# FEASIBILITY & STRATEGY REPORT FOR A HOSPITAL IN DHARAVI

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Introduction:Dharavi, housing ***~600,000–1,000,000*** people in just ***2.1 km²***, faces extreme land scarcity. Mumbai's plans show a *134-hectare* shortfall in health-facility land. A hospital here must optimize space with dense design and alternative service delivery. Key strategies include using vertical space, engaging stakeholders, securing diverse funding (CSR, government, insurance, tech), and phased, risk-managed implementation.

## Site Selection & Space Optimization:

With virtually no vacant land, the hospital must minimize its footprint. Options include:

- **Vertical hospital building:** A multi-storey hospital tower minimizes ground use—Dharavi already hosts *25+* story rehab towers. The report suggests a compact, quake- and fire-resistant design. Given past criticism of narrow corridors and poor fire safety, strict adherence to building and fire codes is crucial.
- **Repurposing/PPP in existing clinics:** Upgrade or merge existing health posts through PPPs—e.g., BMC partnering with NGOs or private clinics like Apnalaya to form a satellite network using current leases or small plots. BMC is already exploring such models for suburban hospitals, reserving *~⅓ beds for the poor and ~⅔ for private operators*.
- **Mobile Health Units (MHUs):** Deploy vans or pop-up clinics to deliver primary care and outreach without fixed infrastructure. Nonprofits like Americares run 7 mobile clinics serving 130 slum clusters in Mumbai. MHUs can provide immediate basic services (OPD, immunizations, referrals) while the hospital is under construction or as permanent outposts.
- **Augment open space:** Green or water-permeable spaces (e.g. rooftop gardens) to reduce flooding and improve airflow. Elevated floors can prevent monsoon waterlogging. With the *0.419 m²/person* health space standard, every square meter must serve multiple purposes—e.g., solar panels providing both power and shade.

Each model has drawbacks: while vertical builds save land, they entail *high construction and maintenance costs* and require strict safety engineering. Mobile units and PPPs reduce land needs but can only partially substitute a permanent facility.Rather a small central hospital augmented by MHUs and partner clinics ensures broad coverage despite space constraints.

## Stakeholder Mapping & Community Buy-In:

Key stakeholders include: government bodies (BMC,State Health Dept.,MHADA, Dharavi SPA, MMRDA, MPT), private sector (hospitals, developers, CSR teams), NGOs/CBOs (*Apnalaya*, *CORO*, *Praja*, *YUVA*, self-help groups), and Dharavi residents (tenants, leaders, religious and youth groups). The Dharavi SPA already involves MHADA, MPT, and others in planning. To align interests and build trust:

- **Participatory planning:** Form a multi-stakeholder task force with BMC/MHADA, health dept., SPA reps, NGOs, and community leaders to oversee site selection, design, and policy ensuring hospital planning aligns with Dharavi redevelopment. The task force should also broker clear land use and compensate agreements—which is often a challenge in Mumbai.
- **Community engagement:** Residents respond better to familiar community or religious leaders than outsiders. Partner with long-established Dharavi NGOs (e.g. Apnalaya, CORO, Praja) that led COVID-19 outreach. Involve their networks (self-help groups, youth clubs) in hospital awareness, hygiene education, and support roles.
- **Public-private dialogue:** Invite private hospital groups (KEM, Sion, Global Health) to co-design services or run wings under CSR. Mumbai's suburban PPP model (Bhagwati, Lallubhai) reserves one-third of beds for free care; ensuring affordability. Early engagement with partners, tech firms, and unions is crucial, as BMC's PPP plans faced union resistance—clear job and fee guarantees are needed.

## Financial Structuring: Blended Financing Strategy

- **Government Schemes:**Leverage *NUHM* and *Ayushman Bharat PM-JAY*. NUHM funds urban primary healthcare, but is underfunded—only ~58% of the ₹11,024 crore PHC target for 2025 is financed. Push for full funding of Mumbai PHCs via the State Health Dept. Use PM-JAY to cover inpatient costs for eligible Dharavi residents. State schemes like *Mukhyamantri Swarozgar* can offer grants for community health facilities.
- **Corporate Social Responsibility (CSR):**Under the Companies Act (2013), CSR contributions to health are significant—*₹825 crore in FY 2022–23* for "hunger, poverty & healthcare". Target local giants (Tata, Reliance, Adani) and philanthropic trusts. Position the hospital as an SDG-aligned initiative to attract CSR for construction or community outreach.
- **Public-Private Partnerships (PPP):**Use BMC's PPP model—private partners operate most beds, BMC retains subsidized ones—as a blueprint. A *Build-Operate-Transfer* concession could attract private health consortia. ORF also recommends special health bonds or a city health infrastructure fund.
- **Micro-Insurance & User Fees:**Promote community-based insurance (via NHAs/NGOs) for outpatient care not covered by PM-JAY. Nominal user fees on non-poor patients can provide working capital, with safeguards (e.g., sliding scales, exemptions) for the poor.
- **Health-Tech Partnerships:**Engage digital health investors (e.g., *telemedicine*, *EHR firms*) to co-fund tech infrastructure in return for data partnerships or CSR credit. Telemedicine platforms can scale cheaply to serve more patients.

# Service Delivery Model:

The hospital should offer comprehensive primary, secondary, and emergency care tailored to Dharavi's needs:

- **Primary Outpatient Services:** *Large outpatient wing* with general medicine,basic specialties (orthopedics, minor surgery) to address chronic and common ailments. Daily physician consults and pharmacy counters reduce reliance on private clinics.
- **Emergency & Critical Care:** A *24×7 emergency department* to stabilize trauma, cardiac etc.before referral. A small 5–10 bed ICU/CCU for major emergencies, with transfer protocols for rare critical cases. On-site ambulance for transport.
- **Maternity & Child Health:** Inpatient obstetric and neonatal services are essential. Include a labor/delivery unit with *On-site immunization, growth monitoring* at least one delivery room and postnatal ward for safe childbirth nearby.
- **Diagnostics & Pharmacy:** On-site labs (blood tests, sputum) and basic imaging (X-ray, ultrasound) create one-stop care.
- **Preventive and Public Health Programs:** Space for community health activities such as health education, TB/HIV screening, and vaccination camps. Collaborate with NUHM's Urban Health Centre scheme, linking to local health posts to cover their populations.
- **Digital Health Integration:** Use *electronic health records (EHR)* and telemedicine.Leverage India's *eSanjeevani* platform for doctor-patient and doctor-doctor consults. Maintain digital records via *Ayushman Bharat* Health Account IDs. Mobile SMS alerts improve follow-up.

# Implementation Roadmap & Risk Mitigation

A phased approach is advised:

1. **Planning & Design:** a stakeholder task force will be set up, the site finalized—preferably public or redevelopment land—and a health needs assessment conducted. Architectural and service plans will prioritize scalable design, while permit applications (building, environmental) go in parallel.
2. **Funding & Approvals:** financial commitments will be secured through NUHM, State grants, CSR, and PPP agreements. The final design and contractor procurement will proceed alongside community outreach—via town halls and local visits—to build public trust.
3. **Construction & Setup:** Build the facility. If feasible, construct instages (e.g. wing by wing) so parts can open sooner. Train and hire staff (partners like local medical colleges or NGOs can accelerate recruitment). Install equipment and telemedicine infrastructure. Meanwhile, deploy mobile units for interim services if major delays occur.
4. **Commissioning & Operation:** Launch hospital services fully. Implement appointment systems, start telemedicine clinics, and integrate digital records. Roll out financing mechanisms (PM-JAY enrolment drives, microinsurance sign-ups). Monitor performance (patient load, quality metrics) and adjust operations.
5. **Review:** Continue community engagement through feedback forums. Regularly review the financial model and service mix, seeking additional funding as needed. Explore expansion of services (e.g. dental health camps) based on evolving needs.

# Resources:


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