ICRIER
Two decades of health policy research

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India’s growth and development have been seriously hampered, *inter alia*, by efficiency and equity deficits in its health sector. Such deficits are poised to become more pronounced with the growing burden of chronic diseases and the threat of emerging infections and pandemics. India is already the world’s largest contributor to premature deaths due to chronic diseases, and suffers from a range of health, economic and other vulnerabilities vis-a-vis emerging infections and pandemics.

ICRIER’s Health Policy Initiative (HPI) has been analyzing critical challenges in India’s health sector and offering policy recommendations for health sector reforms in the country based on multi-stakeholder consultations and lessons from around the world.

We are happy to share with you two decades of our health research, and look forward to contributing much more with you towards the health of the nation.
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Health of the Nation
Perspectives for a New India
HEALTH OF THE NATION

Health of the Nation: Perspectives for a New India (forthcoming – June 2020, Oxford University Press)

The survival and health of citizens is probably the biggest paradox of India’s democracy and economy. Why has the world’s largest democracy and one of its top ten and most rapidly growing economies been unable to ensure a decently long and healthy life for its citizens? Citizens and their welfare should have been a top priority of public policy from the perspective of political legitimacy as well as human and economic growth and development. But this has not happened.

This volume brings together some of the world’s leading health experts to analyze some of the most complex challenges facing survival and health in India and what it would take to address them. It is an attempt to enhance the significance of health in the context of India’s public policy / discourse.

Being the inaugural volume in what we have conceived as a periodic ‘Health of the Nation’ series, it will serve as a comprehensive reference on India’s health sector for policymakers, scholars, students, private sector, civil society and the media in India and abroad. Chapters are lucidly written so that even non-experts could understand the issues under discussion. They end with a set of policy recommendations to facilitate evidence-based health policymaking in the country.
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It is well documented that India is a relatively poor performer in health outcomes, primarily because of inadequate public investment in health and improper implementation mechanisms. Despite large gains in health status since the 1950’s – reflected in higher life expectancy, lower infant mortality and crude death rates – much more needs to be done.

This volume – the first of its kind to explore issues of concern to the Indian health scenario – examines health challenges faced by India’s population, identifies specific problems and analyses various possible solutions. The diverse experiences of different states in India in the context of their health systems and their status in terms of social well-being are also discussed in some detail.

The report is unique in so far as it has been authored by persons having intimate hands-on experience of managing the health system at both central and state levels. The insights of the authors have also been utilized to go further than most such reports, even at the risk of generating controversy. The report goes beyond the usual diagnoses of the problems and analyses of options, by suggesting specific solutions based on available evidence and the authors’ practical experience. Its analyses drew on existing literature and data, supported by widest consultations with all stakeholders – central and state governments, donor agencies, researchers, public health experts and health-related NGOs.

One of the appendices in the report – “Restructuring the Ministry of Health & Family Welfare” – was included to highlight need for a reorganization of the Ministry to lead the process of health reform in the country.
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HEALTH INFORMATION SYSTEM

Health information system in India and the scope of National Family Health Survey (2020)

This research was commissioned by the NITI Aayog and mandated by the Union Cabinet. Its report is presently under review by the NITI Aayog and will be made available once approved.

The NFHS has been a valuable source of reliable, representative and richly disaggregated data on family planning, certain aspects of health, nutrition as well as related determinants. It has been all the more helpful given the weak civil registration and health information system in the country.

Nevertheless, in the context of the health transition as well as proliferation of rich survey as well as non-survey data sources, this report makes a set of recommendations on the basis of extensive review of health information systems at national and selected state level, 90 stakeholder interactions in New Delhi and 6 states – Uttar Pradesh, Rajasthan, Bihar, Maharashtra, Assam and Kerala – as well as review of health surveys in US, UK, Canada.

Following the introduction and a chapter on conceptual framework, the report is organized into 3 sections. Section 1 provides an overview of the national health information system and analyzes the scope of NFHS vis-à-vis other health surveys and institutional health data requirements (health policies, programs, health-related SDGs, health technology assessment etc.). Section 2 does so at the state level. Section 3 provides an overview of health surveys in selected countries and draws some lessons for the Indian context. The report ends with a set of key recommendations for the health information system, especially the health survey landscape, in the country.
We have been developing research inputs for the Department of Economic Affairs, Union Ministry of Finance to help it develop Government of India’s position on health issues in the G20. In 2018, we worked on surveillance of antimicrobial resistance (AMR); in 2019, on universal health care (UHC) and traditional and complementary systems of medicine (TCSM). Since research under the G20 program is meant for Government of India’s internal use and is confidential, we have so far not published it.

Universal health coverage (2019)

This report has 4 sections. Section 1 analyzes WHO’s conceptualization of UHC. Section 2 reviews discussions of UHC at the international level (UN, G20, G8/7, WHO, The World Bank and the OECD). Section 3 analyzes UHC experiences, financing and challenges in selected G20 countries. Section 4 presents a comprehensive assessment of UHC in India since independence.

Traditional and complementary systems of medicine (2019)

This report discusses the TCSM discourse and practice at the international level and lays out recommendations vis-à-vis TCSM in general, AYUSH in particular, in the context of SDGs, UHC and primary health care (PHC).

Section 1 analyses the relevant definitions and nomenclature as well as a set of contexts in which the discussion of TCSM has been embedded (G20, SDGs, philosophy and epistemology and political economy), and evolution of the international TCSM discourse since the 1970s. Section 2 reviews the scope (policy, regulations, financing, insurance, practices, providers and education), data and challenges of TCSM in selected G20 countries. Section 3 discusses views from field interactions in New Delhi, Hyderabad, Chennai
and Bangalore. Section 4 outlines views from the stakeholder consultation that we organized in New Delhi.

**Synchronized surveillance systems: How G20 should tackle antimicrobial resistance (2018)**

G20 leaders have been concerned with the most pressing global challenges, and health threats like pandemics have increasingly come to be recognized as one of them, given their potential to spread globally, with serious implications for health and economies.

The report has 3 sections. Section 1 recommends a synchronized approach to global and health risks and AMR surveillance. Section 2 discusses the evolution of health surveillance in general, infection disease surveillance in particular, methods of health surveillance, AMR and its determinants with 2 case studies (drug-resistant TB and HIV). Section 3 reviews the international status and practice of AMR surveillance in selected G20 countries.


This book discusses equality and justice in the context of child survival, health and flourishing. Children have been guaranteed an equal right to life, yet millions of them continue to die each year due to preventable causes.

Child mortality has widely been perceived and addressed as a medical issue. This book argues that a clear and consistent pattern of preventable child deaths is, at its core, a problem of justice; that modern theories of justice can offer important lessons for the design and assessment of child survival policies from an equity perspective; and that the issue of child mortality can, in turn, illuminate debates on the metrics and measurement of justice in modern political philosophy since the time of John Rawls.

Analyzing trends in child survival and access to its determinants among selected groups in India, it argues that Amartya Sen’s multifocal metric of justice, with a central focus on ‘maximal potentials’ or ‘capabilities’ of individuals and groups, is more plausible than its Rawlsian or resourcist counterparts since it allows for considerations of equity to be met without sacrificing the potentials of the better-off or ignoring aggregative concerns. Such an approach to justice is relevant for affirmative action policies too, which have long been a source of resentment among historically better-off groups around the world, especially in two of the world’s largest and most vibrant democracies – India and the United States.
Prevention of chronic diseases: Reorienting primary health systems in India (2016)

Policy brief https://bit.ly/2w93OsP

Individuals should be entitled to a ‘fair innings’, and the primary role of health systems should be the prevention of premature mortality. In India, 66 percent of all deaths are premature. The burden of premature mortality has shifted from child (0-5 years) to adult (30-69 years) level over the years – there are three times more deaths happening at the latter vis-à-vis the former level. Nevertheless, primary health systems continue to focus almost exclusively on reproductive and child health (RCH). They need to make a health system transition and get engaged in the prevention of risk factors, morbidity and mortality related to chronic diseases – the biggest determinant of adult mortality – together with their original focus on RCH.

This paper analyzes some of the major challenges in terms of governance, manpower and financing that such a transition will be faced with and offers a number of actionable policy recommendations to deal with them.

It does so on the basis of desk and field research in 4 Indian states – Uttar Pradesh, Rajasthan, Kerala and Tamil Nadu (2 health-backward and 2 health-advanced) – and 4 countries – Japan, Canada, United States and Sri Lanka (with varying probability of premature mortality due to non-communicable diseases) – involving semi-structured interviews with close to 200 stakeholders from policy, industry, international organizations, civil society and the academia.
This paper describes the status, challenges and scope for strengthening surveillance of chronic disease risk factors, morbidities and mortality in India. We draw upon the surveillance experience of 4 selected states – Uttar Pradesh, Rajasthan, Kerala and Tamil Nadu – to analyze key requirements vis-à-vis financing, infrastructure, human resources and governance.

The public health system is grappling with resource constraints, but there is room for more efforts to undertake systematic population-based chronic disease surveillance in India. Surveillance activities under the National Programme for Prevention and Control of Diabetes, Cardiovascular diseases and Stroke (NPCDCS) are performing sub-optimally due to issues related to funding, operational guidelines and inadequate clinical, technical and managerial staff. It is apparent that the public health system should devote additional resources towards active population-based surveillance. Besides financing, there is a need to develop institutional mechanisms for engagement of adequate human resources for surveillance and disease management. Engagement of AYUSH and community health workers is identified are reasonable options, but would require sound incentive mechanism to ensure good coverage and programme outreach. Furthermore, local support, both social and political, is critical to create a conducive environment to contact beneficiaries and for information recording. In this regard, private sector is identified as a potential partner that needs enabling environment to come up with services under a public-private partnership mode.
Sixteen million people died prematurely (under 70 years) due to noncommunicable diseases (NCDs) in 2012 — 3.4 million in India alone, the highest in the world. Although total NCD mortality was much higher in China — 8.6 vis-à-vis 5.9 million in India — only 36% of it was premature compared to 58% in India. Within a decade, chronic diseases will overwhelm health systems in India — 89% of total mortality would be concentrated in the 30+ year age group. Even at its current level of development, 72% of deaths at this level are due to NCDs — as the country grows, the proportion of NCD-related deaths will only increase. What India does to tackle chronic diseases will be critical for global efforts to achieve the SDG target 3.4, which calls for a third reduction in premature mortality (30 to 70 years of age) due to NCDs between 2016 and 2030.

Tackling chronic diseases requires strong financial commitments. Unless governments — national and local — are committed, in word and deed, little progress would be made in tackling their enormous burden. Indian policymakers have to match budgetary allocations with their international commitment and leadership towards chronic diseases. They have already signed the SDGs — now is the time to act upon them.


As India experiences a rapid health transition, the mismatch between health care needs and resources is widened by an expanded list of health conditions that vie for attention from policymakers and public health action, while posting competing claims for clinical care. The complexities are compounded when policy has to prioritise on the basis of disease burdens, cost-effectiveness and equity, while delivery systems have to simultaneously cope with the transformative pressures of economic restructuring and health care reforms. The challenges of providing acute and chronic care for NCDs in such settings are immense, yet the imperatives of proper planning and performance for delivering such care become increasingly urgent as health transition rapidly rewrites anew agenda for health care in the India.

This paper examines the socio-economic impact and burden of NCDs and discusses various strategies for the prevention and control of such diseases in India. It recommends that existing health systems need to be reorganised, reoriented and recruited to deliver the expanded mandate of health care involving the prevention, surveillance and management of chronic diseases. The sustained nature of preventive interventions required over many years as well as the growing demand for acute and chronic care of NCDs will need to be accommodated into the agenda of primary and secondary health care. Surveillance of NCDs and their risk factors should also become an integral function of health systems, complementary to the other surveillance functions they are currently performing. Evidence based clinical practice and appropriate use of technologies should be promoted at all levels of health care, including tertiary services.
Drug regulation aims at protecting and promoting public health by establishing the safety, efficacy and quality of medicines. Despite commonalities in the science and objectives of regulation, drug regulatory authorities differ significantly in their respective requirements and capacities, contributing to inequalities in access to medicines as well as health outcomes across nations.

This report seeks to identify key areas of concern in the process of medicine registration in India, and the supportive role that international cooperation can play in this context. It reviews some of the major international cooperation initiatives for registration of medicines to identify lessons as well as opportunities that the Government of India could potentially leverage to address its regulatory challenges and achieve public health objectives.

This report is based on desk research and interactions with a range of key stakeholders in the national capital, 4 Indian states — Gujarat, Maharashtra, Telengana and Karnataka — as well as 7 countries — US, UK, Germany, Switzerland, South Africa, Singapore and Indonesia.
Clinical trials are integral to drug discovery and bringing out newer and better medicines into the market. India has had favourable prerequisites for conducting clinical research—a large and diverse patient pool, a highly skilled workforce of qualified scientists, medical colleges, etc. Yet, an unfavourable ecosystem has undermined its potential—only 19 trials were approved in 2013, a drop of roughly 93 per cent from 2012 (262 trials), and a fraction of its peak of 500 trials in 2010. India is home to 16 per cent of the world population and 20 per cent of the global burden of disease. Yet, it has less than 2 per cent of clinical trials registered worldwide. A critical area of concern where the country continues to underperform despite enormous potential to be a world leader.

This report analyses the prospects and challenges of clinical trials in India, focusing on New Chemical Entities (NCEs) and new drugs. It contextualises the debate around clinical research in the context of new drug approval process. Likewise, it proposes actionable policy recommendations for Indian drug regulatory landscape so that the country could realise its untapped potential while addressing concerns raised regarding the conduct and quality of clinical trials.

This report is based on desk research and interactions with a range of key stakeholders in the national capital, 4 Indian states —Gujarat, Maharashtra, Telengana and Karnataka — as well as 7 countries – US, UK, Germany, Switzerland, South Africa, Singapore and Indonesia.
Serialization is the process by which products are marked with a standards-based unique identifier – enabling systems and processes to enhance supply chain security. It is one of many tools necessary to ensure quality, authentic products are delivered to patients. However, when serialization information is not properly used or protected, it could be used to give substandard and falsified medicines the appearance of legitimacy, creating the exact security threats that traceability systems try to prevent. Breach of the pharmaceutical supply chain could have serious public health consequences from product shortages to medical complications – and in severe cases, large-scale death.

India has established regulatory requirements for serialization / traceability of pharmaceutical products meant for exports from India. Draft requirements for serialization / traceability of products in the domestic Indian market have been proposed, but not finalized yet (May 2017).

A stakeholder consultation on drug serialization and traceability in India was organized by ICRIER and RxGPS on 3rd March 2017 in New Delhi, attended by more than 60 representatives from the Indian and global pharmaceutical markets.

This white paper captures the dialogue and conclusions of the consultation, and sets forth a roadmap for strengthening the Indian drug serialization and traceability system. The recommendations of this white paper are meant to help India in remaining a leader in the global pharmaceutical market as well as advance supply chain security for the benefit and protection of patients.
The global pharmaceutical value chain is becoming increasingly complex, leading to the emergence of ‘multiple quality standards’ for medicines. Non-uniformity in the quality of medicines is contingent upon both the regulatory milieu in the country of manufacture and the export destination.

The focus of this paper is upon the domestic pharmaceutical market in India, where policy makers often face a trade-off between what has been called ‘high quality’ and ‘affordable quality’ medicines. With India being recognised as the pharmacy of the developing world, it is believed that there is a need for strict quality specification and enforcement within the country in the first place. There have been several reports which have raised doubts regarding the quality of medicines in India.

Mapping the perspectives of several stakeholders, this paper tried to bring clarity on issues related to poor quality medicines and suggest institutional reforms in the Indian regulatory regime, looking at good and bad practices followed domestically as well as internationally.

It is based on extensive literature review as well as field interactions in 4 states – Kerala, Tamil Nadu, Gujarat and Maharashtra – and 4 countries – US, UK, China and Indonesia.
Drug regulation has been the focus of several recent policy reform efforts in India – the Mashelkar Committee Report of 2003 and the more recent Ranjit Roy Chaudhary Committee Report of 2013, for instance. Yet, the regulatory structure in India continues to be plagued with several structural challenges, including issues related to regulatory harmonisation between the Union and states, access to regulatory resources, transparency, etc. that have weakened the overall effectiveness of the country’s regulatory system.

This study evaluates the administrative structure and functions of drug regulatory authorities at the central and state level along with comparative perspectives on similar challenges from other international jurisdictions. It is based on extensive literature review as well as field interactions in 4 states – Kerala, Tamil Nadu, Gujarat and Maharashtra – and 4 countries – US, UK, China and Indonesia. Through legal and policy analysis, supported by stakeholder interactions, this study not only provides a systematic analysis of existing challenges, but also actionable policy recommendations and possible means for their operationalization.
Preventive health care holds enormous promise for the competitiveness of Indian companies and the country’s economy at large in the global arena.

This study examines empirical evidence on the relationship between preventive health care and labour productivity and corporate profitability. The primary research undertaken for it included an online survey with 81 companies in the country as well as a field-cum-online survey with a sample of 288 employees in Delhi and the National Capital Region. Using financial data from the Prowess database, a correlation analysis of preventive health care and its impact on profits and labour productivity was carried out for these companies. Based on survey findings, the authors make a set of recommendations in favor of promoting preventive health care in India’s corporate sector to enhance the productivity and competitiveness of the Indian industry.

Its recommendations vis-à-vis the inclusion of preventive health check-ups were adopted by the Government of India under its Income Tax Act as well as by several health insurance companies as part of their packages. Today, almost all private hospitals offer such check-ups. It received widespread national and international coverage in the print and electronic media.
During the nineties, there has been a significant development in the conceptualization of the impact of changes in the health status of the population on demographic changes and long-term economic performance. Health has been found to have strong linkages with individual welfare and overall economic development. This paper deals with the channels through which health affects human capital and income generation and also examines the devastating effects of AIDS on populations. The study also discusses health and HIV prevention measures that need to be built-in to development programmes. To model the linkage between health and growth, the study uses a multivariate theoretical framework which is further tested using a regression model to test the causality between variables of interest. As Indian industry faces increased competition, the paper argues that it is important to ensure that a skilled labour force does not suffer from low participation rates and low productivity due to a lack of awareness of prevention measures or poor access to needed health services.
The Commission on Macroeconomics and Health (CMH) – established in January 2000 by former WHO Director-General, Dr Gro Harlem Brundtland – comprised 18 of the world’s leading economists, public health experts, development professionals and policymakers. Six working groups were set up as part of CMH – Working Group 4 being, “Health and the International Economy”, led by ICRIER Chairperson, Dr Isher Judge Ahluwalia.

It examined the impact of globalization on the health status of developing country populations, with a focus on the poor. Its report examined trade in health services, commodities and insurance; patents for medicines and Trade-Related Intellectual Property Rights (TRIPS); international migration of health workers; international movements of risk factors; health conditions and health finance policies as rationales for protection; and other ways that global trade may be affecting the health sector.

The report also addresses the problems related to the brain drain of skilled health personnel from developing to developed countries and issues involved in a larger role for information technology in the delivery of health care for all and the associated concerns on the regulatory front. In both these areas, it suggested policy responses that may help to address related concerns.
Opportunities and risks for the poor in developing countries (2002)


As globalization proceeds, a pertinent question is its likely impact on the global health situation, including, in particular, whether it will improve or worsen the health of the poor in developing countries. The channels through which globalization may affect health outcomes are multiple.

This paper tries to address some of the following questions vis-à-vis health and globalization. Will globalization help reduce (or exacerbate) the economic and social inequalities around the world, thereby narrowing (or widening) disparities in the distribution of the global burden of diseases? Is globalization limiting the governments’ resources and policy options to confront health problems? Will globalization blur the distinction between national and international health, and would this undermine governments’ ability to prevent and control diseases? What are the potential effects of expanded trade in health commodities and services, and the implementation of patents for medicines and other changes in Intellectual Property Rights as agreed in the multilateral negotiations of the World Trade Organization (WTO)? How is globalization changing the relationship between poverty, health, and food security and nutrition issues? What is the impact of globalization on the transnational movements of health risks? Answers to these queries will all have an impact on the global health situation.
The CGHS and ECHS are unique in India in terms of comprehensive health care coverage that they provide to their members who pay only a limited subscription to be eligible. Thanks to growing demand for private health care services, the government tied up with private health care providers to provide high quality services to beneficiaries. However, this public-private partnership has run into rough weather, with private providers expressing dissatisfaction with the terms as well as the time taken for payments and some actually threatening to withdraw from these schemes.

The objective of this study was to suggest measures to streamline the working of these two schemes and achieve an outcome that balances the interests of the major stakeholders – the beneficiaries, Central government and private providers. It evaluated these schemes in terms of beneficiary satisfaction and issues and concerns of empanelled private health care providers and the government based on desk research and a survey with 1,204 CGHS and 640 ECHS beneficiaries, 100 empanelled private health care providers and 100 officials related to the schemes in 12 Indian cities.

Beneficiaries were more satisfied with the services of private health care providers vis-à-vis the in-house CGHS dispensaries and ECHS polyclinics, and were willing to pay more for better quality services. Rather than try to keep their contributions low – and likewise the rates offered to the private providers – Central government should focus more on the quality of care.
Financial barrier is still a dominant problem for access to necessary health care for majority of Indians. To ensure universal and comprehensive health care to its citizens, alternative health care financing strategies like health insurance are being widely accepted. However, despite health insurance being an equitable and efficient solution, health insurance coverage is still in its infancy in the country.

In the backdrop of the low level of health insurance coverage in India, this study examines the determinants of the scaling-up process of health insurance by analysing the rational behaviour of an insurance agent facing a trade-off between selling 'health insurance' and 'other forms of insurance', subject to his limited time and efforts and the implications of such behaviour on adverse selection and equity.

The paper presents various pre-conditions affecting the rational behaviour of insurance agents and examines various strategies followed by insurance agents for maximizing their net incomes. The theoretical proposition is empirically validated by applying a binary probit model using the primary data collected by the author.

The study concludes that given the existing incentive systems in the Indian insurance market for promoting various forms of insurance, the low level of insurance awareness among the general public, coupled with the dominant role of insurance agents in the market results in a situation of low level of health insurance coverage, no adverse selection and inequity in health insurance coverage.
In comparison to the phenomenon of micro-credit that started in a big way in India in the 1990s, micro-insurance is a very recent phenomenon. Micro-insurance, which basically refers to insurance for the low-income people, is picking up in India.

This study charts the early development of micro-insurance in the country, with a focus on health insurance, mainly with the view to bring out certain issues that come up in the design of micro health insurance.

In this paper, while bringing out the role of the nodal agency in extending health insurance, we discuss how health insurance for the poor is different from health insurance in general. Depending on the functions that a nodal agency performs, all micro insurance arrangements taking root in the country can be categorized in to three distinct types – intermediate, manager and provider type. Each type has its own strengths and weaknesses. All these types may be appropriate for a large and diverse country like India.

The paper analyses selected conceptual issues which are generic to all types of health insurance initiatives as well as those that are specific to a particular type. A good understanding of these issues is important to remove some of the weakness in the design of these schemes. More empirical studies are needed to further our understanding of these schemes so that these schemes can be shaped better.
Health insurance for the poor in India (2004)


Health insurance is emerging to be an important financing tool in meeting health care needs of the poor. Neither market-mediated nor government-provided insurance is an appropriate way of reaching the poor. This paper argues that Community Based Health Insurance (CBHI) is a more suitable arrangement for providing insurance to the poor.

Development of private health insurance in the country has both potential risks and benefits in improving access to health care services for the poor. Appropriate regulatory changes can minimise the risks and turn potential benefits into concrete gains for the poor.

CBHI could take different forms, depending on the characteristics of the target population, their health profile and health risks to which the community is exposed. Indeed, for a country as diverse as India, there can be no Pan-India model and all different forms need to be explored.

The scheme announced in the last budget and recently launched by the Prime Minister seems promising, provided insurers find it attractive enough to partake in the scheme. The proposed scheme being a group insurance scheme is not meant to cover the entire BPL population. Also, it excludes outpatient care. As experience accumulates, the scheme can be fine-tuned and expanded to cover all low-income people. But increased public health spending and reforming of public health facilities is a must for the success of these community-based health initiatives.
That there is an urgent need to extend income and social protection to the poor is widely recognised. One, there is greater appreciation of the fact that income and social protection to the poor is not only an end in itself but also a means to achieving higher economic growth. Two, because the adverse effects of greater economic integration (through liberalisation and globalisation) are likely to be on the poor.

In the mitigation of poverty, there is increasing appreciation of the role played by risks in the lives of the poor. It is not sufficient to provide the poor with income alone. For making any meaningful and lasting impact in their lives, there is a need to also protect them from the several risks such as risk of illness, death, loss of assets, and so forth.

Accordingly, micro insurance – which is basically insurance for low-income populations – is gaining importance in India as well as in other developing countries. Community-based micro insurance has aroused much interest and hope in meeting health care challenges facing the poor.

This paper explores how institutional rigidities such as credit constraints impinge on the demand for health insurance and how insurance could potentially prevent poor households from falling into poverty trap. It argues that the appropriate public intervention in generating demand for insurance is not to subsidise premium, but to remove these rigidities – easing credit constraint in the present context. Thus, from an insurance perspective as well, its analysis highlights the importance of having appropriate savings and borrowing instruments for the poor.
Health is increasingly being viewed not only as an “end” in itself, but also as a crucial “input” into the development process. As developing countries embrace market reforms and integrate themselves with the world economy, there is a concern about insulating the poor from possible adverse effects. While the State is in retreat in several economic spheres, in social sectors such as health, its role will continue to be important.

The debate on health sector reforms in India is currently underway. One aspect of the debate is the challenge of reducing the burden of health care costs by converting out-of-pocket expenditures into prepayment schemes through insurance – social, market-based or community-based insurance. The concept of community-based insurance seems appealing and may even work for people living in rural and informal sector in India.

This paper, by analysing the incentive issues present in community-based health insurance schemes, is an important step towards enhancing our understanding of how such schemes could be designed. It discusses solutions to important incentive problems in micro-health insurance schemes which threaten their sustainability. In particular, three issues have been explored – 1) does defining households as units of insurance always mitigates adverse selection problem; 2) how could ex ante moral hazard problems be circumvented through group insurance contract; 3) how to fix incentives for scheme managers. Various public policies are discussed that could help to set appropriate incentives to better manage health insurance schemes, especially in low-income country environments like India’s.
The contribution of the informal sector to the Indian economy is enormous. It is estimated that about two-fifths of the country's GDP originates from, and almost 90% of families earn their livelihood from, the informal sector. Yet, a large number of informal sector workers live and work in unhygienic conditions and are susceptible to infectious and chronic diseases. Many of them neither have fixed employer–employee relationships, nor do they get any statutory social security benefits, including health care benefits. The persistent poverty and disease syndromes have pushed their families into the process of de-capitalisation and indebtedness to meet their day-to-day contingencies. Both macro and micro studies on the use of health care services show that the poor and disadvantaged sections, especially the scheduled castes and tribes, are forced to spend a higher proportion of their income on health care than the better off. The burden of treatment is particularly unduly large on them when seeking inpatient care.

This paper addresses some critical issues with regard to extending health insurance coverage to poor households in general and those working in the informal sector in particular. A review of the existing health insurance schemes in India and selected Asian and Latin American countries – China, Thailand, Sri Lanka, Chile, Uruguay, Colombia, Brazil and Argentina – has been undertaken with a view to draw lessons for India. On the basis of a pilot study undertaken in Gujarat during 1999, the paper examines the feasibility of providing health insurance to poor people in terms of both willingness and capacity to pay for such services. The paper also suggests various options available to introduce an affordable health insurance plan for workers in the informal sector.
External assistance to the health sector and its contributions:
Problems and prognosis (2002)


In the past 30 years, India has received considerable external assistance for the health sector, including family welfare. However, this support will largely depend on efficient utilisation of funds as well as on the capacity of recipient states to absorb increased donor funding.

Certain disturbing trends can also be observed. Apart from time lags in the sanction, start up and disbursement of donor funds, the implementation is reported to be tardy. This has resulted in both time and cost overruns.

In this paper, an attempt is made to document externally funded programs, projects, activities, with general specifications (e.g. funding levels, timeframe, geographical coverage) to the extent possible as determined by the availability of information which is largely fragmented; and appropriate description of key activities and objectives. The paper then provides an idea about the extent of utilisation of funds over the project cycle with the help of a few selected externally funded projects. This is followed with a brief description of some of the problems associated with externally funded projects. In doing so, the paper relies mainly on authors’ exposure to various key donors and Union / state governments while working on some of the recent projects in the area of health and reproductive health, including nutrition programs. The paper concludes with summarising the main issues emerging from the analysis as well as indicating key lessons for improving the flow of external assistance in the health sector in India. The concluding section, *inter alia*, indicates the role of donors in reshaping health policies and in improving domestic resource mobilisation for the health sector in the country.
This paper examines the main opportunities for India in the EU's health services market and the various barriers affecting India-EU trade and investment relations in this sector. As India-EU Trade and Investment Agreement (TIA) is of significance, given that it is India's first agreement with a major developed country bloc, the objective of this paper is to outline the main issues that need to be discussed in the TIA to promote bilateral commercial interests in the health services sector. The broad coverage of the health services sector in this paper is in line with the coverage of this sector under the WTO. As existing data sources do not provide information on the extent of trade or investment flows in the health services sector for either the EU or for India, factors that drive EU's trade in health care services with non-member countries and the factors that are likely to facilitate India's trade and investment flows in health services have been analysed using a variety of primary and secondary sources. The paper recommends a pragmatic approach to launch joint programs with selected countries in the EU on a pilot basis in all possible segments of opportunity and to scale these initiatives depending on the outcome.
Information Technology (IT) is poised to revolutionise healthcare trade through new thresholds in human connectivity.

This paper focuses on the expanding role of IT in three distinct, but related categories – (a) design and development of healthcare products and services; (b) delivery systems; and (c) healthcare administration. Through the information power that IT enables, the capacities of decision-makers are continually transformed in how they link with each other, in the here and now. This not only promotes conventional trade in services and e-commerce, it also facilitates worldwide convergence in several aspects of healthcare management and organisation.

The analysis in this study focuses on the nature and scope of the expanding role of information and communication technologies in the design and development of healthcare products and services, delivery systems and healthcare administration. The study traces the potential impact of IT on costs, efficiency and equity as a driver of cross-border trade and investments and notes that IT can play an important role in enabling the world’s poor to access essential healthcare products and services in new innovative forms if the challenges that inhibit its diffusion in developing countries can be addressed through appropriate policy choices.

The study points to the need for further research of how IT affects costs of diagnosis and treatment with respect to specific disease burdens at particular locations to resolve tensions between efficiency and equity.
Trade in health services (2001)


The paper provides an overview of the nature of international trade in health services and the lessons that can be learnt from the national, regional, and multilateral experience in this context. The study discusses the various ways in which health services can be traded, the main global players in this trade, and the positive as well as negative implications of this trade for equity, efficiency, quality, and access to health services. It also outlines some of the main barriers constraining trade in health services. The analysis indicates that there has been little progress to date in opening up this sector to trade and foreign direct investment. It emphasises the importance of harmonization of standards, recognition, and insurance portability if health services trade is to be liberalized multilaterally. The study draws broad conclusions about the main issues and concerns which characterize trade in health services and recommends policy measures to ensure that gains from such trade are realized while mitigating its potential adverse consequences.
The paper investigates the role of trade barriers on the prices of inputs – both pharmaceutical and non-pharmaceutical – required for health interventions. The analysis is based on data from 2 sources – a survey by Consumers International and Health Action International of 16 drugs in 36 countries (11 developed and 25 developing) in July / August 1999 and WTO data on the highest and lowest tariff rates on medicaments and active ingredients in developing countries. The analysis of a non-pharmaceutical input called Insecticide Treated Bednets (ITNs) as a preventive intervention of malaria suggests that reduction of tariffs in this category could increase usage by no more than 3% in Sub-Saharan Africa and even less elsewhere. The findings on pharmaceutical prices suggest that trade barriers are of secondary importance in affecting or determining drug prices. Domestic factors, such as distribution costs and retail mark-ups, and international factors such as the new patent regime, have a much greater impact on drug prices.
Much focus seems to be on reduced access to newly patented medicines in the light of changes in technology (improving research techniques but rising costs of research) and the spread of stronger patent legislation worldwide over the past two decades – as well as the forthcoming global application of the WTO TRIPS agreement. Meanwhile, the fact remains that access to older, patent-expired essential drugs remains poor and is a very serious threat to public health. Yet, this situation appears not to be on the road to making substantial progress. Certain disease categories including measles, acute respiratory infections, malaria, diarrheal diseases, TB, yellow fever and others remain major sources of mortality and morbidity in developing countries. And these diseases are curable or preventable by the use of inexpensive, off-patent medicines or vaccines.

The paper discusses problems relating to access to older, patent-expired essential medicines in developing countries. It highlights spending priorities, inadequate infrastructure for public health care, inadequate external financing and insufficient political commitment as the crucial barriers to improving access to quality health care in developing countries. An integrated approach to quality health care makes it necessary to address these problems along with problems emerging from the TRIPs regime and globalisation.
The development of pharmaceutical products requires enormous expenditures for research and clinical trials. On a per unit basis, these costs are generally quite large compared to the actual marginal production cost of producing the product. Unless these expenditures are absorbed by taxpayers through subsidies to research, they must be absorbed by patients, either directly or through intermediary health care organizations (which may themselves be taxpayer-supported).

It is equitable that wealthier patients pay a relatively larger share of the research and development costs. This equitable allocation of costs can be achieved by “tiered pricing”, also called “equitable pricing”, under which patients in developed, high-income nations pay higher prices than patients in developing, low-income nations. This is a sound approach to distributing the costs of products whose development is justified by the developed world market, but it leaves little or no incentive to develop products oriented primarily to the developing world market. For these products, there must be a return from the developing world patient or, more likely, from an international subsidy.

The paper reviews the current evidence on actual price differences between developed and developing nations, what is known (or can be surmised) about the parallel trade market of reverse flows and ways those flows can be affected. It then examines alternative ways to achieve equity in price discrimination. It finally makes recommendations on appropriate international law policies and appropriate policies in developed and developing nations.