



Hassle Free Cash and Fee Management Integrated With AHIMS

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ABSTRACT

Funds in a hospital can flow from different sources e.g., patient registration, admission counter, investigation billing etc. which is the part of patient billing. The entire collection is compiled in via fee module and challan is prepared to deposit the collection in different heads based on various classification of corresponding grant of the cash section in Accounts Department. Further cash section is also responsible to book the various heads from other different sources such as R & I department, SHE department, MS-Office etc. the collection may be receipt by Cash, Cheque, Demand Draft, Indian Postal Order, Bank Advice Note etc.

The major challenge at cash receipt and payment collection center is to recognizing current head for booking and covers all receipt of fund under various accounts along with various corresponding classification and referring the previous data and synchronized format.

Computerization of these activities streamlines the receipt mechanism of hospital. This paper describes the implementation of cash and fee management process using J2EE and Oracle technology.

Introduction

The hospital has various Fee Collection Counters for collection of hospital charges from patients. The fee

amount collected from patients and compiled by fee section in mode of challan and submitted to cash section for further processing. Apart from it cash section deals in collection of funds from various source which

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includes private grants from external agencies for Research Grant, receipts related to subscription of GPF / GIS, Examination collection section for admission / application fee / examination fee, other mode receipt like sale of form/security/membership/ hostel fee/ house rent which is collected by concerned department of Hospitals and deposited on daily basis. However, some department also submit the collected fund in different interval such as R & I department, Estate department etc. Cash section in account department also manages the collection from employee's deposit such as lump sum loan advance amount, house rent and rented blocks.

Following pictorial representation of process flow of cash and fee section for PGIMER is depicted below

The Cash and Fee management processes

It consists of various processes which are summarized as follows

Challan preparation process: - is used to prepare a challan by employee, external agency, concerned department HoD's (Head of Department) or any other depositor such as Shops Keepers, Student or Third party of rented premises and concerned users also fill

the online form along with deposit type such as Cash, Cheque or Demand Draft, Credit Advice and Bank Deposit Receipt.

Challan auditing process: - is used to audit the corresponding challan which is raised through online by the concerned user.

Challan acceptance process: - is used by the cashier in account department, concerned cashier will verify the challan and once the physically received the Cash, Cheque or Demand Draft, Credit Invoice and bank deposit receipts then cash receipt is generated and printed on pre-formatted stationary and one copy is provided to the depositor by the cashier or the dealing concerned.

Main challan process: - is used to prepare the main challan at the day end by the cashier, main challan contains all receipts and corresponding receipt amount on rows wise based on the various classification which is represent through column wise in main challan.

Bank deposit, challan verification and approval process: - is used maintain the deposit details related to various bank deposit category such as Director P.G.I (Main Grant), Director P.G.I (Pvt. Grant), Director P.G.I (Pvt. Res. Grant), Director P.G.I (C & I-II) GPF and Director P.G.I (C & 1-135) GIS. The fund which is received it will deposit by the cashier in bank based on these categories. After bank deposit of the receipt fund cash book will be generated.

Following pictorial representation of process flow of cash and fee section for PGIMER is depicted below-

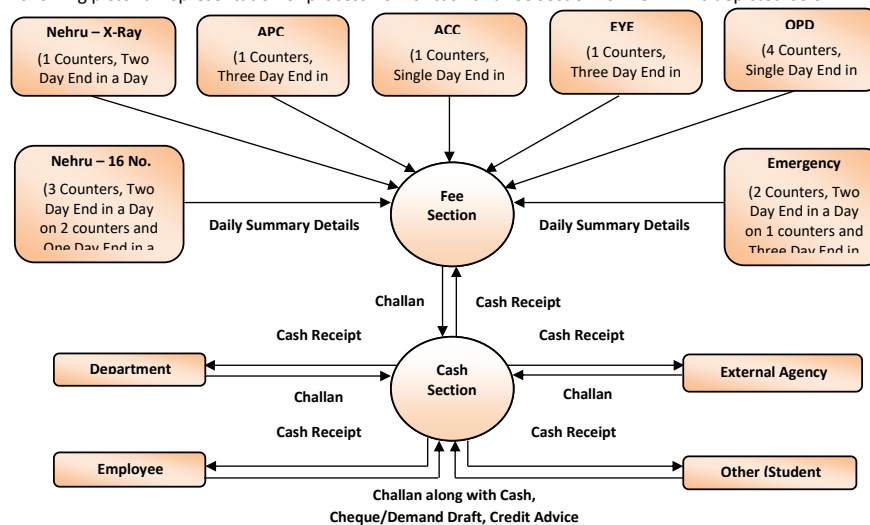


Fig 1. (Process flow of Cash and Fee)

Final receipt head posting process: - is used by the compilation section for posting of receipt head against the fund receipt in hand for the category of Director P.G.I (Main Grant), Director P.G.I (Pvt. Grant), Director P.G.I (Pvt. Res. Grant), Director P.G.I (C & I-II) GPF and Director P.G.I (C & 1-135) GIS.

User Interface

Various user interfaces are used to automate the cash and fee section, some of the important interface enlisted as below –

1. **Daily Summary Acceptance:** - Daily summary acceptance process is used to accept daily summary from various counter of the patient billing.

2. **Challan preparation:** - Challan preparation process is used to prepare a challan by employee, external agency, concerned department HoD's or any other depositor such as Shops Keepers, Student or Third party of rented premises etc. And concerned users also fill the online form along with deposit type such as Cash, Cheque or Demand Draft, Credit Advice and Bank Deposit Receipt. Process.

3. **Challan acceptance:** - Challan acceptance process is used by the cashier in account department, concerned cashier will verify the challan and once the physically received the Cash, Cheque or Demand Draft, Credit Invoice and bank deposit receipts then cash receipt is generated and printed on

Fig 1. (Daily summary acceptance)

Fig2. (Challan preparation form)

Fig 3. (Receipt Challan)

Technology Used

Advanced Hospital Management Information System developed by C-DAC is a web-based system developed using J2EE architecture (Figure 1.8). It consists

of various modules which broadly belong to two main groups Clinical and Non-Clinical. Cash and Fee management system is one of the important modules of the non-clinical group of AHIMS

Classification wise :

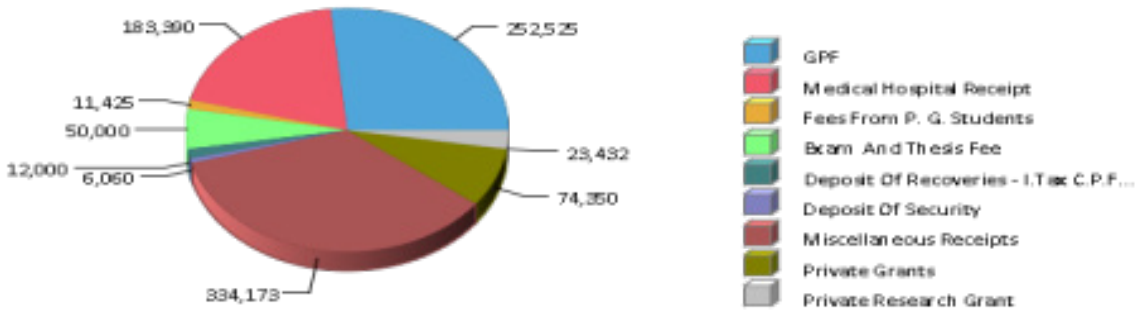


Fig 7. (Cash Book Chart / Graph Classification wise)



Fig 8. (AHIMS Architecture)

Benefits

After development and successful implementation of cash and fee module, the end user can efficiently perform the following functions –

- Print deposit challan electronically
- Acceptance of patient billing daily summary through online system
- Print cash receipt automatically
- Provision for online auditing
- Provision for online challan preparation
- Preparation of cash book and cheque book automatically

- Preparation of (Indian Postal Order) register automatically
- Provision for online receiving of IPO from concerned department
- Provision for online viewing of challan status
- Provision for Receipt head ledger generation
- Provision for online deposit account wise and classification wise report
- Provision for generation of Main Challan
- Provision for duplicate challan printing and cash receipt printing
- Manage Audit Log
- Generate Chart / Graph
- Cheque reconciliation

Conclusion

We have successfully implemented this system and these modules are closely coupled with Patient Billing, Budget module, Estate Management, Private Grants, Paybill, Recruitment, Security etc. This module manages the various funds in type such as Cash, Cheque, Demand Draft, Indian Postal Order and Bank Advice Note and it enables to Cashier and Accounts Officer to compile and prepare report daily, weekly and monthly wise receipt of fund / classification and end user can generate relevant report and graph / chart while click on button using cash and fee report interface.




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References

- Software Requirement Specification of MGIMS, Nagpur
- Software Requirement Specification of PGIMER, Chandigarh
- Software Requirement Specification of GNCTD, Delhi
- Software Requirement Specification of SMS, Jaipur
- MoM(s) with PGIMER Management
- CR from PGIMER, Chandigarh

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