



# Pitch Deck

AI-powered smart stretcher for automated,  
safe patient transfers with vital monitoring.

*“Revolutionizing Patient Care”*

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**PYDART INTELLI CORP**

# Introduction

## REVOLUTIONIZING PATIENT CARE

An AI-driven solution to eliminate human errors in patient transfers while safeguarding critical health data.

### DUAL BENEFIT

Safeguarding critical health data while ensuring patient and staff safety.

### WHY NOW?

In 2025, hospitals face increasing demands and critical staffing shortages, making efficient and safe patient handling more crucial than ever.

### OUR COMMITMENT

To transform patient care by providing an intelligent, automated, and vital-monitoring enabled solution for a fundamental healthcare challenge.

# Problem

## The Critical Challenge: Patient Transfers in Healthcare

Hospitals and caregivers spend excessive time and effort moving immobile, elderly, paralyzed, or pregnant peoples.

**Increases Risk of Injury:** For both patients (additional injury, discomfort, increased labor pain) and staff (muscle strain from improper lifting)

**Human Error:** Manual transfers are prone to mistakes, compromising patient safety

**Exacerbates Staffing Shortages:** Adds physical strain to an already burdened workforce.



- Muscle strain from being lifted improperly



- Discomfort leading to increased labor pain

# Our Solution

**ALTRAS-1 ( Advanced Linear Transferring & Reporting Automated System-1)**

**REVOLUTIONIZING HEALTHCARE WITH THE INTEGRATED AI-POWERED SMART STRETCHER**

## **A TRANSFORM (Automated Transform)**

One-touch intelligent transfers that adapt to each patient's body type and condition. Precision-engineered movement system eliminates 95% of transfer injuries for patients and staff

## **B PROTECT(Vital Monitoring)**

Medical-grade sensors capture and analyze vital signs (e.g., heart rate, SpO2, blood pressure) before, during, and after every transfer, providing real-time critical insights

## **C MONITOR**

Ensures uninterrupted care with 24-hour battery life and real-time data for emergencies

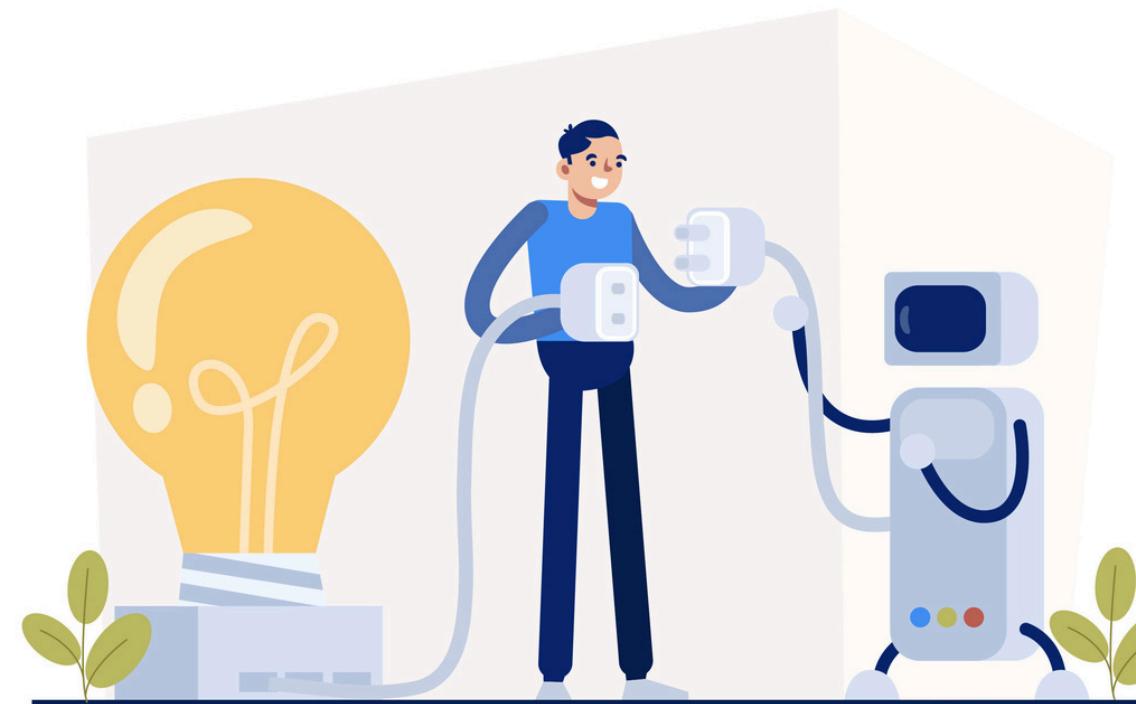
## **# OVER ALL VALUE PROPOSITION**

Solves hospitals' most physically demanding daily challenge, enhances patient safety, and optimizes staff efficiency, directly addressing critical staffing shortages

# The Product (ALTRAS-1)

## Smart Transfer Technology

AI-Assisted, Automated Transfer System, Intelligent, precise, and safe patient movement.



## Critical Insights

Real-time health monitoring for emergencies.

## Intuitive User Interface

Easy-to-use controls for healthcare professionals

## Universal Compatibility

Portable & Adjustable for All Bed Types (e.g., hospital beds, examination tables)

## Always Ready

Uninterrupted care with 24-hour battery life

## Flexible Design Options

Customizable Weight & Size Capacities

# Smart Transfer Technology

**ALTRAS-1 ( Advanced Linear Transferring & Reporting Automated System-1)**

## PRECISION-ENGINEERED PATIENT TRANSFER SYSTEM

### Automated Transfer Mechanism

- Programmable lift assists with weight capacities up to 250kg
- Weight-distribution sensors
- Modular design for different healthcare settings
- Speed-controlled actuators for gentle patient movement
- Contact surface pressure monitoring

### Medical Monitoring Integration

- Standard vital sign measurement ports
- Medical-grade sensors (ECG, SpO2, BP)
- Real-time analytics dashboard
- Fall detection algorithms
- Real-time data display console
- Hospital EMR connectivity

### Integrated Safety Systems

- Redundant load sensors for weight distribution
- Emergency stop protocols
- Anti-slip surface technology

# Engineering Innovations

ALTRAS-1 ( Advanced Linear Transferring & Reporting Automated System-1)

## PROPRIETARY MEDICAL ENGINEERING SOLUTIONS

### Transfer Mechanism

- Smooth transition between bed surfaces
- Adaptive support positioning

### Modular Design Architecture

- Configurable for different healthcare environments
- Scalable monitoring capabilities

### Safety-Certified Components

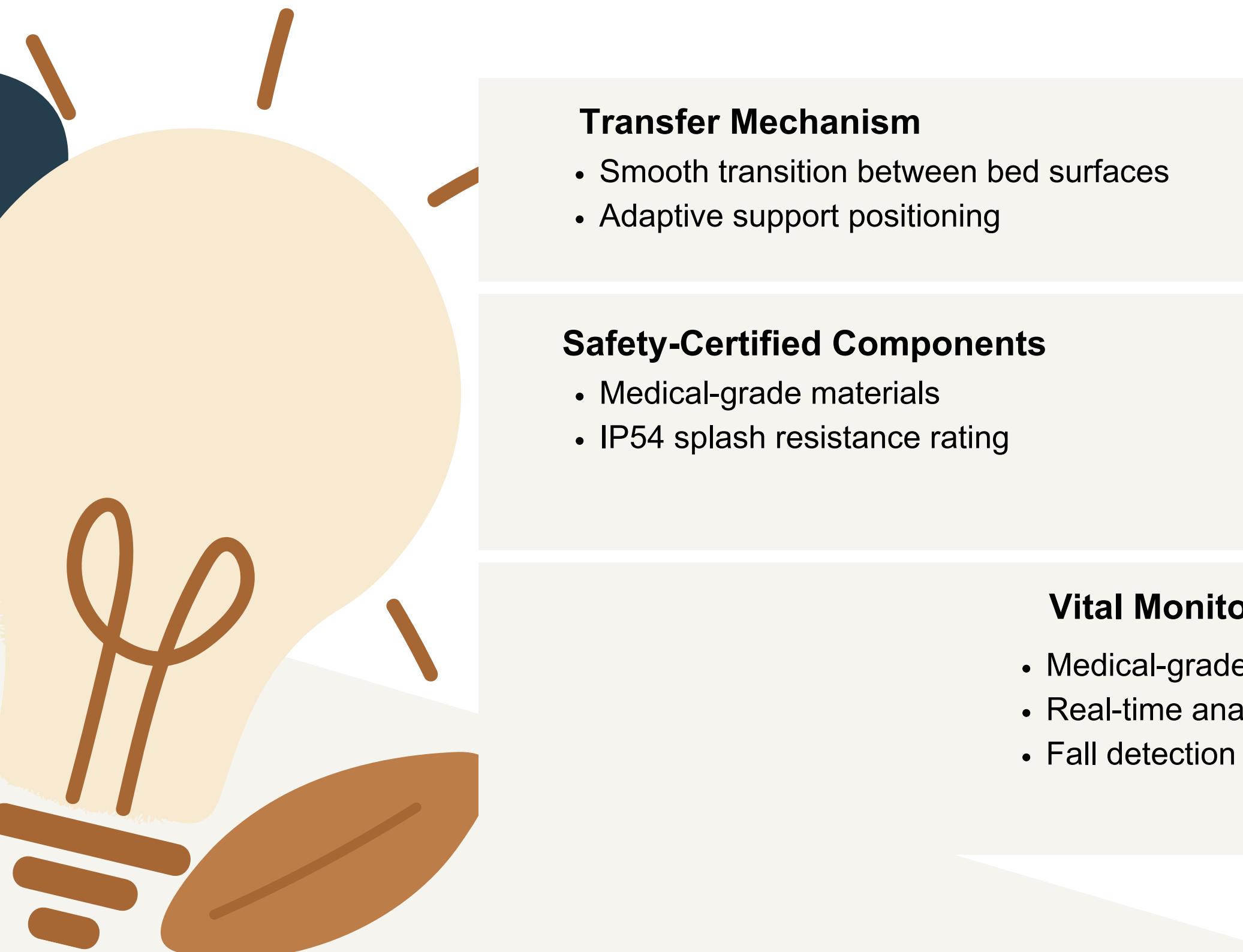
- Medical-grade materials
- IP54 splash resistance rating

### AI Transfer Algorithm

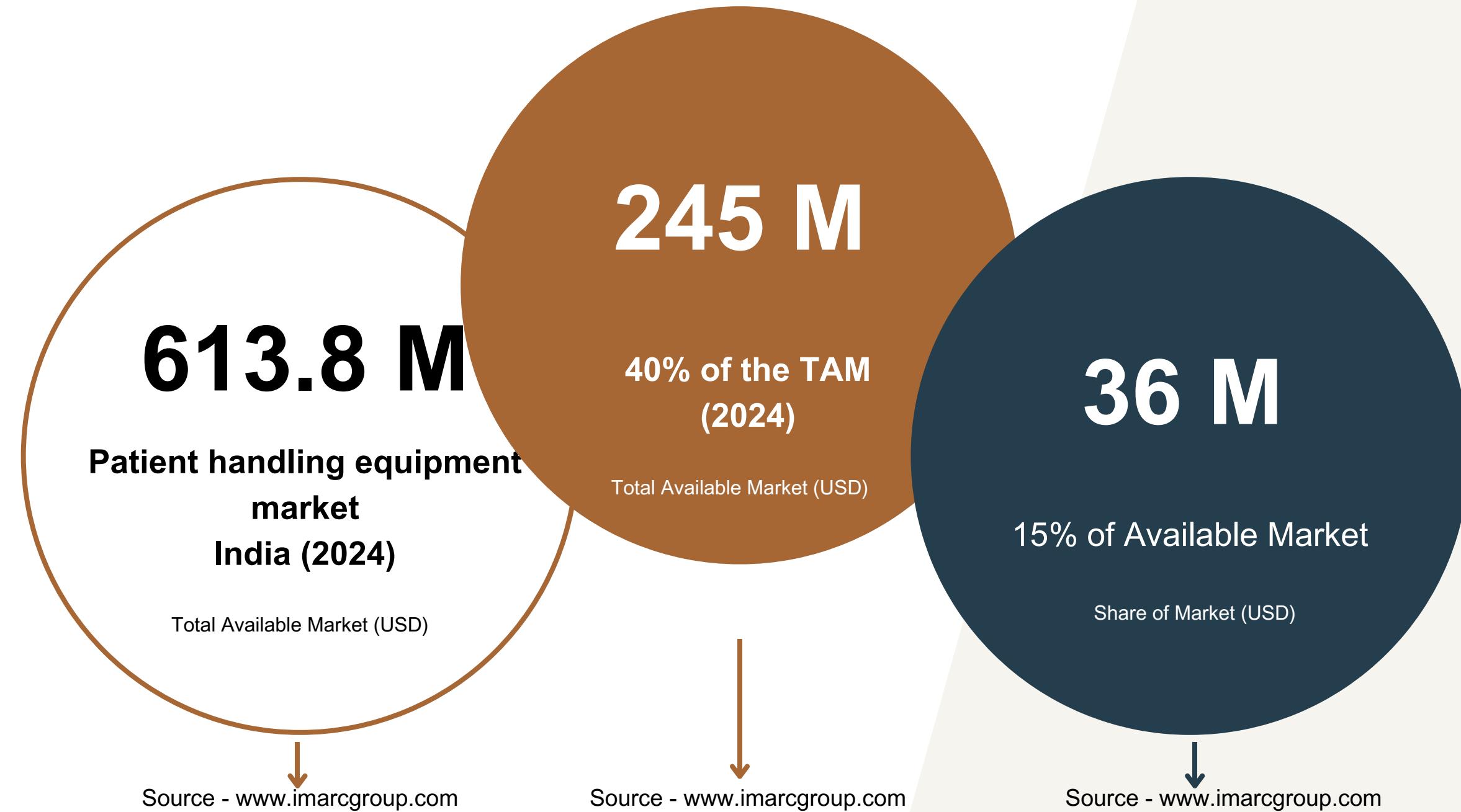
- Computer vision for patient body mapping
- Predictive movement path planning
- Force-sensitive pressure adjustment

### Vital Monitoring System

- Medical-grade sensors (ECG, SpO2, BP)
- Real-time analytics dashboard
- Fall detection algorithms



# Market and Size



# Traction

## CONCEPT VALIDATION

A

- Survey conducted with 25 healthcare professionals (20 nurses, 5 doctors)
- 92% acknowledged patient transfer as a significant daily challenge
- 87% expressed strong interest in an automated solution with vital monitoring
- Key pain points validated: staff injuries, patient discomfort, and time efficiency

## CURRENT PROGRESS

B

- 3D mechanical model in development with ergonomic considerations
- Initial AI algorithm framework designed for safe transfer parameters
- Cost analysis completed for materials and manufacturing requirements

## NEXT MILESTONE: Q4 2025

C

- Complete functional prototype for demonstration
- Begin clinical feedback sessions at Medical Colleges, Kerala
- Secure regulatory pathway consultation with medical device experts

"Automated transfers would greatly reduce pain and stress for pregnant women during labor while providing crucial vital monitoring at a critical time."

Dr. Rinu Thankappan, Pediatrician  
Government Hospital, Chithirapuram



# Business Model

## **A** PRIMARY REVENUE STREAM (70%)

- Direct Sales to Hospitals & Healthcare Institutions
- One-time purchase: ₹50 K -1.5 Lakhs per unit
- Annual maintenance & software subscription: ₹15,000/year

## **B** SECONDARY REVENUE STREAM (30%)

- Equipment Leasing for Smaller Facilities & Home Care
- ₹10,000/month with vital monitoring subscription included
- Minimum 6-month contract

## **C** PRICING STRATEGY

- Premium vs. Economy models based on monitoring capabilities
- Volume discounts for hospital-wide implementation
- Government tender pricing for public healthcare integration



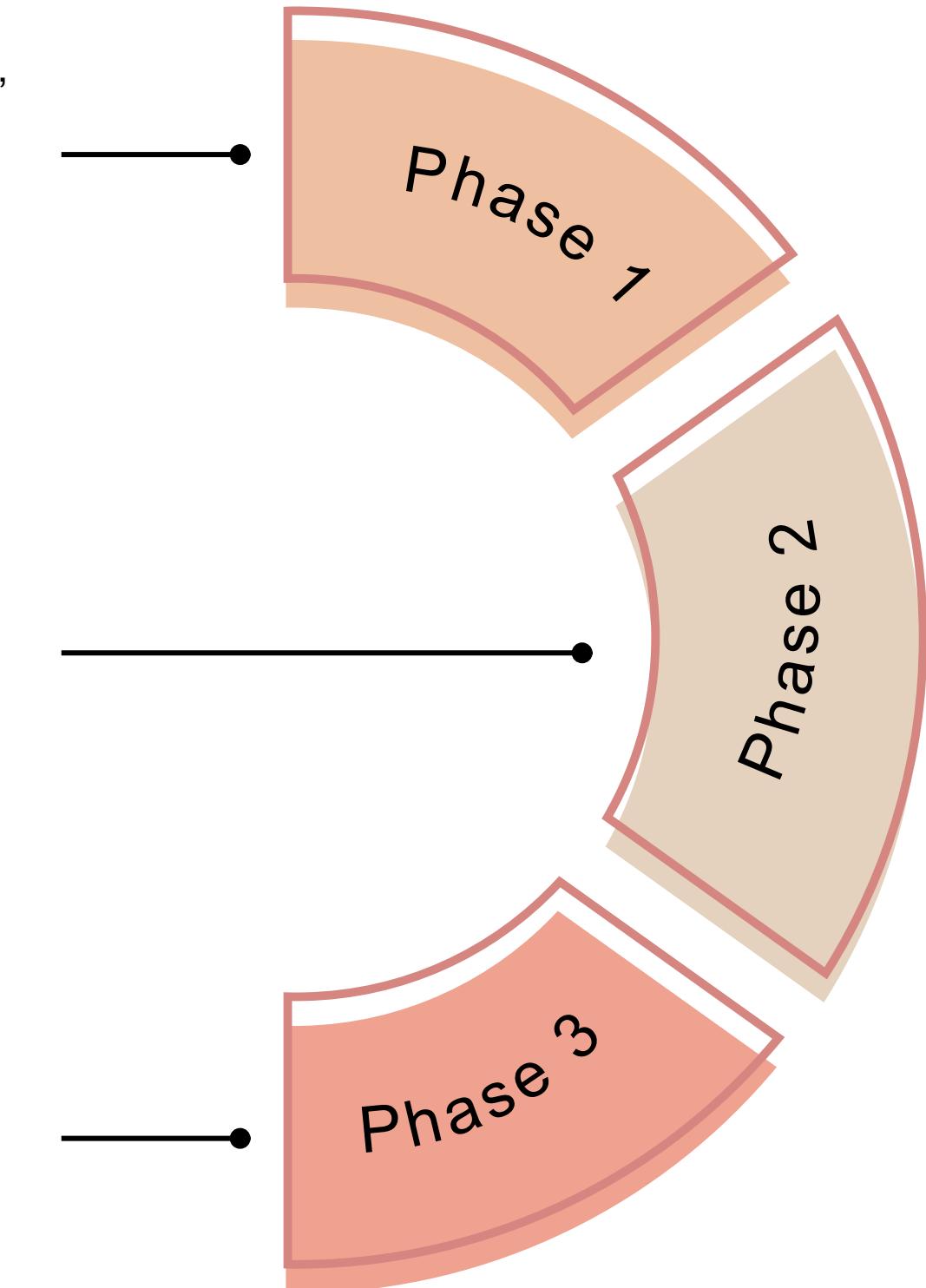
# Go-To-Market Strategy



- Partner with 3 premium hospitals for pilot programs in Kochi, Trivandrum, and Bangalore
- Document clinical outcomes and staff efficiency improvements
- Secure key regulatory approvals and medical device certifications

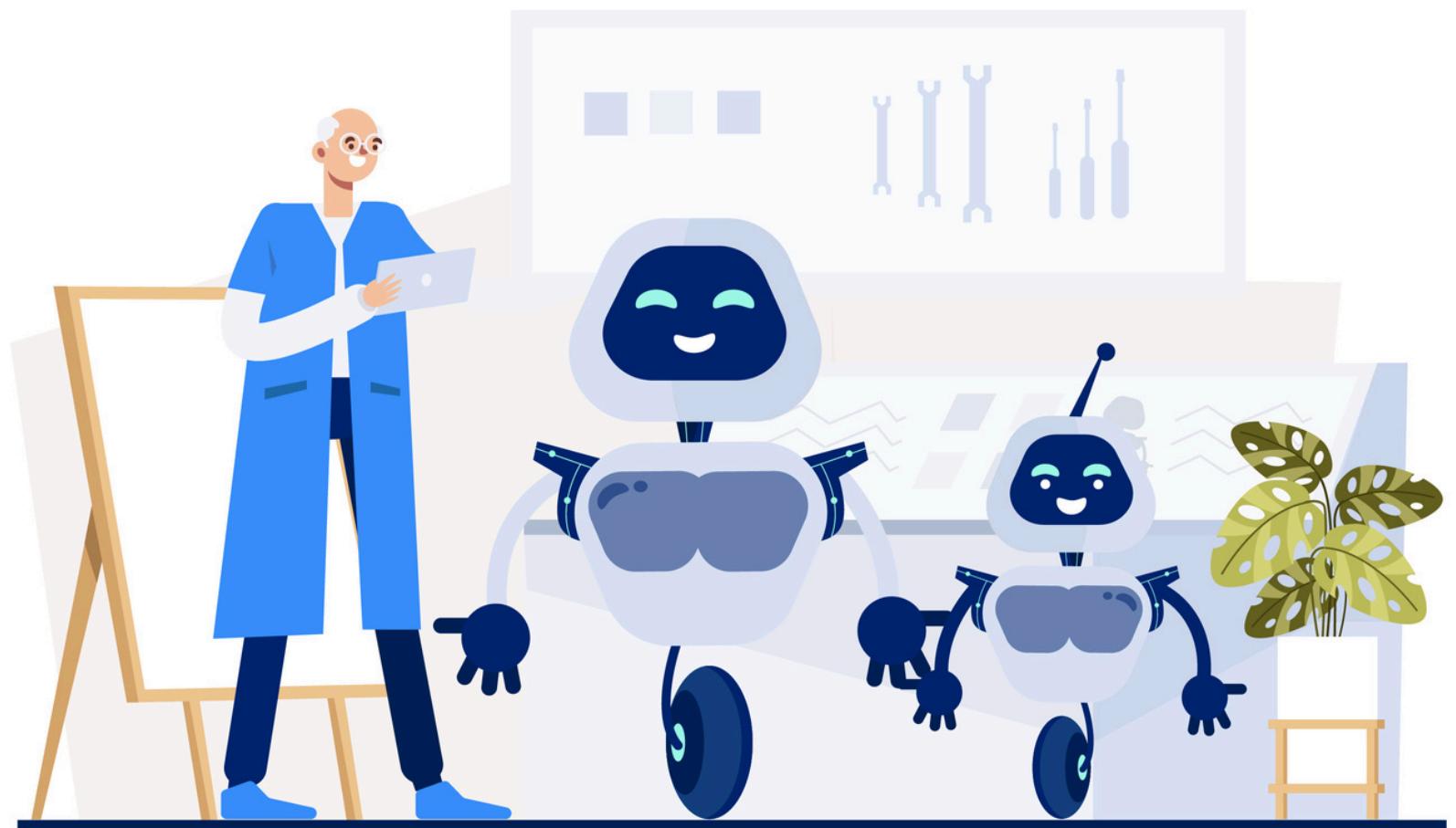
- Direct sales to top-tier private hospitals (₹1.5L purchase model)
- Introduce subscription model for mid-tier facilities (₹15K/month)
- Showcase at three major healthcare exhibitions: MEDICAL FAIR INDIA, MEDICALL, and ARAB HEALTH

- Government hospital integration through Ayushman Bharat scheme partnership
- Expand to home healthcare market with specialized model
- Establish distribution partnerships with leading medical equipment providers across South Asia



## MARKET PENETRATION GOAL

5% of Indian healthcare facilities within 36 months, representing ₹36Cr in market share



# The Team



**Tishnu Thankappan**

CEO

Electrical & Electronics Engineer with R&D expertise in embedded systems, AI, power electronics, and CAD design



**Adwaith Raj**

CTO

Electrical & Electronics Engineer skilled in power electronics and circuit designing.



**Syamchand**  
Head of Mechanical Engineering

Mechanical Engineer experienced in AutoCAD, 3D modeling, and Inventor software.



**Dr. Rinu Thankappan**

Co-Founder

MBBS & MD in Pediatrics with strong healthcare market connections and extensive industry experience.

# Numbers

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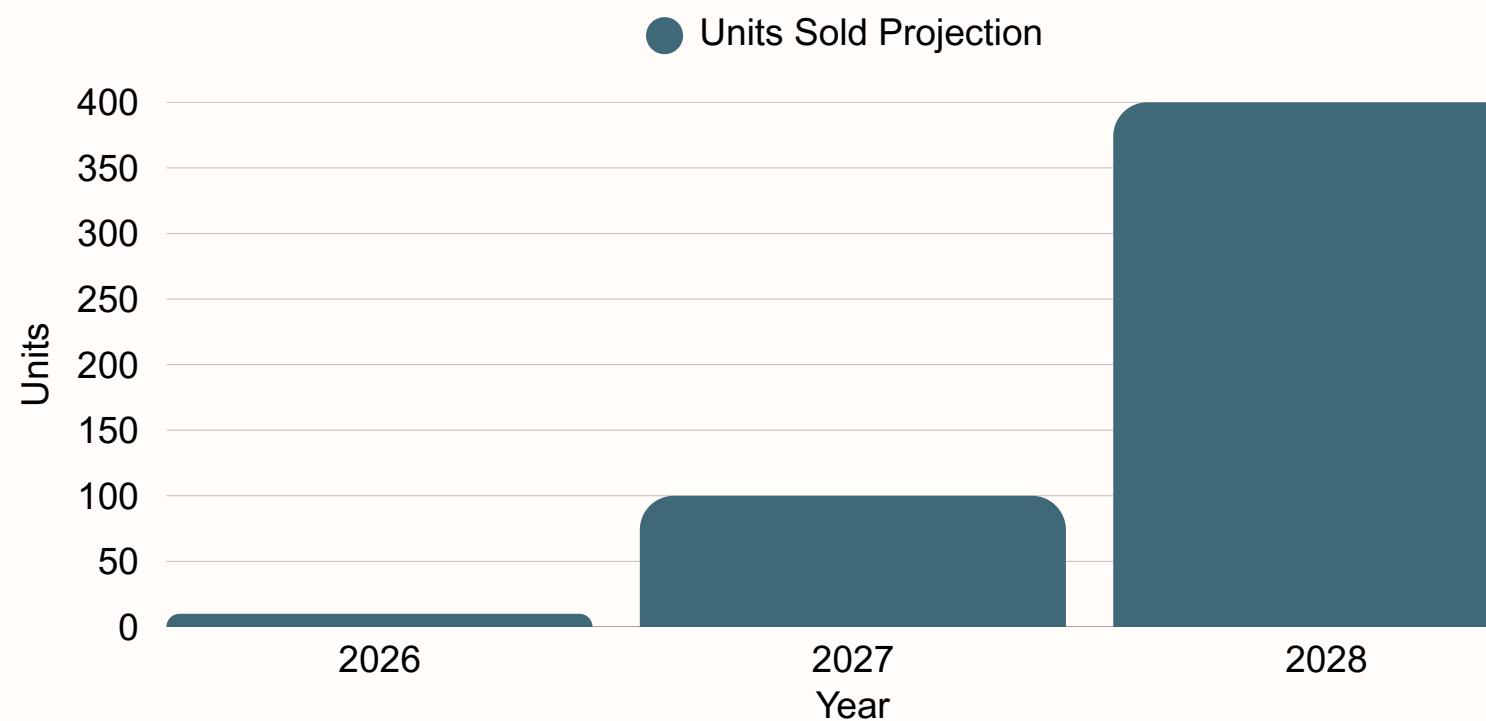
## KEY ASSUMPTIONS

- Product development timeline: 12 months
- Market entry price: ₹0.5 - 1.5 Lakhs per unit
- Initial target: 10 hospitals in Kerala region

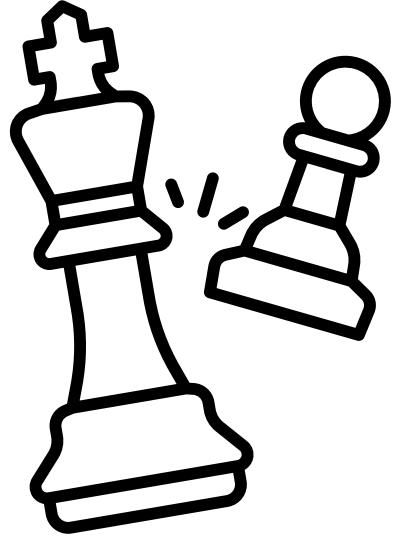
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## CAPITAL EFFICIENCY

- 70% of funding directed to product development and certification
- Revenue generation to begin Q4 of Year 1
- Projected cost-per-unit decreases 30% at scale
- Additional funding round planned after successful pilot

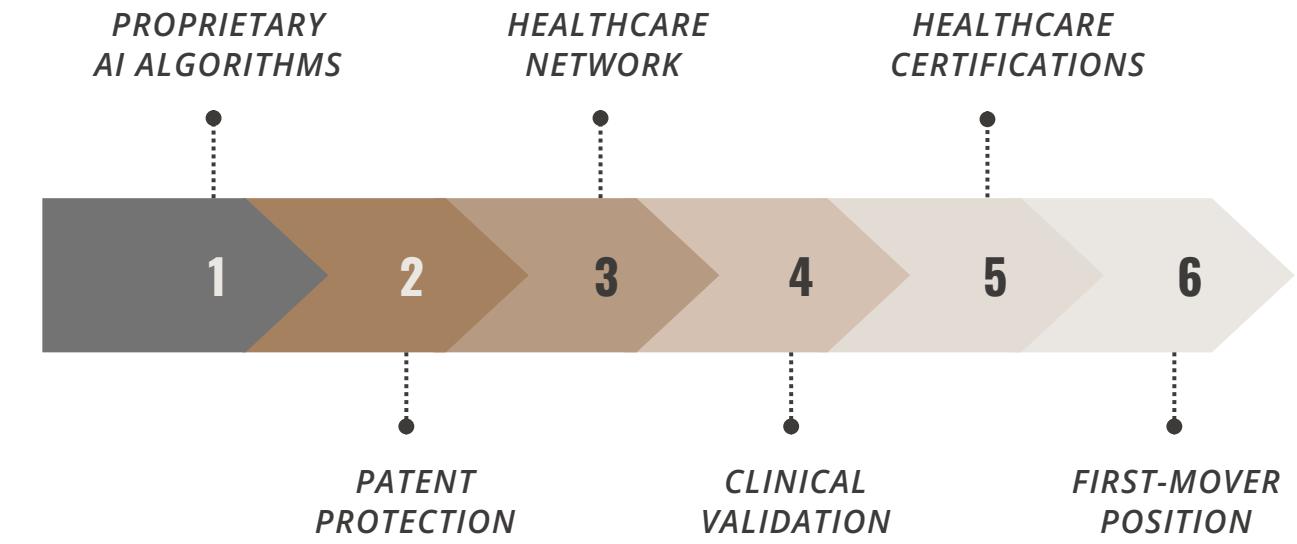


# Competition and Entry Barriers



## COMPETITIVE LANDSCAPE

STARTUPS	OUR SOLUTION	STRYKER/HILL-ROM	ARJO/INVACARE	ROBOTICS
AUTOMATED TRANSFER	YES	NO	NO	PARTIAL
VITAL MONITORING	YES	NO	NO	NO
STAFF NEEDED	1	2-4	2-4	1
PRICE (₹ LAKHS)	0.5-1.5	0.8-3.0	0.2-0.5	10-15
INDIA AVAILABILITY	COMING SOON	ESTABLISHED	ESTABLISHED	LIMITED

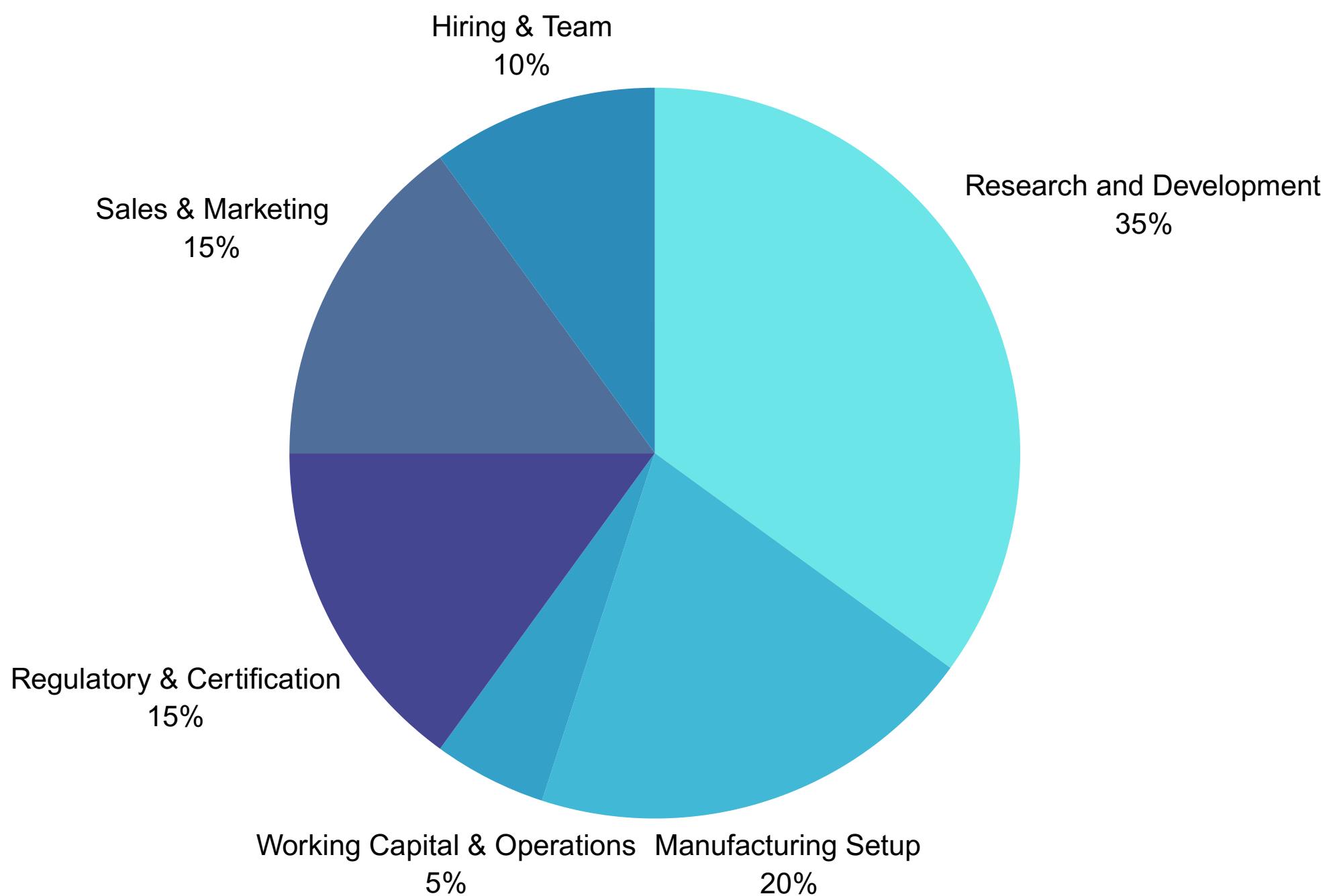


## OUR KEY ADVANTAGE:

Only solution combining automated transfers and vital monitoring at an accessible price point

# Raise and Usage of Funds

INR **5M** in Seed Funding



# Appendix and Carry Alongs

## MARKET RESEARCH DATA

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- Patient Handling Equipment Market (India): ₹613.8 Cr
- Nurse Injury Rate from Patient Transfers: 35%
- Target Hospital Penetration: 5% in first 36 months

## FINANCIAL MODEL

B

- Target Production Cost: ₹35,000 per unit
- Gross Margin: 55-70%
- Break-even: 240 units

## EXIT STRATEGY

C

- Primary Target: Strategic acquisition by medical equipment manufacturers (GE Healthcare, Philips)
- Secondary Option: Licensing technology to established healthcare equipment providers
- Timeline: 4-5 years post-market entry with target valuation of ₹50-75 Cr
- Acquisition Rationale: Integration into existing product lines for large medical device companies

## ATTACHMENTS

D

- Detailed market survey results
- Technical specifications
- 3-year financial projections



# Thank you!

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