



Cloud Enterprise Resource Planning Software Design for Healthcare Account Receivables Billing & Cash Transactions

Thejas Prasad

Email: thejas.prasad@wipro.com

Abstract

As global multinational companies adopt digital transformation, cloud-native enterprise resource planning applications become a critical part of their architecture and roadmap. Modern Enterprise Resource Planning applications and reporting solutions are developed using cloud native architecture that comes with a lot of limitations in them out of the box functionalities with the seeded applications which may not directly resolve the real-world problems that exists in the healthcare industry in recording and reporting the transactions which are of complex nature. This paper will discuss on how to build an effective solution on handling the different types of use cases in the health care sector for Accounts Receivables transactions and account the transactions in an optimized way for financial reporting

Index Terms—Account Receivables, Insurance, Oracle Fusion ERP, Healthcare, Receivables Invoices, Receivables Receipts.

INTRODUCTION

As companies are heavily investing in Digital Transformation, they are increasingly investing in cloud-native Enterprise resource Planning applications that can be scaled as per the company's needs. The requirements for each industry, sector differs based on the nature of the business they are in and the internal controls and process that are placed within the organization. Currently the major Enterprise resource Planning products available in the market like Oracle Cloud Fusion, SAP HANA will not be able to cater all the needs of every company, hence they are designed in a way such that by implementing right functionalities and designing the system with creative solutions can effectively solve many problems in the Healthcare industry. Unlike other sectors of business Healthcare stands unique in terms of their nature of business and their confidentiality guidelines as the customer's personal data is involved. Recording and reporting the transactions specifically the Billing and Payments related transactions gets more complicated as payments are not just received from private customers. The medical related bills are usually split between the private member and the insurance companies strictly based on the policies and benefits the plan has offered to the private member.

Enterprise Resource Planning applications are not specifically designed for healthcare sector, hence recording these types of transactions can be challenging.

Issues faced in Healthcare sector billing and cash receipts

In Oracle Fusion Financials, Accounts Receivables module is used to capture the customer invoices and cash receipts in the day-to-day operations. Billing function records the customer invoices. In Healthcare industry the billing process gets complicated as the medical bills are paid either by customer or by insurance or a mix of both. Fig.1 shows the full life cycle for sales invoice sent from the source systems to Oracle Accounts Receivables and then the customer balances are updated back to the source systems. Major issue in the ERP system is that there is no option to record a receivables invoice against two separate customers (Insurance and Private Member). While creating an receivables invoice it needs to be assigned to a single active customer in the application.

As a provider who is recording the sale in the terminal system, will generate the invoice to customer and insurance company with the estimated private customer portion and the insurance portion. Next sections details the use cases for each of the scenarios .

Insurance Portion Known

This is relatively a less complex problem, as during the point of sale it will be clearly known the amount to be paid by the private member vs the amount that will be paid by the insurance. Need to record the receivables invoice accordingly in the ERP system.

Insurance Pays Less than Expected

At the time of recording the sale there will be an estimated amount calculated to be paid by private member and the insurance. But later when the claim gets processed by the insurance company and payment is made the amount received may be less than what was originally estimated during the point of sale. This mismatch will have to be effectively handled and recorded in the system.

Insurance Portion Unknown

At the time of recording the sale there will be no information on the amount to be paid by private member and the insurance. Only at the time when the payments are received by Insurance the amount owed by insurance will be known, handling these transactions in a regular ERP system gets tricky.

Customer Pays Full In-Advance

In this situation the irrespective of the amount billed, the private member will pay the entire amount to the provider, and once the claim gets processed in the insurance company, payment will be sent for the same original sale. The portion of the payment now received from insurance will have to be refunded back to the private member since the private member had made the full payment initially.

Multiple Insurer's Involved

In certain scenarios, there will be more than one insurance company involved. Then during the sale, it will be unknown that the portion that will be owed by the insurance company 'A' vs 'B' vs 'C', recording these billing transactions will be challenging for most organizations.

integrated to Oracle Cloud. Create and Account the AR documents in Accounts Receivables and acknowledge the customer balances in the source system.

Recommended approach

As most functions within the ERP system works on configurations that are rule based, each scenario discussed above have to be treated differently. For all the scenarios while generating the invoice for the private member, 3 additional information has to be captured in the Invoice feed which goes to Oracle ERP. They are the insurance name, insurance portion amount and the private member portion amount. Capturing this information will be used in processing the transactions in the Accounts Receivables module. For each of the challenges mentioned earlier, below are the proposed solutions.

Insurance Portion Known

In this scenario initially the full amount will be billed against the private member. The additional information will be stored in the invoice header level which will be the insurance name, insurance portion amount and the private member portion amount. As the invoice is imported to Oracle system, a custom process is developed to identify this invoice as special case and will trigger a process to generate a credit memo for the insurance portion and a separate regular invoice to insurance customer with the insurance portion. Both these information are stored in the original invoice sent from the source system. So currently there will be two invoices and a credit memo created in the ERP system. One invoice is for the private member with the full amount and the second invoice is for the insurance company with the insurance portion. The credit memo is for private member with the insurance portion amount. This credit memo will be applied to the original invoice there by reducing the private member liability. As and when the payments are received from the insurance and private member those cash receipts will be applied to the two outstanding invoices closing the balances. Fig.3 shows the overall flow of payments via source systems and integrated to Oracle Cloud Accounts Receivables application. After applying these payments to private member and insurance invoices, the balances are updated back in the source system.

Insurance Pays Less than Expected

This is slightly a more complex situation than the earlier scenario where there is an accurate estimation on private member portion vs the insurance portion. In this use case still there will be an initial estimation on the member portion vs the insurance portion and the initial steps followed will be same in terms of creating the two invoices (private member with full amount & insurance customer with insurance portion) and credit memo (for private customer) based on the additional information stored in the original invoice header feed. Once the cash receipts are received, they are applied to the two invoices. The private member invoice will be fully closed but the amount received from the insurance was less than expected. Hence there will be a balance of 'x'

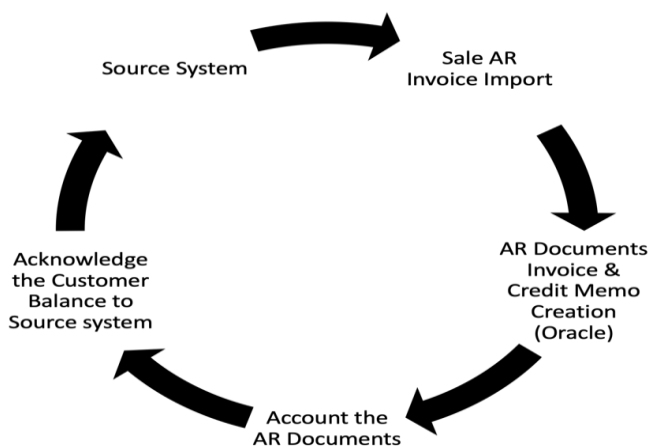


Fig. 1. The flow diagram shows the full cycle flow of sales invoices recorded at the third-party source systems and then

amount in the insurance invoice as outstanding. Latest outstanding invoices will updated to the source system. Source system will send a feed back to Oracle that will move the balance 'x' amount from insurance back to the private member. This is recorded by generating a new billing invoice to private member and a credit memo to the insurance company. Credit memo will be applied to the insurance invoice ad there by it will be closed. Private member will make the payment of 'x' dollar amount to close the new receivables document created while transferring the balance from insurance to private member.

Insurance Portion unknown

In this use case the insurance portion of the bill is unknown during the sale. Hence the original invoice is created to private member with full amount. For this type of cases, the solution discussed in the previous two uses cases will not work as there is no information to create the insurance portion invoice and corresponding credit memo to the private member. The process here would be to wait until the actual payments are received form the insurance. Based on the payment file received a new receivables invoice will be created to insurance and a credit memo will be created and applied to the original private member invoice. Private member would then pay the remaining portion of the original invoice. Insurance payment will be applied to the newly created insurance invoice.

Customer Pays Full In-Advance

In certain situations, private customer chooses to pay the full amount of the original invoice. Based on the stored information on the estimated insurance portion, a new billing invoice to insurance and a credit memo for the private member will be generated. This create memo will not be immediately applied to the original private member invoice unlike the previous uses cases discussed. Full payment received from the private member will be applied to the original invoice. Later once claim is processed and insurance portion payment is received, it will be then applied to the insurance invoice and triggers refund process generate the refund to the customer for the insurance portion. Once the refund is approved, it will then create a payable invoice in the Oracle Payables module and finally get paid to the private member.

Multiple Insurer's Involved

This is a unique situation where the insurance portion will be paid by more than one insurance company. The initial steps remains the same as discussed in the first two use cases. Based on the estimated insurance portion amount details stored in the original invoice, a new insurance invoice and credit memo for the private portion gets created. Credit memo will be applied to the private member invoice to decrease the balance. Then the insurance payment is received from insurance company 'A' and it will less than the estimated amount. Additional another payment form another insurance company 'B' is also received. In this scenario there will be another new invoice created against

the insurance company 'B' and a credit memo will be created for insurance company 'A' automatically. The credit memo will be applied to the insurance company 'A' invoice. The payment form insurance company 'B' will be applied to the billing invoice created for insurance company 'B'. Now all the balances are closed and acknowledgement is transmitted back to the source system

Impact

Automated processes reduce human error, ensuring more precise billing and collections. Streamlined workflows and automated tasks save time and resources, allowing staff to focus on higher-value activities. Timely and accurate ERP applications accelerates revenue cycles, ensuring that healthcare providers can record payments faster and more reliably. Automation and efficient data management reduce the workload on administrative staff, allowing them to manage more accounts with less effort. The integration of advanced technology in ERP systems not only meets operational needs but also provides a competitive edge in the rapidly evolving healthcare landscape.

The solutions discussed in the article enhances the billing process in Oracle Cloud Fusion Accounts Receivables module. the automation for various complex scenarios programmatically, eliminates manual efforts to record these transactions and correct the existing transactions in the systems. This will save many hours otherwise business will be spending to analyze and process these transactions. Fig.2 represents the details flow for the solution discussed in this article, starting from the source system to Oracle Cloud ERP via integrations and recording the Accounts Receivables documents for the different uses cases discussed. It also shows the cash receipt applications for the private customer and insurance invoices.

This automation also includes an accounting logic change as it will have an impact on the accounting entries posted to General Ledger. The suggested approach to this accounting logic is the original Invoice generated to private member will be recorded to the company's actual revenue account and the subsequent invoices and credit memos will using a temporary clearing account. This allows the actual revenue account to be intact and smooth

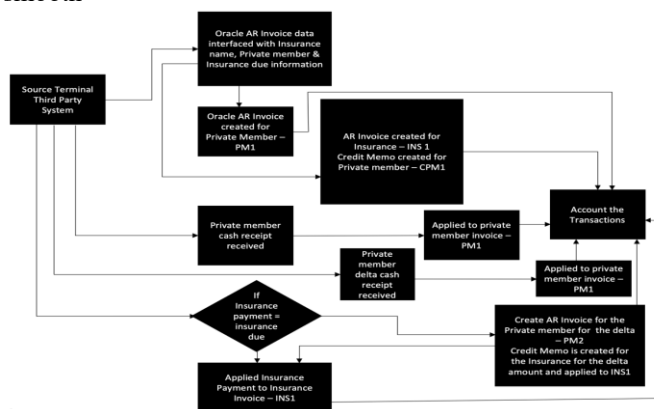


Fig. 2. The flow diagram shows the end-to-end flow of all the scenarios discussed in this article. Starting from the third-party source system to Receivables Interface and then the creation of AR documents to Accounting.

transfer of balances from original private member invoices to insurance invoices. This touchless process ensures that minimal to no manual interventions are required for the recording and reporting these complex scenarios.

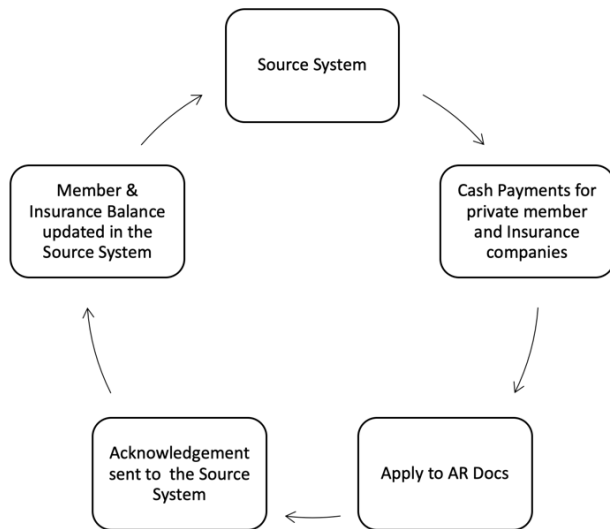


Fig. 3. The flow diagram shows the full cycle flow of sales invoices customer recorded at the third-party source systems and then integrated to Oracle Cloud. Apply the receipts to AR documents in Accounts Receivables and acknowledge the customer balances in the source system.

Scope

The use cases explored in this article pertain to Oracle Cloud Enterprise Resource Planning (ERP) application and its extensive functionalities within the financial modules, with a particular emphasis on the Billing and Cash Applications of the Accounts Receivables module.

The proposed solutions for these use cases are predominantly functional, focusing on the practical deployment and operationalization of these capabilities. However, the requisite technical development to support these initiatives falls outside the scope of this discussion. This article primarily underscores the functional dimensions and pragmatic applications of Oracle Cloud ERP in enhancing and streamlining financial processes.

Conclusion

In the modern digital era, utilizing technology is essential for optimizing accounts receivables in healthcare. Cutting-edge

cloud software solutions provide real-time tracking and automation, transforming Accounts Receivables system.

- These proposed solutions enable a more agile, precise, and efficient approach to financial management, enhancing cash flow and minimizing administrative burdens.

- Strategically integrating technology into healthcare accounts receivable management is both an operational imperative and a competitive edge in the fast-evolving healthcare environment.

- Implementing the discussed solutions, with slight modifications tailored to an organization's specific needs, can significantly benefit most companies in the healthcare industry.

- These solutions streamline the Sale to Cash process, as well as accounting and reporting in Enterprise Resource Planning (ERP) systems, while maintaining data integrity and security.

- Automated transactions eliminate human errors in recording and reporting sales-related financial transactions, ensuring accuracy and efficiency.

- Embracing these technological advancements in healthcare accounts receivable management is not just beneficial but necessary to thrive in today's fast-paced and dynamic environment.

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