DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Memorandum

Date . FEB 9 1993

From Bryan B. Mitchell
Principal Deputy Inspector General

Subject Validation Review of the Hospital Minimum Data Set of the Health Care Provider Cost Report Information System (A-07-92-00500)

To

William Toby, Jr.
Acting Administrator
Health Care Financing Administration

This final report summarizes the results of our "Validation Review of the Hospital Minimum Data Set of the Health Care Provider Cost Report Information System." The primary purpose of our review was to determine the accuracy of the hospital Minimum Data Set (MDS) and to inform users as to the degree of reliance that could be placed on the data.

Overall, we found MDS was well maintained and managed, and that the current error rate should be acceptable to most MDS users. Our statistical sample results of MDS showed an error rate of only .39 percent; or conversely, an accuracy rate of more than 99 percent for the data elements tested. We believe this accuracy rate would be acceptable to most MDS users.

We are recommending that the Health Care Financing Administration (HCFA): (1) make certain corrections to the MDS record layout and distribute the revision to MDS users and (2) strengthen fiscal intermediaries (FI) internal controls by requiring FIs to obtain computer software having password protection to preclude unintentional alteration of MDS.

In responding to the draft report, HCFA concurred with our recommendation to correct the MDS record layout and confirmed that the errors have been corrected. The HCFA also concurred with the intent of our recommendation that FIs be required to obtain computer software having password protection. The HCFA will study the potential cost of password protection and determine whether to proceed with implementation.

Please advise us, within 60 days, on actions taken or planned on our recommendations. If you have any questions, please call me or have your staff contact George M. Reeb, Assistant Inspector General for Health Care Financing Audits at (410) 966-7104. Copies of this report are being sent to other top Department officials.

Attachment

Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

VALIDATION REVIEW OF THE HOSPITAL MINIMUM DATA SET OF THE HEALTH CARE PROVIDER COST REPORT INFORMATION SYSTEM

FEBRUARY 1993 A-07-92-00500

SUMMARY

This report presents the results of our review of the hospital Minimum Data Set (MDS) of the Health Care Provider Cost Report Information System (HCRIS). The HCRIS is a national data base of financial and statistical information from Medicare cost reports. The MDS is generated from HCRIS on a quarterly basis. The Congress, various Federal and State agencies, and private consultants use MDS.

The Health Care Financing Administration (HCFA) contracts with insurance companies to act as fiscal intermediaries (FI) for Part A of the Medicare program. The FIs' duties include gathering hospital cost reports and sending the report data to HCFA. The HCFA maintains and administers HCRIS.

The purpose of our review was to determine the accuracy of MDS and to inform users as to the degree of reliance that could be placed on the data. We statistically sampled MDS data fields and tested those fields for accuracy. We reviewed the completeness of MDS and compared the two types and formats of MDS. The review also included evaluations of selected edits and HCRIS internal controls at HCFA and the FIs.

Overall, we found MDS was well maintained and managed, and that the current error rate should be acceptable to most MDS users. Our statistical sample results of MDS showed an error rate of only .39 percent; or conversely, an accuracy rate of more than 99 percent for the data elements tested. The .39 percent error rate is lower than the .66 percent error rate reported in our prior review of the September 30, 1988 MDS (A-07-88-00120 dated April 30, 1990). Only two FI data entry errors were responsible for the .39 percent error rate, and since most hospitals must submit their cost reports on electronic media for all cost reporting periods beginning on or after October 1, 1989, this error rate should be lower in the future.

In our review, aside from hospital cost report fields statistically sampled, we identified several other types of errors. First, MDS contained the wrong cost report status in five hospital cost reports. Second, the file creation date preceded the end of the cost report period in six hospital cost reports. While these errors are of some concern, none of these errors influence, to any degree, the overall accuracy and reliability of hospital cost report data.

We found no material differences between the two MDS types, "full" and "unduplicated." However, we determined that the record layout for the "sequential" format of MDS was incorrect for two fields. We are recommending that HCFA correct the "sequential" MDS record layout for decimal errors (fields W9 and W11) for prospective payment system (PPS) years 6 and 7 and distribute the revision to MDS users. In addition, we found a small number of differences between the "Statistical Analysis System" (SAS) and "sequential" formats of MDS. However, these minor differences occurred only in older versions of MDS. The current version does not have these types of differences. Consequently, we are not recommending any corrective action by HCFA.

Internal controls at HCFA, the HCFA Data Center (HDC), and FIs were generally adequate. However, we are recommending that HCFA strengthen security controls at FIs by requiring password security systems on all HCRIS computers. The HCRIS operation at HCFA is protected by password security. Adding password entry at FIs should aid in ensuring that only authorized personnel access the HCRIS system and that MDS will not be accidentally altered.

On November 3, 1992, HCFA responded to a draft of this report. In its response, HCFA concurred with our recommendation to correct the "sequential" MDS record layout. The HCFA concurred with the intent of our recommendation to require FIs to use password security systems on HCRIS computers.

We summarized HCFA's response relating specifically to our recommendations at the end of the conclusions and recommendations section of this report and provided our comments as appropriate. A copy of the text of HCFA's response is included as Appendix D to this report.

As recommended in our prior HCRIS review, HDC has implemented an adequate disaster recovery plan to safeguard data files and ensure continued operations in the event of a disaster.

In the Other Matters section of this report, we have identified that some hospital cost reports are missing from MDS. Users of MDS should be aware of this fact. Although the number of missing hospital cost reports is relatively low considering the thousands of cost reports and their five statuses that HCFA processes, HCFA should strive to further improve the completeness of MDS.

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INTRODUCTION

BACKGROUND

The HCRIS is a national data base of hospitals' and other providers' financial and statistical information from Medicare cost reports. The hospital portion of HCRIS includes annual cost reports of about 6,800 facilities for hospitals' fiscal years ended after December 31, 1981. Hospital cost reports become part of the HCRIS master file and MDS. The MDS, the focus of our review, is extracted quarterly from the HCRIS master file.

Federal organizations such as the Congress, Office of Inspector General, General Accounting Office, Executive Office of Management and Budget, and Prospective Payment Assessment Commission receive MDS. These organizations use MDS to study hospital profitability, determine Medicare costs, set diagnosis-related group rates, and study specific elements of cost and reimbursement, such as indirect medical education and disproportionate share adjustments. Private consultants and State health departments also use the information. The MDS is available to the public for a fee.

The HCFA contracts with insurance companies to serve as FIs for Part A (hospital insurance portion) of the Medicare program. The FIs audit Medicare cost reports as well as process and pay claims for Part A services.

The FIs also process and transmit MDS data (primarily by diskette) to HCFA's Bureau of Data Management and Strategy, Office of Statistics and Data Management, Division of Special Programming, Provider Cost Report Information Branch. The MDS consists of five statuses of hospital cost report information: as submitted, settled without audit, settled with audit, audited but not settled, and reopened.

Development of MDS begins with the hospital's submission of a hard copy cost report to the FI. Section 4007(b) of the Omnibus Budget Reconciliation Act of 1987 (OBRA '87) enacted by Public Law 100-203 mandates electronic cost reporting for hospitals with cost reporting periods beginning on or after October 1, 1989. Electronic reporting requires hospitals to submit the cost reports in a machine readable format on electronic media such as diskettes. The FI then processes the computerized information rather than manually inputting the data. Each hospital must also submit a hard copy of the cost report to the FI.

The FI performs a desk review of the report, often making financial and statistical adjustments to the unaudited report. Next, the FI enters prescribed cost report data into a HCFA approved Automated Desk Review (ADR) system. The ADR system corrects mathematical errors, subjects the report to a series of relational edits, and prepares a cost report file.

An example of a relational edit is that if the net full-time interns and residents hospital total (Worksheet S-3 of the cost report, column 9, line 8) is greater than zero, the indirect medical education adjustment (Worksheet E, part A, column 1, line 6A) must be greater than zero. These edits identify potential errors but are not performed on a pass or fail basis. A cost report which fails a relational edit can still be submitted to HCRIS.

Next, a program extracts data from the cost report file in the required format for submission to HCFA. The FI copies the edited extract to a diskette (or tape) for mailing to HCFA.

The HCFA uploads the data to HDC mainframe computer which performs front-end consistency checks. Failure of a consistency check, such as having an invalid FI number, causes rejection of the cost report. The HCFA returns rejected cost reports to the FI for correction and resubmission within 30 days.

After the cost report passes the consistency checks, HCFA runs the same relational edits performed by the FIs. If the data fails a relational edit, a relational error report is sent to the FI. The FI either corrects the errors or explains on the error report why no correction is necessary and returns the report to HCFA.

Errors identified by failed consistency checks or failed relational edits are factors in HCFA's overall evaluation of a FI's performance. This annual evaluation is part of the Contractor Performance Evaluation Program (CPEP) review. The CPEP review judges the accuracy and timeliness of cost reports submitted by a FI during the year.

All hospital cost reports which pass the front-end consistency and relational edits become part of the HCRIS master file. The master file version of each cost report contains 1,500 data fields on average. The MDS is extracted from the HCRIS master file on a quarterly basis. Appendices B and C are flowcharts depicting the MDS process.

There are two different types of MDSs available. The first type is the "full" MDS which contains the five statuses of cost report information: as submitted, settled without audit, settled with audit, audited but not settled, and reopened. Although there may be revisions within a cost report status, the "full" MDS will keep only the latest submission of each status. To maximize our coverage of MDS data, we selected the "full" MDS as the focus of our review.

The other type of MDS, "unduplicated," contains only the latest version of each cost report. For example, for a given hospital, the "unduplicated" MDS might include only the "settled with audit" cost report, if that was the latest report sent to HCFA. According to HCFA personnel, the "unduplicated" MDS is the most frequently used version.

Both the "full" and the "unduplicated" MDSs are available in the "SAS" and "sequential" formats. The "SAS" format defines the fields within the data set for use by the SAS programming language. A "sequential" data set does not define the fields within the data set. The "sequential" data set may be used by defining the fields in whatever programming language processes the file.

SCOPE

The purpose of our review was to determine the accuracy of MDS and the degree of reliance that users could place on the hospital cost report data.

Our prior report (A-07-88-00120 dated April 30, 1990) covered the hospital MDS through September 30, 1988. Our current review covers hospital cost report file creation dates from October 1, 1988 to September 30, 1991 that were included on the September 30, 1991 MDS.

Our review determined: (1) the accuracy of MDS based on an evaluation of a statistical sample of data fields for hospital cost reports in the "full" MDS; (2) the accuracy of HCFA's range and consistency edits performed on hospital cost reports in the "unduplicated" MDS for PPS year 6 as of September 30, 1991; (3) the level of agreement between the two types and formats of MDS; (4) the adequacy of MDS internal controls at HCFA, HDC, and eight FIs; and (5) the completeness of MDS.

Our review did not include tests to determine the accuracy of cost report data recorded from the books and records of the

hospitals. However, we did review the accuracy of the ADR systems' output. The review covered MDSs for PPS years as follows:

PPS Year	Hospital Fiscal Year From	To
2	September 30, 1985	September 29, 1986
3	September 30, 1986	September 29, 1987
4	September 30, 1987	September 29, 1988
5	September 30, 1988	September 29, 1989
6	September 30, 1989	September 29, 1990
7	September 30, 1990	September 29, 1991

Sixty insurance companies participate as Medicare FIs. Our multistage statistical sample included 70 data fields on hospital cost reports at each of 8 of the 60 FIs. We selected the sample fields from the "full" MDS. We compared MDS field amounts with FIs' records such as hard copy hospital cost reports or other pertinent documentation. Differences between FIs' records and MDS field amounts were discussed with the FIs to find out the nature and basis of any adjustments.

For the eight FIs, we compared the two types of MDS, "full" and "unduplicated," to determine if both types were identical. In addition, we compared the two formats of MDS, "SAS" and "sequential," to determine if both were the same.

We performed HCFA's 12 range and 38 consistency edits. The HCFA runs these edits against MDS each quarter. We examined the edits for the "unduplicated" MDS for PPS year 6 as of September 30, 1991.

To further enhance confidence in HCRIS, we evaluated HCRIS internal controls at HCFA, HDC, and at the eight FIs. Areas reviewed at HCFA and HDC included: implementation controls, program and data file security, computer operations, system software change controls, application controls, and management controls. Areas reviewed at FIs included: organization and operation of HCRIS department, controls to reduce data input errors, controls to assure processing of all cost reports, and checks necessary to validate data output.

In addition, we compared the eight FIs' records with MDS to determine whether MDS contained all applicable hospital cost reports.

Our examination was made in accordance with generally accepted government auditing standards. We performed field work at the

HCFA offices in Baltimore, Maryland and at the offices of eight FIs from October 1991 to April 1992.

FINDINGS AND RECOMMENDATIONS

Overall, we found MDS was well maintained and managed. Consequently, our review disclosed a relatively low error rate based on our statistical sample of MDS. Our review also indicated HCFA's range and consistency edits functioned properly.

During the course of our validation, we found hospital cost report errors, other than those from the fields statistically sampled. First, MDS contained the wrong cost report status in some instances. Second, the file creation date preceded the end of the cost report period in some cases. While these errors are of some concern, none of these errors influence, to any degree, the overall accuracy and reliability of hospital cost report data.

We found no material differences between the two MDS types, "full" and "unduplicated." However, we determined that the record layout for the "sequential" format of MDS was incorrect. In addition, we found differences between the "SAS" and "sequential" formats of MDS.

Overall, the internal controls at HCFA, HDC, and the FIs were generally adequate. However, the FIs could improve data processing security controls.

As recommended in our prior HCRIS review, HDC has implemented an adequate disaster recovery plan to safeguard data files and ensure continued operations in the event of a disaster.

Statistical Sample of MDS Database

The universe in this review was the total fields from hospital cost reports with file creation dates from October 1, 1988 to September 30, 1991 that were included on the September 30, 1991 MDS. Statistically sampling these fields and recording all differences in the sample fields between MDS and FIs' records, we found two errors. Both errors found were attributable to FIs' incorrect data entries.

Using the attribute sample assessment which shows the rate of occurrence of an attribute in a universe based on the number of times that attribute was observed in the statistical sample, our

review showed a very low error rate for the universe. The attribute error appraisal of our multistage sample estimated an overall sample mean error rate of .39 percent with the range of error from a low of .12 percent to a high of .66 percent at the 95 percent confidence level. This low error rate should be acceptable to most MDS users and should be lower in the future due to the electronic submission of cost reports from the hospitals for periods beginning on or after October 1, 1989.

Although the overall error rate for MDS is quite low, it is possible that, if only specific fields are the targets of users, the specific fields may contain higher error rates than might be acceptable for limited versus overall analyses. A user testing data from a particular MDS field should assess the reasonableness of that data. As mentioned in our prior review, data with unusually large or small values might distort the user's findings. Thus, MDS users should develop supplemental edits similar to HCFA's range and consistency edits to determine if the data meets that user's requirements for reliability. (See Appendix A for additional data on statistical sample projections.)

Range and Consistency Edits of MDS

In addition to the front-end consistency checks and relational edits in the system, HCFA periodically reviews MDS with a group of post-processing informational edits (range and consistency edits). We performed the 50 range and consistency edits on the "unduplicated" MDS for PPS year 6 as of September 30, 1991. We compared the results of these edits with HCFA's quarterly Minimum Data Set Quality Analysis Report. The range and consistency edits worked properly.

The HCFA publishes a quarterly Minimum Data Set Quality Analysis Report which summarizes the number of exceptions by edit. This report, distributed to selected MDS users, shows the probable reliability of certain fields.

The 12 range edits measure data for reasonableness. For example, one edit reviews records with outlying "Medicare Hospital Capital Related Costs for Adults and Pediatrics (field F345)." An exception would be an amount less than $100 or greater than $5 million. Although data falling outside these parameters could be correct, users should be aware that a high chance of error exists. Users should take steps to either verify or exclude the data.

The 38 consistency edits generally compare different fields to determine whether the data interact to form a logical conclusion. For example, one edit identifies records in which "Total Part A Ancillary Charges (field F317)" are not equal to charges for all ancillary departments (sum of fields F291 to F316).

Other Types of MDS Errors

Our review found two other types of errors on hospital cost reports which were not related to our statistical sample of the cost report fields. Three of the eight FIs experienced errors in either the cost report status field or the file creation date field.

For five hospital cost reports, the cost report status field in MDS was incorrect. The MDS listed two hospital cost reports as "settled with audit" when the correct status should have been "settled without audit." Two hospital cost reports were entered into MDS as "settled without audit," but the correct status should have been "settled with audit." Finally, a "settled with audit" hospital cost report was entered into MDS as a "reopened" cost report. All of the above errors were due to inaccurate FI data entry. The HCFA should reiterate to FIs the importance of having the correct cost report status.

The file creation date errors involved six hospital cost reports. In these cases, the cost report end date followed the MDS file creation date. The file creation date is when the FI extracts a MDS file from the hospital cost report, therefore, that date cannot precede the end of the cost reporting period. The file creation date is primarily for internal HCFA use only. Consequently, we are not recommending any corrective action.

Comparisons of MDS Types and Formats

No material differences were noted between the "full" and "unduplicated" types for hospital cost reports with file creation dates from October 1, 1988 to September 30, 1991 and included on the September 30, 1991 MDS. However, we found an error in the "sequential" format record layout as well as data differences between the "SAS" and "sequential" formats.

The "Sequential" Format

The record layout for the "sequential" format of MDS was incorrect for fields W9 (Worksheet S-3, part II, Total Adjusted Salary) and W11 (Worksheet S-3, part II, Unadjusted Average Hourly Wage). For PPS years 6 and 7, the MDS record layout

stated field W9 contained two decimal places. However, the actual data contained no decimal places. Thus, field W9 was understated. For example, field W9 from one provider's "as submitted" hospital cost report for PPS year 6, interpreted using HCFA's record layout, contained $12,381.86 instead of the correct amount of $1,238,186. The record layout showed that field W11 contained no decimal places while this field actually contained data with two decimal places. As a result, data in field W11 was overstated (the data in field W11 would be interpreted as $734 instead of the correct amount of $7.34).

Therefore, users of the "sequential" format of MDS might incorrectly interpret data from these two fields in PPS years 6 and 7. The two fields were not in use in PPS years 2 through 5.

As a result of our audit, HCFA is correcting the record layout. Once corrected, HCFA plans to make the correction available to MDS users.

The "SAS" and "Sequential" Formats

During the course of our review, we examined 2,998,194 fields and found 413 differences between the "SAS" and "sequential" formats. These differences occurred in 29 different data fields at 6 of the FIs in PPS years 4 through 7. For example, 30 of the differences were in field F26 which records "Type of Control." The "SAS" format contained the code for "Governmental, State" control while the "sequential" format reflected "Proprietary, Other" control.

We identified these differences on the September 30, 1991 MDS after MDS had been updated. The HCFA officials stated the differences were created when MDS was updated. Limited capacity in the mainframe computer at HDC can result in differences in older versions of MDS. These types of differences do not occur in the current version of MDS.

All the differences, which were attributable to older versions of MDS, represented about .01 percent of the fields examined (413/2,998,194). Consequently, we are not recommending any corrective action by HCFA. However, users of MDS should be aware that such differences between the two formats can occur.

Internal Controls

Our review showed that internal controls at HCFA, HDC, and at the eight FIs were generally adequate.

Although controls at FIs were generally adequate, we noted that six of the eight FIs did not have password security in the HCRIS system. Password security is a control which would only allow individuals entering the proper password to use HCRIS software. This control would assist in safeguarding the HCRIS system against unauthorized or accidental alterations. As noted, two of the sample FIs already have this type of protection.

Prior Review

In our prior HCRIS audit (A-07-88-00120 dated April 30, 1990), we recommended that HDC implement a disaster recovery plan to safeguard data files and ensure continued operations in the event of a disaster. Our current review found that an adequate disaster recovery plan has been implemented by HDC.

Conclusions and Recommendations

Our statistical sample of MDS showed a low overall error rate of .39 percent which should be acceptable to most MDS users. This error rate was less than the rate found in our prior review of the September 30, 1988 MDS which had an error rate of .66 percent. The errors detected in the current review were due to inaccurate FI data input. The errors should be reduced in the future since OBRA '87 requires hospitals to electronically submit cost reports for cost reporting periods beginning on or after October 1, 1989.

Although the overall error rate for MDS is quite low, it is possible that if only specific fields are the targets of users, the specific fields may contain higher error rates than might be acceptable for some analyses. A user, testing data from a particular MDS field, should assess the reasonableness of that data. We conclude, as we did in our prior review, that data with unusually large or small values might distort the user's findings. Thus, MDS users should develop supplemental edits similar to HCFA's range and consistency edits to determine if the data meets that user's requirements for reliability.

We recommend that HCFA:

- Correct the "sequential" MDS record layout for fields W9 and W11 for PPS years 6 and 7 and distribute the revision to MDS users.

- Strengthen FIs' internal controls by requiring FIs to obtain computer software having password protection to preclude unintentional alteration of MDS.

The HCFA Response

The HCFA concurred with our recommendation to correct the "sequential" MDS record layout. The HCFA stated the errors were the result of typographical errors which have been corrected.

The HCFA agreed with the intent of our recommendation to strengthen FIs' internal controls by requiring password protection. The HCFA will discuss the potential cost of password protection with FIs and determine whether to proceed with implementation. The response from HCFA also expressed concern that the wording of our recommendation could be construed to preclude intermediaries from programming the password protection themselves.

The OIG Comments

The HCFA concurred with the first recommendation and agreed with the intent of the second recommendation.

With respect to the second recommendation and its potential cost to implement, two of the sample FIs had password protection which would indicate that password protection was not cost prohibitive. The HCFA also noted that no MDS data was reported as having been unintentionally altered. Our recommendation, however, was made to ensure that the FIs have sound internal controls to adequately safeguard the system.

In regards to HCFA's remark on the wording of the second recommendation, our recommendation is to HCFA and not the FIs. Thus, any action that HCFA directs the FIs to take to invoke password protection would be acceptable to us.

OTHER MATTERS

The MDS did not contain all appropriate hospital cost reports. For the 8 FIs in our sample, we reviewed the 5,759 hospital cost reports listed on the September 30, 1991 MDS with file creation dates from October 1, 1988 to September 30, 1991. Hospital cost reports included in the FIs' records but not on the September 30, 1991 MDS were compared with the March 31, 1992 MDS. These comparisons identified 134 hospital cost reports which were missing from MDS:

- Fifty-one reports were hard copy non-PPS hospital reports containing little or no Medicare utilization which were received by HCFA but not included on MDS. During most of our audit period, HCFA did not manually input these non-PPS hospital cost reports into MDS due to the lack of staff. However, for non-PPS hospital cost reports submitted on or after January 1, 1991, HCFA is currently entering selected data into MDS. This practice of entering part of the data should reduce the number of missing hospital cost reports in the future.

- Thirty reports were attributable to FIs not properly reviewing the monthly inventory reports sent to them by HCFA. Even though FIs had forwarded these missing hospital cost reports, HCFA did not show these cost reports being received. The HCFA should reiterate to FIs the importance of reviewing the monthly inventory report.

- Seventeen reports were not mailed to HCFA. Two of the reports were "as submitted." The remainder were "settled without audit," "settled with audit," or "reopened." The HCFA issues a periodic "Overdue Report" to inform FIs which "as submitted" cost reports have not been received timely. Beginning in 1992, HCRIS personnel will routinely receive the System for Tracking Audit and Reimbursement (STAR) reports from HCFA's Bureau of Program Operations. The STAR report will alert HCRIS personnel to the existence of new hospitals which should file "as submitted" cost reports. The use of the STAR report could be adapted to monitor submission of the other statuses of cost reports as well.

- Five reports were amended "as submitted" reports. The FI presumed that the first "as submitted" version and a "settled with audit" or "settled without audit" hospital cost report would be sufficient. The HCFA should reiterate to FIs the need to submit all versions of the cost reports to HCFA.

- Twenty-one reports contained relational edit exceptions. Although these edits did not indicate that the data was incorrect, the data was so far from the normal range of data that HCFA decided not to enter the hospital cost reports into MDS in order to provide more reliable data to MDS users.

- Seven short-period reports were filed by hospitals upon termination from the Medicare program. The reports were short-period (less than 12 months) reports for periods beginning on or after January 1, 1989. The HCFA required filing of those hospital cost reports 45 days after termination from the program. Reports for cost reporting periods beginning on or after January 1, 1988 were excluded from MDS because a new cost report format (HCFA Form 2552-89) was not available until February 1990.

- Three reports were received by HCFA but were unexplainably not in the data base.

While these missing hospital cost reports are of some concern, we believe the reliability of MDS is not materially affected, especially considering the thousands of costs reports and each of their five statuses that HCFA processes.

APPENDICES

HCRIS REVIEW
SCHEDULE OF DATA FIELD SAMPLE REVIEW ERRORS
AND ATTRIBUTE ERROR RATE APPRAISAL
COST REPORTS ENTERED IN THE MINIMUM DATA SET
FROM OCTOBER 1, 1988 THROUGH SEPTEMBER 30, 1991

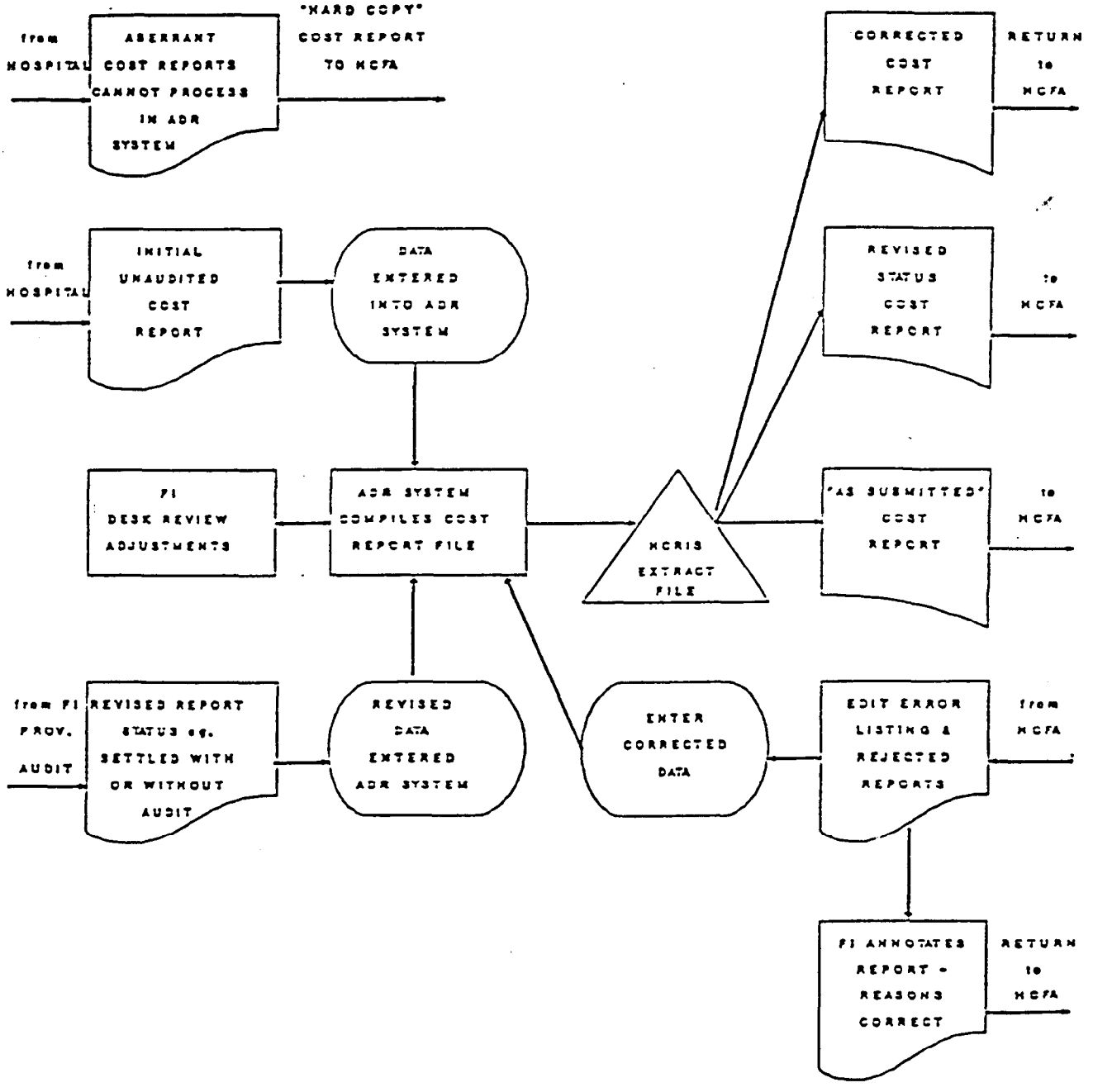
PPS YEAR	1/ REPORT STATUS	MDS FIELD	DESCRIPTION	HCRIS AMOUNT	FI AMOUNT	DIFFERENCE	ATTRIBUTE ERROR RATE AT 95% CONFIDENCE LEVEL MEAN	UPPER LIMIT	LOWER LIMIT	REF
4	N	F504	Amount Due Provider Before Sequestration	$1,388,106	$1,187,451	$200,655				2/
4	N	F59	Medicare Inpatient Days - Hospital Total	2,965	23,454	(20,489)				2/
			TOTAL RANDOM FIELDS				0.39%	0.66%	0.12%	

NOTES:

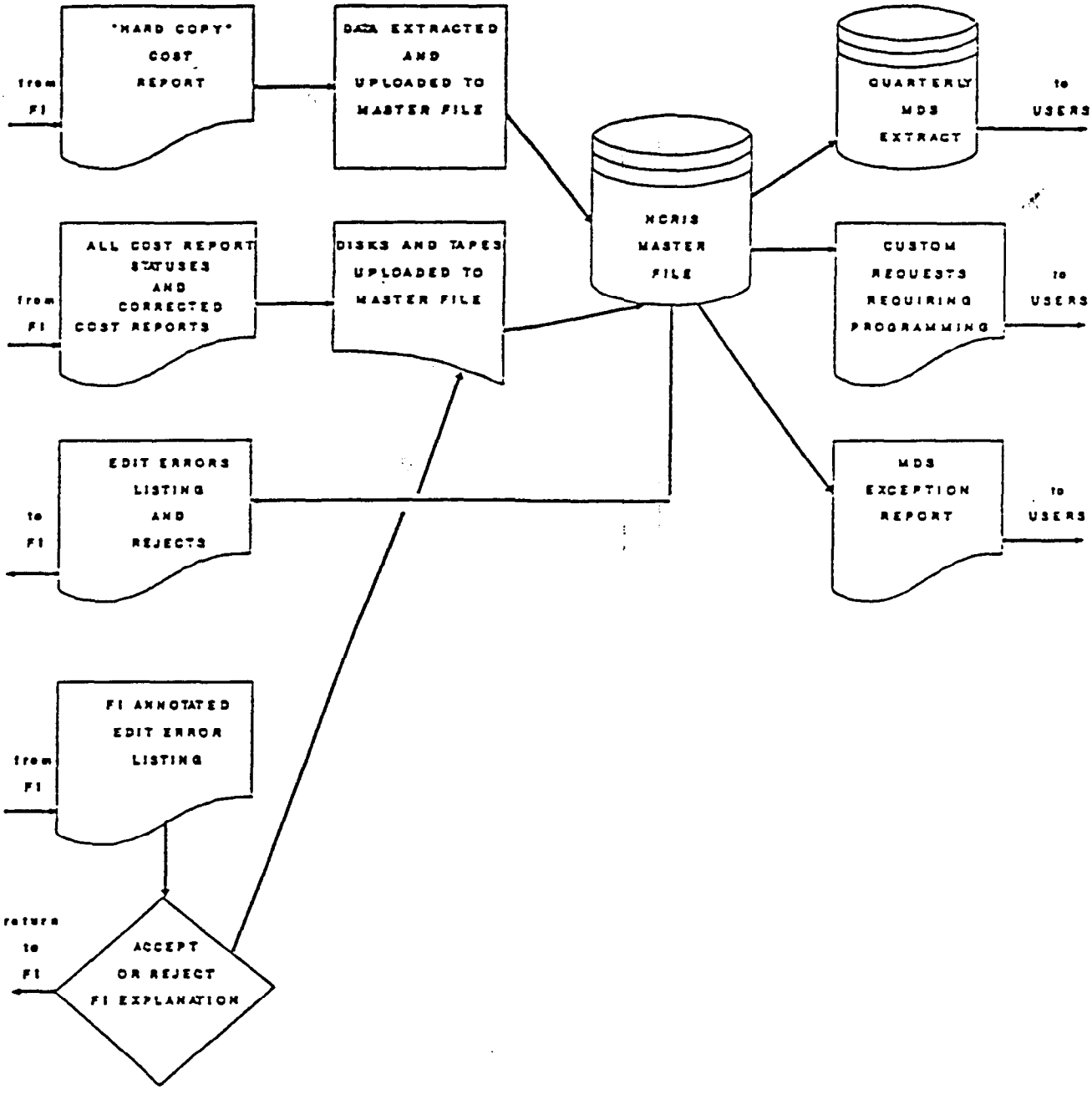
1/ Cost Report Status:
N = As Submitted

2/ FI Data Entry Error

HCRIS REVIEW
FLOWCHART OF FI HCRIS PROCESSING



HCRIS REVIEW
FLOWCHART OF HCFA HCRIS PROCESSING



DEPARTMENT OF HEALTH & HUMAN SERVICES

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Health Care
Financing Administration

NOV 3 1992

Memorandum

Date

From William Toby, Jr.
Acting Administrator

Subject Office of Inspector General (OIG) Draft Report: "Validation Review of the Hospital Minimum Data Set of the Health Care Provider Cost Report Information System," A-07-92-00500

To

Bryan B. Mitchell
Principal Deputy Inspector General

We have reviewed the subject draft report in which OIG discusses the accuracy of the hospital Minimum Data Set (MDS), and the degree of reliance that users could place on hospital cost report data. Overall, OIG found the MDS was well maintained and managed. Through completion of a multi-stage sampling of hospital cost reports, OIG determined the current overall MDS error rate to be only 0.39 percent, a rate OIG said should be acceptable to most MDS users.

However, OIG found additional hospital cost report errors outside the scope of the statistical sample. In particular, while comparing the "Statistical Analysis System" and "sequential" format of MDS, OIG noted that the record layout for the "sequential" format of MDS was incorrect for two specific data fields in two different years. Also, though OIG reviews showed that internal controls at the Health Care Financing Administration (HCFA), the HCFA Data Center, and the eight fiscal intermediaries (FIs) involved in the sample were generally adequate, six of the eight FIs did not use password security in the Health Care Provider Cost Report Information System.

Consequently, OIG recommends that HCFA:

(1) correct the "sequential" MDS record layout for fields W9 and W11 for prospective payment system years 6 and 7, and distribute the revision to MDS users; and

(2) strengthen FIs' internal controls by requiring FIs to obtain computer software having password protection to preclude unintentional alteration of MDS.

IG	
PDIG	
DIG-AS	✓
DIG-EI	
DIG-OI	
AIG-MP	
OGC/IG	
EX SEC	✓
DATE SENT	11/4

Comments of the Health Care Financing Administration (HCFA) on Office of Inspector General (OIG) Draft Report: "Validation Review of the Hospital Minimum Data Set of the Health Care Provider Cost Report Information System," A-07-92-00500

Recommendation 1

That HCFA correct the "sequential" MDS record layout for fields W9 and W11 for prospective payment system (PPS) years 6 and 7 and distribute the revision to Minimum Data Set (MDS) users.

HCFA Response

OIG states on page eight of the report that: "As a result of our audit, HCFA is correcting the record layout. Once corrected, HCFA plans to make the correction available to MDS users." We are now confirming that these errors were the result of typographical errors in the record layout of the MDS in 2 out of 589 fields, and they have been corrected.

Recommendation 2

That HCFA strengthen the fiscal intermediaries (FIs) internal controls by requiring FIs to obtain computer software having password protection to preclude intentional alteration of MDS.

HCFA Response

We agree with the intent of this recommendation. We will discuss the potential cost of password protection with several FIs and determine whether to proceed with its implementation. We note the report contains no data to indicate that unintentional or unauthorized alteration of MDS data by FI staff is a problem. Indeed, OIG seems to anticipate that the already low MDS error rate will improve further in the future due to the electronic submission of cost reports by hospitals (pages six and nine of the report).

OIG may also wish to reconsider the wording of its recommendation. The current wording could be construed to preclude intermediaries from programming the password protection themselves.

Page 2 - Principal Deputy Inspector General

HCFA agrees with the intent of these recommendations. We note we have already made the corrections suggested in OIG's first recommendation. Before we can proceed with the second recommendation, however, we will need to discuss the potential costs of password protection with FIs as part of determining the best course for implementation. . Our specific comments on the report's recommendations are attached for your consideration.

Thank you for the opportunity to review and comment on this draft report. Please advise us whether you agree with our position on the report's recommendations at your earliest convenience.

Attachment