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# Digital Medical Reimbursement via iHRMS: Modernizing Governance in Punjab, India

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## Abstract

**Background and need:** For many years, state employees in Punjab seeking compensation for hospital bills were forced to navigate a long paper trail. Printed invoices and forms wound their way through employer offices, district health authorities and, for larger sums, the state headquarters. These layers, combined with manual arithmetic and filing, meant reimbursements were slow and sometimes documents went missing.

**Purpose:** This project set out to design and trial a digital reimbursement option within the Integrated Human Resource Management System (iHRMS). The goal was not only to shorten wait times but also to make the process more transparent and easier for employees and administrators alike.

**Approach:** We undertook a quality-improvement exercise using the Plan–Do–Study–Act (PDSA) method, a four-step cycle commonly applied to refine processes. Teams from the Directorate of Health & Family Welfare and the National Informatics Centre collaborated on software development. Staff trainings began in May 2025; the pilot was launched in district SAS Nagar on 21 May 2025 and later expanded to district Patiala and Fatehgarh Sahib. Data from iHRMS dashboards were reviewed to measure turnaround time, error rates and user perceptions.

**Findings:** Over six months (May–October 2025) several hundred claims were filed online. The average processing period dropped from roughly 45–60 days to under 25 days. Built-in rate tables and document checklists reduced calculation errors and missing attachments, while online dashboards let employees follow the status of their claims in real time. Participants highlighted the elimination of physical file transport and the ease of verification through automated calculations.

**Implications:** Embedding medical reimbursement into iHRMS shows how an existing digital platform can bring public-sector administration into the modern age. Faster decisions, clearer audit trails and satisfied users suggest that a similar model could work across other departments and states.

**Keywords:** Embedding medical reimbursement; Punjab; State employees; Hospital; Integrated Human Resource Management System (iHRMS)

## Introduction

Medical reimbursement for government employees is a long-standing welfare benefit in India. In Punjab, however, the mechanism had hardly changed for decades: employees collected hospital receipts, filled out reimbursement forms and submitted everything to their offices. The paperwork then travelled sequentially from local offices to district health authorities, and, when costs

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exceeded a set limit, onward to the state headquarters. Throughout this journey there was no real-time visibility and claims often sat for weeks on someone's desk. As a result, reimbursement could take six to eight weeks, and some files were even misplaced.

Imagine having to wait weeks just to be reimbursed for a hospital stay; that was the reality for many Punjabi state workers before this initiative. The frustration of not knowing where your papers were or when money would arrive added stress to an already difficult time.

The Government of Punjab has committed to the **Digital India** mission, which encourages public services to adopt digital platforms wherever possible. The Integrated Human Resource Management System (iHRMS) [1] is a centralized platform that already handles payroll, leave, service records and other human-resource functions. It enforces role-based access, standardizes procedures and enables real-time dashboards. Recognizing these strengths, the Directorate of Health & Family Welfare (DHS) proposed adding a medical reimbursement module to iHRMS so that claims could be processed on the same platform that already managed employee data and salaries. This paper describes the design and early results of that initiative [2].

## Methods

### Quality-improvement framework

We chose the **Plan–Do–Study–Act (PDSA) cycle** to guide the project [3]. This iterative approach is widely used in quality-improvement work: teams plan a change, implement it on a small scale, study the results and then act to refine the process before scaling further.

### Objectives

The digital module aimed to replace a paper-bound workflow with an online one that would be auditable and user-friendly. Specific objectives were to:

1. **Shorten processing times:** We targeted at least a 40 % reduction in average turnaround time compared with the manual process
2. **Provide real-time tracking:** Employees should be able to log in and see exactly where their claim is in the approval chain
3. **Reduce errors:** Automated checklists and pre-loaded rate tables should help staff avoid arithmetic mistakes or incomplete submissions
4. **Ensure accountability:** Every action should be time-stamped and signed digitally so that claims can be audited from submission to sanction

### Partners and governance

- **Directorate of Health & Family Welfare (DHS), Punjab:** Led policy design, provided oversight and organized training sessions
- **National Informatics Centre (NIC), Punjab:** Developed and maintained the software and provided technical support
- **District health offices:** Coordinated on-site trainings and tracked progress during roll-out
- **Participating departments:** Included staff from Civil Surgeon offices, Deputy Commissioner offices, police and education departments, and other administrative units

### Mapping the old and new processes

In designing the new process, we first sat down with stakeholders to chart the old workflow step by step. This exercise highlighted bottlenecks and duplicated efforts and laid the groundwork for the digital design that followed.

- **Pre-digital workflow:** Historically, claims were passed from the employee's office to district health officials and sometimes to the state headquarters. Everything was paper-based; there were no dashboards and employees could not trace their claim's status. Processing averaged six to eight weeks
- **Design of the digital module.** The new module was integrated into the existing iHRMS portal. Employees log in with their iHRMS credentials and choose an "Upload Bill" option on the dashboard. A single online form captures hospital details, treatment category and claim amount, and allows attachments of scanned documents. Only family members listed in the employee's service record can be selected, and for treatments in private hospitals outside Punjab the hospital details must be entered manually. Employees claiming reimbursement from insurance must provide policy details; those who received a medical advance enter the advance-letter number and date

Once submitted, a claim moves through several digital tiers:

- **Drawing and Disbursing Officer (DDO) level:** Each employer sets up a medical branch, maps employees to approval flows and prioritises cases. Staff at this level can view and edit bill details, add notes, and forward the case to the next level. Pharmacy bills can be edited only at this stage. A history of changes is recorded automatically
- **Civil Surgeon level:** If the DDO is not the sanctioning authority, the case is routed to the civil surgeon's office. There, medical branches and boards are configured, staff are mapped to workflows and cases are prioritized. The civil surgeon generally acts as the approving authority; if not, the case moves to the Directorate of Health Services (DHS)

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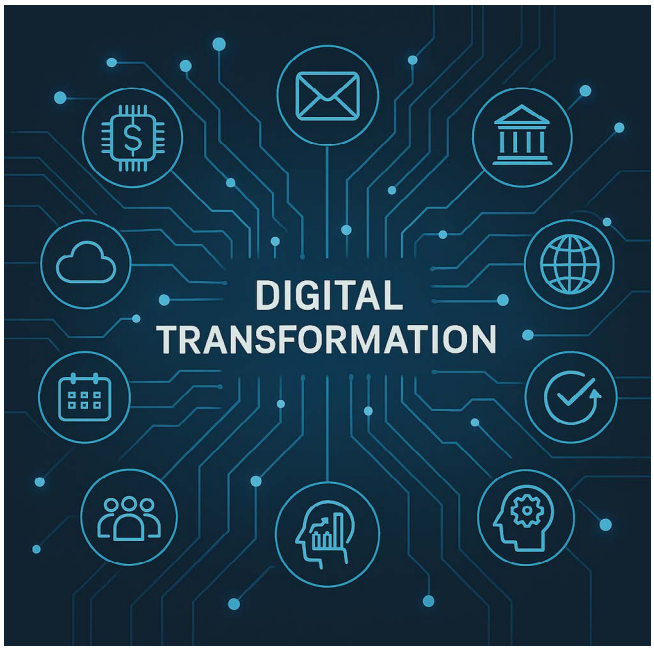
- **DHS level:** Head-office cases and those escalated from lower tiers are handled by the DHS. Dedicated teams prioritize and sanction claims. Where necessary, the approving authority applies an Aadhaar-based e-signature after receiving a one-time password
- **Digital signature and audit trail:** Approvers enter their Aadhaar number, generate an OTP and sign electronically. Each action is logged with a timestamp, creating a secure trail for later audits
- **Tracking and communication:** Employees can monitor their claim at every stage. Staff can send a case back for clarification and choose among co-equal authorities when forwarding. Dashboards and notifications keep everyone informed (Figure 1)

Key features of the module include role-based log-ins, pre-loaded rate lists, mandatory document checklists, priority tags, live tracking and automatic alerts. Collectively, these tools remove the need for files to travel physically and standardize the path each claim follows.




*Stylised digital transformation illustration*

**Figure 1:** The image symbolizes digital transformation in government services, with a stylised depiction of data flows and connectivity.

### Roll-out timeline

#### Data collection and evaluation (Table 1)

Data came from the iHRMS dashboards [1]. To protect privacy, analyses used aggregated numbers rather than individual case data. We tracked the number of bills generated, measured the average time between submission and sanction, counted errors and omissions and gathered qualitative comments during training sessions and follow-up meetings.

**Table 1:** Data collection and evaluation.

| Milestone | Date | Description |
|---|---|---|
| **Initial training** | 19 May 2025 | Workshops in district SAS Nagar introduced staff to the new module |
| **Pilot launch** | 21 May 2025 | Online reimbursements began for employees in SAS Nagar |
| **Refresher training** | 1 Sep 2025 | Additional sessions incorporated lessons from the pilot |
| **Phase 2 training** | 14 Aug 2025 | Staff in district Patiala and Fatehgarh Sahib were prepared for expansion |
| **Phase 2 roll-out** | 22 Aug 2025 | The module went live for selected departments in district Patiala and across all departments in district Fatehgarh Sahib |

## Results

During the six-month pilot (May–October 2025), several hundred claims were filed through the online module. Key observations were as follows:

### Efficiency gains

- **Shorter turnaround:** During the pilot we processed hundreds of claims and the mean turnaround time fell from roughly 45–60 days to well under 25 days, easily surpassing the 40 % reduction target
- **Fewer mistakes:** Pre-populated rate tables and required-field checklists cut down on arithmetic errors and missing documents
- **Greater transparency:** Employees could view the status of their claims at any time, and every step in the process was recorded
- **Better auditability:** Electronic signatures and timestamps produced a robust record for later review

### User experience

Participants reported that the new system removed the need for physical file transport. Automated calculations made verification straightforward, and reliance on multiple departments decreased because workflows were clearly defined. Some staff members requested periodic refresher sessions to stay familiar with the system.

## Discussion

### Contrasting manual and digital approaches (Table 2)

These differences illustrate how the digital module transforms the experience for both employees and administrators. The project leveraged the existing architecture

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**Table 2:** Contrasting manual and digital approaches.

| Aspect | Old paper system | New digital module |
|---|---|---|
| **Workflow** | Paper files circulated sequentially; no real-time tracking | All steps are online, with role-based dashboards and automatic notifications |
| **Processing time** | Approximately six to eight weeks | Generally three to four weeks (average under 25 days) |
| **Audit trail** | Manual record-keeping; files could go missing | Every transaction is signed and time-stamped digitally |
| **Transparency** | Employees had little visibility into claim status | Claimants see progress in real time; management can view aggregated dashboards |
| **Integration** | A stand-alone process; accounting entries were manual | Linked to iHRMS and the Treasury system; one of 38 bill types handled by the e-Treasury |

of iHRMS, which already manages payroll, leave and other HR functions, making integration efficient. Oversight from the DHS and technical support from NIC Punjab were crucial to the smooth roll-out.

## Strengths

- **Building on existing platforms:** By adding a module to iHRMS rather than creating a new system, the project benefited from established security features, role-based access controls and a user base already familiar with the interface
- **User-centric design:** A single dashboard offered employees an intuitive entry point. The system is web-based and supports local languages, widening accessibility
- **Standardized data entry:** Uniform forms and automated validations improved data quality and reduced opportunities for fraudulent claims
- **Replicability:** Because medical reimbursement is just one of many bill types processed through iHRMS and the Integrated Financial Management System, this model can be extended to other administrative workflows

## Limitations

- **Digital skills:** Some staff members initially struggled with the online interface and required extra coaching
- **Internet connectivity:** Occasional network outages in remote areas interrupted real-time data entry
- **Data scope:** The pilot focuses on operational metrics; full statistical analysis will be possible only after a broader roll-out

## Sustainability and Future Work

After the first phase, the project team returned to the offices and clinics to speak directly with employees who were uploading bills and with officers who processed them. Many described the bill-entry form as cumbersome and noted that glitches sometimes froze the system. Over the following weeks the workflow was simplified, the developers worked with the National Informatics Centre to squash bugs, the master data for reimbursement rates was updated to reflect the latest orders, and a small troubleshooting unit was set up so issues could be resolved quickly. Only when those changes were in place was a second phase rolled out in August 2025 to bring the module to more departments. That expansion was followed by another user-feedback review. Drawing on lessons from both phases, a third phase is now being planned to broaden coverage and incorporate additional improvements.

Ongoing technical support from NIC Punjab and periodic refresher trainings will be vital to maintain momentum. Plans include expanding the module to all districts, integrating it with Treasury modules for direct fund release, and monitoring metrics such as turnaround time, user satisfaction and error rates to identify further improvements.

## Conclusion

In summary, the digital medical reimbursement module embedded in iHRMS offers a practical example of how public-sector processes can be modernized. By harnessing a unified HR platform, the Punjab Government has cut processing times, improved data accuracy and enhanced user satisfaction. Looking ahead, the success of this pilot suggests that similar digital initiatives could streamline other administrative functions both within Punjab and across India.

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**Ethical considerations:** This work was a quality-improvement project. No patient information was collected, and the study analyzed only anonymized, aggregated data. Formal ethics approval was therefore not required.

**Conflict of interest:** The author declares no conflicts of interest and received no external funding for this study.

## References

1. Integrated Human Resource Management System (iHRMS). Overview and objectives. National Informatics Centre, Government of India. Available: iHRMS project page.

Dr Goyal S., Fortune J Health Sci 2025
DOI:10.26502/fjhs.371

2. NIC Punjab Profile and Achievements. This document notes that the iHRMS module includes a Medical Reimbursement System.

3. Plan–Do–Study–Act (PDSA) cycle. Definition and key questions for quality improvement. Minnesota Department of Health. Available at: "Tools and Training – PDSA: Plan–Do–Study–Act".

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