FOREIGN DIRECT INVESTMENT, PRIVATE EQUITY CONSOLIDATION, AND CARTELIZATION IN INDIAN HEALTHCARE: A STUDY ON COMPETITION LAW GAPS AND POLICY IMPERATIVES

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ABSTRACT

Foreign direct investment (FDI) has transformed India's hospital sector from mission-driven care providers into vertically integrated, investor-controlled healthcare conglomerates, generating unprecedented consolidation across hospitals, pharmaceuticals, devices, diagnostics, and insurance. This paper argues that the resulting private equity (PE)–driven ecosystems pose a distinct cartelization risk, as coordinated pricing and tacit collusion are engineered across the healthcare value chain through information signalling, standardized high-priced packages, talent-market practices, and insurance–hospital nexuses that existing Indian competition law is structurally ill-equipped to detect or deter. Crucially, many of these foreign PE firms maintain minimal or zero hospital ownership in their own home markets, preferentially channelling capital into India's more liberal and less tightly regulated healthcare environment, thereby externalising risks that domestic regulators in their jurisdictions would not permit. Using sectoral FDI data, global cartel precedents, and recent Competition Commission of India (CCI) actions, the paper demonstrates how conventional tools focused on explicit agreements, narrow relevant market definitions, and single-sector scrutiny systematically miss ecosystem-level price-fixing and "killer acquisitions" in healthcare. It then proposes a regulatory roadmap including service-line–based merger guidelines, a tacit collusion detection framework, vertical integration audits, lowered merger thresholds, inter-regulatory coordination, FDI caps in critical care, data localization mandates, and enhanced transparency and public sector capacity, to restore competition and affordability while preserving beneficial foreign investment.

1. Introduction

India's healthcare sector stands at an inflection point. The combination of policy liberalization, 100% FDI permitted under the automatic route for hospitals and medical device manufacturing and massive capital inflows ($36+ billion cumulative since 2000) has fundamentally transformed the operational structure of Indian hospitals. Yet this transformation has occurred alongside a troubling shift: from mission-driven, affordability-first healthcare delivery to revenue-maximizing, investor-return-focused operations [1].

The threat is acute and evolving. Foreign private equity firms, which maintain zero or minimal hospital ownership in their home markets, have become dominant players in India's tertiary care ecosystem. These PE operators simultaneously control hospitals, pharmaceutical companies, medical devices, diagnostics, and, increasingly, health insurance products. This vertical integration creates a uniquely Indian risk: coordinated price-fixing mechanisms that current Indian competition law, designed for single-sector analysis, is structurally incapable of detecting [2].

The consequences are measurable and accelerating. Average Revenue per Occupied Bed (ARPOB) in PE-backed hospital chains has risen 8-10% annually, translating directly to higher patient bills. Pharmaceutical prices have risen in tandem, driven by the same PE ecosystem. Insurance premiums spiral upward in response to inflated hospital and drug costs. The result: a three-layered cost explosion that systematically excludes the poor and increasingly squeezes the middle class [3].

This paper provides a comprehensive analysis of FDI-driven cartelization in Indian healthcare and presents an evidence-based roadmap for regulatory intervention.

2. The FDI Landscape in Indian Healthcare: Policy Framework and Investment Magnitude

India's FDI policy where healthcare is concerned is amongst the most liberal globally. This is exercised through permission of 100% FDI for hospitals, medical devices, pharmaceuticals and investments in the wellness and AYUSH Sectors. The specifics of the same are listed as follows,

1. Hospitals: 100% FDI permitted under the automatic route (no government approval required).

2. Medical Devices: 100% FDI permitted under the automatic route.

3. Pharmaceuticals: 100% FDI in greenfield projects; brownfield projects capped at 74% (requiring government approval beyond that).

4. Wellness and AYUSH sectors: 100% FDI permitted.

This policy framework, while designed to attract capital and technology, has created a structural vulnerability ,i.e., no foreign ownership limits, no mandated domestic shareholding requirements in critical care services, and no horizontal restrictions on cross-sector consolidation by the same investor[4].

The scale of FDI inflows remains unprecedented. Over 20 PE operators are now active in India's healthcare sector, making it one of the most PE-invested sectors globally. This level of consolidation, driven by lower valuations and less mature regulation compared to developed markets, has occurred at a pace and scale that exceeds global norms[6].

Investment Category	Amount	Period/Year
Hospitals (FY23-FY24)	US$1.5 billion	FY23-FY24
Share of total healthcare FDI	~50%	FY23-FY24
Cumulative healthcare FDI	US$36+ billion	Since 2000
PE healthcare investments	₹4,900 crore ($580M)	Q2 2025 alone
Active PE operators	20+ firms	Current

Table 1: FDI Inflows into Indian Healthcare

Major consolidations as driven by PE include the Manipal Hospitals Acquisition of Sahyadri Hospitals, the KKR Acquisition of Baby Memorial Hospitals with 70% controlling stake, Temasek Holdings etc.

3. How FDI-Driven Hospital Consolidation Has Raised Healthcare Costs

3.1 The Shift from Mission-Driven to Revenue-Driven Operations

Traditional Indian hospitals operated under a different operational calculus: balance

affordability with financial sustainability, prioritize access for the economically disadvantaged, and embed quality care into the institutional mission. PE-backed hospital chains operate under an explicit return-maximization mandate to maximize investor returns within a defined exit window (typically 3-7 years), and extract maximum value before divesting [7].

3.2 The PE Acquisition and Value Extraction Playbook

PE-driven consolidation follows a predictable, high-pressure lifecycle designed to extract maximum value:

1. **Leveraged Acquisition:** PE firms use substantial debt (leverage) to finance hospital acquisitions. This debt must be serviced from hospital cash flows, creating immediate pressure to increase revenue and margins. A typical acquisition might be 60-70% debt-financed, meaning aggressive cost-cutting and revenue-raising are not optional—they are mandatory to avoid financial distress.

2. **100-Day Efficiency Drives:** Immediately post-acquisition, PE implements aggressive "efficiency" measures including Revenue Cycle Management (Aggressive coding optimization), Supply Chain Rationalization (Consolidating procurement), Asset Sales, Staff Restructuring (reducing numbers and reallocating work).

3. **Add-On Acquisitions and Roll-Up Strategy:** To maximize value before exit, PE firms acquire smaller competitors, consolidating, market share and pricing power within specific geographies and specialties, creation of closed, high-margin ecosystems by bringing diagnostics, pharmacies, home care, and rehabilitation services in-house and elimination of price-competitive alternatives.

4. **Exit Imperative:** Within 3-7 years, PE must exit with maximum valuation. This exit window drives the most aggressive pricing and market behavior, including tacit collusion with peer hospital chains on price floors and service mix coordination.

3.3 Real-World Outcomes: Cost Escalation and Access Exclusion

The cumulative effect of PE consolidation manifests in three critical outcomes [8]:

1. **Rising Costs for All:** Treatment costs in PE-backed hospitals have surged. Rising

ARPOB directly translates to higher patient bills. Unnecessary procedures driven by revenue targets inflate costs for chronic and elective cases. Specialists are assigned monthly revenue targets, effectively converting them into sales personnel.

2. **Systematic Exclusion of the Uninsured:** Patients without insurance or with chronic needs are increasingly deprioritized or denied care. Hospital case mix increasingly skews toward insured, high-paying patients. The uninsured poor face either denial of care or stratified service quality.

3. **Insurance Dependency:** Access to quality healthcare becomes contingent on insurance coverage. This creates a two-tier system: premium care for the insured and wealthy; neglected or limited care for the uninsured poor. Insurance premiums themselves rise due to inflated hospital and pharmaceutical costs, squeezing middle-class affordability.

4. The Vertical Integration Threat: PE Ecosystems Spanning Hospitals, Pharma, and Insurance

4.1 The PE Ecosystem Problem—A Uniquely Indian Risk

A critical distinction emerges when examining global PE operations wherein major PE firms tend to maintain minimal or zero hospital ownership in their home markets yet seem to have invested heavily in hospitals across India. Simultaneously, these same firms maintain substantial holdings in pharmaceutical companies, companies providing health insurance, medical device manufacturers, diagnostic networks and pathology labs.

This vertical integration strategy does not exist in their home markets due to regulatory restrictions and mature market dynamics while the same is not only permitted in India but permitted with such ease and flexibility of execution that it is pursued actively. [9].

The result is a uniquely Indian risk. A single PE firm now controls entities across the entire healthcare value chain, from hospital billing and pharmaceutical pricing to insurance coverage decisions. This vertical integration creates powerful incentives for coordinated price-fixing that current competition law cannot detect thus compromising the market balance.

4.2 Cartelization Pathways: Hospital-Pharma-Insurance Nexus

Vertical integration across these three sectors today are predominantly showing more and more

collusive traits.

(i) Hospital Pricing Coordination

PE-backed hospital chains (Blackstone-owned Care Hospitals, Temasek-owned Manipal, TPG-backed Quality Care, KKR-owned HCG) coordinate hospital billing for procedures through public signaling during investor calls and earnings presentations. They do this whilst simultaneously raising ARPOB through announced "yield management" strategies, shifting service mix toward high-margin specialties and eliminating low-margin basic care from service portfolios

When 2-3 dominant chains signal identical strategies simultaneously, it functions as a price floor coordination mechanism—collusion without explicit agreement [10].

(ii) Pharmaceutical Price Signaling

The same PE firms influence pharmaceutical pricing through holdings in drug companies. Pharmaceutical prices rise in tandem with hospital procedure costs, creating a compounding cost increase for patients. Generic drug cartels—already documented in India through CCI cases against Chemists & Druggists Associations—receive tacit support from PE-backed distributors who align with the broader ecosystem's revenue-raising strategy [11].

(iii) Insurance Ecosystem Capture

Foreign insurance companies entering India tend to raise premiums in response to inflated hospital bills and pharmaceutical costs. This creates a coordinated price floor. Insurance companies and PE-backed hospitals coordinate on "reasonable charges" that are actually mutual price floors. Patients without insurance lose access, as hospitals prioritize the insured and high-paying patients. Insurance products are bundled with hospitals, creating closed ecosystems where patients have no real choice.

(iv) Data Leverage for Discriminatory Pricing

PE-backed hospital chains accumulate sensitive patient data. Combined with data from affiliated pharmaceutical and insurance arms, this enables a system of discriminatory pricing based on insurance status, medical history, and willingness to pay, targeting of high-income

individuals with premium service offerings and a systematic exclusion or reduced service for uninsured populations.

Foreign ownership of this data creates sovereignty and privacy risks, enabling overseas entities to make decisions affecting Indian patients' access to care [12].

5. Advanced Forms of Cartelization in Indian Healthcare

Beyond traditional price-fixing, PE-backed hospital ecosystems now employ sophisticated collusive mechanisms camouflaging as compliant of competitive norms in this vast and actively functioning industry exploiting the nature of necessity that the same holds.

5.1 Information Signalling via Public Channels – Where large PE-backed hospital chains make public statements during investor calls and earnings presentations, a cartelization effect is noted when 2-3 major chains signal identical strategies, functioning as a coordinated price signal without an explicit agreement. Competitors understand the signal and align their behavior accordingly. This is tacit collusion enabled by information transparency that ironically was designed to serve investor interests [13].

5.2 Standardization of High-Priced Service Packages- All major chains develop identical, high-priced surgical packages. For example:

- Cardiac bypass procedures: ₹8-12 lakhs, with bundled consultations, tests, premium room facilities
- Orthopedic joint replacement: ₹6-10 lakhs, with mandatory physical therapy and extended stay
- Oncology treatment packages: Non-itemized bundled pricing preventing price comparison

Patients are denied the alternative of a cheaper, bare-bones option because it is not offered. Packages create an illusion of choice while enforcing a price floor. Product homogenization facilitates parallel pricing, i.e., when all competitors offer nearly identical services at identical price points, there is no basis for competitive differentiation through pricing[14].

5.3 Tacit Collusion in Specialist Talent Markets - PE-backed hospitals implicitly agree not

to aggressively poach specialists from each other, avoiding wage inflation that would increase costs. A vertical collusive agreement is noted where this agreement results in suppression of specialist salaries, maintenance of high patient charges, curbing the emergence of lower-cost competitors and creating barriers to entry for new healthcare providers who cannot compete on specialist compensation.

5.4 Coordinated Insurance-Hospital Pricing - PE-backed hospitals and affiliated insurance companies coordinate on "reasonable charge" limits creating mutual price floors disguised as reasonable pricing standards. The cartelization effect of the same is noted through the following,

- Insurance premiums rise in lockstep with hospital charges
- Patients without insurance lose access
- Insurance-dependent access creates a two-tier system: quality care for insured, poor care for uninsured
- The vertical integration ensures the same PE firm profits from both higher hospital prices (increasing claims) and higher premiums (recovering costs).

6. Global Precedents: Documented Healthcare Cartels

The risk of cartelization is not theoretical. Global healthcare markets have documented multiple cartels:

Case	**Country**	**Behavior**	**Outcome**
Generic Drug Scandal	USA	Price-fixing, market allocation	Billions in damages
Paroxetine Case	UK	Pay-for-delay strategy	Major fines
Vitamin Cartel	Global	Price-fixing (A, B, C, E)	€1+ billion fines
Medical Gas Cartel	Europe	Price coordination	€100+ million fines

Mexican Hospital Cartel	Mexico	Market allocation	Sanctions imposed
Italian Surgeons' Fee Cartel	Italy	Fee-fixing	Fines imposed
Insulin Pricing	USA	Parallel price hikes	Lawsuits ongoing
Hearing Aid Cartel	Denmark	Price coordination	Fines imposed

Table 2: Documented Healthcare Cartels Globally (1990s-Present)

These precedents primarily establish two critical points [15]. Firstly that healthcare cartels are not rare or theoretical and secondly, that healthcare is particularly vulnerable to cartelization because patients are price-inelastic (they cannot delay or forgo urgent care), creating high profit potential for cartels.

India's healthcare sector, similarly, exhibits multiple risk factors that are present in nearly all documented cartels including high consolidation (PE roll-ups), vertical integration (same owners across value chain), information opacity (bundled pricing, limited price transparency), and regulatory immaturity (competition authorities still developing expertise)[16].

7. The Critical Regulatory Gap: Why Current Indian Frameworks Cannot Stop This

7.1 CCI's Structural Limitations

India's Competition Commission (CCI), while well-intentioned, operates within a framework designed for simpler market structures. In the further understanding of this, four critical blind spots emerge:

(i) Tacit Collusion vs. Explicit Agreements

CCI's framework is fundamentally built to punish explicit collusion (documented agreements, communications) but modern society poses more sophisticated forms of the age-old problem through PE-backed hospital chains engaging in tacit collusion by coordinating through public signals (investor calls, annual reports) without explicit agreements.

The legislative gap arises where the regulator is unable to prove causation. Without

documented evidence of agreement, prosecution under the existing laws proves to be impossible [17].

(ii) Relevant Market Definition

The CCI defines the market as "tertiary healthcare in City X" (broad, city-wide hospital market). This definition ignores service-line specialization. A merger between two dominant oncology providers should be analyzed at the oncology service-line level, not the city-wide hospital market. This narrowness in scope results in mergers that create local monopolies in critical specialties and these continue to be approved because the "overall" hospital market is not [18]. The impact of this is that disruptive assets proceed into the market entirely unchecked.

(iii) Vertical Integration Across Ecosystems

The Commission focuses on single-sector competition (hospitals, pharma, insurance analyzed separately) but in reality PE firms now control entities across all three sectors simultaneously.

The legislative gap here is that the CCI has no methodology to detect or prevent coordinated price-fixing across vertically integrated PE portfolios. For example the regulator sees hospitals in isolation, pharma in isolation, and insurance in isolation but never the coordinated ecosystem in its entirety [19].

(iv) "Killer Acquisitions" Below Thresholds

The threshold exemption is that many strategically significant healthcare acquisitions fall below CCI's mandatory notification thresholds (e.g., smaller specialty hospitals, niche diagnostic networks, emerging pharmacy chains). Thus, PE firms are able to quietly consolidate competition-disruptive assets without CCI review. These "killer acquisitions" result in purchases of smaller competitors to eliminate disruptive pricing or service models proceeding entirely under the regulatory radar[20].

9. Concrete Policy Recommendations

9.1 Immediately Actionable: CCI Reforms

(i) Sector-Specific Hospital Merger Guidelines

The same may be enforced by possible actions such as,

- Development of a detailed set of competition guidelines for hospital mergers that define "relevant market" at the service-line level (oncology, cardiology, orthopedics, nephrology, etc.) and geographic catchment area (not just city-wide).

- Require pre-clearance for all hospital acquisitions exceeding 25% market share in a service-line within a geographic area.

- Impose specific thresholds for service-line concentration: mergers creating >35% market share require heightened scrutiny; >50% presumed to harm competition.

This would help prevent local monopolies in critical care from escaping scrutiny. A merger of two large oncology centers in a city might be missed if analyzed at the city-wide hospital level, but properly identified if analyzed at the oncology service-line level. Effective implementation would ideally block anticompetitive consolidations in specialized care preserving price competition in high-margin specialties.

(ii) Tacit Collusion Detection Framework

The same may be enforced by possible actions such as,

- Empowering the CCI to conduct sector-wide pricing analysis

- Establish "information signaling" as a per se violation when more than two competitors simultaneously announce identical yield management or service-mix strategies.

- Create a monitoring database to track public statements by hospital chains on pricing strategy, service mix changes, and revenue target and accordingly flag coordinated announcements as evidence of collusion.

This closes the loophole that allows sophisticated collusion to operate without explicit evidence. Coordinated behavior can be proven through inference from actions rather than requiring documented agreements. This would create a deterrent effect making sure hospitals cannot coordinate strategy through public signaling without triggering investigation.

(iii) Vertical Integration Audit

Possible course of action for a vertical integration audit includes,

- CCI must identify all PE portfolios with holdings across hospitals, pharma, and insurance sectors.
- Conduct annual audits for evidence of coordinated pricing across vertically integrated entities.
- Impose strict information barriers (Chinese walls) between hospital, pharma, and insurance arms of the same PE firm, prohibiting data sharing on pricing, patients, or market strategy.

This prevents cartelization at the ecosystem level forcing separation of decision-making even within the same parent company, eliminating coordinated pricing across the hospital-pharma-insurance nexus and restoring competitive discipline to each sector.

(iv) Lower Merger Thresholds in Healthcare

Actions in furtherance of the same include,

- Reduction in CCI's mandatory notification thresholds for healthcare M&A to ensure smaller, strategically significant deals receive scrutiny.
- Reduce the thresholds in the healthcare sector.

This prevents consolidation of competition-critical assets (specialty hospitals, diagnostic networks, medical device manufacturers) flying under the regulatory radar. It captures "killer acquisitions" and consolidations that currently proceed without CCI review.

9.2 Inter-Regulatory Coordination: The Critical Linchpin

(v) Establish a Statutory Inter-Regulatory Task Force on Healthcare Market Competition

This would ideally create a deterrent effect by ensuring that pricing, insurance and quality data are referenced by a single body and players are now aware that there is a higher risk of a would-be cartel being detected. A assigned body for this purpose would also ensure regulatory coherence by closing loopholes and aligning incentives across regulators. The evidence-based policy that a regulatory body entails provides for an overall view of the healthcare market enabling precise and pro-competitive interventions.

9.3 Longer-Term Structural Reforms

(vi) FDI Ownership Caps in Critical Care

Caps on ownership in the critical care sector provides for a pro-competitive effect by ensuring firstly that India continues to retain primary control over its essential healthcare. It prevents overseas decision making where access and pricing of life-saving healthcare is concerned. Precedent for determination of such rates as necessary, may be derived from countries such as Japan and Australia that similar, air-tight restrictions in this regard.

The expected outcome of such a cap is that there remains foreign PE control over India's essential healthcare infrastructure whilst also maintaining openness to technology transfer and non-critical investments.

(vii) Data Localization and Sovereignty

Data Localization may be achieved by storing all patient health data on Indian servers refraining from export of such data without explicit patient consent. Transfer of data management to Indian entities protects patient privacy and prevents overseas entities from using the same in the establishment of discriminatory pricing. It also ensures legal recourse under Indian laws where such a data breach does in fact occur.

This ensures elimination of foreign PE firms' ability to use patient data for coordinated pricing across international portfolio companies.

(viii) Mandatory Transparency and Fair Billing Standards

Fair Billing standards aid in ensuring restoration of patient agency through price transparency. It detects systemic overcharging and unnecessary procedures that companies may try to impose on unknowing and trusting patients. It ensures that incentives are aligned towards quality rather than volume. Patients will now be able to compare costs putting pressure on hospitals to reduce unnecessary procedures and unfair pricing.

(ix) Strengthen Public Sector and Insurance Coverage

This can be achieved through expansion of the Ayushman Bharat coverage and increase in reimbursement caps to reduce out-of-pocket burden. Further, building of public sector tertiary

care capacity helps create a cost-competitive alternative to private hospitals. Implementation of reference-based pricing sets reasonable caps for procedures (binding on both insurers and hospitals).

This creates a competitive pressure on the private sector when it comes to pricing. It ensures access to the uninsured and the economically disadvantaged providing them with quality care as well.

(x) Regulatory Capacity Building

Investment must be made in CCI's healthcare expertise through hire of healthcare economists, clinical experts, and data scientists. This ensures that regulators have the expertise and resources on the subject matter to make them qualified and able to detect and prevent sophisticated cartelization. It also builds institutional capacity ensuring long-term, proactive oversight.

11. Conclusion

India’s healthcare sector today stands at the crossroads of capital influx and public interest. Foreign direct investment, while instrumental in modernizing infrastructure and expanding tertiary care capacity, has simultaneously enabled a silent structural capture of healthcare by global private equity conglomerates. The paradox is stark: investors who hold minimal or no hospital ownership in their own heavily regulated home markets have found in India a uniquely permissive environment, one where 100% ownership, cross-sector consolidation, and vertical integration across hospitals, pharmaceuticals, and insurance are not only allowed but incentivized. This asymmetry exposes a systemic vulnerability where policymaking designed to attract foreign capital has inadvertently opened corridors for coordinated market behaviour bordering on cartelization.

As healthcare becomes increasingly financialized, Indian patients bear the compounded consequences of vertically integrated pricing, higher costs for treatment, pharmaceuticals, and insurance, while regulators remain structurally blind to coordinated conduct that transcends sectoral silos. The absence of FDI caps in critical care and inadequate frameworks within the Competition Commission of India allow these entities to leverage India’s openness without reciprocal accountability in their home jurisdictions. The result is not competition but control:

an ecosystem where foreign capital dictates access, cost, and even the flow of health data.

Reform, therefore, is not merely regulatory housekeeping but a sovereignty imperative. India must recalibrate its FDI policy to distinguish between constructive foreign participation and extractive consolidation. Ownership caps in critical healthcare services, mandatory data localization, and cross-sector merger assessment are essential to prevent cross-border entities from arbitraging India's legal and institutional gaps. Only through such calibrated intervention can India preserve the benefits of investment without compromising affordability, access, and autonomy in healthcare delivery. The challenge before policymakers is clear: to ensure that the future of Indian healthcare is defined by equity and accountability, not by external investors seeking in India what their own nations forbid.

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