

formally trained and licensed private health providers such as doctors, nurses, midwives and paramedical staff including pharmacists serve communities along with an active informal sector including traditional healers (“quacks”) and traditional birth attendants. Informal sector is significant but unfortunately not well-documented source of health care especially for poor rural communities [7]. Variation in the format of practice is great and range of practice expands from a solo practice, couples practicing together, multispecialty hospitals owned by doctors, corporate hospitals, private medical colleges and non-for-profit hospitals. Majority of private providers operate in single specialty clinics but liaise with other specialties to ensure comprehensive care. Corporate hospitals and specialists are located in cities and general practitioners some with medical degree and large majority having no medical qualification are found in rural areas [8].

3.2 Quality of care

Lack of adequate infrastructure, unavailability of qualified support staff, absence of knowledge regarding recent clinical protocols and discrepancies between provider knowledge and practice affects quality of care in the formal private sector. As a result of irrational practices, patients in private hospitals incur higher costs. Higher cost of treatment affects affordability and equity. Informal private sector has similar issues in addition to the major concern related to lack of formal training to provide health care. In short, in absence of regulations leads to irrational practices and higher cost of care in the private sector. Before suggesting possible interventions to improve quality of care and expand access to quality care through private sector, we use SWOT analysis to examine the private sector, presented in below table.

Table 1: SWOT analysis of private health sector

<i>Strengths</i>	<i>Weakness</i>
<ul style="list-style-type: none"> • Private sector has more number of doctors than the government sector. • Better technical skills and high quality in some segments of formal sector physicians. • Private providers have better accessibility in terms of distance and timing of clinics and are responsive to client demands. • Private sector has a fee for services but provides flexibility in terms of payment schedules and discounts or fee waivers to needy patients. • Majority of patients are satisfied with services they get and are willing to go back as evidenced by rapid growth of private sector. • Some of corporate hospitals are internationally and nationally accredited including RSBY. • Government and public sector agencies empanel private sector hospitals to provide high-end services. • Private sector has latest technology and equipment. • Services in private sector are confidential and provide better privacy for the client. 	<ul style="list-style-type: none"> • Informal providers in the rural areas are unqualified/untrained and not supervised. • Fragmentations of services as majority have a single specialty and general practitioners do not work in a formal network. • Considerable variation in the rates charged for providing services, the maximum variation occurring in childbirth cases. • Human resource related issues such as recruitment and retention of skilled paramedical staff are major operational problem area for most of private sector facilities. • Choices about where to locate and what type of services to provide is driven by market demand in the private sector hence majority located in urban areas. • Irrational practices lower quality of care, compromise patient safety and increase the cost of care (e.g. overuse of injections and antibiotics, overuse of C-sections). • High cost of care in major illness treated in private sector without any insurance mechanisms limits access for the poor and thus affects equity in health care access. • Lack of information on outcome data and service practices makes it difficult to judge quality of care and monitor it.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Mainstreaming informal sector by training and accreditation of them as “Independent Health workers” would exploit available resource in rural and peri-urban area to increase access to quality primary care and preventive and promotive services. • Investment in staff training and capacity building in private sector would improve quality of care. • Larger strength of private sector and better rapport with clients can be used to increase utilization of health services. • Public private partnership can be forged to improve access where public health facilities are not available or where they are overcrowded. • Pilots- franchising and voucher schemes have been successful in improving access and quality of care. 	<ul style="list-style-type: none"> • Difficulties in institutionalizing informal providers in formal health care especially as legal issues regarding their practice are unresolved. • Global evidence suggests that attempts to regulate quality of care in the private sector by government have not been successful. • Private sector may misuse the partnership with government or accreditation to exploit the clients through irrational practices, use public or subsidized resources for private profit. • Cost of care may go up if insurance mechanism is used to provide care via private sector as has happened via Medi-claim type insurance.

Observations presented here are mostly related to formal private sector as it was appropriate to discuss informal sector issues and innovations separately as both have distinct issues. A systems framework comprising three simple elements: Inputs, process and output/outcome is used to

present observations. Inputs include infrastructure, manpower, drugs, equipment, etc [10]. The process relates to appropriateness, safety, effectiveness and timeliness of interventions and output/outcomes relate to cure/relief from disease, mortality, disability and patient satisfaction.

Output/outcomes are usually units of service delivered and benefits to clients. Quality of care is part of all three.

A. Inputs

Inadequate funding plagues majority of solo private providers leading to non-maintenance of facility and infrastructure might be limited to a single room which negatively affects quality of care including privacy. With mushrooming of private medical colleges and inability of Medical Council of India (MCI) to maintain educational standards and monitoring competencies of medical graduates also affects technical expertise of formal sector. In absence of standards for staffing, private facilities employ unskilled staff to increase profit margin and compromise quality in the process. Due to absence of continued medical education (CME) and no linkage to the government national health programs, majority of private providers are not updated in protocols. In 2002, MCI formulated a code of ethics requiring at least 30 hours of CME every five years for members for reregistration. Only about 20% of doctors have complied as it is not a legal requirement. A study done with practicing physicians indicate that many rely primarily on their own experience or colleagues' recommendations before adopting new techniques/interventions [11]. Majority of private practitioners lack knowledge of recent protocols for treatment [12].

B. Process

Unfortunately in India, clinical care processes are individual driven. It begins at the medical colleges training where students usually follow consultants and professors and learn clinical guidelines. This problem is compounded as government also does not mandate use of standard processes for providing health care services. Historically, professional organizations have largely private sector providers as members. These organizations arrange workshops/conferences and have CME types of sessions, which are sponsored by pharmaceutical companies to extend their agenda of promoting new drugs rather than evidence based protocols. Thus professional organizations are underutilized mechanism of influencing clinical practice of members.

Majority of physician run nursing homes do not have written protocols for patient management including infection prevention. Private sector is not regulated adequately and patient safety in private sector is adversely affected due to non-adherence to standard guidelines for patient management. Even when aware of standards, providers may deviate from recommended practice. Recent research in Indian settings found influence of provider factors such as higher profit margins and meeting clients' expectations leading to discrepancies between provider knowledge and practices [13]. For example antibiotics are overprescribed for childhood acute respiratory infections and diarrhoea, due to market practice considered congruent with good quality by the clients and risk avoiding practice [14]. At times diagnostic procedure may be too expensive or unacceptable to the client for example giving antibiotics empirically is cheaper than getting blood culture done before prescribing appropriate antibiotics.

Some corporate hospitals seek accreditation from industrial accreditation agencies such as ISO for marketing purposes otherwise accreditation is voluntary. Accreditation does not ensure that facility has specified infrastructure and systems in place and accredited hospitals adhere to standard guidelines for clinical and management practices. Private sector may seek accreditation for participation in government scheme such as "Janani Suraksha Yojana", to attract medical tourism and mandate by insurance companies. Studies have proved that accreditation improves quality of care and reduces unwarranted procedures and medications [15].

Health insurance is expanding in India and can modulate the quality of care in the private sector although there is no evidence yet that insurance companies are paying attention to this aspect. About 50 million Indians are beneficiaries of private health insurance and 247 million are covered by government sponsored schemes [16]. By insisting on following standard guidelines by private providers, these entities can improve quality of care. Insurance schemes involving private sector such as Chiranjeevi Yojana have been found to improve the quality of care and access to care while providing financial protection to poor [17].

C. Output/Impact

About 64% of beds and 85% of doctors are in the private sector in India [4] and yet the information regarding service and output indicators such as number of surgical procedures done, patients seen, profile of patients and treatment given is lacking. Dearth of data on service indicators makes it difficult gauge and regulate quality of care in the private sector.

3.3 Evidence on interventions to improve Quality of care

Global evidence on quality of care in the private sector in low and middle income countries is limited but suggests that poor adherence to guidelines in prescriptions and higher rates of potentially unnecessary procedures such as cesarean section are more common in private sector. Also there is a dearth of information on outcome data and clinical practices in the private sector. Patient's perception of quality of care in private sector is due to higher medication prescription and more time spent with providers. Regulatory capacity of low and middle income countries is weak which affects the quality of care in health sector including private sector. Literature reviews find that private sector is not more efficient, accountable or medically effective than public sector but training and accreditation improve quality of care in the private sector [18]. An analysis of approaches that are most effective in bringing about changes in clinical practice (provider behavior change) have shown that multifaceted intervention strategies are most effective in bringing about changes in clinical practice [19][20]. Time-of-service delivery reminders and academic/medical detailing are the most important elements of provider behavior change. Interactive learning and the use of adult learning techniques are more effective than didactic learning. Leveraging local opinion leaders as agents of change such as professional organizations can have substantial impact on changing behavior.

Similar studies done in Indian states of UP, Maharashtra, Andhra Pradesh, New Delhi and Haryana confirm that lack of standardization in infrastructure and staffing in private sector along with absence knowledge of clinical protocols affects quality of care in the private sector. Patient satisfaction was found to be higher and majority of patients indicated they would return to the same private provider for similar health problems. Also there is a huge variability in cost of same procedures and there was lack of knowledge regarding standard procedures. Studies looking at interventions to improve quality found that training and accreditation are most likely to succeed in improving quality of care in the private sector in India [21] [22].

3.4 Informal private sector: Issues and innovations

As discussed previously, informal providers are first contact for poor rural population in India. Information regarding numbers, type of services provided and quality of care provided by them is sketchy and mostly anecdotal. A study done by Center for Health Market Innovations (CHMI) looking at dynamics of informal provider interactions within broader health marketplace in India concluded that many perceptions about informal providers are myths [23]. For example, the belief and perception that informal providers are no “quacks” or illegal providers who maintain low profile to sidestep government regulation is not correct. On the contrary, they appear to be trusted and respected members of the community who view their profession as “noble profession”. Also they are not illiterate school dropouts but majority have at least secondary level schooling while some even hold graduate degree though not in medicine. The study also noted that informal providers have well-developed ties with formal health system especially private sector. Many receive gifts or commission for referring patients to private facilities. Informal providers have developed lucrative business models to respond to market incentives and patient demand. Informal providers do engage in harmful medical practices such as overuse of injections and over prescription of antibiotics like formal private providers [22].

Interventions suggested to improve quality of care in informal private sector in India include formalizing ties between informal providers and their formal counterparts in a mentorship program. A comprehensive literature of interventions to improve health services by informal providers in low and middle income countries suggests that their widespread presence offers an opportunity to expand quality primary care [23]. Interventions included training of informal providers, changing institutional relationships and behavior change to follow standards. Effective interventions need to take into account the sources of knowledge and drugs for these providers, livelihood strategies and institutional arrangements between stakeholders and how they maintain their reputation in the community [25]. Market based approaches rather than interventions focused on training or individual capacity building are more successful in improving quality of care in informal private sector. In conclusion, majority of outpatient healthcare has been provided by informal health providers and quality of care is an issue.

Evidence from Indian states suggests that providers are motivated to offer services when they are established as providers of quality products/ services through brand promotion [26]. Unregulated and fragmented private sector in India has major quality of care deficiencies including in the area of clinical skills and it is difficult to formulate policies for engagement and/or regulation of private sector.

4. Discussion & Recommendations

SWOT analysis reveals many strengths of the private sector and opportunities of engaging it to provide quality care in India. Innovations in service delivery such as mainstreaming informal providers by providing training for primary care can improve access to quality care for rural population. Involvement of the private sector in national programs would not only help in increasing utilization of reproductive child health care services in India but also provide training, building capacity and other resources to improve quality of care in the private sector. Public private partnerships for improving access to health care have been implemented but unfortunately quality of care has not been a focus.

The overall aim for private health care services providers whether informal, non-profit or for-profit remains increase in client volume. Evidence suggests that service quality initiatives positively influence market for service or commodity offered by the private provider [27]. For-profit private health care providers benefit from increased revenues, improved opportunities for provider training, or expanding the range of services offered. Staff retention is better in establishments following quality improvement initiatives than those not following such initiatives. Branding and marketing practices followed in franchising or contracting benefit both formal and informal providers in building provider-community linkages. Following are some suggested interventions to improve quality of care through private sector in India.

4.1 Regulations

- Develop a reliable database on private sector including informal sector starting at sub-district level to ensure regular data collection on qualification of service providers, service statistics from private sector. This will be needed under the new Clinical establishment act.
- Assess competency and provide certification to informal providers and stipulate which services they can provide and cannot.
- Establish standard guidelines regarding staffing and infrastructure in the private sector and ensure implementation of these guidelines.
- Establish standardized clinical care guidelines including for prescribing and dispensing practices and investigation / diagnostic procedures.
- Use public private partnerships to monitor and provide supportive supervision and increase accountability.

4.2 Professional Development

- Renewal of medical license should be mandatory and based on CME and knowledge of current protocols and initiate competency-building mechanisms with

appropriate monitoring to ensure quality and follow up. It is already mandated by MCI but not enforced.

- g. Use collaboration with private sector such as social franchising for capacity building and competence and provide additional resources.
- h. Facilitate access to drugs, tests and other resources through national health programs to private sector.
- i. Improve access to standard guidelines for private sector.

4.3 Engagement

- j. Encourage voluntary accreditation and/or make accreditation mandatory for participation in public private partnership initiatives.
- k. Use insurance companies to push for improving quality of manpower, infrastructure and protocol use.
- l. Help strengthen role and capabilities of professional associations to improve their engagement in the public programs.
- m. Improve capacity of government to provide stewardship by improving management capacity and providing specific skills needed to manage collaborations with private sector. This can be done by establishment of audit in government directorate to measure private sector engagement.

Quality and access are interrelated, sustaining quality improvement with formal and informal providers call for broad coalitions that go beyond government and health professionals [28]. Such coalition needs to include citizen groups, pharmaceutical companies, information-technology and telecommunications companies, and associations of informal health-care providers. Such coalitions have to coordinate disease-surveillance systems, information networks for pricing and sourcing quality drugs, and patient-referral mechanisms. As suggested previously regulations are difficult to impose in absence of strong system and when accreditations are voluntary. Indian government needs to invest in establishing a mechanism with improved management capacity at state, district and sub district level to ensure quality of care in the private sector.

A designated manager should be responsible for engaging informal and formal private providers to increase utilization of maternal child health services and ensure optimum quality of care in India. It will also encourage constant dialogue between professional organizations and private sector managers to encourage voluntary accreditation facilitate public private partnerships and foster regular data collection from private sector on input and service indicators. It should be noted that specific skills would be required to engage private sector and ensure that standards and guidelines are followed. Fragmentations of private sector make it difficult to come up with specific policy to address quality of care issues. The "Clinical Establishments (Registration and Regulation) Act", 2010 and the notification of "Clinical Establishments Rules", 2012 requires registered facilities to have minimal standards and will be mandated to charge fixed rates in a given band for each type of procedure and services. The government is still to implement the law but this seems a silver lining for expanding access to quality care through the private sector [29].

5. Conclusion

India is one of the most populous countries and has the distinction of having one of the worst reproductive child health indicators. High health needs and limited government provision of health services has led to a mixed health care market in India. In addition to large numbers of allopathic doctors in urban areas, a significant proportion of health care for rural poor population is provided by informal providers that range from qualified indigenous system doctors to faith healers. Private sector is geographically more accessible and is perceived to be of better quality by clients. Lack of government guidelines and knowledge regarding clinical protocols lowers quality of care and raises cost of care in the private sector. Improving quality of care in the private sector requires strong regulatory capacity of government and coalition involving civic society and professional organizations. Collecting data on input and service indicators for the private sector would help understand the extent and the nature of quality of care issues better. Accreditation, regular training of private providers and mainstreaming the informal private sector will help improve access to quality care through private sector. Adoption of "Clinical establishment act" is a step in the right direction for India and raises hopes of improving quality of care in the private sector in near future.

6. Future Scope

The paper highlights the need to study inputs, processes and outcomes of private sector in relation to maternal child health provision to understand quality of care issues. Understanding the issues will help design of interventions that can improve access to quality care and reduce cost of care to poor Indian women and children. As the private sector is providing significant proportion of maternal child health services including delivery care services, it is important to systematically study the same and implement evidence based policies and programs.

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