Public Hospital Governance in India

A study of All India Institute of Medical Sciences (AIIMS), New Delhi
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• Dr Parmeshwar Kumar, Senior Resident Administrator, Department of Hospital Administration, All India Institute of Medical Sciences, New Delhi, India

• Dr Chandrakant Lahariya, Routine Immunization and New Vaccines focal person, WHO Country Office for India

• Mr Kamal Gulati, Project Manager, Department of Hospital Administration, All India Institute of Medical Sciences, New Delhi, India

• Dr Antonio Duran, Chief Executive Officer, Tecnicas de Salud, Spain
Methodology

• Review of existing literature and data sources
• Supplemented by key informant interviews
• The case study used both explicit and tacit knowledge as evidence, the later coming from the participation of senior hospital managers and other national experts as key informants during focused group discussion and/or individual interviews (loosely structured, in-depth discussions).
• Draft discussion guides & topic points were shared across the working group members to enhance comparability of the case studies’ findings.
• Conceptual framework given by APO was used as the guidance document
Selection of the Hospital

• Mandate: Focus on the type of **public hospitals that account for the large bulk of budgets and patient load**. These should be public hospitals that are experiencing policy directed change in their governance ...

• Answer: **ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS), New Delhi, India**
  – Apex Public Hospital (1/11993 or 0.00008%)
  – 0.2% of Public Hospital Beds
  – 0.5% of Federal Health Budget
  – Handles over 10000 walk-in patients per day
  – Rated amongst the best in the World & the Country in various surveys ...
This is what it takes to be India's best public hospital. Last year the government-run hospital, with about 2,000 beds, treated 3.5 million people, achieving mortality and infection rates comparable to the best facilities in the developed world--for fees that come to about $1 a day for inpatients.
AIIMS FOR EXCELLENCE

Infrastructure – beyond limit
Well equipped library and learning resources
Teacher – student ratio comparable to best in the world
Exposure to clinical material and research
Competent & committed faculty and staff

RANKING OF COLLEGES ON THEMES

<table>
<thead>
<tr>
<th>College</th>
<th>Reputation</th>
<th>Curriculum</th>
<th>Quality of Academic Input</th>
<th>Student Care</th>
<th>Admission Procedure</th>
<th>Infrastructure</th>
<th>Job Prospects</th>
<th>Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIIMS, Delhi</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Bangalore Medical College, Bangalore</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Kasturba Medical College, Manipal</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Madras Medical College, Chennai</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Christian Medical College, Vellore</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

The best & the rest

Exclusive 20-city survey of hospitals and medical colleges

Top 10 hospitals
- AIIMS Institute of Medical Sciences, Delhi
- Bangalore Medical College, Bangalore
- Kasturba Medical College, Manipal
- Madras Medical College, Chennai
- Christian Medical College, Vellore
- Jawaharlal Institute of Postgraduate Medical Education & Research, Kolkata
- TATA Memorial Hospital, Mumbai
The All India Institute of Medical Sciences stands lonely at the top as traditional toppers make way for new aspirants in a major churn in the rankings. What makes AIIMS the leader for 14 years?

**TOP 25 MEDICINE**

The rankings are based on various themes such as reputation, academic impact, student care, infrastructure, job prospects, and research.

**WHAT SETS AIIMS APART**

- **Teaching**: Intensive curriculum, close mentoring, clinical exposure, and research-focus make AIIMS the best.
- **Exams**: Toughest all-India medical entrance; 45,000 students apply for 77 seats.
- **Research**: 1,559 publications in high-impact journals, 300 projects, and a budget of Rs 56 crore last year.
- **Ethics**: Giving back to society is the mantra. Students are exposed to social and ethical issues of clinical practice.
- **Patient Care**: A year of internship gives MBBS students the rare exposure to a massive patient-load of 30 lakh.
Data Sources (Indicative)

- AIIMS Act, Rules and Regulations
- AIIMS Annual Reports
- Valiathan Committee Expert Committee Report on AIIMS
- Report of the Committee constituted to look into the aspect of Improvement in Standard of Research Activities in Autonomous Institutes of Medical Education in under the Ministry of Health & FW.
- Report of the Committee on the Welfare of Scheduled Castes and Scheduled Tribes (14th Lok Sabha) – 2006-2007
- Report of the Committee to enquire into the Allegation of Differential Treatment of SC/ST Students in AIIMS
- Note on Employee Health Scheme provided at AIIMS
- Key Informant Interviews & Focused Group Discussion
Country Profile (2013)

• World’s largest democracy

• 2\textsuperscript{nd} most populous country - (1.23 billion) - 17.5\% of world’s population vis a vis 2.4\% of the world area

• 29 States of wide population variations (from 0.6 million in the hilly state of Sikkim to almost 20 million in the Uttar Pradesh), and 6 Union Territories.

• Population density (382 per sq.km) also varies widely, Arunachal Pradesh having a sparse population of 17 per sq.km whereas the National Capital Territory of Delhi has more than 11,000 living per sq.km.
Country Profile (2013)

• 11\textsuperscript{th} largest economy (GDP $1.842 trillion)

• Per capita income - $1219

• Total health expenditure : 3.7% of GDP
  – Public Health Expenditure: 1.2%

• Drastic Inter-state differences in health status:
  – there is an 18 year difference in life expectancy between Madhya Pradesh at 56 years and Kerala at 74 years;
  – a difference of 44 in infant mortality rates between Madhya Pradesh at 56 and Kerala at 12 (Government of India, 2013).
Per capita total expenditure on health

<table>
<thead>
<tr>
<th>Year</th>
<th>India (US$)</th>
<th>SEAR (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Health workforce*

<table>
<thead>
<tr>
<th>Category</th>
<th>India</th>
<th>Regional average</th>
<th>Country</th>
<th>Regional average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>6.5</td>
<td>5.5</td>
<td>10.0</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Source: WHO 2013
Healthcare expenditures (total, public and private) in India and selected countries, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Total expenditure on health as % of GDP</th>
<th>Public expenditure on health as % of total expenditure on health</th>
<th>Private expenditure on health as % of total expenditure on health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>9%</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>China</td>
<td>5%</td>
<td>54.3%</td>
<td>45.7%</td>
</tr>
<tr>
<td>India</td>
<td>3.7%</td>
<td>28.2%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Russia</td>
<td>6.5%</td>
<td>6.5%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Srilanka</td>
<td>3.5%</td>
<td>9.6%</td>
<td>54.4%</td>
</tr>
<tr>
<td>UK</td>
<td>9.6%</td>
<td>16.8%</td>
<td>83.2%</td>
</tr>
<tr>
<td>USA</td>
<td>17.6%</td>
<td>51.8%</td>
<td>48.2%</td>
</tr>
<tr>
<td>Global</td>
<td>9.2%</td>
<td>41.1%</td>
<td>58.9%</td>
</tr>
</tbody>
</table>

Source: WHO 2013
Public Health System in India
Structure & Organization

• Under the Indian Constitution, health is a state subject.

• The Central government retains aspects of policy-making, planning, guiding, assisting, evaluating and coordinating various provincial health authorities as well as providing funding to implement national programmes while States are responsible for the functioning of their respective healthcare systems.
Structure & Organization

• The organisation at the national level consists of the Union Ministry of Health and Family Welfare (MoHFW).

• In each State, the organisation is under the State Department of Health and Family Welfare that is headed by a State Minister and with a Secretariat under the charge of the Secretary/Commissioner.
Superspeciality Tertiary Care Hospitals e.g. AIIMS

State Medical Colleges & Hospitals

District & Sub divisional Hospitals
First Referral Unit for the Tehsil/Taluk/block population which caters to about 5-6 lakhs people. It provides effective, affordable health care services (curative including specialist services, preventive and promotive) for both rural and urban population.

Community Health Centres
A 30-bedded hospital/referral unit for 4 PHCs with specialized services, which covers a population of 120000 in plain areas and 80000 in Hilly and difficult terrains manned by 4 specialists and 21 subordinate staff

Primary Health Centres
A referral unit of six sub-centres, 4-6 bedded which covers a population of 30000 in plain areas and 20000 in Hilly and difficult terrains manned with a Medical officer incharge and 14 subordinate paramedical staff

Sub-Centres
Peripheral most physical healthcare unit at the Village level. Covers a population of 5000 in plain areas and 3000 in Hilly and difficult terrains manned by a pair of Health Workers (Male & Female).

ASHA at Village level
ASHA (Accredited Social Health Activist) complement the work of ANM & is appointed one per 1000 population. ASHA is the first port of call for any health related demands of deprived sections of the population, especially women and children and acts as a facilitator & promoter of the various Health Programmes of the Government.
Public Health System in India (2012)

- Subcentres: 148,366
- PHCs: 24,049
- CHCs: 4,833
- Hospitals: 11,993
- Bed compliment: 9 per 10,000 ppl

- Shortfall of 23% sub-centres, 26% PHCs and 40% CHCs

Source: Central Bureau for Health Statistics
# Development of Healthcare in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946 (pre-independence)</td>
<td>‘Health Survey and Development Committee Report’ popularly referred to as the ‘Bhore Committee Report’ Recognized the vast rural-urban disparities health services and hence based its plan with the “rural population” specifically</td>
</tr>
<tr>
<td>1961</td>
<td>Planning Commission proposed increasing hospital beds and organizing hospitals’ out-patient departments into polyclinics for providing much of the treatment. Encouraged establishing convalescent homes and inns near hospitals to help reduce pressure on hospital in-patient facilities.</td>
</tr>
<tr>
<td>1978</td>
<td>Alma ata declaration</td>
</tr>
<tr>
<td>1983</td>
<td>National Health Policy rated healthcare services development as ‘urban oriented and curative’ Focus back on a ‘comprehensive public health system’ with a primary healthcare approach</td>
</tr>
<tr>
<td>1986</td>
<td>Consumer Protection Act, provided a mechanism for grievance redressal</td>
</tr>
</tbody>
</table>
# Development of Healthcare in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990s</td>
<td>A liberalization-privatization process enabled the entry of the corporate sector in health. Many states provided land, water and electricity at subsidized rates on the condition that they provide outpatient and inpatient care free of cost to people “below the poverty line” The strategy however had serious policy omissions: (i) failure to establish a regulatory framework and accreditation processes for governing the private sector; (ii) absence of a surveillance and epidemiological system resulting in poorly designed health interventions; and (iii) inadequate investments in developing skilled human resources.</td>
</tr>
<tr>
<td>1997-2002</td>
<td>India’s 9th Five-year Plan recognized the growing demand for complex, costly diagnostic and therapeutic modalities, and lack of skilled manpower, equipment and consumables</td>
</tr>
</tbody>
</table>
## Development of Healthcare in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 2002 National Health Policy (2002) | Focus on:  
(i) greater involvement of the private sector in public health delivery through Public Private Partnership, outsourcing, etc,  
(ii) introduction of social insurance packages;  
(iii) Stressed regulating the private health sector through statutory licensing and monitoring of minimum standards. |
| 2005                | Govt. of India launched National Rural Health Mission (NRHM), aimed at strengthening state health systems with special focus on Reproductive and Child Health (RCH) and Disease Control Programmes.                                      |
| 2006                | “Pradhan Mantri Swasthya Suraksha Yojana” (PMSSY) to establish 8 AIIMS-like institutions and upgrade 13 government medical colleges to correct imbalances in availability of tertiary healthcare services and also augment quality medical education facilities |
## Development of Healthcare in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 2008 | Non-contributory publicly funded Rashtriya Swasthya Bima Yojna (National Health Insurance Scheme)  
To protect below poverty line households from major health contingencies requiring hospitalization affecting the vast majority of workers in the unorganized sector, including agriculture. |
| 2013 | Government approved National Urban Health Mission - a sub-mission under an overarching National Health Mission, with the modalities of service funding, organization and delivery in nascent stages of development. |
Private Health Sector

• Consists of the 'not-for-profit' and the 'for-profit' sectors.

• Not-for-profit
  – Non-government organisations (NGOs),
  – Charitable institutions, missions, trusts, etc;

• For-profit sector
  – Various types of practitioners and institutions i.e. General Practitioners (GPs), super specialists, consultants, nurses and paramedics
  – Registered/Rural Medical Practitioners (RMPs)
  – Unqualified providers (quacks)
Private Health Sector

• At the time of independence, private health sector provided only 8% of total healthcare services
• Grown exponentially to emerge as major service provider (~80% of total out-patient & 60% of total inpatient care)
• Accounts for 80% of the market in India now, the highest proportion in the world in volume as USD 23.72 billion
• Approx. 93% of all hospitals, 64% of beds and 82% of doctors are in the private sector (World Bank, 2001)
• In 2012 private sector contributed 70% of new beds added between 2002 and 2010
• Proportion of private sector beds to total beds increased from 49% to 63%
All India Institute of Medical Sciences, New Delhi
Factors leading to the Birth of AIIMS

• In 1947 the country only had 20 medical schools and about 1200 students
• Bhore Committee (1946) recommended that no time should be lost in establishing one “All-India Medical Institute” to ensure quality medical education, research and patient care
• AIIMS would excel in postgraduate courses and function as a university demonstrating high standards to all other medical colleges in the country
• Initial funding for setting up AIIMS was provided by the Government of New Zealand under the Colombo plan
• Training and financial assistance from the Rockefeller Foundation
• AIIMS was established in 1956 with a large measure of autonomy through an Act of Parliament i.e. the AIIMS Act, 1956
Governance Structure

- AIIMS makes decisions at the institutional level with accountabilities/incentives.
- Decision-making structure has an apex management authority called ‘Institute Body’, with 17 members.
- An 11-member ‘Governing body’ functions under this ‘Institute body’ as executive authority.
- President of the Institute is the Chairperson of both these Apex Bodies.
- Director is the Chief Executive Officer of the Institute.
- Director General of Health Services is the ex-officio member of the Institute body.
Autonomy

The spirit behind the Autonomy envisaged for AIIMS can be appreciated from the extract of the speech delivered by the then Union Health Minister, Raj Kumari Amrit Kaur while piloting the bill with regard to AIIMS in Lok Sabha on the 18th February 1956:

“Subject to such minimum control as the Government of India may exercise through its rule-making powers, the Institute will enjoy a large measure of autonomy in order that it may fulfill the objectives...The Government of India will, of course, make itself responsible for providing adequate funds for the maintenance of the institute....The future of the Institute will lie ultimately in the hands of the Directors, the Professors and other members of the teaching staff and students...”
Autonomy

• Further, while clarifying regarding the representation of the Ministry of Health in the Institute Body, the Health Minister had stated categorically that other than Director General Health Services, Govt. of India, who is the ex-officio member, there won’t be any additional representation from the Ministry of Health.

• To respect the assurance given to Parliament after establishing the Institute, she remained the President of the Institute (while being only Rajya Sabha Member [Upper House of the Parliament]) without being Health Minister from 1957 to 1964 after which the practice of appointing the Union Health Minister as the President of the Institute came in vogue.
Autonomy

- AIIMS has always argued that the autonomy of the Institute stands undermined by nominating the Health Minister as the President even though none of the provisions of the AIIMS Act provides for such a nomination.

- The Ministry of Health and Family Welfare was of the opinion that this did not in anyway jeopardize the autonomy of AIIMS.

- AIIMS was setup under an Act of Parliament, it has to be accountable to the legislature as well. This accountability is best ensured if both the Union Health and Family Welfare Ministry and Secretary (Health), Govt. of India are brought on board of the Institute.
Autonomy

• Another facet of its autonomy relates to medical education and the purposeful move by its founders to keep AIIMS out of the ambit of Indian Medical Council (IMC).

• This was probably done as IMC did not recognize certain foreign medical qualifications which would have disqualified several faculty members who were to establish their respective departments during the early years of the institute.

• This has also enabled AIIMS to experiment with medical education curriculum and seek out and make initiatives in various fields of medical science, in training, in research and most importantly in patient care.
Autonomy

• The autonomous structure of AIIMS notwithstanding, the effect of government policies, successive five year plan priorities, as well as the focus of the different governments that have ruled the country have all had an impact on the governance and therefore on the evolution of AIIMS.

• From that perspective, **AIIMS is a semi-autonomous system constantly interacting with and influenced by with its external environment.**
Growth Pangs ...

- In the early years of its inception, AIIMS established itself as a Centre for Excellence primarily focusing on imparting high quality medical education in India.

- Underdevelopment of the primary & secondary healthcare system and the virtual non-existence of a mandatorily enforced referral system resulted in a manifold increase in the patient load at AIIMS.
Growth Pangs ...

- This enlarged patient care component has gradually transformed AIIMS into a tertiary level teaching hospital with dual patient care roles viz. Referral & General Hospital.
- There has been a paradigm shift in the mandate of AIIMS from primarily Medical Education & Research to Patient Care.
- AIIMS has gone through many adaptive responses to become one of the largest public sector hospitals in the country, from nearly 750 beds in 1970s to 2,328 beds now.
# AllMS Hospital & Specialty Centres

<table>
<thead>
<tr>
<th>Centre</th>
<th>No. of beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main hospital</td>
<td>1052</td>
</tr>
<tr>
<td>Cardiothoracic and Neurosciences Centre</td>
<td>423</td>
</tr>
<tr>
<td>Dr. B.R. Ambedkar Institute Rotary Cancer Hospital</td>
<td>180</td>
</tr>
<tr>
<td>Dr. Rajender Prasad Centre for Ophthalmic Sciences</td>
<td>302</td>
</tr>
<tr>
<td>Jai Prakash Narain Apex Trauma Centre</td>
<td>203</td>
</tr>
<tr>
<td>Centre for Dental Education and Research</td>
<td>20</td>
</tr>
<tr>
<td>National Drug Dependence Treatment Centre</td>
<td>50</td>
</tr>
<tr>
<td>Comprehensive Rural Health Services Project</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL Beds</strong></td>
<td><strong>2328</strong></td>
</tr>
</tbody>
</table>
Rise in bed compliment at AIIMS (1972-73 to 2012-13)
Referral source for AIIMS patients (2012)

- Private practitioner: 25.4%
- Pvt. Hospital: 15.3%
- Govt. dispensary: 11.6%
- PHC/CHC: 3.2%
- District hospital: 8.5%
- Medical college hospitals: 22.0%
- Unreferred: 12.0%
- Not available: 0.0%
OPD Patients

![Graph showing the number of OPD patients from 1972-73 to 2012-13. The number of patients ranged from 529,729 in 1972-73 to 2,756,538 in 2012-13.

Source: AIIMS Annual Reports]
• In its 2009 Report the Valiathan Committee suggested the expansion of AIIMS OPD as only a temporary reprieve.

• It recommended that the OPDs of four other medical colleges in Delhi should also be expanded to draw away 8000 patients a day thus reducing pressure on AIIMS OPD.
Total number of Inpatients

Source: AIIMS Annual Reports
Financial Framework

• AIIMS budget is allocated during the Union Budget by the Federal Govt.
• Also receives funds through
  – Intramural resources
    • Hospital receipts (revenue receipts)
    • Patient treatment accounts
  – Extramural resources (from Governmental and Non-Governmental agencies and individuals)
    • Grants for specific research projects
    • Donations
    • Poor patient and Patient treatment funds
Financial Framework

• The annual budget of AIIMS from the Central Government has increased commensurate with patient load and healthcare technology development;

• The increase in allocation from $0.6 million in 1972 to $173 million in 2011-12 also mirrors India’s GDP increase

• Notably, even on occasions when the Government of India’s healthcare outlay has fallen, allocation to AIIMS continued to rise.
Growth of India's GDP and AIIMS Budget (1972-73 to 2011-12)
AIIMS Budgetary Allocation (2010-11)

- Ophthalmic Centre: 6%
- Cardio-Neuro Centre: 15%
- Cancer Centre: 5%
- Drug dependence treatment centre: 1%
- JPNA Trauma Centre: 10%
- Dental Centre: 1%
- Main Hospital: 62%
Staffing

• AIIMS plans its staffing requirements based on its patient load, teaching and research requirements etc, independent of the Medical Council of India’s “Minimum Standard Requirements for Medical College”.

![Faculty Chart]

![Non-Faculty Chart]
AIIMS performance
Average length of stay (days)

- 1972-73: 17.88 days
- 1977-78: 12.7 days
- 1982-83: 10.3 days
- 1987-88: 8.9 days
- 1992-93: 7.8 days
- 1997-98: 5.9 days
- 2002-3: 5.7 days
- 2007-8: 5.9 days
- 2012-13: 5.5 days
Figure 8: Average bed occupancy rate in AIIMS

- 2012-13: 81.60%
- 2007-8: 79.90%
- 2002-3: 80.90%
- 1997-98: 89%
- 1992-93: 85.20%
- 1987-88: 84.20%
- 1982-83: 92.10%
- 1977-78: 93.90%
- 1972-73: 96.30%
<table>
<thead>
<tr>
<th>State</th>
<th>2011-2012</th>
<th>2004-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
<td>45%</td>
<td>54%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>22%</td>
<td>16%</td>
</tr>
<tr>
<td>Haryana</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Punjab</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Bihar</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>Other states</td>
<td>8.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other countries</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>
Source of payment for the patients admitted at AIIMS (2011)

- 75.1% Self
- 6.9% Government
- 2.6% Friends & relatives
- 1.6% Employer
- 0.5% Insurance
- 7.9% Loan
- 5.3% Others
Family income per month of inpatients (USD)

- <200: 60%
- 200-400: 11%
- 400-600: 3%
- 600-800: 2%
- >1000: 1%
- Not available: 3%

Chart showing the distribution of income ranges for inpatients.
Education status of patients admitted in AIIMS (2011)

- No formal schooling: 13.8%
- Primary school: 16.4%
- High school: 30.2%
- Graduate: 20.1%
- Postgraduate: 9.1%
- Professional education: 1.1%
- Not mentioned: 9.0%
Trends in patient satisfaction at AIIMS (1996-97 to 2011-12)

<table>
<thead>
<tr>
<th>Service</th>
<th>1996-97</th>
<th>2006-07</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour of admission staff</td>
<td>96%</td>
<td>96%</td>
<td>85%</td>
</tr>
<tr>
<td>Medical care</td>
<td>71%</td>
<td>77%</td>
<td>93%</td>
</tr>
<tr>
<td>Information provided by doctors</td>
<td>57%</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>Behaviour of doctors</td>
<td>96%</td>
<td>97%</td>
<td>89%</td>
</tr>
<tr>
<td>Behaviour of nurses</td>
<td>87%</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Nursing care</td>
<td>66%</td>
<td>86%</td>
<td>95%</td>
</tr>
<tr>
<td>Behaviour of hospital &amp; sanitary attendants</td>
<td>44%</td>
<td>71%</td>
<td>65%</td>
</tr>
<tr>
<td>Quality of food</td>
<td>38%</td>
<td>65%</td>
<td>66%</td>
</tr>
<tr>
<td>Hygiene of washrooms</td>
<td>70%</td>
<td>76%</td>
<td>81%</td>
</tr>
<tr>
<td>Linen</td>
<td>75%</td>
<td>83%</td>
<td>85%</td>
</tr>
<tr>
<td>Cleanliness of wards</td>
<td>75%</td>
<td>83%</td>
<td>80%</td>
</tr>
<tr>
<td>Security services</td>
<td>83%</td>
<td>82%</td>
<td>80%</td>
</tr>
</tbody>
</table>
OPD patient load vis-à-vis maximum patient handling capacity in selected departments of AIIMS

<table>
<thead>
<tr>
<th>Department</th>
<th>Max. Handling Capacity</th>
<th>Patient Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics</td>
<td>140</td>
<td>250</td>
</tr>
<tr>
<td>Surgery</td>
<td>77</td>
<td>215</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>288</td>
<td>650</td>
</tr>
<tr>
<td>Cardiology</td>
<td>286</td>
<td>650</td>
</tr>
<tr>
<td>Neurology</td>
<td>133</td>
<td>257</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>51</td>
<td>167</td>
</tr>
</tbody>
</table>
Cost of Services at AIIMS

- **In-Patient Care** costs approx $38 /day
- Providing **Diet** to each patient costs $2 /day
- **General Surgical Procedures** cost $1,000
- **ICU Care** costs $125/day
- **Kidney Transplant** costs approx $3600
- **Robotic Urology Surgical Procedures** costs between $1800 – 2500

Whereas patient in a general ward pays only $0.6 per day which includes diet, medicines and other consumables..
## Cardiac procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>AIIMS</th>
<th>FORTIS ESCORTS</th>
<th>APOLLO HOSPITAL</th>
<th>MEDICITY</th>
<th>MAX HOSPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bypass Surgery</td>
<td>1200</td>
<td>5080</td>
<td>3900</td>
<td>6400</td>
<td>3400</td>
</tr>
<tr>
<td>Valve Replacement Surgery</td>
<td>1983</td>
<td>8080</td>
<td>6900</td>
<td>6500 (includes single valve cost)</td>
<td>6700</td>
</tr>
<tr>
<td>Surgery for CHD (Hole in Heart)</td>
<td>1000</td>
<td>3780</td>
<td>2800</td>
<td>4000</td>
<td>1300</td>
</tr>
<tr>
<td>Angiography</td>
<td>80</td>
<td>320</td>
<td>255</td>
<td>300</td>
<td>207</td>
</tr>
<tr>
<td>Angioplasty</td>
<td>2216</td>
<td>4940</td>
<td>4600</td>
<td>2200 plus Stent cost</td>
<td>1300 (Stent cost + Balloon + Guide wire)</td>
</tr>
<tr>
<td>Cardiac Cath</td>
<td>120</td>
<td>320</td>
<td>360</td>
<td>300</td>
<td>207</td>
</tr>
</tbody>
</table>
# Neurosurgical procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Charges (in US dollars) at:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AIIMS</td>
</tr>
<tr>
<td>Burr hole</td>
<td>40</td>
</tr>
<tr>
<td>VP Shunt</td>
<td>100</td>
</tr>
<tr>
<td>Spine Surgery</td>
<td>300</td>
</tr>
<tr>
<td>Trans-sphenoidal surgery</td>
<td>300</td>
</tr>
<tr>
<td>Complex Craniotomy (incl Brain Tumor)</td>
<td>400</td>
</tr>
</tbody>
</table>
Patient Centric Initiatives

• 24x7 pharmacy  
  – offer 56% Discount
• Package System
• Pre-paid Cash Card System
• Inn’s (Dharamshalas)
• Railway Reservation Counters
• Patient Assistance Services
Employee Focused Initiatives

- Employee Health Service
- Priority Counters at various service points
- Assured Promotion Scheme
- Outsourcing of Services
- Learning Resource Allowance
- Academic Leave
- Conference Grants
Lessons learnt and Conclusion

• India’s “uniqueness” is also reflected in its health system

• While for example more resources, more information, more technology, more doctors, etc all have favored quality and choice, they have also made governance more complex, with an extraordinary development of the private sector in health and a change in the role played by some hospitals, AIIMS being a very important example.
## Summary-analysis of factors related to AIIMS governance in 1969-70 and 2013

<table>
<thead>
<tr>
<th>Components</th>
<th>AIIMS (1960-70)</th>
<th>AIIMS (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary mandate</td>
<td>Education, Research, &amp; Patient care, in that order. Developing patterns of teaching in medical education to demonstrate a high standard of medical education to all other medical institutions in India.</td>
<td>The focus on education continues while the research component has increased manifold. Increase in patient load over the decades has resulted in allocation of a large proportion of resources for patient care.</td>
</tr>
<tr>
<td>Patient care</td>
<td>Referral institution</td>
<td>Referral &amp; general institution</td>
</tr>
<tr>
<td>Components</td>
<td>AIIMS (1960-70)</td>
<td>AIIMS (2013)</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Organizational</td>
<td>a) Centralized, close-knit and smaller institute</td>
<td>a) Partial decentralization due to emergence of various Centres &amp; super-specialties.</td>
</tr>
<tr>
<td>behavior</td>
<td>b) Outsourcing not mandate</td>
<td>b) Beginning with security services in 1980s, many services including housekeeping have been outsourced. Accountability &amp; responsibility frameworks have shifted. Interaction of permanent employees with outsource contractual staff is complex,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Largely autonomous as enshrined in AIIMS Act.</td>
<td>Complete autonomy not deemed desirable by successive national governments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>Primarily to the Parliament through Ministry of Health and Family Welfare (MoHFW)</td>
<td>To parliament, MoHFW, various regulatory bodies and to the public at large through laws including Right to Information Act and Consumer Protection Act</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of Government</td>
<td>Providing adequate funds. Minimal control</td>
<td>In addition to funding, exercising control over policy-making, performance auditing &amp; accountability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td>AIIMS (1960-70)</td>
<td>AIIMS (2013)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Relation to external environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients’ perspective</td>
<td>Considered primarily for research &amp; education</td>
<td>An institute for rendering accessible and affordable, quality patient care.</td>
</tr>
<tr>
<td>Private hospitals &amp; increased paying capacity of the consumer</td>
<td>Few private hospitals to match the quality of AIIMS, thereby having no direct effect on functioning of AIIMS</td>
<td>Affluent patients have, to an extent been largely weaned away to private hospitals. However, continued faith in AIIMS doctors result in second opinions being sought at AIIMS and sometimes, patients initially treated at private hospitals are shifted to AIIMS because of either untreatable complications or spiraling cost. Yearly attrition rate of doctors in AIIMS is nearly 5.5%. The attrition of nurses is more due to better opportunities abroad (and probably not related to private sector boom in India).</td>
</tr>
<tr>
<td>Components</td>
<td>AIIMS (1960-70)</td>
<td>AIIMS (2013)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Limiting factors for growth</td>
<td>Limited Funding, scarcity of trained manpower, paucity of technology, absence</td>
<td>Land, limitations in infrastructure, complex administrative processes, older</td>
</tr>
<tr>
<td></td>
<td>of global networking</td>
<td>system hindering modernization, growth of medical science, and attrition.</td>
</tr>
<tr>
<td>Patient demographics</td>
<td>Limited to patients from Delhi and referral cases from other parts of country.</td>
<td>Large influx of patients from Delhi, neighboring states and countries</td>
</tr>
</tbody>
</table>
Conclusions

• Over the years the pressures of an inadequate primary and secondary healthcare system in the country compounded by the absence of a structured referral system, has gradually led to the diversion of a substantial percentage of AIIMS resources into patient care services vis-a-vis education and research.

• AIIMS has gradually shifted from a ‘referral’ to a ‘referral and general’ role.
Conclusions

• The level of its autonomy has changed over time - the institute which was originally accountable to the Parliament only, now has a closer control exercised by the government; the accountability mechanisms have also become broader and more complex and other mechanisms such as people’s charter and ‘right to information’ to ensure accountability have been introduced.
Conclusions

• There have been increasing demands for the revamp of the existing Autonomy Structure including a greater stakeholder participation in decision and policy making viz. adequate representation of the faculty, staff & students in the governing & institute body, insulation from political environment, performance-based appraisal, etc. to enable it to continue its ability to attract & retain the best talent from across the globe.
Conclusions

• The study of AIIMS cannot be separated from the health systems of India.

• Any attempt to develop health services in India should take into account how the service delivery institutions are interconnected with each other and how they are organized internally.

• The creation of new AIIMSs across India is a challenge that offers many opportunities but needs to be handled carefully.
Conclusions

• Hospital performance is substantially influenced by its governance, in turn related to its external and internal (“managerial”) environment.