Enhanced Patient Safety
through Contactless Remote Patient Monitoring Solution
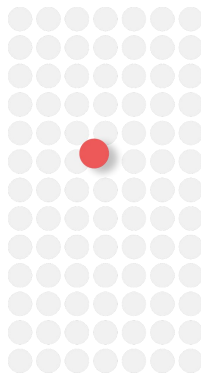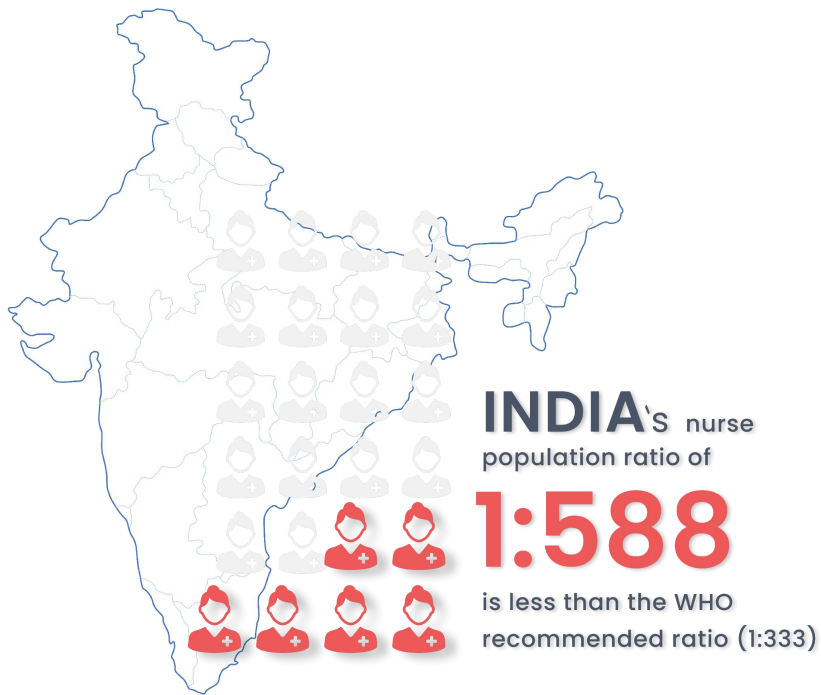
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India's Healthcare Infrastructure

Current Scenario

INDIA's nurse population ratio of

1:588

is less than the WHO recommended ratio (1:333)

INDIA has only **5 beds** per 10,000 people

INDIA ranks **155th** out of 167 on bed availability

Sub-optimal Patient Monitoring

Can Compromise Patient Safety

Everytime there is an emergency situation, there is always a trend of deteriorating vitals

6-8 hours

before the event occurs.

This leads to escalations in care - leading to longer length of stay, higher costs and also negative clinical outcomes

It is not that the patient deteriorates suddenly, it is that clinicians suddenly notice!

Detrimental Events
in general wards are common and avoidable

73%

73% of patients who died in hospitals were not admitted to critical care at any stage after surgery

Why haven't we provided a Safety Net?

Even though there is Desire

Hospitals With adoption of Accreditations standards have created their own system of providing a safe care, and ensuring there are SOPs and protocols in place for patient safety.

But, there are still numerous challenges

People dependent &

not system dependent

- Low uniformity
- Gaps in uniform skillset
- Lack in providing consistent round-the-clock service

x

Shortage of resources

- Shortage of doctors/nurses
- Lack of affordable technology led solutions

With all the challenges we have in
Providing Safe Care

What's the ideal solution/system?

Is there any sustainable & cost-effective way?

Technology led Systems

Need of the Hour

We need to enhance our system with existing human resources, and the only way possible is through technology.
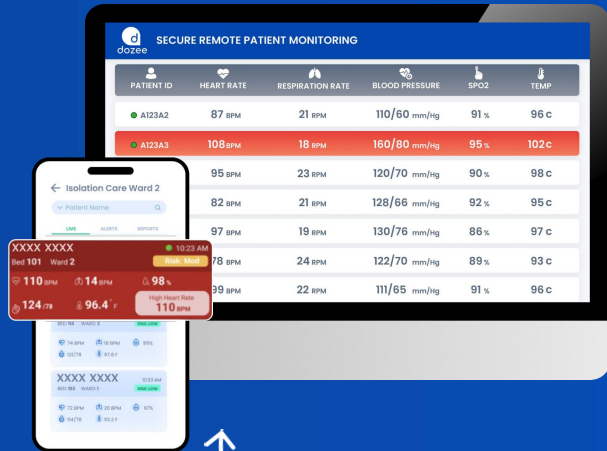
Affordable

Easy to adopt

Easy to use

Scalable

Robust

Adoptable for future addition

Dozee - Contactless RPM
And AI-based Early Warning System

SecureRPM
Dashboard & App

Convert Any Bed into a Connected Bed
With Contactless Continuous Vitals Monitoring

With World's First Non-contact Blood Pressure ™

Contactless

- Heart Rate
- Respiration Rate
- Non-contact Blood Pressure
- Heart Rate Variability
- Sleep Apnea

Extensible Accessories

- Skin Temperature
- Blood Oxygen
- 12L ECG
- Non-invasive Blood Pressure

8 Publications

7 Patents

*On Heart Rate under clinical supervision.

Apollo's Proactive Enhanced Patient Safety Net

Making Every Bed a Smart Bed

Setting Standards for Care Delivery
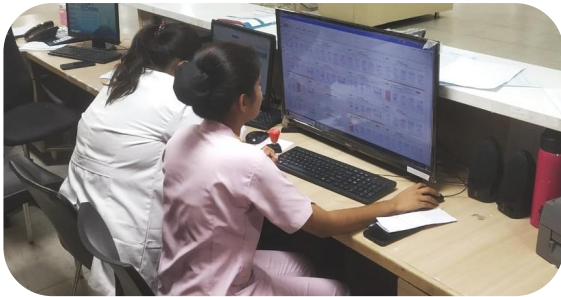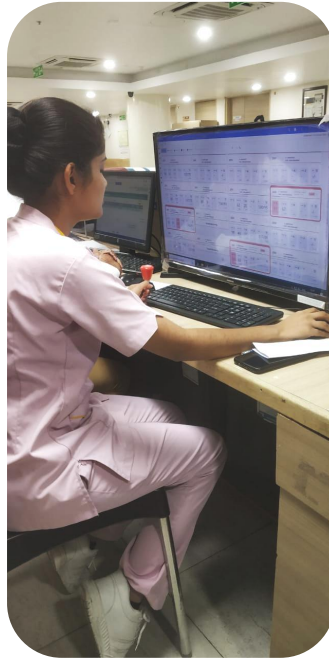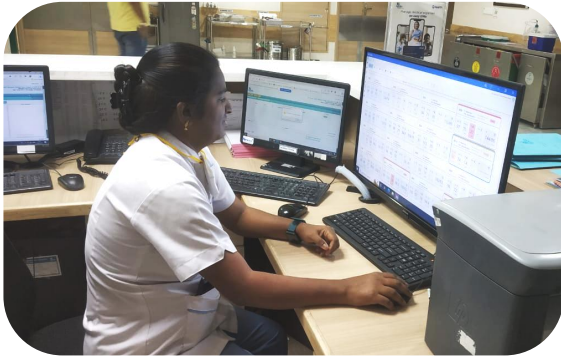
Total beds in the hospital: 140

Total ICU beds : 35

ER & Recovery beds : 22

Dozee powered RPM beds: 83

Command Centre

Providing a Safety Net at every Level of Care

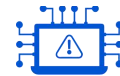## Risk Mitigation via Command Center

Centralized Vitals Monitoring of all patients

Centralized Alerting System
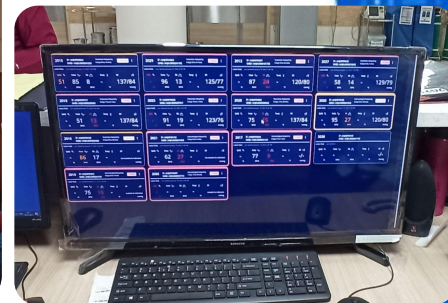
Automatic risk triaging through MEWS

HIMS Integrated Systems

Empowering Patients at Apollo Hospital

Training and Deployment of Dozee Devices

Enablers in better Adoption of Technology

A Multi-faceted but Integrated Effort

01 Leadership as Enablers

- Visionary leadership
- Conviction at the top management level
- Decentralised implementation structure

02 Champions on Ground

- Units recognising implementation champions
- Proactive Training
- Rewards & Recognition

03 Accountability at every step

- Monthly Mortality Meeting Discussions
- Keeping every stakeholder at all levels informed (MET team, nursing, clinicians)

Enablers in better Adoption of Technology

A Multi-faceted but Integrated Effort

04   Training Excellence

- Regular training sessions
- On-job trainings & troubleshooting
- Extensive Field support by Dozee team

05   IT Infrastructure

- Supporting Infrastructure, eg. internet connectivity
- Integratable HIMS systems
- Robust data Storage and processing
- Superior Data security

06   Financial Viability

- Insurance reimbursement
- Viable pricing model by Dozee

Impact at Apollo Enhanced Care

Walking the Talk

Zero Code Blues in last 90 days

Early identification and **mobilisation to ICU**

Efficient Operations with **Patient Satisfaction**

Impact Story:

Date: 8/02/2023

Time: 10:44 AM

Alert Type: Low SpO2 (Below 70%)

Graph of Vitals

Action taken: Low SPO2 below 80%. Patient was not wearing Oxygen mask. Nursing team connected the mask and increased oxygen by 1 litre. Saturation increased to 93%.

Low Risk   Moderate Risk   High Risk

SpO₂
99
<70   88 %

11:00 AM
O2 80 %

100 95 90 85 80 75 70

04:36 05:36 06:36 07:36 08:36 09:36 10:36 11:36 12:36 01:36 02:36 03:36 04:36 05:36 06:30

Next Target

Decreasing the
Average Length of Stay (ALOS)
thereby improving clinical outcomes

Keep Patients Safe

Build Reliable Systems

Enhance The Safety Net

Just Culture