

A Study of Three Public Private Partnership Models for Health in Gujarat, India

*Alka Barua*¹⁻²

¹Senior Consulting Associate, Gynuity Health Projects, India

²PhD Scholar, Tata Institute of Social Sciences, Mumbai, India

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ABSTRACT: Public Private Partnerships have been implemented in India to help improve the performance of the public health sector. The experiences of implementation have been a mixed bag with some successes. There have been concerns during implementation about the designs not accounting for disparate motivations, ambiguous roles and risks to partners that affect the management, sustainability and ultimately the services. A study was conducted to understand the designs of three Public Private Partnerships addressing reproductive health needs of women at primary and secondary health care level in rural Gujarat. These partnerships were with a corporate body, a Non-Government Organisation and with private empanelled gynaecologists respectively. Review of data and relevant documents from the government and private partners and in-depth interviews with select key informants were conducted. The Government of Gujarat has drafted elaborate conceptual framework and guidelines for Public Private Partnership. Yet, the non-competitive selection of partners, conflict of interest, lack of commitment and attention to standards of care and insufficient monitoring and accountability mechanisms all point towards weaknesses in design of these models. Implementation without fidelity to the purpose and design of the PPP and un-addressed risks to partners make these partnerships vulnerable to exploitation and un-sustainable in the original format. The study highlights the need for thorough review of partners and evaluation of existing models to ensure that the potential benefits of PPPs are not frittered away at the altar of weak designs and lack of monitoring.

KEYWORDS: Design, Selection, Roles, Responsibilities, Risks, Sustainability.

1 INTRODUCTION

Essential reproductive health services are not available to the majority (70%) of women in India through the public health system. [1] Provision of health facilities is a constitutional obligation of the government and yet the poor performance on health indicators in India has been largely attributed to inadequacies in availability, accessibility, acceptability and quality of health services, particularly in the public sector health system. [2] To improve the performance of the public health sector, successive Five-Year Plans since 1992 [3] have stressed on the need for health sector reforms. Public Private Partnerships (PPPs), one such reform has a very strong symbolic appeal as it envisages bringing together the two sectors to improve the health of the poor and deprived sections of the population. The task force set up under the National Rural Health Mission (2005) of Government of India, re-iterated the need for PPPs to meet the public health challenges in the country. [4] At the core of this is the assertion that the easily accessible and better managed private sector will promote accessibility, efficiency, accountability and cost effective and good quality services. [5] The PPPs have been conceptualized as effective, efficient, equitable and sustainable models of service delivery. Till the advent of health sector reforms and PPPs, private collaboration was limited and largely informal or ad hoc. Increasing importance of efficiency in service delivery mandated a more formal, equitable relationship between partners to deliver comprehensive services. [6]

A variety of PPP intervention models have been implemented in India. Many of these PPPs have succeeded in providing an efficient, flexible, equitable cost effective and viable alternative for “government only” service delivery models. Subsidies and local reach of these models succeeded to some extent in ensuring that services are affordable and reach the unreached. Those in partnership with Community Based Organisations (CBOs) were especially found to be more transparent, accountable

and sensitive to the needs of patients. Some of these initiatives resulted in improved use of services particularly by poor women. The experience highlighted that to achieve its objectives the PPP has to be dynamic. It has to evolve to meet the changing strengths, weaknesses, and commitment of different partners and has to be nurtured in an enabling policy environment by a focused, pragmatic, decisive leadership.

On the other hand, these experiences of implementing PPPs also raised a horde of issues. Globally the high transaction costs, sustained commitment of the governments, poor regulatory environment, skills to manage contracts, accountability, inequitable partnership, escalating health costs and quality of care have been recognised as concerns relevant to PPPs. [5]

The Ministry of Health and Family Welfare (MoHFW) in India defines PPPs as, "Collaborative efforts between public and private sectors, with clearly identified partnership structures, shared objectives, and specified performance indicators for delivery of a set of services in a stipulated time period". [7] "Public" means Government or organizations functioning under State budgets, "Private" means the Profit/Non-profit/Voluntary sector and "Partnership" means a collaborative effort and reciprocal relationship between two parties with clear terms and conditions to achieve mutually understood and agreed upon objectives following certain mechanisms. [4] However, often the PPP models in India have been found to suffer from poorly designed contracts, inadequate resources, delayed fund release and absence of ownership at state level. Inability to attract and retain private partners, poor monitoring systems, low accountability, rigid eligibility criteria for benefits and absence of standard operating procedures are compounded by low awareness among women. [8] There are larger concerns about the relevant policies, concept, rationale and functioning of PPPs. Further, there also appears to be inherent contradictions in the concept of PPP, the main orientation of the two partners and the scope for opportunism in a PPP. It is feared that private sector may serve only those who can pay increasing inequity and allocative inefficiency in the health sector, and making profits through supplying more health care than is required and providing low-quality health care. [9] Critics of PPPs are of the opinion that the term 'partnership' disguises unequal power relations and distinct agendas of the different stakeholders. [10] Multiple stakeholders, their motivations, risks they face and ambiguity of roles impacts the governance and accountability and leading to fragmentation of services. [11] There is an urgent need to understand the nature of partnership, the roles of partners, their motivation, risks involved and long term sustainability of PPP models in India. This paper tried to fill that gap.

2 STUDY

2.1 SITE

Gujarat, a State in Western India is known for the rapid strides it has made economically. The State government has been at the forefront in implementing health sector reforms. Of these, the PPPs have had the longest history in the state with the much celebrated example of a government primary health centre being managed by SEWA Rural in the 1980s [12]. Chiranjeevi yojana, the latest PPP designed, developed, piloted and upscaled successfully in the state [13], is on the threshold of being implemented in other states in the country. The Government of Gujarat has drafted conceptual framework and guidelines for PPPs that explicitly spell out the objectives and the expected contribution of pursuing and involving the private sector in health service delivery. The state therefore offered an interesting context for the proposed study to understand the nature of PPPs.

2.2 OBJECTIVE

The objective was to explore the nature of partnership, specifically the attributes of interest such as partners, their selection, roles and responsibilities, type of contract and perceived motivation for partnership, risks and sustainability that have direct bearing on performance of the partnership and its outcome.

2.3 METHODOLOGY

2.3.1 SAMPLE

The draft PPP framework of Government of Gujarat states that primary objective of PPPs is to engage private sector to provide services which government is currently unable to provide and in partnership operationalise Primary Health Centres, Community Health Centres and First referral Units to provide health services to the unreached and undeserved areas. PPPs at the programme level and those that are implemented at the community based Primary Health Centres (PHCs) and Community Health Centres (CHCs) were therefore selected for this study. Focus on women's reproductive health, documented successes, government's stated plans of upscaling, and feasibility of studying them determined the selection of

PPPs. Three PPPs that met these requirements were: Dahej PHC run by a corporate body in Bharuch district, Shamlaji CHC run by a Non-Government Organisation in Sabarkantha district and Chiranjeevi Yojana (CY) run by private empanelled Gynaecologists in Surat district.

2.3.2 DATA MANAGEMENT

PPPs are a complex development initiative. A holistic, in-depth and contextual exploration of this complex topic and issues around it needed case study method that offers a platform to describe the structure, processes and activities of the PPPs through perspectives of the multiple stakeholders. Qualitative methods were used to garner information about PPP models, their genesis, contracts, roles and responsibilities, operational management, governance and performance. The data was collected through review of documentary information from Government of Gujarat, private partners and from the public domain. Policy statements, vision and contract documents, records, government resolutions, and monitoring, grievance redressal, financial and performance reports were referred to. In-depth interviews with select policy makers, researchers, programme managers both government and private and service providers (N=14) were conducted. A checklist and semi-structured interview field guides were used to collect data.

Data from in-depth interviews was transcribed in English and analysed manually. Data was analysed to explore the emerging themes and patterns. The findings were co-related with existing literature. In-depth analysis of each PPP was done in the context of the study objectives.

3 FINDINGS

3.1 PARTNERS, THEIR SELECTION AND CONTRACTS

The Government of Gujarat has guidelines for selection of partners and their roles and responsibilities. The State guidelines specify that the private partner should be registered at least for 3 years under the appropriate income tax Act, should have local presence, at least three year experience of running the specific programme, fixed assets worth Rs. 5 lakhs and requisite infrastructure and manpower. The State government calls for Expressions of Interests (EoI). The EoI proposals are scrutinized and approved by the Principal Secretary, Health and Family Welfare. As per the guidelines the initial approval of these partnerships is for 3 years with the provision for renewal on recommendation of the district authorities and the Rogi Kalyan Samiti (RKS) at that level of health facility.

All the three PPP models were launched around the time NRHM was launched. For Dahej PHC, Government of Gujarat partnership was with Indian Petrochemical Industries Limited (IPL, later 46% stakes bought by Reliance Industries), for Shamlaji with All India Movement for Sewa and for Chiranjeevi Yojana with select private obstetricians. The contacts were in form of Government Resolutions (GRs) for Dahej and Shamlaji and mutually agreed Terms of reference (ToR) for Chiranjeevi Yojana.

The selection of these partners for Dahej and Shamlaji was based on their expressing interest in running the respective facilities. In Chiranjeevi Yojana, on the other hand, was a pro-active effort by the State government to engage private obstetricians to support their move to increase institutional deliveries and thereby reduce maternal mortality. The eligibility of private obstetricians for selection in Chiranjeevi Yojana has been described in great details in the ToR for Chiranjeevi Yojana (**Table 1**).

All three contracts are relational, incomplete and have been renewed more than once. The contracts for Dahej and Shamlaji seem more incomplete as there is no explicit mention of overall objective and expected outcomes of the partnership and mechanisms to address opportunism by and risks to partners. The Chiranjeevi Yojana contract though fraught with gaps is framed in more details regarding overall objectives, selection criteria for partners and expected outcomes.

Table 1: Private partners, process of selection and their contracts

	Dahej PHC	Shamlaji CHC	Chiranjeevi yojana
Year of launch	2006	2003	2005
Private partner/s	IPCL /Reliance industries	All India Movement for Sewa (AIMS)	Private Obstetricians (Allopaths)
Selection	Expression of interest by private partner; invitation from government	Expression of interest by private partner; invitation from government	List of obstetricians with 24X7 nursing home with \geq 15 beds, a labour room and OT, newborn resuscitation kit and willingness to report; Laparoscopic empanelment, availability of sonography machine, services for MTP and accreditation for sterilization preferred; GoG accreditation.
Period of contract	3 years, renewable.	2 years, renewable.	Renewable
Level of partnership	Primary health centre	Community health centre	Private facilities at district level

3.2 ROLES AND RESPONSIBILITIES OF PARTNERS

The state government PPP model is largely a “contracting out” model at different levels of service delivery with a variable extent of involvement of partners. The involvement of government ranges from handing over the physical infrastructure, equipment, budget and personnel to the private partner to allowing the latter to recruit its own staff as per government norms, designing its own model for service delivery or providing it flexibility to expand its service delivery and charge user fees.

The State government, in addition to designing, planning and engaging in implementation of programmes, also has the responsibility to regularly monitor services. At the primary and secondary level of health care, the MO-in-Charge of the health facility leads the Rogi Kalyan Samiti¹ which is responsible for overall monitoring and performance of the facility and has to report to the Chief District Health Officer. Technical support is provided by the District officials under direct supervision of the Principal Secretary and Additional director (Health and family Welfare). Representatives of the government partner have to conduct regular meetings with private partners, resolve conflicts, release funds, ensure that the partnership is sustainable and that the services reach the poor and vulnerable. It retains the right to revise, modify or terminate the partnership contract or MoU with one month notice in cases of need or gross violations of agreements. The government provides 60-100% of running costs for the facilities handed over to private partners but the latter have the freedom to raise additional resources for providing better quality services.

The role of the private partners as per the guidelines is to effectively deliver specified curative, preventive and promotive health services, participate in national programmes, strengthen referral services, promote community partnership and institutional care for maternal care and train Skilled Birth Attendants as mandated. They also have the freedom to purchase additional equipment and supplies using the existing budget made available by the government.

The roles and responsibilities of partners as specified in the respective GRs and ToRs for the three models under study were reviewed (**Table 2**). They were to a large extent in compliance with the State government guidelines for that level of health care delivery system. Additionally, the private partners are responsible for upkeep of the physical infrastructure and at the secondary level or Shamlaji CHC the responsibility extends to managing ophthalmic cases and given the location of the facility on State highway, to managing trauma cases. The Chiranjeevi Yojana guidelines about expected role of private partner is described in detail in the contract. However, articulation of the role of government partner in terms of setting up of

¹ Rogi Kalyan Samiti or Hospital / health facility Management Society is a registered society, which acts as a group of trustees for the hospitals to manage the affairs of the hospital / health facility.

standards of care and monitoring those was conspicuous by its absence in the contract. Thus, operational management of all three models is in the hands of the private partners and barring Shamlaji CHC, the governance of the models is also largely the State government responsibility.

Table 2: Roles and responsibilities of partners

Dahej PHC	Shamlaji CHC	Chiranjeevi yojana
Private partner		
<ol style="list-style-type: none"> 1. Provide mandated services at PHC level; 2. Charge nominal fees for lab investigations, OT, special room and ambulance to the non-BPL patients 3. Repair/ maintain building, furniture, equipment, PHC vehicle; 4. Maintain hygiene, quality of available food and disposal of medical waste; 5. Pay electricity, water and other consumable bills; 6. Recruit staff in compliance with government norms; 7. Provide financial inputs for transport, drugs and equipment in case of shortfall; and 8. Submit quarterly financial statement & annual audited statement. 	<ol style="list-style-type: none"> 1. Provide mandated services at CHC level; 2. Run a trauma centre, Ophthalmology clinic 3 times a week and conduct eye surgeries once a week; 3. Charge nominal fees for lab investigations, OT, special room and ambulance to the non-BPL patients; 4. Manage victims of natural calamities; 5. Raise resources for upgradation of infrastructure; and 6. Rest same as Dahej PHC, additionally 	<ol style="list-style-type: none"> 1. Provide maternal care to BPL population; 2. Conduct cashless deliveries; 3. Provide free medicines and supplies; 4. Address complaints or grievances or SAE; 5. Provide Rs. 200 transport charges for BPL women and Rs. 50 for accompanying dai; 6. Display information of free services; and 7. Submit report every month with documentary evidence
Public partner		
<ol style="list-style-type: none"> 1. Plan and monitor services and programme; 2. Own immovable property and capital goods; 3. Set up service norms; 4. Provide Grant-in-Aid for running expenses; and 5. Modify or terminate the contract based on performance 	<ol style="list-style-type: none"> 1. Same as Dahej PHC' additionally 2. Provide funds for new Ophthalmology unit; and 3. Sanction additional manpower. 	<ol style="list-style-type: none"> 1. Map area for private doctors; 2. Assess and accredit private facilities; 3. Empanel eligible Obstetricians; 4. Create awareness; 5. Provide specified amount for 100 deliveries at institutions²; 6. Provide specified amount to set up nursing home in remote areas³ and for 1000 deliveries in CHCs/FRUs; 7. Stop funding or cancel of contract based on performance

As per the State officials and State MIS, all the three models have been instrumental in improving access and reaching more people or beneficiaries. While Chiranjeevi yojana has in the recent past shown some decline in empanelment of Obstetricians and in its contribution to institutional deliveries, it is still considered to be a successful strategy. To sustain these PPP models, one needs to understand the motivation of partners, the risks they are exposed to and their potential for sustainability. This data was sought from key informants and stake holders to explore their perceptions on these aspects of these three models of PPPs.

² Rs. 2.8 lacs for 100 deliveries at private Obstetrician's own clinic and 86,500 at government facilities

³ Extended CY: provide Rs.5.4 lacs to set up nursing home in remote areas and carry out >=300 BPL deliveries & additional Rs. 2 lacs after 100 deliveries and provide Rs. 4.09 lacs for 1000 deliveries in CHCs/FRUs

3.3 MOTIVATION OF PARTNERS

Of the three models under study, Dahej PHC is run as the CSR initiative of Reliance industry, Shamlaji as the NGO's altruistic effort to serve the community and Chiranjeevi yojana is implemented as a profit making and practice enhancement strategy by the private obstetricians. The stated government role in these models is to facilitate services to the unreached community.

All the Key Informants (KIs) had similar perceptions about motivation of partners. According to them, the motivation of partners depends on their background and the level of operation. All of them mentioned that the government seeks the partnership to seek support to execute its mandate and reach the unreached, either in collaboration with or through abdication of its duty to the private sector in the name of partnership. On the other hand, in their view, the private partners despite their claim of supporting the government move implicitly have a range of reasons or motivations. One of the key informants summed it up as, *"There are different motives of different private entities. The corporate sector gets into these partnerships under its Corporate Social Responsibility (CSR) initiatives, that too mostly an effort to spend that money earmarked for CSR. A large section of private partners get involved for expansion of own practice or profit. There is no commitment to public good in it. In case of NGOs, the motive is largely philanthropy."*

3.4 RISKS TO PARTNERS

The KIs were of the opinion that both the partners are open to risks in these partnerships. Government partner faces the risk of political interference, bureaucratic inconstancy, destabilising influence of market forces, diminishing motivation and interest of the partner and a difficulties in sustaining such partnerships. They also acknowledged that the risks undertaken by private sector are not insubstantial. The possibility of delays in fund release, micro-management by the government and sudden termination of contracts are threats that loom large for them. But, they were unequivocal about the risks faced by the beneficiaries (particularly poor women) of these PPPs given the nebulous nature of these partnerships.

The KIs expressed their doubts about sustained motivation of private partner at Dahej in view of the new State of the Art hospital that Reliance was coming up in the same area. They also wondered about the ability of beneficiaries of Dahej PHC to afford services at the new hospital. In case of Shamlaji, according to the KIs the CHC management's response to market conditions in form of highly specialised services was at the cost of routine services mandated for secondary level of care. The risks faced by both partners in Chiranjeevi Yojana, on the other hand are already evident. The mismatch between market rates and the payment by Government of Gujarat has led to withdrawal of private Obstetricians from the Yojana and to referral of complicated cases to government tertiary care hospitals.

3.5 SUSTAINABILITY

The KIs had serious misgivings about potential for long term sustainability of PPPs in social sector, particularly health. Most key informants were sceptical and talked about the difficulties in realising the potential of such initiatives particularly in view of the costs, service quality, competition, characteristics of beneficiaries / clients, desired outcomes, institutionalisation of operations and political influence. Interestingly, a government official himself voiced his reservations and said that the benefits of such partnership accrue only if these are implemented with mutual trust and team spirit against an enabling environment of clear policy and State's leadership and stringent monitoring. The State according to him still holds the key to the success and sustainability of these partnerships but still does not have the wherewithal to keep it going in mutually beneficial way.

All the KI and stakeholders unanimously believed that of the three models, Shamlaji CHC model implemented by the NGO had the potential to sustain due to the sheer commitment of the founder, the trust that State government had reposed in him due to the consistent performance of the facility over time. The absence of commercial interests strengthened the possibility of sustaining this partnership. At the same time, the KI and stakeholders had strong doubts about the sustainability of Dahej and Chiranjeevi yojana models. In case of the former, Reliance setting up a secondary care hospital in same area and limited economic relevance of such PPPs in the highly industrialised area were cited as the reasons. In case of Chiranjeevi yojana, the KIs foresee a reversal of power centres, and lack of viable alternative for reaching the unreached and under-served as two possible scenarios that would impact sustainability, especially of Chiranjeevi yogini's current format.

4 SUMMARY AND DISCUSSIONS

Public-Private Partnership (PPP), an important strategy under the health sector reforms of Government of Gujarat to provide reproductive health services in rural areas, is being implemented through a range of private partners at different levels of health service delivery. The need for this reform has emerged out of the growing realization of the State government about its inability to meet the growing demand single handedly, particularly in the face of infrastructural challenges and trained manpower shortages.

The Government of Gujarat has conceptual framework and guidelines which articulate the objective and the roles and responsibilities of both the partners. While the guidelines are elaborate, their actual operationalization in the field is not true to its letter and spirit. The selection of partners has been non-competitive and based on Expressions of Interest by individuals organisations. The roles and responsibilities, on the other hand, have been articulated and to a certain extent implemented as per the guidelines. But essentially ad hoc selection of partners, their disparate motivation, the power imbalance amongst the partners, lack of attention to standards of care and insufficient monitoring and accountability mechanisms all point towards weaknesses in concept and design of the models.

Also, while incomplete and relational contract are deemed inevitable in health sector partnerships given the demographic, technical and political changes, the extent of incompleteness in itself can pose a risk. Implementation without fidelity to the purpose and design of the PPP and un-addressed components such as risks to partners and opportunism by partners, make the partnership vulnerable to exploitation by vested interests. Despite its intent, the capability of public health system to monitor and address these vulnerabilities through a dynamic contracting system is debatable. The long terms sustainability of partnerships necessitate the relational nature of contracts with trust and adjustment as the core content.

While the potential benefits of well designed and implemented PPPs is unquestioned, the weaknesses of strategy and upscaling of such initiatives without robust evaluations strengthen the perception about government's abdication of its primary responsibility to the unregulated private sector under the garb of PPPs. The price of weak and short sighted initiatives is often paid by the unreached and underserved population, especially poor women in terms of their unmet needs and poor health. The study thus highlights the need for thorough evaluation of existing models, particularly to assess their reach amongst to the unreached and poor for serving whom ostensibly these partnerships were conceptualised in the first place.

5 LIMITATIONS

The study focused on effect of select reproductive health PPPs, particularly amongst women in poverty. Inherent in the restricted focus of the design is the difficulty in generalizing the findings to other PPPs addressing other health issues. The study also accounts for a select population with unique socio-cultural context and therefore has limited generalisability to PPPs in a different context.

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REFERENCES

- [1] International Institute for Population Sciences (IIPS) and Macro International, *National Family Health Survey (NFHS-3), 2005–06: India: Volume I*. IIPS, Mumbai. 2007
- [2] The Center for Reproductive Rights, *Maternal Mortality in India: Using International and Constitutional Law to Promote Accountability and Change, 2008*, [Online] Available: <http://reproductiverights.org/en/feature/maternal-mortality-in-india-2011-update%E2%80%93accountability-in-action> (January 12, 2012)
- [3] Planning Commission, *Eighth Five Year Plan*. Planning Commission, Government of India. New Delhi, 1992.
- [4] Ministry of Health and Family Welfare, *Draft Report on Recommendation of Task Force on Public Private Partnership for the 11th Plan, 2006*. [Online] Available: mohfw.nic.in/NRHM/Task.../Draft_Report_Task_Group_on_PPP7_9_06.p (March 28, 2011).

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- [5] A. Venkat Raman and J. W. Björkman. *Public/Private Partnership in Health Care Services in India: Lessons for developing Countries*. Routledge Limited, 2009.
- [6] R. Baru and M. Nandy. "Blurring of Boundaries: Public-Private Partnerships in Health Services in India", *Economic & Political Weekly*, vol. 43, no.4, pp. 62-72, 2008.
- [7] Ministry of Health and Family Welfare. *Public Private Partnerships: Chapter 7. Family Welfare, 2006*, [Online] Available: [Mohfw.nic.in/WriteReadData/892S/Family Welfare-38385935](http://Mohfw.nic.in/WriteReadData/892S/Family%20Welfare-38385935) (April 14, 2011).
- [8] CEHAT. *Emerging Health Care Models: Engaging the Private Health Sector - National Conference Report*. CEHAT, Mumbai, 2009.
- [9] Mitchell-Weaver, Clyde and B Manning. "Public-Private Partnerships in Third World Development: A Conceptual Overview", *Studies in Comparative International Development*, vol. 26, no. 4, pp. 45-67, 1992.
- [10] M. Faranak. "Public-Private Partnerships: The Trojan Horse of Neoliberal Development?", *Journal of Planning Education and Research*, vol. 24, no. 1, pp. 89-101, 2004.
- [11] A. Singh and G. Prakash. "Public-Private Partnerships in Health Services Delivery", *Public Management Review*, vol. 12, no. 6, pp. 829-856, 2010.
- [12] UNNATI, Vadodara Medical College (BMC), *Making of a Primary Health Centre. The SEWA Rural Experience. UNNATI, 1999*. [Online] Available: <http://www.gujhealth.gov.in/Images/pdf/jhagadia.pdf> (January 2, 2011).
- [13] D. Mavalankar, A. Singh, S. Patel, A. Desai, and P. Singh. "Saving Mothers and Newborns Through an Innovative Partnership with Private Sector Obstetricians: Chiranjeevi Scheme of Gujarat, India", *International Journal of Gynecology and Obstetrics*, vol. 107, pp. 271-276, 2009.