

An abstract digital illustration. In the center, a person in a dark coat stands with their back to the viewer, pointing towards a large, stylized face that appears to be composed of digital data or code. The face is rendered in shades of blue and green. To the right, a large, glowing yellow sphere, resembling a globe or a planet, is visible. The background is a mix of dark blue, green, and yellow, with vertical lines and a red, swirling pattern at the bottom. The overall style is futuristic and digital.

Agents of Change

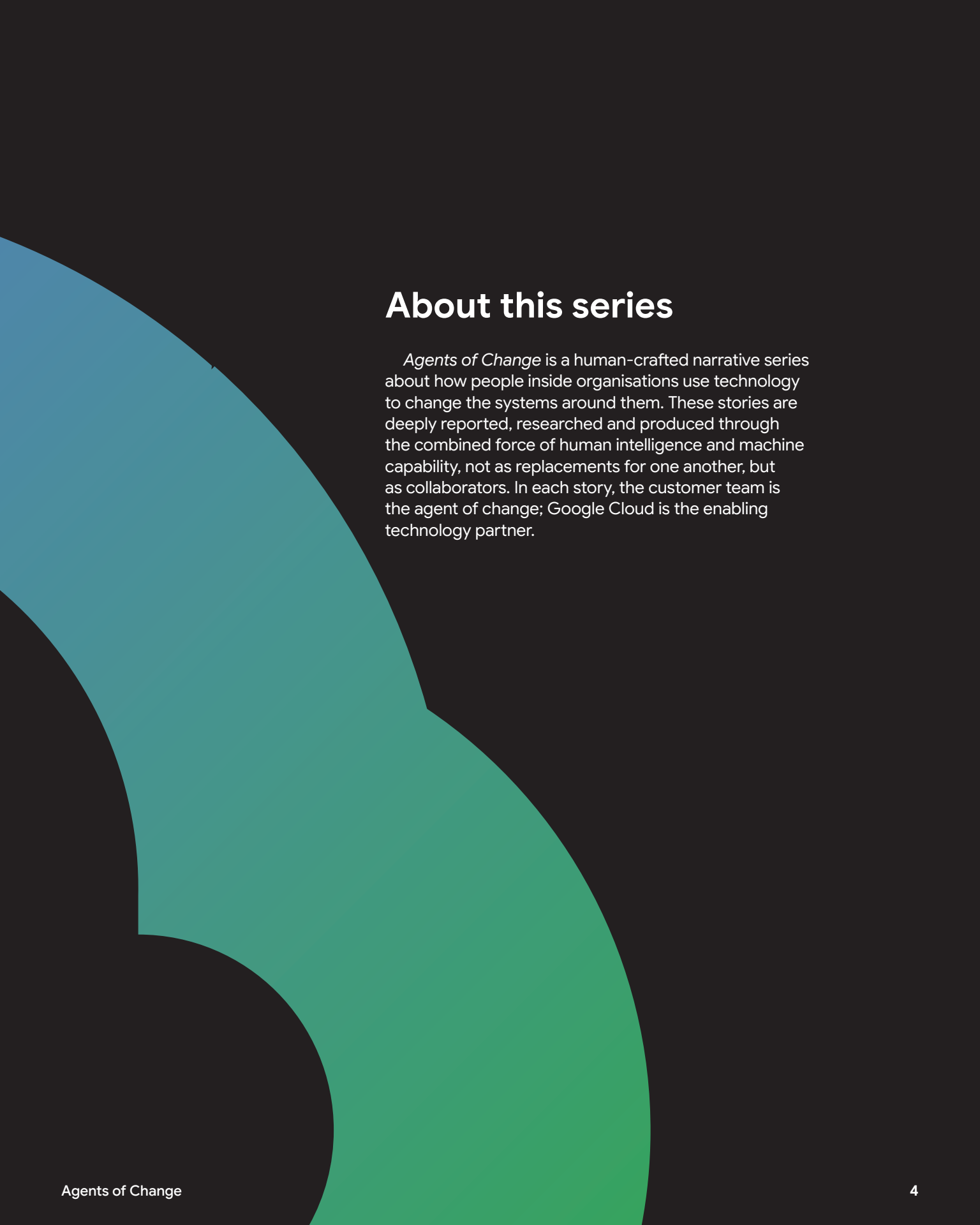




When healthcare finds its balance again

How Manipal Hospitals used AI from Google Cloud to turn a ninety-minute nurse handover into a structured, near-instant summary, giving time back to nurses, and continuity to care.

Chapter 1 | Agents of Change by Google Cloud



About this series

Agents of Change is a human-crafted narrative series about how people inside organisations use technology to change the systems around them. These stories are deeply reported, researched and produced through the combined force of human intelligence and machine capability, not as replacements for one another, but as collaborators. In each story, the customer team is the agent of change; Google Cloud is the enabling technology partner.

The Breakthrough

Manipal Hospitals became an agent of change by solving one of the most fragile operational problems in Indian healthcare: how to turn fragmented clinical records, handwritten notes, and high-pressure nurse handovers into structured, usable information that people could trust.

The most immediate challenge sat at the nurses' station. Shift handovers were slow, noisy, and vulnerable to error. A process meant to preserve continuity of care was often consuming close to ninety minutes, with critical details at risk of being missed in the overlap between one shift ending and another beginning. For a hospital system operating at scale, that was not just an efficiency problem. It was a patient-safety problem.

Working with Google Cloud, Manipal built the underlying digital foundation required to change that. A deeper data layer and a more interoperable records architecture made it possible to generate structured, in-system summaries from the information nurses were already entering. The result was simple at the surface but significant underneath: a one-click, ISBAR-style handover summary that could sharply reduce the time and uncertainty built into every shift change.

That same foundation opened up a larger possibility. Once clinical records could be made more structured and more reliable, Manipal could begin extending the system into adjacent problems: digitising handwritten prescriptions at very high accuracy, enabling ePharmacy workflows, and creating the base for more proactive patient care over time.

The story that follows is about what that technical shift looked and felt like for the people closest to its consequences: the nurses carrying the burden of handover, the leaders trying to rebuild the system beneath them, and the patients whose care depended on details not being lost in the noise.

The tide at 12:30



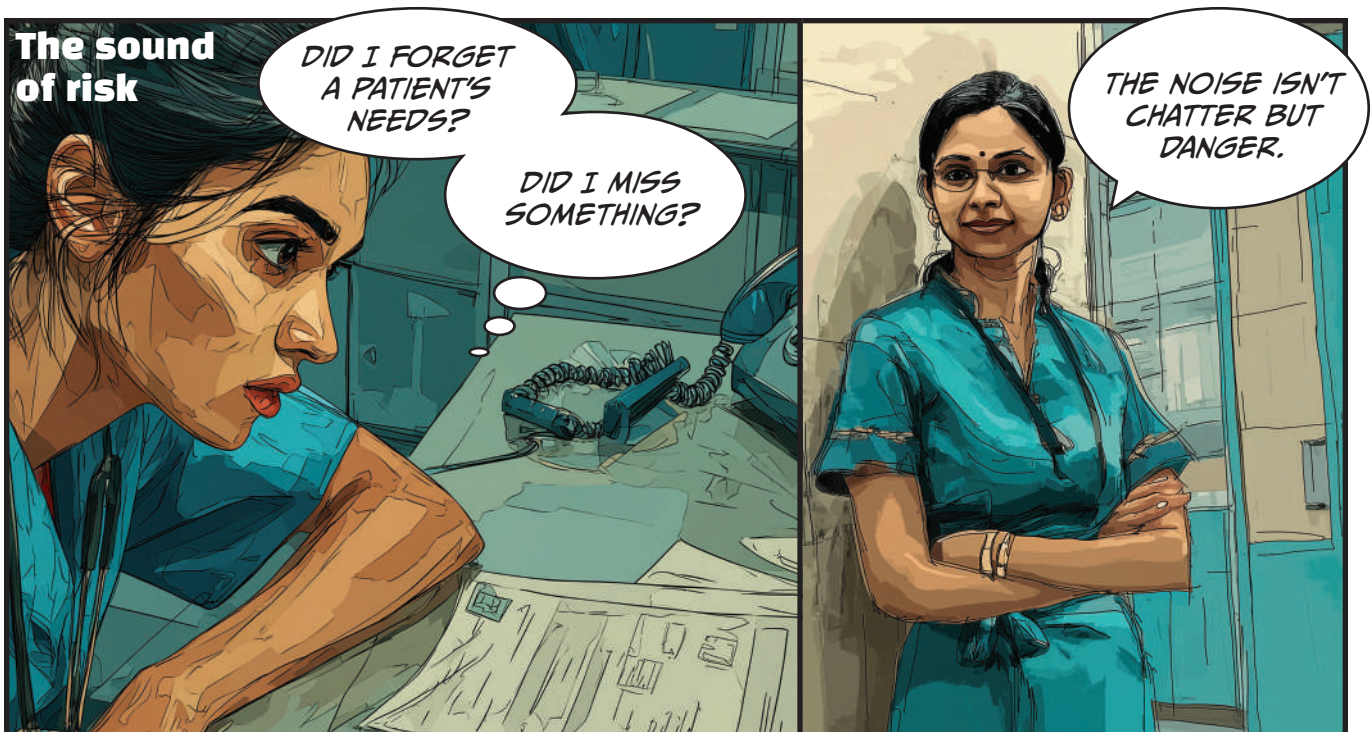
IT'S 12:30 PM. THE NURSES' STATION AT MANIPAL TURNS INTO A CROSSING OF TIDES. ONE SHIFT IS WINDING DOWN, ANOTHER IS ASSEMBLING, AND FOR 90 ODD MINUTES THE COUNTER BECOMES A CORRIDOR OF COMPETING VOICES. CHARTS ARE SLID ACROSS THE DESK, PHONES BUZZ, ORDERS ARE REPEATED, AND IN THE RUSH OF HANDOVER, FRAGMENTS SLIP THROUGH.

The cliff edge of handover



The pivot point





THIS CHAOS WORRIED CHIEF NURSING MANAGER SAROJA JAYAKUMAR. AND IT DIDN'T END WITH THE SHIFT.



AFTER A TWELVE-HOUR NIGHT, THE SHIFT WAS SUPPOSED TO END. YET THE PHONE COULD RING HOURS LATER WITH A COLLEAGUE'S REPROACH.

The seam that needed repair



The cost of getting it wrong



IF IT GOES WRONG, OUR PATIENT CARE COULD BE COMPROMISED, AND THE MANIPAL HOSPITALS BRAND COULD BE TARNISHED.

The HIS alone was not up to this challenge.



THEY WERE NEVER DESIGNED TO MAKE A MEANINGFUL SUMMARY FOR THE NURSES.



The nightmare under the hood



Move fast, but make it strong



A DATA LAKE IS A CENTRALIZED REPOSITORY THAT STORES VAST AMOUNTS OF RAW DATA IN ITS NATIVE FORMAT. IT ENABLES LATER ANALYSIS USING TOOLS FOR MACHINE LEARNING, BIG DATA PROCESSING, AND BUSINESS INTELLIGENCE.

HL7 meets FHIR



Debugging the unwritten path



The base layer that enables the future



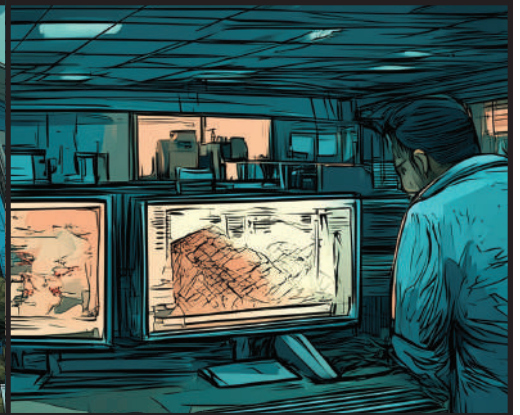
EVERY FUTURE INNOVATION STANDS ON THIS. FINALLY THEY WERE READY TO TURN CHAOS INTO CLARITY! BUT...

The memory of the first failure

...IT WAS TOO EARLY TO CELEBRATE. MADHUR WAS REMINDED OF AN EARLIER SET BACK.



A pilot that started at home



A FEW MONTHS AGO, THE TEAM HAD TRIED A PILOT. THEY EQUIPPED PATIENTS WITH A FITBIT.



THE FITBIT, SENT DATA TO THE CLINICIAN. LOOKING FOR ANY SIGNS OF TROUBLE.

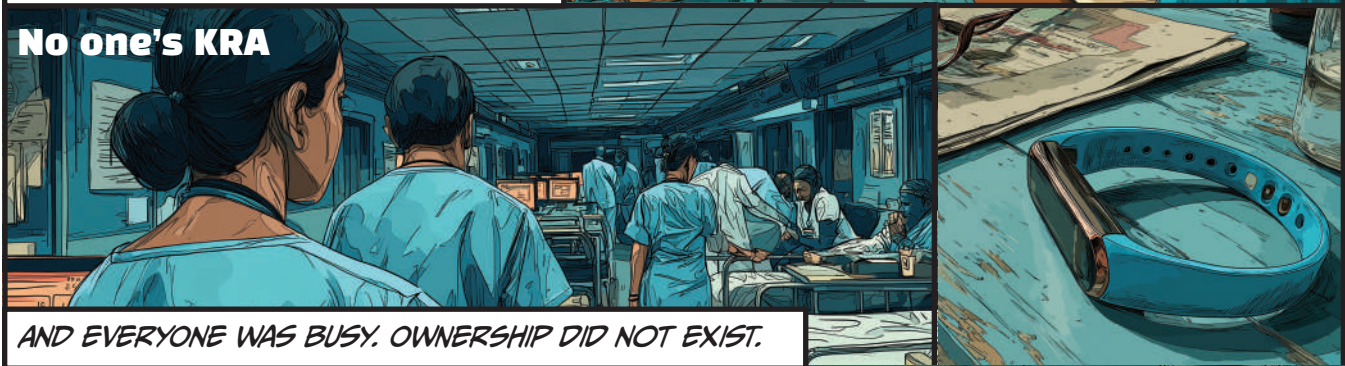
The wins were real



The shadow over the pilot



No one's KRA



Demand, but no carriers

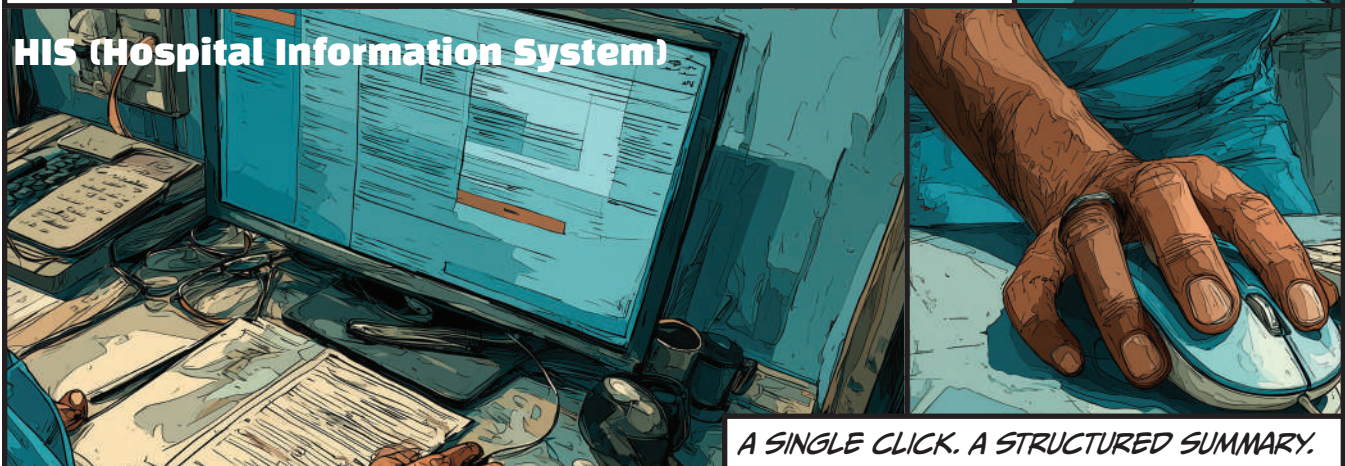


The most fragile ninety minutes



THE RISKIEST MOMENT WASN'T SURGERY. IT WAS THE SHIFT HANDOVER.

HIS (Hospital Information System)



A SINGLE CLICK. A STRUCTURED SUMMARY.

The summary that writes itself



MANIPAL USES THE ISBAR (IDENTIFY, SITUATION, BACKGROUND, ASSESSMENT, RECOMMENDATION) FORMAT FOR THE SUMMARY.

Designed for the grain of work



Saves precious time



THE 90 MINUTES HANDOVER CHAOS IS NOW A THING OF THE PAST. THE HANDOVER IS NOW FASTER!

Clarity replaces the quiet fear



CONFIDENT IN THEIR PATIENTS' CARE, NURSES CAN RETURN TO THEIR OWN FAMILIES ON TIME.

Technology that finally served them



A system that moves work, not adds to it



NURSES NOW SPEND MORE TIME AT THE BEDSIDE, NOT AT THE DESK. BUT THAT WASN'T ALL. MADHUR WANTED TO BEAT THE FINAL BOSS: UNREADABLE PRESCRIPTIONS.

[illegible]

FOR DECADES, THESE LINES WERE LEGIBLE TO TWO PEOPLE. THE DOCTOR AND THE PHARMACIST. AND INVISIBLE TO EVERYONE ELSE.

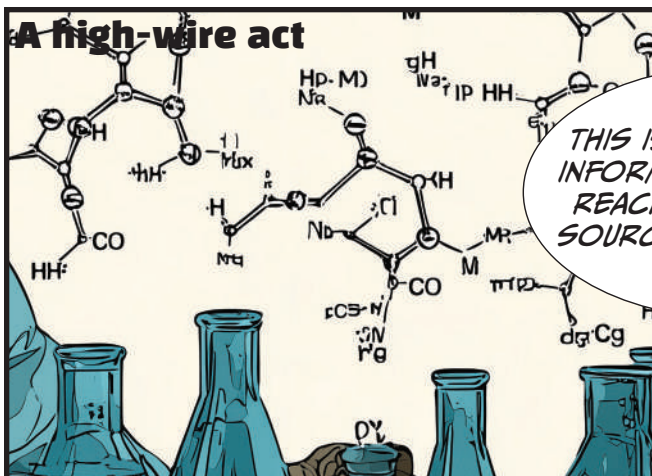
A man with glasses and a light blue shirt is looking down at a newspaper. The image is a stylized illustration with a teal and brown color palette. A speech bubble in the bottom right corner contains the text: "EXCEPT THE DOCTOR AND THE PHARMA".

A problem too big to ignore

EXCEPT THE DOCTOR AND THE PHARMA

NO OTHER
PERSON C
UNDERSTAN
BEHIND H
STACKS O
PRESCRIPT
RISE LIKE
UNSCALAB
MOUNTAIN

A high-wire act

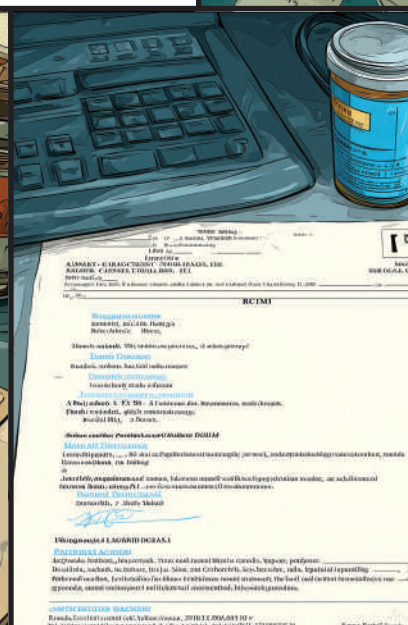


The risk was real

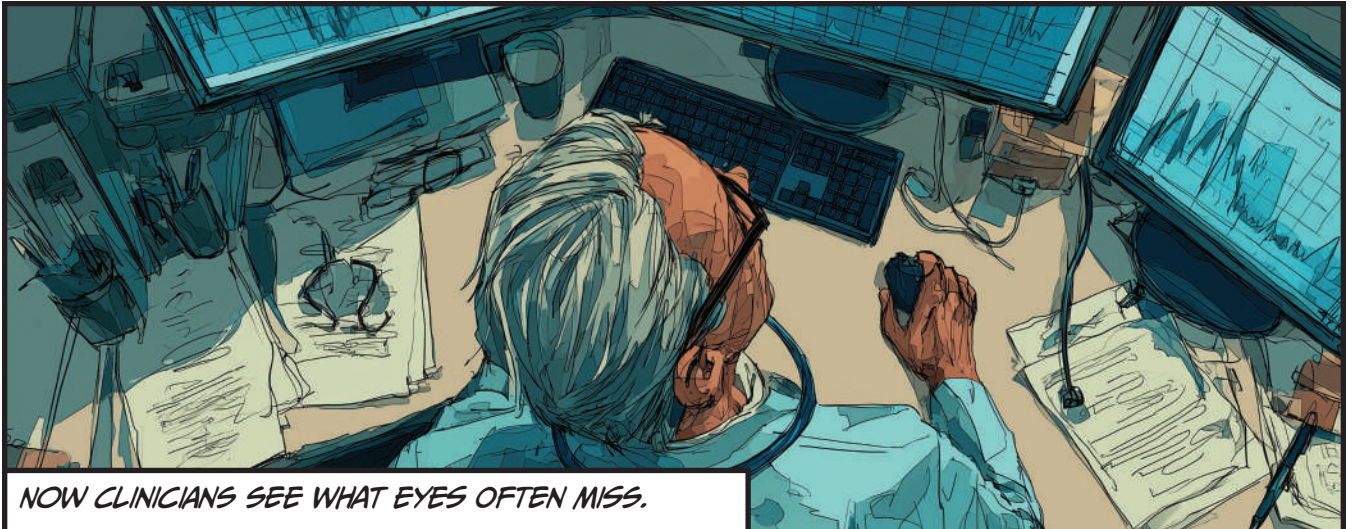
THIS IS PATIENT DATA... INFORMATION HAD ONCE REACHED THE WRONG SOURCE. THEY TOOK US TO COURT.

A SINGLE MISREAD LETTER CAN TURN A HEART MEDICINE INTO A NEUROLOGY DRUG.

Months of engineering one breakthrough



PATIENTS CAN SEE THEIR OWN TREATMENT. FINALLY, UNDERSTANDING HAD REPLACED DEPENDENCE.

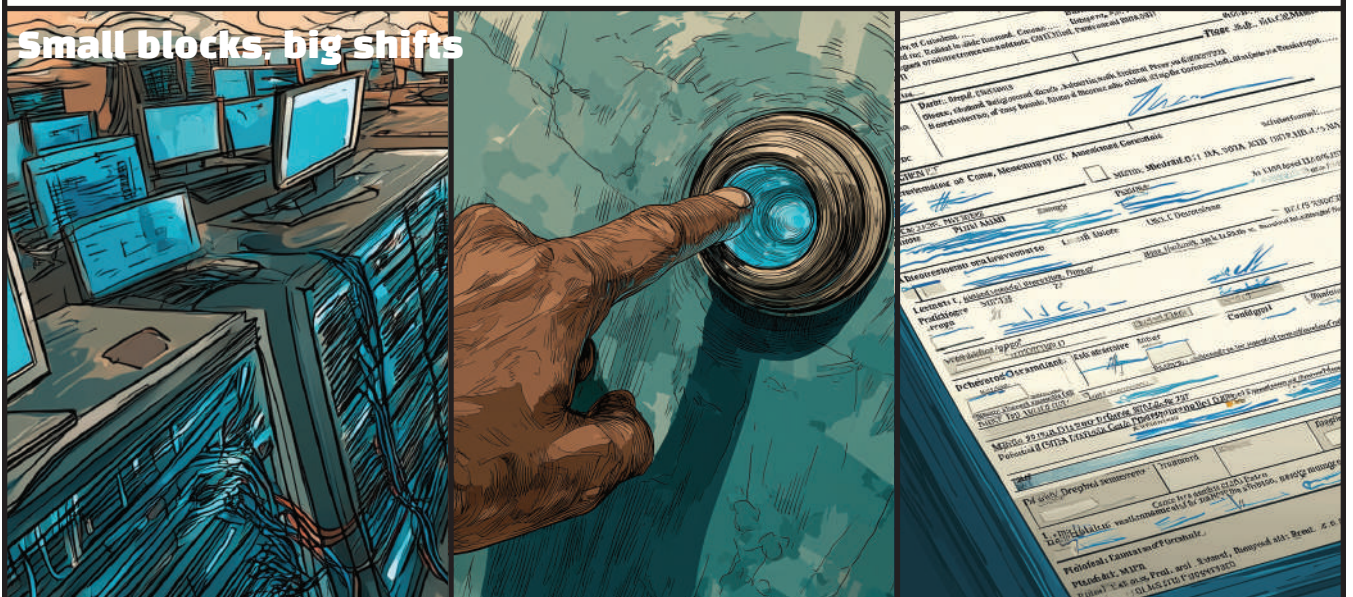


NOW CLINICIANS SEE WHAT EYES OFTEN MISS.



Proof that digital can protect

FAMILIES WHO ONCE FEARED UPSELLING NOW SEE TRANSPARENCY INSTEAD OF OPACITY.

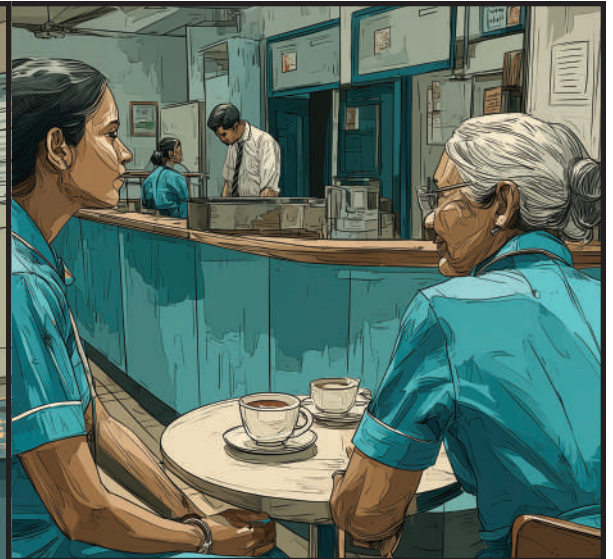


Small blocks, big shifts

IN ISOLATION, THEY MAY NOT SEEM BIG, BUT TOGETHER THEY CHANGE THE SYSTEM.

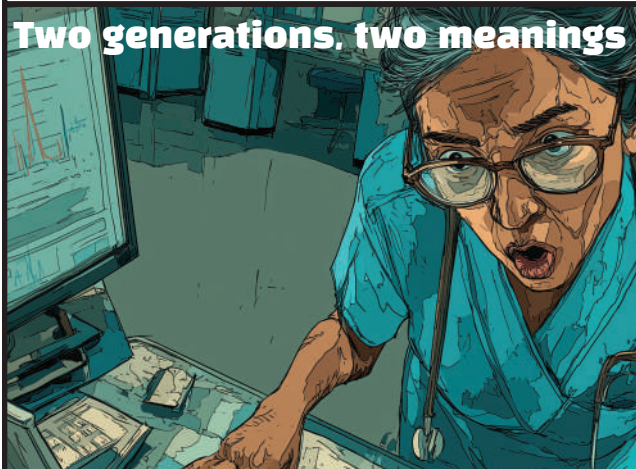


*SAROJA CAN NOW LEAVE WITHOUT FEAR.
THE SUMMARY SPOKE FOR HER.*



*FOR THE FIRST TIME IN YEARS, RELIEF
COULD FINALLY BE TASTED, NOT JUST
HOPED FOR.*

Two generations, two meanings



ONE TOOL, TWO ERAS OF NURSING.



Replacing burnout with reliable, quality care



HUNDREDS OF NURSES, SAVING AN HOUR EACH. IT ADDS UP.

The feeling of completeness



CLOSURE BECAME PART OF THE WORKFLOW.

EVEN IF ONE OF US FORGETS, IT IS ALREADY CAPTURED." THE TEAM STANDS IN QUIET ALIGNMENT.

Trust becomes shared



When noise becomes clarity



I'M IN GOOD HANDS.

The signals that matter most



CRITICAL PATIENTS NOW SURFACED, NOT SEARCHED FOR.

Safety has no shortcuts



AUTOMATION CARRIES RISK—BUT COMPLACENCY IS THE GREATER DANGER.

From ward to world



Returning the nurse to the bedside



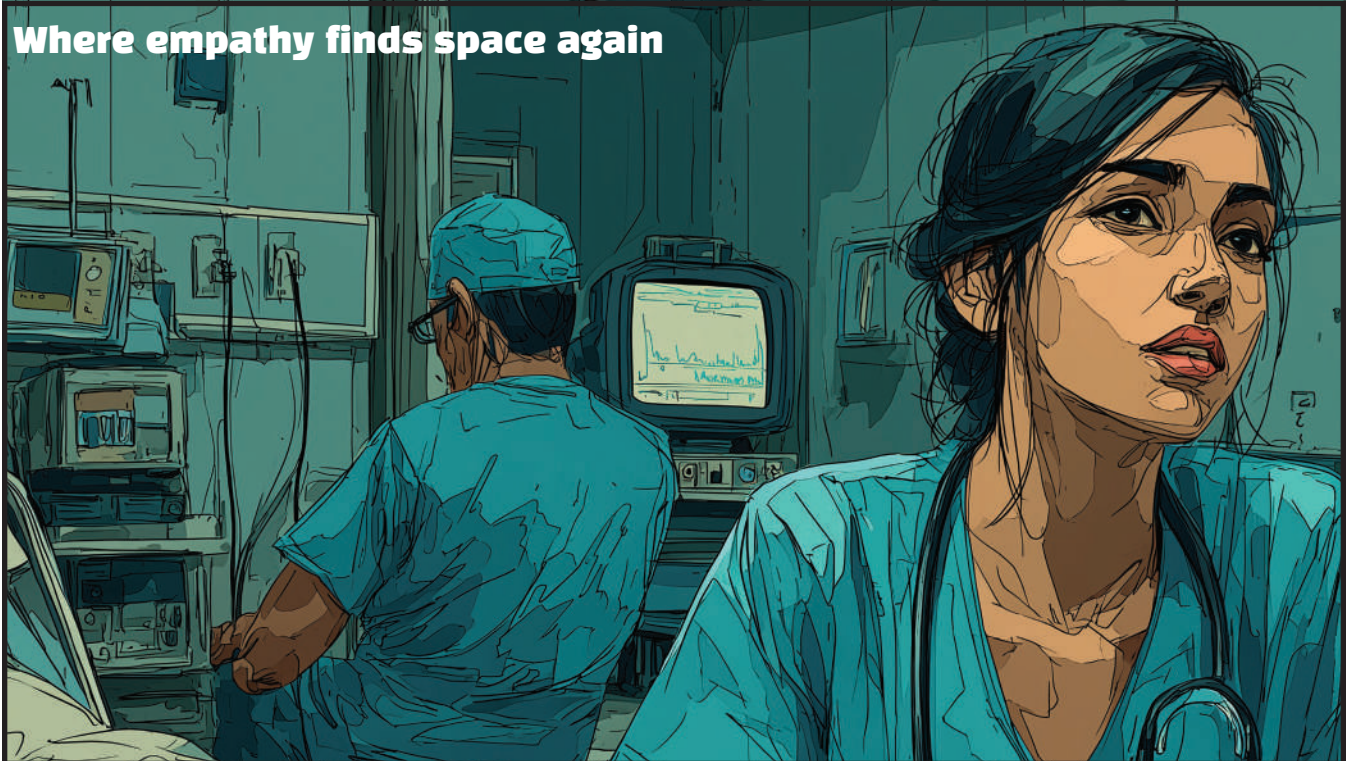
I AM A NURSE, AND I WOULD WANT TO BE MORE OF AN EMPATHETIC NURSE.

CARE NO LONGER DEPENDS ON MEMORY.

From reactive to proactive



Where empathy finds space again



THE FUTURE OF HEALTHCARE WILL BE BUILT NOT IN THE SPECTACLE OF AI, BUT IN THE QUIET RELIEF OF A NURSE WHO DOES NOT FEAR THE PHONE AFTER A 8-HOUR SHIFT.

A hospital doesn't throw a party when a handover goes right. When a handover goes right, it disappears.

You feel it in what doesn't happen: less noise at the station, less scrambling for missing details, fewer shifts that spill into the hours after someone has gone home.

The change looks simple: a click, a summary, a handover completed in minutes. But it only holds because of what came before it: the slow work under the hood, the choice to make the system carry meaning, and the decision to treat trust as the main requirement.

The goal isn't just to refine the software, but to make the technology so intuitive that it becomes a silent partner in care.

As we move toward more integrated systems, the ultimate success won't be measured by the complexity of the tools, but by the quiet assurance that the system remembers so that human focus remains on patient care.

Coming up next

***Speaking in your own accent:
Building AI that listens to India***

