.
2. Other reviews include requests for wheelchair parts and service, respiratory devices, and rehab equipment other than orthotics/prosthetics.

While the number of requests increased 47%, the overall approval rate declined (see Table 3.27).

TABLE 3.27 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT REVIEWS – EPSDT

Review Outcome	FY 08	FY 09	FY 10
Approved	1,249	1,431	2,016
Modified	52	32	68
Medical Denial	3	3	2
Technical Denial	128	134	308
Not Reviewed	76	46	18
Total Reviewed	**1,508**	**1,646**	**2,412**
Approval Rate[1]	**83%**	**89%**	**86%**

1. Percentage of requests approved or modified.

As with all DME prior authorizations, each review may contain requests for more than one piece of equipment. The mean number of units requested per EPSDT DME review was 4.5, 31% fewer than the adult program.

TABLE 3.28 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES BY CATEGORY – EPSDT

DME Category	Units Approved	Units Denied	Total Units Reviewed	Percentage Approval
Wheelchair Accessory	2,931	472	3,403	86%
Orthotics/Prosthetics	2,670	358	3,028	88%
Labor/Service/Repair	1,610	378	1,988	81%
Communication Device	1,203	284	1,487	81%
Respiratory Device	325	113	438	74%
Power Wheelchair	127	14	141	90%
Back-up Manual Wheelchair	0	5	5	0%
Power Scooter	3	0	3	100%
Rehabilitation Equipment	1	1	2	50%
Hearing Device or Service	0	0	0	NA
Miscellaneous[1]	35	294	329	11%
Totals	**8,870**	**1,625**	**10,495**	**85%**

1. Miscellaneous items are those products, such as safety equipment, that do not fit into an established category.

The number of items requested increased 28%, but the approval rate remained the same. Table 3.29 shows the volumes and approval rates for the past three fiscal years.

TABLE 3.29 – PROSPECTIVE DURABLE MEDICAL EQUIPMENT UNIT REQUEST OUTCOMES – EPSDT

Review Outcome	FY 08	FY 09	FY 10
Units Approved	7,501	6,998	8,870
Units Denied	1,563	1,204	1,625
Total Units Reviewed	**9,064**	**8,202**	**10,495**
Percent Approved	**83%**	**85%**	**85%**

Select Non-Emergent Medical Transportation

Federal regulations require that all states receiving federal Medicaid funds ensure Medicaid clients who have no other means of transportation are able to access Medicaid covered services. Colorado uses an approved Medicaid transportation broker for the metro area and the remaining 56 county departments of human/social services are responsible for their respective counties to administer the program. As the Department's designee, CFMC is responsible for reviewing non-emergent air ambulance requests, commercial flights, and meals and lodging requests for recipients and escorts.

In addition, CFMC reviews requests that cost more than the allowed for standard transportation services. These "over-the-cap" reviews are for special situations such as bariatric ambulance and mental health transports. Bariatric ambulances are special ambulances designed to handle obese clients who cannot use a standard ambulance. Mental health transport services are for those clients a risk to themselves or others and required clinical observation during transport. Mental

health transports provide a safe environment for transport to state mental health facilities. Due to the expense of these services ($250 to $600 plus $6 per mile for bariatric services and $550 to $811 for mental health transport to Pueblo), CFMC reviews prior authorization requests to ensure that the client meets all medical necessity criteria for these transports. As with all other prior authorization reviews, failure to respond to requests for missing information necessary to conduct the review results in the issuance of a technical denial.

Outcomes

The number of select non-emergent medical transportation requests increased 33% in FY 10 (see Table 3.30).

TABLE 3.30 – PROSPECTIVE SELECT NON-EMERGENT MEDICAL TRANSPORTATION REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	629	771	991
Modified	9	5	1
Medical Denial	0	0	0
Technical Denial	37	48	107
Not Reviewed	8	19	22
Total Reviewed	**683**	**843**	**1,121**
Approval Rate[1]	**92%**	**92%**	**88%**

1. Percentage of requests approved or modified.

The number of units requested was up 35% (see Table 3.31). Recipient lodging and meal services led the increase, up 110% and 130%, respectively.

TABLE 3.31 – PROSPECTIVE SELECT NON-EMERGENT MEDICAL TRANSPORTATION UNIT REQUEST OUTCOMES BY CATEGORY

Category of Service	Units Approved	Units Denied	Total Units Reviewed	Percent Approved
Lodging – Escort	8,102	3,118	11,220	72%
Meals – Escort	8,435	2,742	11,177	75%
Meals – Recipient	5,569	1,224	6,793	82%
Lodging – Recipient	4,708	1,262	5,970	79%
Air Transport	51	49	100	51%
Travel – Escort	9	72	81	11%
Over-the-cap Ambulance Services	9	1	10	90%
Travel – Recipient	0	0	0	NA
Totals	**26,883**	**8,468**	**35,351**	**76%**

Table 3.32 compares the number of select non-emergent medical transportation units requested during the past three fiscal years, and the approval rate for each year.

TABLE 3.32 – PROSPECTIVE SELECT NON-EMERGENT MEDICAL TRANSPORTATION UNIT REQUEST OUTCOMES

Review Outcome	FY 08	FY 09	FY 10
Units Approved	13,557	20,211	27,052
Units Denied	3,615	6,080	8,468
Total Reviewed	**17,172**	**26,291**	**35,520**
Approval Rate[1]	**79%**	**77%**	**76%**

1. Percentage of requests approved or modified.

Impact

Based on a fee schedule provided by the Department, CFMC is able to estimate the reduced expenditure for the Department from unqualified meal and lodging expenses. The prospective review of non-emergent transportation prevented $204,017 in unnecessary expenditures in FY 10, a 20% increase over FY 09. The increase was largely due to the costs associated with the increased requests for medically unnecessary recipient lodging and meal services. While denied recipient lodging and meals conserved $59,730, denials of escort lodging ($104,101) and escort meals ($38,533) accounted for 70% of total program savings.

Analysis

While the number of recipient lodging and meal services requests were up 110% and 130%, respectively, the approval rates for these services declined to 82% and 79%, respectively. An investigation identified a number of requests for 120 to 365 days of lodging and meals, leading to the increase in units requested. Denial of the excessive units produced the lower approval rate.

To provide insight into the types of services routinely denied, CFMC identified the ten most frequently requested services with the highest denial rates. Although these services are listed on PARs submitted to CFMC, the service may not require prior authorization by CFMC (see Table 3.33).

TABLE 3.33 – TOP TEN NON-EMERGENT MEDICAL TRANSPORTATION DENIALS BY PROCEDURE CODE

Requested Service	Number Requested	Units Denied	Denial Rate	Average Unit Cost	Total Cost
Individual Vehicle – Mile	8,427	8,427	100%	$0.37	$3,118
Taxi	16	16	100%	$47.79	$765
Ambulance Oxygen Supplies	5	5	100%	$10.95	$55
Volunteer Vehicle – Mile	5	5	100%	$0.38	$2
Mini-bus	3	3	100%	$15.43	$46
Travel - Escort	81	72	89%	$14.26	$1,027
Air Transport	100	49	49%	$223.20	$10,937
Lodging Escort	11,220	3,118	28%	$35.73	$111,400
Meals - Escort	11,177	2,742	25%	$15.71	$43,070
Lodging - Recipient	5,970	1,262	21%	$35.66	$45,005
Totals	**37,004**	**15,699**	**42%**	**NA**	**$215,425**

EPSDT Home Health

Early and Periodic Screening, Diagnosis and Treatment (EPSDT) is a federally mandated benefit which provides clients under the age of 21 years with services including equipment and supplies necessary for the treatment, prevention, and alleviation of an illness, injury, condition, or disability. The extraordinary home health services program provides medically dependent children with skilled medical care services and at-home services that cost more than $227 per day. Clients under the age of 21 years may receive a portion of their benefits in a daycare or school setting. Clients receive therapy sessions outside the home setting.

Outcomes

EPSDT Home Health serves the long-term needs of a very specific population. When clients reach the age of 21 years the Department facilitates the transition out of the EPSDT program and into one of the adult service programs, as appropriate. Table 3.34 indicates that the number of PAR requests for EPSDT program services rose 16% in FY 10. This is slightly less than the 22% increase in the number of clients requesting EPSDT services, up from 60 in FY 09 to 73 in FY 10. Because changes in client needs can necessity multiple requests (one client submitted seven requests in FY 10 and three others submitted five requests), the total reviews in Table 3.34 overstate the size of the program.

TABLE 3.34 – PROSPECTIVE EPSDT HOME HEALTH REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	78	96	111
Modified	1	1	0
Medical Denial	0	0	0
Technical Denial	1	3	15
Not Reviewed	19	12	4
Total Reviewed	**99**	**112**	**130**
Approval Rate[1]	**79%**	**87%**	**85%**

1. Percentage of approved or modified

Table 3.35 summarizes the number and types of services reviewed. The type of unit requested is significant because of costs and services rendered by the different levels of care providers. For example, one unit of skilled nursing care includes up to 2.5 hours of service. Certified home health aide services, on the other hand, are calculated differently. The first hour of home health aide during the day is billed as one unit. Each additional 15 minutes of extended home health aide visits required for the same day is also one unit. Each type of unit is paid a different rate.

TABLE 3.35 – PROSPECTIVE EPSDT HOME HEALTH REVIEW OUTCOMES BY CATEGORY

Category of Care	Units Approved	Units Denied	Total Units Reviewed	Percent Approved
Home Health Aide - Extended	89,711	18,188	107,899	83%
Home Health Aide - Basic	24,230	2,584	26,814	90%
Skilled Nursing	12,256	1,308	13,564	90%
Physical Therapy	3,601	538	4,139	87%
Occupational Therapy	2,154	388	2,542	85%
Speech Language Therapy	1,122	178	1,300	86%
Other[1]	546	944	1,490	37%
Totals	**133,620**	**24,128**	**157,748**	**85%**

1. Miscellaneous items are those products, such as safety equipment, that do not fit into an established category.

Table 3.36 indicates that the number of units requested increased 36%, exceeding the 16% increase in the number of requests. The number of units will vary depending on the number of clients in the program and the status of their health. The units denied are due to the submission of retrospective PAR requests or Department administrative denial. CFMC issues technical denials for failure to provide adequate information necessary to conduct the review.

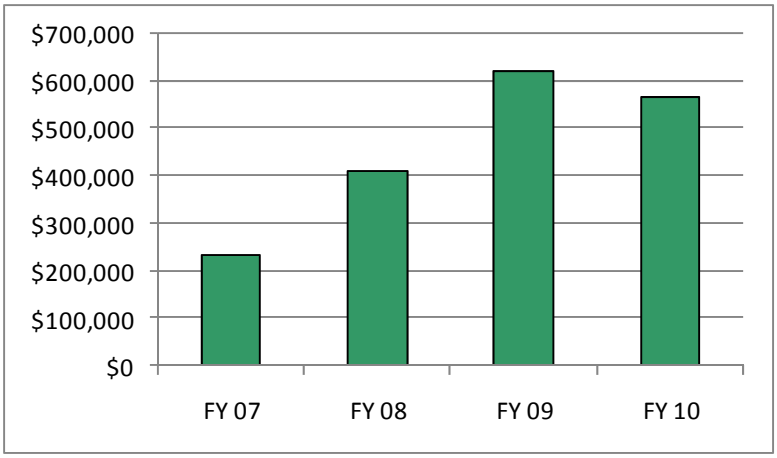
TABLE 3.36 – PROSPECTIVE EPSDT HOME HEALTH SERVICE UNIT REQUEST OUTCOMES

Review Outcome	FY 08	FY 09	FY 10
Units Approved	98,541	91,526	133,620
Units Denied	16,936	24,098	24,128
Total Units Reviewed	**115,477**	**115,624**	**157,748**
Percent Approved	**85%**	**79%**	**85%**

Impact

The home health prospective review process conserved $567,518 in FY 10, a 9% decrease from FY 09 (see Figure 3.8). Costs avoided from unnecessary physical and speech therapies increased 270% and 224%, respectively. Home health aide and skilled nursing visits, however, account for 79% of the costs conserved; $450,912 combined versus $85,047 for physical and speech therapies. Occupational therapies conserved $40,589, up 18% from FY 09.

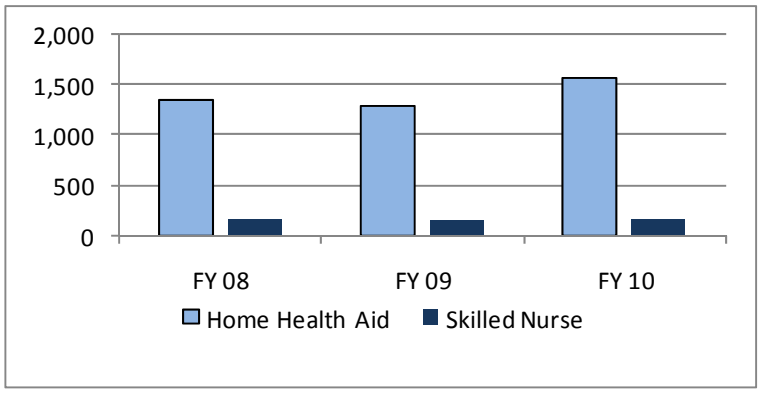
FIGURE 3.8 –
DOLLARS CONSERVED – HOME HEALTH REVIEW



Analysis

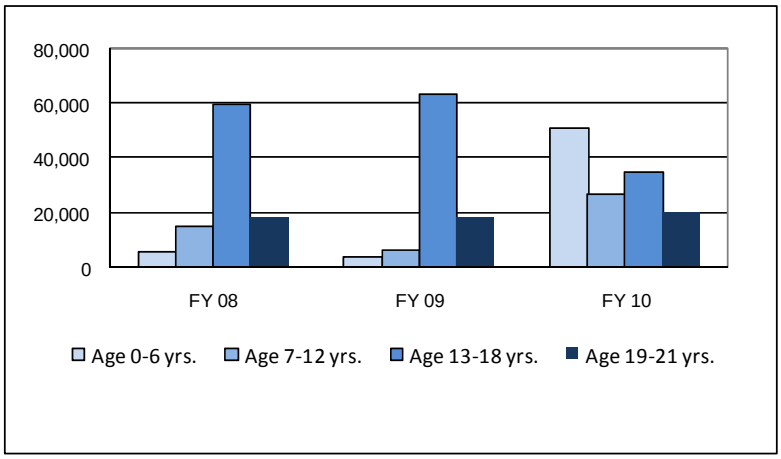
Figure 3.9 illustrates the average number of certified home health aide and skilled nursing services required by each client over the past three fiscal years. The number of clients in the program, as well as changes in individual health status, will affect the number of services required in any particular year. Tracking the ratio of home health aide units and nursing services units over time, however, can provide insight into the efficiency of the program. A higher ratio indicates that certified home health aides are assuming a greater role, providing each service in the most cost-effective manner, while ensuring the appropriate level of care. In FY 10, the average client received 9.3 units of certified home health aide services for every unit of skilled nursing care. This compares favorably to the ratios of 9.2 in FY 09 and 8.4 in FY 08, suggesting an increase in cost effectiveness.

FIGURE 3.9
AVERAGE HOME HEALTH AIDE AND SKILLED NURSING UNITS PER CLIENT



Differences in unit utilization can be seen when clients are categorized by age group (see Figure 3.10). The relationship between age and service requirements can be useful in predicting future demand for services. Historically, clients aged 13-18 years required the largest share of services (69% of the total in FY 09), while those aged 0-6 years required the least (4%). This tread changed in FY 10. Clients aged 0-6 years received 38% of the units approved during FY 10, while clients aged 13-18 received 26%. Since younger clients are likely to require services well into the future, this shift should be monitored to help project future program needs.

FIGURE 3.10 –
NUMBER OF UNITS APPROVED BY AGE CATEGORY



Physical and Occupational Therapy

The Department rules and regulations allow registered practitioners to bill the Department for up to 24 units of service without seeking prior approval. In FY 10, 15 minutes of therapy constituted one unit. Services provided in excess of the first 24 units require providers to receive prior authorization. Independent providers and hospital outpatient providers are required to receive

prospective approval for services beyond the initial 24 units. Physical and occupational therapy services provided to clients in the Developmentally Disabled (DD) Waiver program are also required to receive prospective approval for services for these clients.

Outcomes

Since CFMC began conducting PT/OT prospective reviews, the number of requests has increased an average of 20% per year. The number of requests increased 54% in FY 10 (see Table 3.37). The nature of the clinical conditions treated with PT/OT contributes to historical increases. Clients in this program have long-term needs and most receive maintenance PT/OT services as part of their ongoing treatment plans. Consequently, the number of clients no longer requiring services is outpaced each year by the number of new clients. Every six months we review ongoing services to ensure continued medical necessity and to allow modifications based on the clients' medical needs and progress.

A second factor influenced the rise in requests during FY 10. A few new PT/OT providers submitted a large number of unnecessary PT/OT requests during FY 10, resulting in a nearly three-fold increase in the number of technical denials (see Table 3.37). These requests included the 24 initial units of therapy not subject to review. The Department attempted to clarify the requirements in the January 2010 *Provider Bulletin*. CFMC noticed an immediate positive impact following publication of the bulletin. However, request volumes and denial rates returned to their normal range within a month and in April 2010, CFMC received 16 requests that did not require review.

TABLE 3.37 – PROSPECTIVE PHYSICAL & OCCUPATIONAL THERAPY REVIEWS

Review Outcome	FY 08	FY 09	FY 10
Approved	5,112	6,185	8,479
Modified	197	179	580
Medical Denial	18	0	5
Technical Denial	669	686	1,793
Not Reviewed	11	17	38
Total Reviewed	**6,007**	**7,067**	**10,895**
Approval Rate[1]	**85%**	**90%**	**83%**

1. Percentage of approved or modified.

TABLE 3.38 – PROSPECTIVE PHYSICAL & OCCUPATIONAL THERAPY PROSPECTIVE REVIEW OUTCOMES

Prospective Request	Approved	Modified	Medical Denial	Technical Denied	Not Reviewed	Total	Approval Rate[1]
Physical Therapy	4,917	408	3	1,023	16	6,367	84%
Occupational Therapy	3,562	172	2	770	22	4,528	82%
Totals	**8,479**	**580**	**5**	**1,793**	**38**	**10,895**	**83%**

1. Percentage of requests approved or modified.

Physical and occupational therapy reviews are complex due to the number of units requested. The average number of units requested per review in FY 10 was 150, down from 166 in FY 09 and 168 in FY 08. CFMC expects yearly variation because the appropriate number of therapy intervention units depends on the client's condition. For example, an adult with a knee replacement will require less therapy than a child with a diagnosis of cerebral palsy, who may require numerous interventions for a long period. The approval rate of 58% in Table 3.39 indicates that almost half of the total units requested did not meet medical necessity criteria.

TABLE 3.39 – PROSPECTIVE PHYSICAL & OCCUPATIONAL THERAPY UNIT REQUEST OUTCOMES

Category of Therapy	Units Approved	Units Denied	Total Units Reviewed	Percent Approved
Physical Therapy	517,977	392,030	910,007	57%
Occupational Therapy	430,258	289,490	719,748	60%
Totals	**948,235**	**681,520**	**1,629,755**	**58%**

The percentage of units approved reached was its highest level in three years (see Table 3.40).

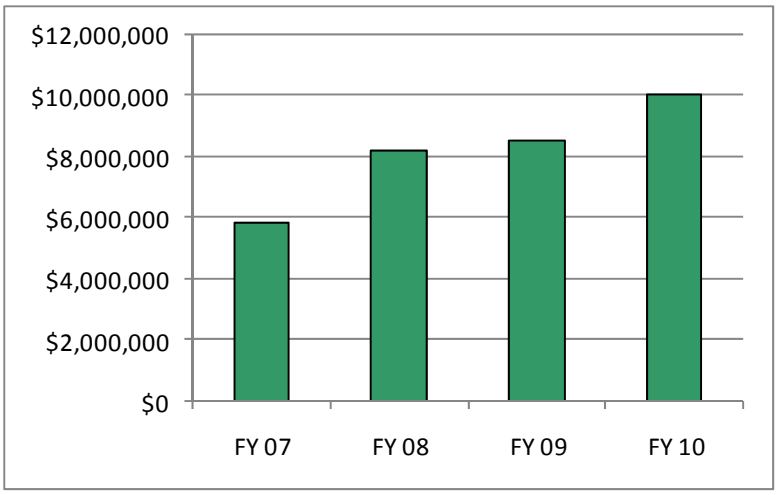
TABLE 3.40 – COMBINED PHYSICAL & OCCUPATIONAL THERAPY UNIT REQUEST OUTCOMES

Review Outcome	FY 08	FY 09	FY 10
Units Approved	312,371	634,193	948,235
Units Denied	495,289	536,818	681,520
Total Units Reviewed	**807,660**	**1,171,011**	**1,629,755**
Percent Approved	**39%**	**54%**	**58%**

Impact

Costs avoided continue to increase (see Figure 3.11). Since CFMC began conducting prospective reviews of PT/OT in FY 04, reduced expenditures have increased by an annualized rate of 50% per year, from $870,273 in FY 04 to $10,076,027 in FY 10. In FY 10, the fiscal impact of PT/OT reviews was 74% of the prospective review total and 60% of the CFMC Review Services total.

FIGURE 3.11 –
COSTS AVOIDED – PROSPECTIVE PT/OT REVIEW



Analysis

To better understand the dynamics of the program, CFMC looked at the most frequent conditions and/or diagnoses associated with each therapy modality. Tracking enables CFMC to monitor requests for indications of inappropriate activities. Table 3.41 lists the most frequent diagnosis codes used in FY 10 and number of requests for each over the past three fiscal years.

TABLE 3.41 – MOST FREQUENT DIAGNOSES FOR PHYSICAL THERAPY REQUESTS

Diagnosis	FY 08	FY 09	FY 10
Lack of Coordination	211	275	337
Lumbago	125	157	336
Cerebral Palsy	205	233	310
Joint Pain – Leg	124	138	234
Lack of Normal Physiological Develop	121	229	228
Other Physical Therapy	33	50	218
Developmental Coordination	110	150	172
Mixed Development Disorder	153	84	164
Delayed Milestones	72	133	155
Cervicalgia	83	91	150

Lack of coordination is the most common condition cited on the requests. In fact, half of the top ten reasons given for therapy are not definitive diagnoses, but instead are symptoms, signs, and ill-defined conditions of a wide range of potential diagnoses. The use of these non-specific codes has increased over time, with "Other Physical Therapy" now the sixth most common code used to justify treatment. While the official ICD-9-CM outpatient coding guidelines allow these conditions to be coded, the use of precise ICD-9-CM diagnosis codes and complete documentation describing the patient's condition, will better enable CFMC and the Department to determine the appropriateness of therapy and potentially identify alternative treatments and/or additional program and service opportunities.

TABLE 3.42 – MOST FREQUENT DIAGNOSES FOR OCCUPATIONAL THERAPY REQUESTS

Diagnosis	FY 08	FY 09	FY 10
Lack of Coordination	395	378	604
Mixed Development	153	186	382
Lack of Normal Physiological Develop	173	336	360
Delayed Milestones	121	193	287
Unspecified Lack of Normal Develop	33	41	193
Infantile Autism	52	102	186
Autistic Disorder	103	121	172
Down's Syndrome	108	82	156
Development Coordination	61	80	144
Development Delay	42	75	142
Feeding Problem	74	109	142

To provide insight into the types of services routinely denied, CFMC identified the ten most frequently requested services with the highest denial rates. Although these services are listed on PARs submitted to CFMC, the service may not require prior authorization by CFMC (see Table 3.43).

TABLE 3.43 – TOP TEN PHYSICAL/OCCUPATIONAL THERAPY DENIALS BY PROCEDURE CODE

Requested Service	Number Requested	Units Denied	Denial Rate	Average Unit Cost	Total Cost
Range of Motion Measurements	800	800	100%	$11.27	$9,016
Orthoptic/Pleoptic Training	298	298	100%	$27.00	$8,045
Apply Neurostimulator	78	78	100%	$12.89	$1,005
Office Consultation	68	68	100%	$106.98	$7,274
Checkout for Orthotic/Prosthetic Use	56	56	100%	$18.59	$1,041
Range of Motion Measurements	30	30	100%	$10.70	$321
Prosthetic Training	20	20	100%	$20.07	$401
Active Wound Care – Small	16	16	100%	$33.48	$536
Office/Outpatient Visit	12	12	100%	$78.54	$942
Anal/Urinary Muscle Study	6	6	100%	$76.35	$458
Totals	**1,384**	**1,384**	**100%**	**NA**	**$29,039**

Diagnostic Imaging

Effective August 1, 2009, physician offices, free-standing radiology centers or agencies that bill using the 837P transaction or the Colorado 1500 paper claims form were required to obtain prior authorization for all PET scans and non-emergent CT and MRIs. Emergent situations that require immediate medical intervention are exempt from the prospective review requirement. Also exempt are emergency room, observation, and inpatient imaging procedures. In order to establish medical necessity, requests must include the client's history, physical findings, preliminary diagnosis, pertinent laboratory/pathology results, and any previous radiology reports.

Outcomes

Being the first year, CFMC expected a large number of requests for procedures not requiring prospective authorization (see Table 3.44). Questions about the review program increased the number of calls CFMC received from providers. These provided an opportunity to educate providers about program requirements and submission options. By the end of FY 10, providers submitted 61% of diagnostic imaging requests electronically via a secured Web portal, compared to 23% for the other prospective review programs.

TABLE 3.44 – PROSPECTIVE DIAGNOSTIC IMAGING REVIEWS

Review Outcome	FY 10
Approved	2,899
Modified	22
Medical Denial	82
Technical Denial	1,354
Not Reviewed	638
Total Reviewed	**4,995**
Approval Rate[1]	**58%**

1. Percentage of approved or modified.

Table 3.45 summarizes the number and types of services reviewed.

TABLE 3.45 – PROSPECTIVE DIAGNOSTIC IMAGING REQUEST OUTCOMES BY CATEGORY

Imaging Category	Approved	Modified	Medical Denial	Technical Denial	Not Reviewed	Total	Approval Rate[1]
MRI Scans	1,714	9	33	751	264	2,771	62%
CT Scans	870	10	29	413	277	1,599	55%
PET	248	0	18	57	18	341	73%
CTA Scans	32	1	0	24	20	77	43%
MRA Scans	35	2	2	20	9	68	54%
Other[2]	0	0	0	89	50	139	0%
Totals	**2,899**	**22**	**82**	**1,354**	**638**	**4,995**	**58%**

1. Percentage of requests approved or modified.
2. "Other" includes procedures not reviewed by CFMC.

Impact

The diagnostic imaging prospective review process conserved $578,260 in FY 10. MRI scans ($369,098) and CT scans ($127,352) accounted for 64% and 22% of the savings, respectively. This translates to $147 and $96 conserved per review of these two services, respectively.

Analysis

To provide insight into the types of services routinely denied, CFMC identified the ten most frequently requested services with the highest denial rates. Although these services are listed on PARs submitted to CFMC, the service may not require prior authorization by CFMC (see Table 3.46).

TABLE 3.46 – TOP TEN DIAGNOSTIC IMAGING DENIALS BY PROCEDURE CODE

Requested Service	Number Requested	Units Denied	Denial Rate	Average Unit Cost	Total Cost
X-ray Ribs	40	40	100%	$22.89	$916
CT Scan of Thoracic Spine	5	5	100%	$239.08	$1,195
MRI of Orbit, Face and/or Neck	3	3	100%	$461.34	$1,384
MRA of Upper Extremity	3	3	100%	$362.58	$1,088
CT of Cervical Spine	3	3	100%	$240.00	$720
CT of Lower Extremity	3	3	100%	$237.07	$711
MRI of Jaw Joint	2	2	100%	$138.92	$278
Echo Exam of Fetal Heart	2	2	100%	$117.66	$235
Cardiac MRI	1	1	100%	$857.95	$858
CT Chest Spine	1	1	100%	$237.07	$237
Totals	**63**	**63**	**100%**	**NA**	**$7,622**

Reconsiderations and Appeals

Prospective reviews contain program costs for the Department by denying inappropriate services. CFMC makes every effort to gather complete and accurate information in order to make appropriate medical necessity determinations for services requested for each Medicaid client. Providers and clients have the right to appeal the medical necessity decision to CFMC if they do not agree with the initial review outcome. We consider all new information provided as part of the appeal. For example, an update of the client's condition may make the request medically justified. We forward the additional information along with the original review and documentation to another specialty-matched physician reviewer for a second opinion. If upheld, the client has the right to appeal CFMC's decision to an administrative law judge (ALJ) hearing.

When notified of a hearing, CFMC provides the Department with all prior authorization encounter information for a two-year period. We forward the description of the specific aspects of the appealed case and reason(s) for denial including deidentified physician comments to the Department. CFMC then collaborates with the Department prior to the hearing for documentation needs and is available to discuss the case and address any questions. When requested, CFMC's clinical review staff is available to provide testimony in support of the review determination process.

CHAPTER 4

RETROSPECTIVE REVIEW HIGHLIGHTS

CFMC completed 4,000 retrospective reviews of inpatient stays in FY 10. Retrospective reviews enable the Department to contain inpatient costs while ensuring high quality of care by identifying inappropriate admissions, unnecessary treatment, and incorrect coding and billing. CFMC calculations show that these reviews identified $3,301,079 in inappropriate payments that the Department is entitled to recover. These figures are based on CFMC review determinations and do not reflect later administrative payment determinations by the Department or fiscal agent.

Retrospective reviews examine medical records to ensure the care paid for was medically necessary, required acute level of care, was coded correctly, and free from quality of care concerns. If a provider is unable to produce evidence to support the payment received, the Department is entitled to recover the excess payments. Denial of the entire claim results in the return of all funds, while modification results in adjusted payment to reflect the correct payment of the care provided based on the documentation available.

CFMC presents the results of the retrospective review findings to the Department to assist the Department in determining future review selection. The report highlights providers and DRGs with the highest number of payment errors resulting in payment changes. The percentage of claims with identifiable errors was 11% in FY 10, down from 13% in FY 09. Every year CFMC analyzes data from previous years to identify trends and identify areas with the greatest potential for fiscal impact. We present these findings to the Department and, working together, modify the methodology used to focus future chart review on areas with the highest potential for error.

CFMC reports all review data to the Department. The Department works with the fiscal agent to recover any funds unsupported by the medical record. CFMC calculates that its retrospective review activities identified $3,301,079 in unsubstantiated payments. In FY 10, the number of admission denials decreased from 48 to 29, a 40% decline from FY 09 (see Table 4.1). The number of billing error denials decreased 12%, from 412 to 361, while technical denials were down 14%, from 65 in FY 09 to 56 in FY 10. The number of DRG changes continues to be small (see Table 4.2), but they were responsible for a savings of $206,805 (see Table 4.3).

As of September 24, 2010, the Department had recovered $2,669,363. The remaining $631,716 (19%) represents unrealized savings to which the Department is still entitled. The ratio between realized and unrealized savings in FY 10 was more than 4:1.

TABLE 4.1 – NUMBER AND DISTRIBUTION OF RETROSPECTIVE REVIEW OUTCOMES

Final Review Outcome	FY 08		FY 09		FY 10	
Approved[1]	3,384	84%	3,491	87%	3,554	89%
Admission Denial	57	1%	48	1%	29	1%
Technical Denial	112	3%	65	2%	56	1%
Billing Error Denial	453	12%	412	10%	361	9%
Total Reviews	**4,006**		**4,016**		**4,000**	

1. See Table 4.2 for DRG changes.

TABLE 4.2 – NUMBER AND FREQUENCY OF CODING CHANGES

Change Type	FY 08		FY 09		FY 10	
DRG Change[1]	33	1%	35	1%	31	1%
Total Changes	**33**	**1%**	**35**	**1%**	**31**	**1%**

1. These cases met medical necessity and level of care criteria, but were coded incorrectly.

TABLE 4.3 – RETROSPECTIVE REVIEW IMPACT – EXPECTED[1]

Review Impact	FY 07	FY 08	FY 09	FY 10
Admission Denial Savings	$183,279	$199,927	$167,367	$83,323
Technical Denial Savings	$841,709	$667,091	$311,547	$386,175
Billing Error Denial Savings	$1,544,118	$1,977,770	$2,506,907	$2,624,776
DRG Change Savings[2]	$47,273	$144,484	$215,047	$206,805
Total Retrospective Review Savings	**$2,616,379**	**$2,989,272**	**$3,200,868**	**$3,301,079**

1. Savings the Department has the right to expect. Actual savings may be realized or unrealized at the time of this report.
2. DRG changes can increase or decrease reimbursement to the provider.

TABLE 4.4 – RETROSPECTIVE REVIEW COST RATIOS

Key Retrospective Review Ratios	FY 07	FY 08	FY 09[1]	FY 10
Costs Avoided Per Review	**$649**	**$746**	**$797**	**$825**

1. The FY 09 annual report mistakenly reported the review cost ratio as $789.

Retrospective Review – Discussion

Retrospective review of paid hospital claims allows the Department to control acute care costs while ensuring quality of care. CFMC's review process focuses on medical necessity and the appropriateness of the level of care provided within the hospital and the correct DRG assignment. CFMC's process also allows us to identify inappropriate payments and potential quality concerns. The Department is able to use this information to recover improper payments while looking towards quality improvement opportunities.

Occasionally, a client is readmitted to the hospital shortly after being discharged. If the readmission is related to the original hospitalization, and occurs within 24 hours of discharge, Department policy requires hospitals to bill the two admissions as a single hospital stay. Effective July 1, 2009, all such claims were denied unless the readmission was completely

unrelated to the first admission. Prior to FY 10, CFMC reviewed readmissions for medical necessity and compliance with billing requirements. Beginning July 1, 2009, CFMC also reviewed readmissions to determine if the two admissions were for related care. Facilities may appeal a readmission denial through the normal reconsideration process.

A revised reimbursement policy for hospitalizations involving avoidable errors went into effect October 1, 2009. In keeping with national efforts to protect patient safety and ensure high quality care, Colorado Medicaid will not cover any additional costs resulting from the 12 serious reportable events identified by the Centers for Medicare & Medicaid Services. These events include hospital-acquired injuries, death or disability associated with incompatible blood, and surgical site infection following certain surgical procedures. In addition, costs for surgery performed on the wrong body part, surgery performed on the wrong patient, and wrong surgical procedure on a patient are not reimbursed. No serious reportable events were identified during the retrospective review process in FY 10.

The Review Process

CFMC uses nationally recognized Milliman Care Guidelines to assess the appropriateness of the care provided. These guidelines use the latest medical knowledge, ensuring that the care is patient focused, of high quality, and resource efficient. Use of Milliman Care Guidelines for medical services review makes sure Colorado Medicaid clients receive optimal health care treatment in the most cost effective manner. Registered nurse review coordinators review selected medical records for the following elements:

- Documentation – Assurance that required elements of the medical record have been provided
- Medical necessity – Verification that the hospitalization was medically justified
- Level of care – Verification that the client's treatment required inpatient admission
- Quality of care – Screening to determine the client received quality care
- Correct DRG assignment – Validation that the diagnosis/procedure coding was appropriate
- Medical benefit coverage – Verification that the service was a Medicaid benefit

We check records upon receipt to guarantee that the documentation necessary for review is present. If the facility fails to supply the necessary documentation within the required period, we issue a technical denial and notify the Department that recovery of payment is justified. A technical denial means the facility was not able to substantiate the care for which it was paid. Facilities are notified of technical denials and given the right to have the case reopened by supplying all missing information within Department specified timeframes.

When the necessary documentation is present, the nurse reviewer applies Milliman Care Guidelines to each case to determine if the hospitalization was medically necessary and if the level of care provided within the facility was appropriate. The additional elements of review are completed and, if all screening guidelines are deemed met, the nurse reviewer approves the

admission. In FY 10, the nurse reviewer approved 89% of the reviews conducted and no additional action was required.

If the medical necessity, appropriateness of care, or level of care does not meet Milliman Care Guidelines, we refer the case to a CFMC licensure-matched physician for review. Physician reviewers are Colorado licensed and board certified practicing physicians trained by CFMC for medical review. If the physician reviewer determines that the care was appropriate and medically necessary, we approve the admission and take no further action. If the physician reviewer determines that the admission was not medically necessary, or that the level of care was not appropriate for the client's condition, we deny the admission. We send a letter explaining the reason for the denial to the facility, attending physician and client. We also notify the Department of the denial and the potential to recover payment.

TABLE 4.5 – NUMBER AND FREQUENCY OF REFERRALS TO PHYSICIAN/ CODING REVIEWERS

Reason for Referral	FY 08[1]		FY 09[1]		FY 10[1]	
Medical Necessity of Admission	128	3%	123	3%	74	2%
Potential Quality of Care Problem	73	2%	55	1%	22	1%
Coding (DRG) Issue[2]	37	1%	21	1%	9	<1%
Total Referrals	**238**	**6%**	**199**	**5%**	**105**	**3%**

1. Percent of the total retrospective reviews.
2. DRG issues which require a coding specialist; most DRG changes are technical changes made by an RN.

Quality Review Process

In addition to medical necessity and level of care guidelines, we screen each case for quality of care. If the care provided fails the quality of care screen, the nurse reviewer refers the case to a CFMC licensure-matched physician reviewer for a final determination. Physician reviewers also may identify a quality of care concern. During FY 10, reviewers identified 22 cases of potential quality issues. Further physician review verified quality concerns in eight cases. Providers appealed all eight cases, providing additional information during the appeal process. CFMC sent these cases to another specialty-matched physician for a final determination. The second physician reviewer upheld each case. Analysis of facility, practitioner or type of case selection identified no trends. Quality of care referrals do not impact payment, but provide insight into areas requiring additional provider education.

DRG Validation Review

The primary Medicaid reimbursement method used by Colorado acute care facilities is the diagnosis related group (DRG) payment system. The DRG classification system allows inpatient providers to categorize patients by diagnoses, treatment, and resource consumption. Under this system, providers receive a predetermined, fixed payment based on the DRG for each admission. The DRG payment system has been shown to be both statistically and medically meaningful. That is, patients within a given DRG tend to have similar clinical conditions and consume similar resources as measured by both length of stay and cost.

Reimbursement for most hospitals relies on the DRG rate set by Medicare. Rehabilitation and pediatric hospitals use a slightly different system. Each DRG has an assigned weight used for payment calculation at these facilities. The weight of the DRG is multiplied by the facility's base rate to determine actual reimbursement. Facilities have different base rates because they differ in the number, type, and complexity of cases they handle. Hospitals that typically treat cases that are more complicated have higher base rates to cover the costs of the added care required. At the request of the Department, CFMC periodically updates each facility's case mix index.

The nurse reviewer examines each case to determine correct billing according to 10 CCR 2505-10, Section 8.300 Hospital Services and Colorado Medicaid Provider Bulletins. Nurse reviewers refer questionable DRGs to a CFMC coding specialist for review. The coding specialist determines the DRG best supported by the information available in the medical record. If the DRG is incorrect, we notify the Department of the potential adjustment. Changing a DRG determination is different from a denial in two regards. First, unlike a denial, a DRG change does not deny the entire payment. Only the difference between the correct DRG and the billed DRG is recoverable. Second, the correct DRG may indicate that the facility is due more money.

Medical Record Review Selection

Retrospective review of every acute care admission would be prohibitively expensive. Given the resources available, the Department contracted with CFMC to conduct 4,000 retrospective reviews of the total admissions during FY 10. This relatively small number of reviews requires effective sampling to achieve maximum efficacy. CFMC and the Department work together to continually refine the sampling method to balance effectively the value of focused and random review selections. During FY 10, CFMC completed 4,000 unduplicated reviews (see Table 4.6).

TABLE 4.6 – NUMBER AND DISTRIBUTION OF SAMPLING CRITERIA

Sampling Criteria	FY 08		FY 09		FY 10	
Provider Focus	1,872	45%	2,028	49%	1,773	44%
DRG Focus	976	24%	459	11%	1,118	28%
Readmissions[1]	649	16%	899	22%	533	13%
Focused Inliers[2]	176	4%	316	8%	373	9%
Random Selection	374	9%	379	9%	231	6%
Rehabilitation Readmission[3]	6	0%	-	-	6	<1%
DRG Outlier Focus without CC	86	4%	59	1%	1	<1%
Total Selections	**4,139**		**4,140**		**4,035**	
Total Unduplicated Cases[4]	**4,006**		**4,016**		**4,000**	

1. Readmissions are claims for the same patient readmitted to the same provider within 24 hours, excluding routine deliveries.
2. Focused inliers are hospital stays of less than two days, excluding routine deliveries and dialysis claims.
3. Rehabilitation related DRG codes 861, 867, 868, 869, and 871.
4. Overlap in sampling criteria means a single case may be selected for review more than once. Because duplicate cases are only reviewed once, CFMC over samples (4,035 in FY 10) to ensure contracted review volumes are met. Eight DRG focus selections and 27 provider focus selections were readmissions and reviewed as readmissions.

Focused reviews target specific types of cases known to, or expected to, contain a large number of errors based on previous review data. Almost half of the cases reviewed in FY 10 focused on the 22 facilities with the highest denial rate. Fourteen of the facilities were high volume providers.

During the fiscal year, reviews also focused on 13 DRGs with historically high error rates, those with high volume and high costs, and those with low volume and high costs.

Readmissions refer to clients who return to the hospital within 24 hours of discharge with the same DRG or conditions related to the principal diagnosis of the initial stay. The Department provided clarification in the July 2009, *Provider Bulletin*.

In addition to focused reviews, we selected a random sample of claims for review. Random sample review provides timely information that allows CFMC and the Department to better focus ongoing review activities. After conducting the selected intensified review, data analysis can identify potential causes and contributing factors for billing errors and/or utilization denials. Based on this analysis, the Department can take appropriate actions, such as provider education.

Readmission Reviews

In early FY 10, readmission selections were based on clients readmitted to the same facility within one calendar day of their initial discharge, and excluded routine deliveries (DRG 370-375). After consulting with the Department, CFMC refined the readmission selection process to conform to policy clarifications highlighted in the Department's *Provider Bulletin* and *Outpatient/Inpatient Billing Manual*. Effective November 2009, CFMC no longer excluded routine deliveries from readmission reviews. A second refinement was made in April 2010. Subsequent readmission selections were limited to readmissions to the same facility within 24 hours of the discharge time on the first admission's claim. Because providers have 30 days to respond to a medical record request, and CFMC has 30 days to complete the review following receipt of the medical record, the impact of these changes began two months later, in January and June 2010, respectively.

For every readmission identified, two reviews are conducted, one of the first admission and one of the second. Of the 287 readmission pairs reviewed in FY 10, 104 (36%) met medical necessity, utilization, and quality of care criteria. Of the 183 cases with an error, almost all (99%) met the Department's criteria as one continuous event billed as two separate stays. The other 1% was either outpatient billed as inpatient, a technical denial, or a confirmed quality of care concern.

An examination of the 287 cases found that 176 (61%) of the readmissions occurred within 24 hours of the initial discharge. Of these reviews, 20 (11%) were approved while 156 (89%) resulted in an adverse outcome. The value of the reviews can be assessed by looking at the total costs recovered, average per denial, and average per review. The total cost savings from the 156 readmissions within 24 hours was $1,184,940, an average of $7,596 per case. Errors in the 27 reviews of readmissions greater than 24 hours totaled $195,059, with a slightly lower average of $7,224 per case.

Impact Calculation Methodology

CFMC's Medicaid retrospective review program saves the Department money by identifying inappropriate admissions and inaccurate coding or billing that can result in the recovery of payments. For retrospective reviews, we used paid claims data to calculate savings. The ability to determine the actual dollar amount recovered improves the accuracy of the impact assessment. Savings are based on CFMC review determinations and do not reflect later administrative payment determinations by the Department or fiscal agent.

Retrospective reviews can have a financial impact in one of four ways:

- Admission denial – Acute care admission deemed not medically necessary
- Technical denial – Failure of provider to supply documentation supporting the admission
- Billing error – Improperly billed admission resulting in denial of entire claim
- DRG change – Reassignment of the DRG based on evidence contained in the medical record

When an admission is denied or a technical denial is declared, the entire amount of the admission claim is recoverable. While some billing errors, such as incorrect dates of service, do not affect reimbursement, only billing errors expected to recover money have been included in impact calculations. Unlike a denial, a DRG change may result in either an increased or a decreased payment to the facility. The financial impact of a DRG change is the difference between the amount originally paid and the amount review deemed correct.

Realized Versus Unrealized Savings

CFMC reports the results of retrospective reviews to the Department for claim adjustment. When the fiscal agent recovers payment from the hospital, the savings are "realized." "Unrealized" savings occur if no adjustment to the claim occurs, or if the hospital receives payment following the initial adjustment. For this report, CFMC compared the expected savings from retrospective reviews with the paid claims available on September 24, 2010 to determine the amount of savings realized.

Retrospective Review Activity Outcomes

The percentage of inappropriate claims declined to 11% (see Table 4.7). This means that 89% of claims reviewed met medical necessity criteria. CFMC, however, continues to analyze the data to identify trends and increase the efficacy of the sampling process. Analysis of this data identified readmissions as having the largest percentage of errors at 34%, with focused DRG at 31% and provider focus at 23%. These three focus areas generated 88% of the denials in FY 10.

TABLE 4.7 – NUMBER AND DISTRIBUTION OF REVIEW OUTCOMES

Review Outcomes	FY 08		FY 09		FY 10	
Approved[1]	3,384	84%	3,491	87%	3,554	89%
Admission Denial	57	1%	48	1%	29	1%
Technical Denial	112	3%	65	2%	56	1%
Billing Error Denial	453	12%	412	10%	361	9%
Total Reviews	**4,006**		**4,016**		**4,000**	

1. An approved admission may still be subject to a DRG change.

Impact

The Department has the potential to recover $3,301,079 it paid for medically unnecessary acute care services during FY 10 (see Table 4.8). Of that amount, the Department recouped $2,669,363 as of September 24, 2010, leaving $631,716 (19%) un-recouped. This is an improvement from the $1,184,401 (37%) un-recouped dollars in FY 09.

TABLE 4.8 – RETROSPECTIVE REVIEW IMPACT – EXPECTED[1]

Retrospective Review Impact	FY 07	FY 08	FY 09	FY 10
Admission Denial Savings	$183,279	$199,927	$167,367	$83,323
Technical Denial Savings	$841,709	$677,091	$311,548	$386,175
Billing Error Denial Savings	$1,544,118	$1,977,770	$2,506,907	$2,624,776
DRG Change Savings[2]	$47,273	$144,484	$215,047	$206,805
Total Retrospective Review Savings	**$2,616,379**	**$2,989,272**	**$3,200,869**	**$3,301,079**

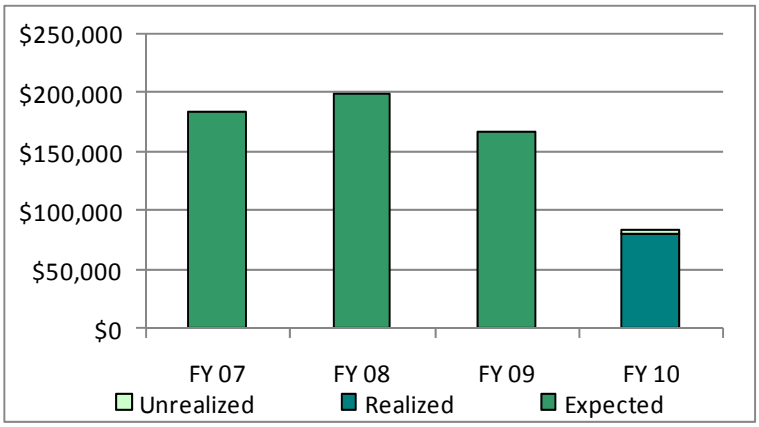
1. Savings the Department has the right to expect. Actual savings may be realized or unrealized at the time of this report.
2. Savings are a result of DRG changes made to approved admissions.

Below we discuss the financial impact of the four retrospective review outcomes. To maintain consistency between reports, CFMC reports only the expected savings from previous fiscal years. The realized savings for FY 10 were as of September 24, 2010.

Admission Denials

Of the 4,000 retrospective reviews, CFMC denied 29 because the documentation failed to support the need for inpatient level medical care. This is 40% few than the 48 denials in FY 09. The $83,323 expected costs recovered were about half the total from FY 09. The Department realized about 97% of the savings as of September 24, 2010 (see Figure 4.1).

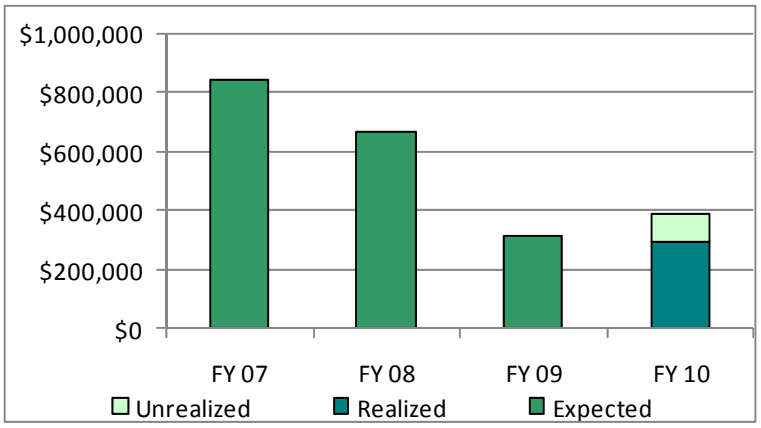
FIGURE 4.1 –
COSTS AVOIDED – RETROSPECTIVE ADMISSION DENIALS



Technical Denials

The number of technical denials was down 14% in FY 10 (see Table 4.7 on page 46) while the dollars saved were up 28% (see Figure 4.2). Of the $386,175 expected savings identified in FY 10, the Department realized $293,694 (76%) as of September 24, 2010.

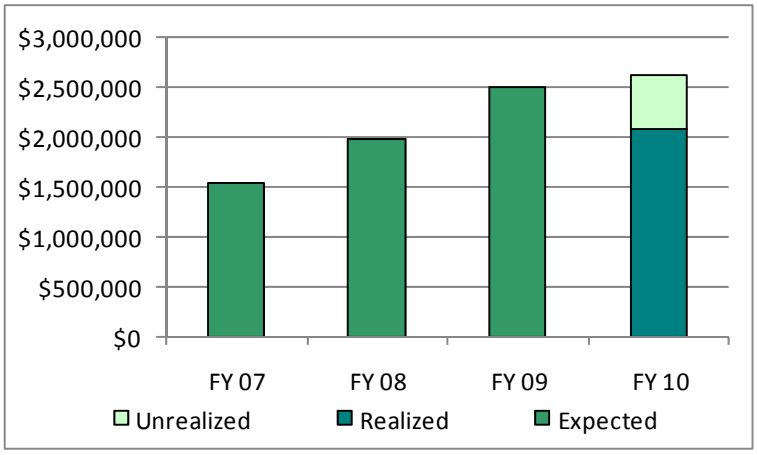
FIGURE 4.2 –
COSTS AVOIDED – TECHNICAL DENIALS



Billing Errors

CFMC's ongoing analysis of billing trends has enabled the Department to adjust the sampling methodology. Changes to the readmission selection process are just one example. The result has been an increase in the costs avoided from billing errors (see Figure 4.3). The costs avoided topped $2.6 million in FY 10. The Department realized over $2.0 million (80%) as of September 24, 2010.

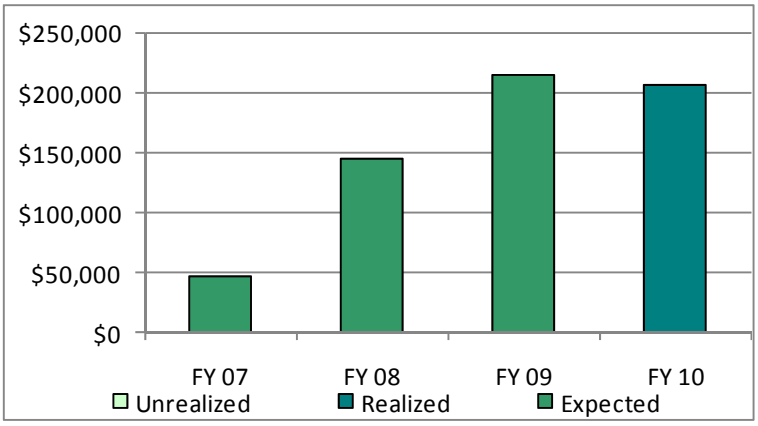
FIGURE 4.3 –
COSTS AVOIDED – RETROSPECTIVE BILLING ERRORS



Diagnosis Related Group Changes

The Department uses the diagnosis related group (DRG) classification system for acute care reimbursement. The DRG validation process is a part of every hospital review. In the course of the FY 10 reviews, CFMC made 31 DRG changes. These changes accounted for $206,805 in expected savings. The Department realized the entire amount as of September 24, 2010.

FIGURE 4.4
COSTS AVOIDED – RETROSPECTIVE DRG CHANGES



Appeals

When the result of the review process is an admission denial or DRG change, the facility, attending physician, and client receive written notification from CFMC that includes an explanation of the denial and a description of the appeal process. If CFMC does not receive an appeal within 60 days, the case is closed. The attending physician or the facility may initiate an appeal during the 60-day period. We consider all new information provided as part of the appeal. For example, additional documentation may justify a reconsideration of the initial outcome. We forward the additional information along with the original review and documentation to a specialty-matched physician review for a second opinion. If upheld, the client has the right to appeal CFMC's decision to an administrative law judge (ALJ). We notify the facility, attending physician and the client of the final determination. Table 4.9 shows the number of appeals and their outcomes.

TABLE 4.9 – NUMBER OF APPEALS AND THEIR OUTCOMES

FY 10								
Outcome	**Admission Denial**		**DRG Change**		**Quality Concern**		**Totals**	
Initial Outcome	35		43		11		89	
Appealed	10	29%[1]	14	33%[1]	8	73%[1]	32	36%[1]
Upheld	4	40%[2]	2	14%[2]	4	50%[2]	10	31%[2]
Reversed	6	60%[2]	12	86%[2]	4	50%[2]	22	91%[2]
Final Denials	**29**	**83%[1]**	**31**	**72%[1]**	**7**	**64%[1]**	**64**	**72%[1]**

1. Percent of initial outcome.
2. Percent of appeals.

FY 09								
Outcome	**Admission Denial**		**DRG Change**		**Quality Concern**		**Totals**	
Initial Outcome	53		37		13		103	
Appealed	10	19%[1]	6	16%[1]	11	85%[1]	27	26%[1]
Upheld	5	50%[2]	4	67%[2]	7	64%[2]	16	59%[2]
Reversed	5	50%[2]	2	33%[2]	4	36%[2]	11	41%[2]
Final Denials	**48**	**91%[1]**	**35**	**95%[1]**	**9**	**69%[1]**	**92**	**89%[1]**

1. Percent of initial outcome.
2. Percent of appeals.

FY 08								
Outcome	**Admission Denial**		**DRG Change**		**Quality Concern**		**Totals**	
Initial Outcome	74		43		20		137	
Appealed	17	23%[1]	14	33%[1]	10	50%[1]	41	30%[1]
Upheld	0	0%[2]	4	29%[2]	2	20%[2]	6	15%[2]
Reversed	17	100%[2]	10	71%[2]	8	80%[2]	35	85%[2]
Final Denials	**57**	**77%[1]**	**33**	**77%[1]**	**12**	**60%[1]**	**102**	**74%[1]**

1. Percent of initial outcome.
2. Percent of appeals.

CHAPTER 5

PROGRAM RECOMMENDATIONS

1. Identify high volume providers who continue to submit prospective authorization requests via fax and provide additional assistance to encourage use of CFMC's Web portal for electronic submissions.

2. Consider mandating electronic submissions through CFMC's Web portal of prospective authorization requests. In addition to maximizing review efficiency, electronic submission has the potential to improve the timeliness of services. Following review, the results of electronically submitted requests are immediately available on CFMC's Web portal. Access to this information eliminates the need for approval letters and the corresponding delay.

3. Implement an automated authorization system for uncomplicated PAR reviews submitted electronically. Such a process could reduce review costs and eliminate delays.

4. Conduct a cost/benefit analysis of prospective reviews with the highest approval rates. A complete investigation would allow informed decisions, balancing the cost of reviews with the potential for abuse.

5. Consider investigating the use of DME code K0105 to designate otherwise unspecified wheelchair components and accessories. Further investigation may identify over use or abuse of this code, necessitating provider education or a benefit change.

6. Address the need for specific diagnosis codes for PT/OT requests. The use of these non-specific codes has increased over time. While the official ICD-9-CM outpatient coding guidelines state that codes describing signs and symptoms are acceptable when a confirmed diagnosis is not available, CFMC will encourage providers to be more specific when a diagnosis is available. The use of precise diagnoses will better enable CFMC and the Department to determine the appropriateness of therapy and potentially identify alternative treatments and/or additional program and service opportunities.

7. Consider contracting with a single air ambulance provider. The current prospective review process involves obtaining three cost estimates, potentially delaying services.

8. Provide regular provider education about prospective review requirements using the Department's *Provider Bulletin* with the goal of reducing the number of unnecessary requests.

9. Continue to assist the Department with requests related to policy change and updates to Provider Manuals. For example, finalize and distribute the service list identifying the codes requiring prior authorization and the responsible agency.

CHAPTER 6

ANCILLARY ACTIVITIES

Special Service Requests

CFMC provides research and consultation hours to assist the Department in exploring, investigating and determining the appropriateness and/or feasibility of clinical and administrative practices. CFMC responded to six service requests during FY 10 for a total of 7,143 hours. The consultation hours used to support DI PAR reviews accounted for 97% (6,900) of the total hours used. Additional consultation hours were used to support some of the following service requests.

The following list is a brief description of each service request processed:

- **Nurse Home Visitor Program (NHVP) Targeted Case Management (TCM) – Part 2 of 2:** CFMC conducted chart reviews and analysis of provider data to determine amount of provider time spent on various activities for the NHVP. This service request continued in FY 10. CFMC completed Part 1 in FY 09.

- **Diagnostic Imaging Prospective Reviews:** CFMC began review of all PET scans and non-emergent CT and MRIs on August 1, 2009. All outpatient clinics, including physician offices and freestanding radiology centers, were required to obtain prior authorization.

- **Comparison of Milliman Care Guidelines and National Cancer Comprehensive Network Guidelines:** CFMC conducted a side-by-side comparison of the two review protocols to determine whether the NCCN guidelines added rigor the current radiology review process.

- **Crosswalk for New ICD-9 Codes:** CFMC developed a crosswalk to match new ICD-9 diagnoses codes to existing codes, allowing the DRG grouper program to adjudicate inpatient hospital claims.

- **Continue review of all PAR submissions for PET Scans and Non-Emergent CT Scans and MRIs:** CFMC used consultation hours to continue to process digital imaging prospective authorization reviews.

- **General Benefit Services beyond Contracted Amount:** CFMC continued to review prospective authorization reviews beyond the 12,500 requested under contract.

In addition, CFMC used one consultation hour to conduct two Hospital Backup Unit (HBU) reviews. The HBU program offers support to clients requiring complex wound care, has recognized medically complex condition(s), and/or ventilator-dependent. We share the physician reviewer's rationale with the Department and, if requested by the Department, can provide physician testimony at Administrative Law Judge (ALJ) hearings regarding the review, determination and actions. Under exceptional circumstances, the Department may request a

specialty-matched physician review. We conduct HBU reviews within three business days and specialty-matched physician reviews within seven business days. For detailed program rules, please see 10 CCR 2505-10, Section 8.470.

Fraud And Abuse Prevention

While not directly responsible for investigating fraud and/or abuse cases, CFMC continues to work closely with the Department's Program Integrity Unit to identify inappropriate activities. Familiarity with both the clinical and financial aspects of health care makes CFMC an ideal resource for groups as diverse as the Department of Law, the Medicaid Fraud Unit, and the State Auditor's office. When requested, CFMC offers information on specific cases, an explanation of processes, information on current standards of care, appropriate comparative data, and/or historical practice.

Colorado Medicaid Telephone Triage Program

The Department established the Colorado Medicaid telephone triage program in 1996 to provide Medicaid clients with an alternative to emergency department care. By identifying the level of care required, clients are instructed to seek care in the most effective manner. This increases access to services while reducing long waiting times in over-crowded emergency departments. CFMC currently contracts with the Denver Health and Hospital Authority to provide these services through the Rocky Mountain Poison and Drug Center's (RMPDC) Nurse Advice Line (NAL).

Outcomes

Inbound calls from persons with clinical symptoms, illness or injury are triaged by registered nurses using a clinical algorithm to determine the best level of care based on the client's circumstances. All other calls, including referral resources, are handled by non-clinical staff. Call volume totaled 9,279 in FY 10, an increase of 62% over the annualized call volume RMPDC handled during the nine months of service in FY 09 (see Table 6.1).

TABLE 6.1 – NUMBER AND DISTRIBUTION OF CALL ACTIVITIES

Call Category	FY 09[1]		FY 10	
Symptomatic Illness or Injury	2,191	51%	5,846	63%
Other & Rerouted Encounters	2,117	49%	3,433	37%
Total Calls	**4,308**		**9,279**	

1. Totals from September 16, 2008 through June 2009, after RMPDC took over triage services from McKesson Health Solutions.

Of the 5,846 callers with symptomatic complaints, nurses instructed 28% to emergent level care (see Table 6.2). In contrast, nurses gave 37% the symptomatic callers directions for self-care, thereby avoiding any additional medical intervention. Of the remaining callers, nurses instructed 25% to make an appointment with their primary care physician or other provider.

TABLE 6.2 – DISTRIBUTION OF SYMPTOMATIC CALL RECOMMENDATIONS - RMPDC

Call Category	FY 09[1]		FY 10	
Emergency Care	546	25%	1,637	28%
Urgent Care	227	10%	585	10%
Appointment with Health Provider	492	23%	1,461	25%
Self-care	813	37%	2,163	37%
Information	113	5%		NA
Total RN Encounters	**2, 191**		**5,846**	

1. Totals from September 16, 2008 through June 2009, after RMPDC took over triage services from McKesson Health Solutions.

For tracking purposes, triage staff attempt to identify the age and gender of the client with the medical issue. It was determined that 44% of the encounters concerned a minor under the age of 18 years. The top-five complaints in this group were fever, colds, cough, constipation and diarrhea.

RMPDC reviewed client calls daily for triage service quality and a quarter of all triaged calls receive an in-depth case review for evaluation of the quality of triage assessment, treatment recommendations, and education provided. Case reviews demonstrate a high level of quality based on the accuracy of the above parameters. Additionally, any client having a disposition of calling 911 receives a follow-up phone call to assess their status. The staff in the call center initiated many of these 911 calls.

Impact

The goal of the telephone triage program is to reduce the number of unnecessary costly emergency department (ED) visits while providing clients with appropriate levels of care. Nurses directed 72% of the 5,846 callers to a lower level of care, potentially preventing 4,209 unnecessary ED visits. Given the Medicaid reimbursement rate of $187 per ED visit, the triage program reduced potential emergency expenditures by as much as $751,927. It is not possible, however, to determine the actual savings because even callers directed to lower levels of care would have incurred some costs. However, research by RMPDC found that approximately 80% of callers complied with the nurses' recommendations and that those not complying typically did not seek emergency level of care.

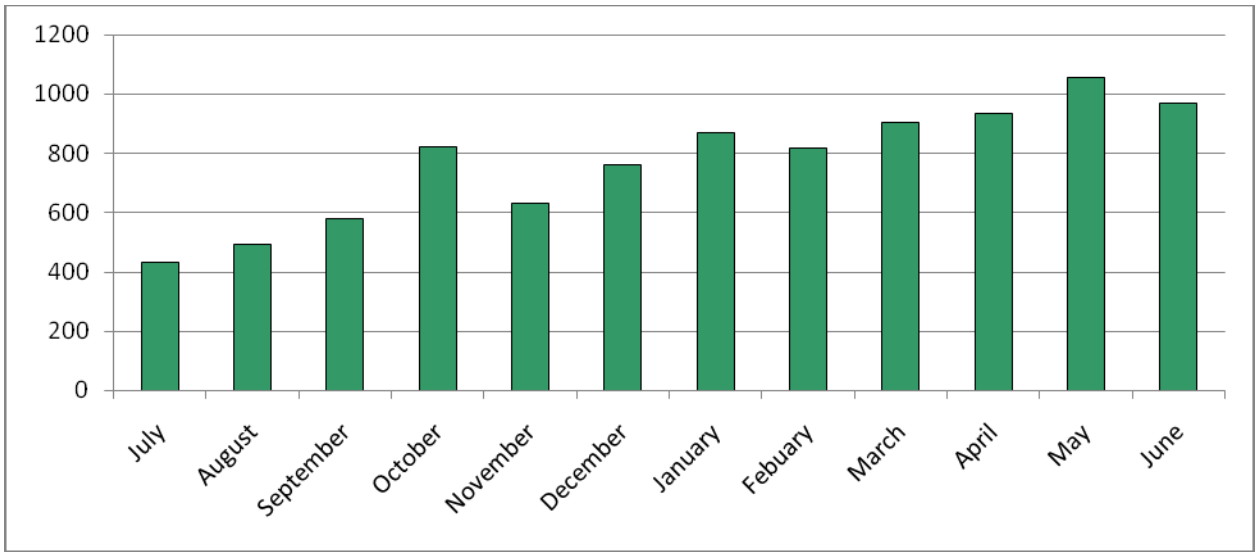
Program Marketing

In FY 09, RMPDC began a focused marketing effort to enhance call center awareness and utilization among clients and providers. One goal was to increase the proportion of calls related to the triage of illness or injury. In FY 09, 49% of calls concerned non-clinical matters such as benefit information. The RMPDC marketing effort increased the proportion of symptomatic calls 12 percentage-points, from 51% in FY 09 to 63% in FY 10.

A second goal was to increase call volume. Wallet cards, key fobs, and magnets with the NAL phone number were part of the general marketing effort. A more targeted campaign focused on seven Federally Qualified Health Center sites identified by the Department. This campaign included monthly enrollee mailings, waiting room posters and cards for distribution by providers. Beginning in 2010, the NAL number was also printed on the Medicaid card.

Call volumes increased steadily during FY 10 (see Figure 6.1). A month after targeted marketing began, call volumes increased between 25% (Pueblo county) and 271% (Arapahoe county). Jefferson, Adams, Denver, Arapahoe, and El Paso counties accounted for 39% of all calls. Monthly call volume in these counties remains up 149% as of June 2010.

FIGURE 6.1 – TOTAL CALL VOLUME BY MONTH



CHAPTER 7

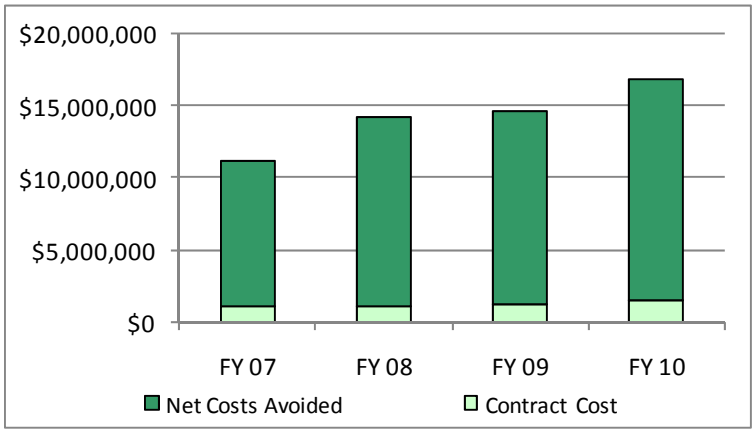
IMPACT SUMMARY

CFMC's acute care review services program reduces expenditure for the Department funds by assisting the Department in avoiding unnecessary costs through prospective and retrospective reviews. Prospective reviews prevent the inappropriate use of Medicaid dollars by denying payment for unnecessary or inappropriate procedures, equipment, and other services. We cannot know the actual amount saved from that item or service, so CFMC must estimate savings on the average cost of the item based on the reimbursement figures provided by the Department. Other items or services that do not require prior authorization and that may have been provided in lieu of the denied item or service is unknown and do not figure into CFMC costs avoided calculations.

Retrospective reviews identify inappropriate admissions and inaccurate coding or billing that can result in recovery of payment. Savings are based on CFMC review determinations and do not reflect later administrative payment determinations by the Department or fiscal agent. We calculate savings from retrospective review based on the actual hospital payment. The following figures do not include the potential savings from the telephone triage program.

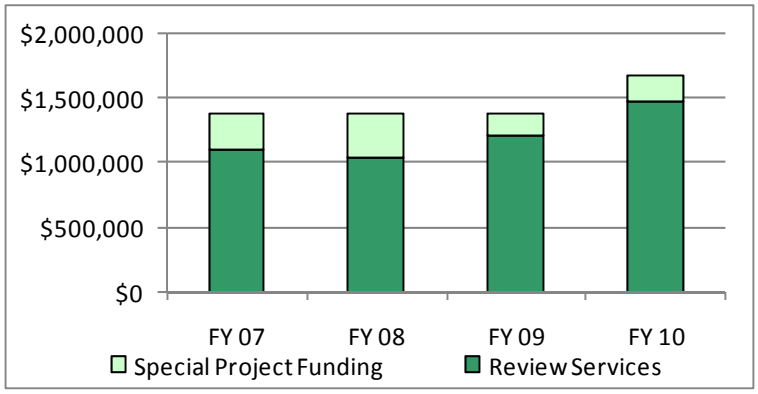
CFMC's acute care review program prevented $16,841,812 in inappropriate services in FY 10. This is a 15% increase over FY 09. After factoring in the cost of the FY 10 contract, net costs avoided were $15,386,814, over $2 million more than the previous fiscal year. Figure 7.1 illustrates the increasing efficiency of the acute care review process and the impact it has had on the program.

FIGURE 7.1 –
NET COSTS AVOIDED RELATIVE TO CONTRACT COST



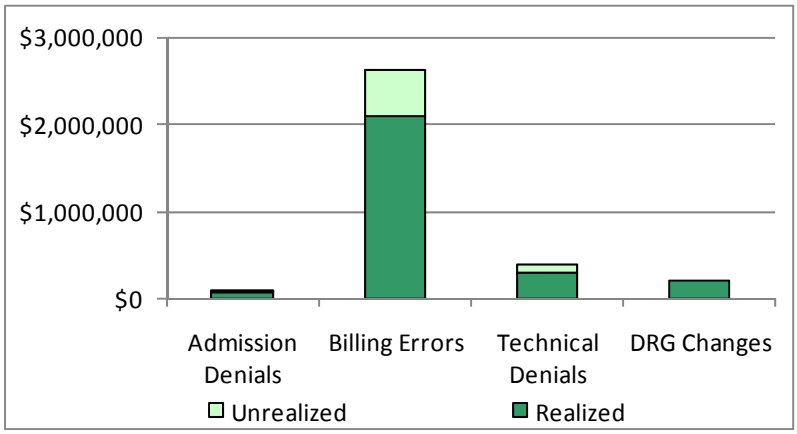
Keep in mind two factors when assessing the net fiscal effects of the review process. First, the figures used to calculate net costs avoided include only the amounts spent on review activity. CFMC receives additional funding as part of its contract to fund the Medicaid triage program and any special studies requested by the Department (see Figure 7.2).

FIGURE 7.2 –
DISTRIBUTION OF FUNDS RECEIVED BY CFMC



Second, CFMC uses the Department's admission payment when calculating the dollars conserved from retrospective reviews. The recovery process, however, takes time. The retrospective review figures reported here reflect the amounts the Department expects to recover. As of September 24, 2010, the Department had realized 81% ($2,669,363) of the expected $3,301,079 savings (see Figure 7.3). The remaining $631,716 represents unrealized savings.

FIGURE 7.3 –
RETROSPECTIVE REALIZED VERSUS UNREALIZED SAVINGS

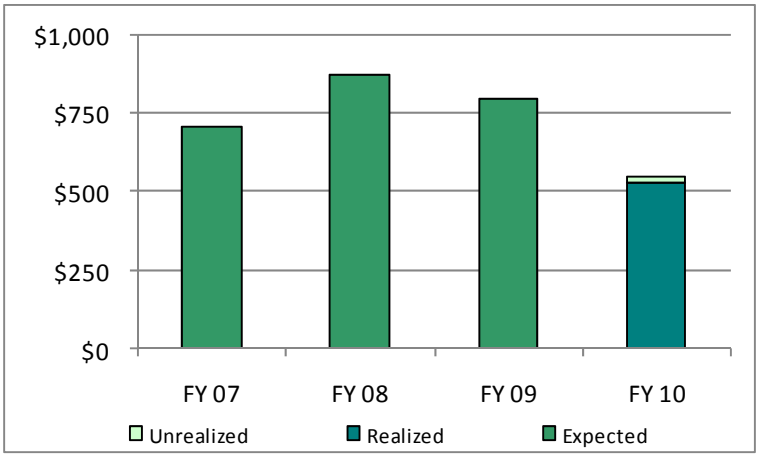


Savings Ratios

Average Cost Avoided Per Review

There are two good ways to assess the effectiveness of the acute care review process. The first is to look at the average costs avoided per review. For each of the 27,851 reviews conducted in FY 10, the Department avoided $552 in unnecessary expenditures. Of this amount, they had recovered $529 as of September 24, 2010. These amounts are less than previous years because of the increased number of prospective reviews. Please note, these are net amounts, after subtracting the cost of conducting the reviews.

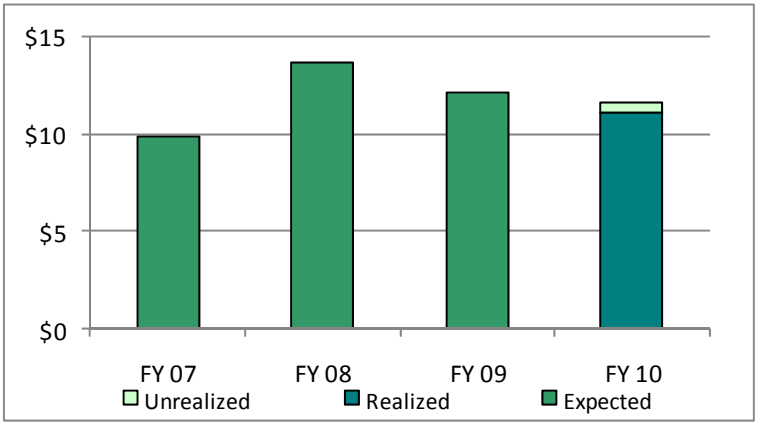
FIGURE 7.4 –
AVERAGE COST AVOIDED PER REVIEW



Return On Investment

A more accurate way to assess the effectiveness of the process is to compare the costs of the program to the financial benefits it produces. Figure 7.5 shows the return on investment for the past four fiscal years. For each dollar spent on acute care review activities in FY 10, CFMC prevented $11.58 from inappropriate use.

FIGURE 7.5 –
RETURN ON INVESTMENT



Impact for Colorado

State and federal agencies share the costs of providing Medicaid services as well as the costs to conduct review activities. In FY 10 the state and federal governments each provided 50% of the funds necessary to provide Medicaid services and therefore benefited equally from the $16,841,812 in reduced expenditure during FY 10 (see Figure 7.6). Colorado, however, only pays 25% of the Medicaid acute care review program's contract; the remaining 75% comes from federal funding. As a result, it cost Colorado $363,750 to fund activities that saved $8,420,906.

FIGURE 7.6 –
COST AVOIDED VERSUS CONTRACT COSTS

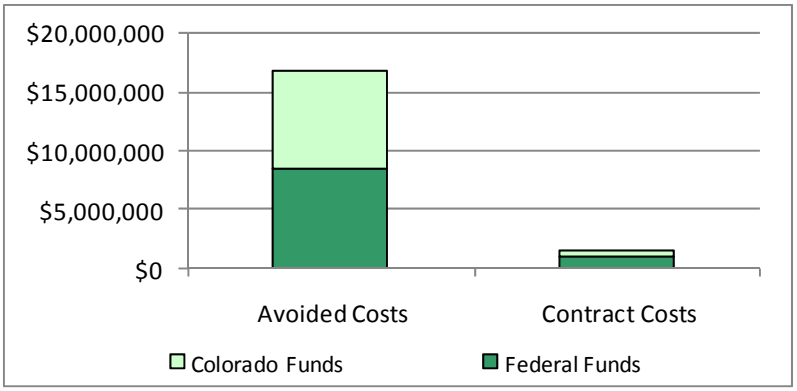
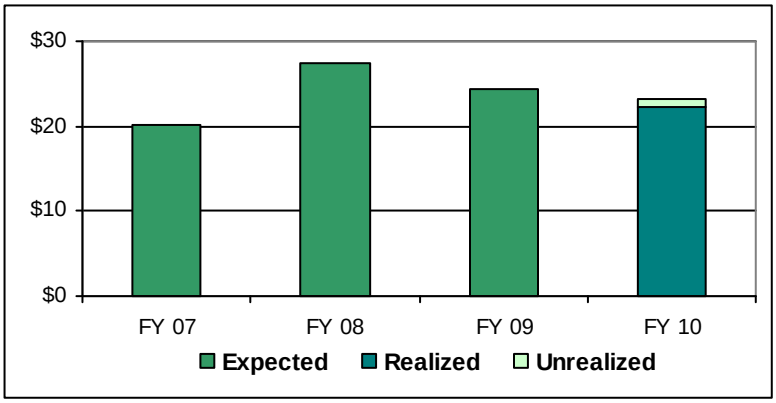


FIGURE 7.7 –
COLORADO'S RETURN ON INVESTMENT



To appreciate the benefit of the review process it is necessary to compare how much the Department pays for review activities to the financial benefits received. Figure 7.7 shows the return on investment in FY 10 compared to previous years. Data available as of September 24, 2010 indicate that the Department has already realized a return of $22.20 for every Colorado dollar spent on review activities. Once all funds are realized, total return on investment would equal $23.15.

Consolidated Financial Impact Tables

Table 7.1 – Total Costs Avoided

Fiscal Impact	FY 07	FY 08	FY 09	FY 10
Gross Costs Avoided	$11,104,939	$14,171,869	$14,653,705	$16,841,812
Review Contract Expenditure	($1,101,555)	($1,037,384)	($1,203,379)	($1,454,998)
Net Costs Avoided	**$10,003,384**	**$13,134,485**	**$13,450,326**	**$15,386,814**

Table 7.2 – Acute Care Review Contract Expenditures

Contract Expenditures	FY 07	FY 08	FY 09	FY 10
Acute Care Review Services	$1,101,555	$1,037,384	$1,203,379	$1,454,998
Medicaid Telephone Triage Program	$274,351	$282,580	$172,527	$211,312
Special Studies	$0	$55,942	$0	$9,720
Total Paid to CFMC	**$1,375,906**	**$1,375,906**	**$1,375,906**	**$1,676,030**

Table 7.3 – Costs Avoided – Colorado Funds

Fiscal Impact – Colorado Funds	FY 07	FY 08	FY 09	FY 10
Gross Costs Avoided – Colorado Funds	$5,552,470	$7,085,935	$7,326,853	$8,420,906
Contract Expenditure – Colorado Funds	($275,389)	($259,346)	($300,845)	($363,750)
Net Costs Avoided – Colorado Funds	**$5,277,081**	**$6,826,589**	**$7,026,008**	**$8,057,156**

Table 7.4 – Costs Avoided Per Review

Source of Funds	FY 07	FY 08	FY 09	FY 10
Colorado Funds	$374	$455	$415	$289
Federal Funds	$335	$420	$380	$263
Costs Avoided Per Review	**$709**	**$875**	**$795**	**$552**

1. The FY 09 annual report mistakenly reported the review cost ratio as $746.

Table 7.5 – Return On Investment

Source of Funds	FY 07	FY 08	FY 09	FY 10
Colorado Funds	20.16	27.32	24.35	23.15
Federal Funds	6.72	9.11	8.12	7.72
Return on Investment	**10.08**	**13.66**	**12.18**	**11.58**

Prospective Review Fiscal Impact Detail

TABLE 7.6 – PROSPECTIVE REVIEW TOTAL COSTS AVOIDED

Prospective Review	FY 07	FY 08	FY 09	FY 10
Procedures[1]	$655,545	$1,146,925	$543,193	$265,415
Inpatient Mental Health Services[2]	$0	$0	$0	$0
Inpatient Substance Abuse Rehab	$9,137	$0	$0	$2,909
Durable Medical Equipment[3]	$1,731,545	$1,306,215	$1,584,267	$1,846,587
Select Non-emergent Medical Transportation	$35,378	$78,998	$169,861	$204,017
EPSDT Home Health	$234,882	$412,203	$621,106	$567,518
Physical & Occupational Therapy	$5,822,073	$8,238,256	$8,534,410	$10,076,027
Diagnostic Imaging	NA	NA	NA	$578,260
Total Prospective Review Costs Avoided	**$8,488,560**	**$11,182,597**	**$11,452,837**	**$13,540,733**

1. Combines transplants and select procedures. Avoided costs are not calculated for out-of-state admissions.
2. The one client denied was ineligible for the program, thus not included in the impact calculations.
3. Totals for all durable medical equipment programs.

TABLE 7.7 – PROCEDURE REVIEW TOTAL COSTS AVOIDED

Procedure Review[1]	FY 07	FY 08	FY 09	FY 10
Organ Transplants – In-state	$603,529	$1,134,067	$515,562	$219,237
Organ Transplants – Out-of-state	$0	$0	$0	$0
Select Procedures	$52,016	$12,858	$27,631	$46,178
Total Procedure Costs Avoided	**$655,545**	**$1,146,925**	**$543,193**	**$265,415**

1. Avoided costs are not calculated for out-of-state admissions.

TABLE 7.8 – DURABLE MEDICAL EQUIPMENT REVIEW TOTAL COSTS AVOIDED

Durable Medical Equipment Review	FY 07	FY 08	FY 09	FY 10
Power Wheelchairs	$705,107	$405,271	$439,705	$493,892
Wheelchair Accessories	$632,458	$451,165	$605,032	$296,983
Orthotics/Prosthetics	$120,217	$95,901	$127,326	$107,017
Respiratory Devices	$92,299	$122,320	$182,616	$671,694
Communication Devices	$83,986	$175,656	$164,654	$222,339
Power Scooters	$49,182	$12,619	$3,523	$5,539
Labor/Service	$17,541	$26,337	$26,345	$13,046
Other DME	$30,755	$16,946	$35,066	$36,077
Total DME Costs Avoided	**$1,731,545**	**$1,306,215**	**$1,584,267**	**$1,846,587**

TABLE 7.9 – SELECT NON-EMERGENT MEDICAL TRANSPORTATION REVIEW TOTAL COSTS AVOIDED

Transportation Review	FY 07	FY 08	FY 09	FY 10
Lodging – Escort	$13,999	$44,105	$107,469	$104,101
Meals – Escort	$12,161	$21,486	$39,381	$38,533
Lodging – Recipient	$1,638	$3,509	$14,031	$41,603
Meals – Recipient	$439	$2,079	$5,852	$18,127
Air Transport	$6,562	$7,819	$2,011	$1,339
Over-the-cap Ambulance Services	$541	$0	$1,083	$0
Travel – Escort	$31	$0	$34	$314
Travel – Recipient	$7	$0	$0	$0
Total Transportation Costs Avoided	**$35,378**	**$78,998**	**$169,861**	**$204,017**

TABLE 7.10 – EPSDT HOME HEALTH REVIEW TOTAL COSTS AVOIDED

EPSDT Home Health Review	FY 07	FY 08	FY 09	FY 10
Home Health Aide	$143,281	$333,612	$373,072	$271,220
Skilled Nursing	$74,039	$25,867	$189,452	$179,692
Occupational Therapy	$8,820	$26,855	$34,483	$40,589
Physical Therapy	$6,756	$25,287	$15,118	$55,914
Speech Therapy	$229	$582	$8,982	$20,103
Total EPSDT Home Health Costs Avoided	**$234,882**	**$412,203**	**$621,106**	**$567,518**

TABLE 7.11 – PHYSICAL & OCCUPATIONAL THERAPY REVIEW TOTAL COSTS AVOIDED

Physical & Occupational Therapy Review	FY 07	FY 08	FY 09	FY 10
Physical Therapy	$2,854,022	$3,880,342	$4,457,598	$5,361,836
Occupational Therapy	$2,968,051	$4,357,914	$4,076,812	$4,714,191
Total PT/OT Costs Avoided	**$5,822,073**	**$8,238,256**	**$8,534,410**	**$10,076,027**

TABLE 7.12 – DIAGNOSTIC IMAGING REVIEW TOTAL COSTS AVOIDED

Diagnostic Imaging Review	FY 10
MRI Scans	$369,098
CT Scans	$127,352
PET	$62,275
CTA Scans	$6,806
MRA Scans	$12,729
Total Diagnostic Imaging Costs Avoided	**$578,260**

Retrospective Review Fiscal Impact Detail

TABLE 7.13 – RETROSPECTIVE REVIEW TOTAL COSTS AVOIDED

Review Outcome	FY 07[1]	FY 08[1]	FY 09[1]	FY 10
Admission Denials – Realized Savings				$80,848
Unrealized Savings				$2,475
Total Admission Denial Savings	**$183,279**	**$199,927**	**$167,367**	**$83,323**
Technical Denials – Realized Savings				$293,694
Unrealized Savings				$92,481
Total Technical Denial Savings	**$841,709**	**$667,091**	**$311,541**	**$386,175**
Billing Errors – Realized Savings				$2,088,016
Unrealized Savings				$536,760
Total Billing Error Savings	**$1,544,118**	**$1,977,770**	**$2,506,907**	**$2,624,776**
DRG Changes – Realized Savings				$206,805
Unrealized Savings				$0
Total DRG Change Savings	**$47,273**	**$144,484**	**$215,047**	**$206,805**
Retrospective Review – Realized Savings				$2,669,363
Unrealized Savings				$631,716
Total Retrospective Review Savings	**$2,616,379**	**$2,989,272**	**$3,200,868**	**$3,301,079**

1. To maintain consistency with past reports, only the expected savings are reported for previous fiscal years.