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# Health Co-operatives: Review of International Experiences

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There is renewed interest in the revival of health co-operative as a "third option" for meeting health care needs of populations in developing countries in the context of health sector reforms. This article reviews some international experiences with health co-operatives. We briefly assess the history of health co-operatives in industrialized countries where they originated and review past experience from China and the states of Kerala and Gujarat in India to explore the viability of health co-operatives for the provision of health care. In industrialized countries, co-operatives came into existence as autonomous entities with voluntary participation, aiming to contribute to the welfare of their members. In recent years, however, co-operatives are being envisaged as a mechanism to overcome economic barriers in access to health care, despite lack of evidence of their cost-effectiveness and sustainability. In China, health co-operatives achieved universal coverage of basic health services but became dysfunctional when state support was withdrawn. In Gujarat/India, co-operatives have been useful to provide primary health care services and not as a mechanism to run hospitals and provide medical care for the general population. In Kerala/India, health co-operatives could not successfully compete with expanding state health services and private services unless they were managed like private enterprises. In terms of managerial effectiveness and sustainability co-operatives can not be "prescribed" to compensate for the deteriorating access to health services following market-oriented health sector reforms in developing countries.

***Key words:*** *cooperative behavior; delivery of health care; efficiency, organizational; health care reform; quality of health care*

In countries undergoing structural adjustment programs, the principle of equity and social responsibility in the health sector is replaced by a policy that regards health as a marketed commodity. With widespread privatization in the health sector, access to health services is becoming an individual responsibility (1). As large population segments in developing countries are unable to access health care, there exists a renewed interest in a "third realm", an intermediary between the receding state and the profit-oriented private sector (2). Co-operatives are seen as a potential "third realm", and there already appears to be a global revival of co-operatives in the social and health fields (3).

Co-operatives have been highly successful in the credit sector and in agricultural marketing, in particular in Germany (4). Based on such experiences, there is much enthusiasm about the potential of co-operatives in health care provision, and an idealized picture is relayed: "The [health] co-operative provides comprehensive medical care, including preventive services for a fixed prepaid fee with minimal payments" (6,7). However, even proponents have noticed the paucity of studies evaluating the potential of co-operatives for poverty alleviation and the provision of health services (8,9). Issues such as the viability of co-operatives in a hierarchical society and the reasons for the decline of co-operatives in the social sector of some developing countries need to be examined before propagating their revival.

#### Methodology and Framework

We reviewed the performance of health co-operatives in the industrialized countries where they originated and analyzed experience from developing countries, in particular China, and Gujarat and Kerala in India. In China, co-operatives functioned mainly as a financing mechanism; in the state of Gujarat in India, they performed a mixed function of both as a delivery (mainly primary health care) and financing of health care; and in the state of Kerala in India, co-operatives existed as a mechanism mainly to deliver curative services. These mixed experiences could point to the possible roles of co-operatives as a "third option" for the provision of health care in India as a whole. These experiences are specifically categorized under the nomenclature of co-operatives or those agencies, which fall under the definition of co-operatives as per International Labour Organization.

The materials were accessed through a systematic search of MEDLINE and Sociofile databases and the websites of government and the United Nations agencies. Apart from these, documents, reports, and unpublished seminar papers were also included into analysis. The criteria that we employed to examine the viability of co-operatives in the developing countries were a) the type of organizational and managerial strategies including the level of health activities, and b) the sustainability of the activities

to arrive at some preliminary conclusions regarding their relevance. A number of issues, such as membership profiles, risk sharing, local cultural or contextual factors, were not addressed and will require an in-depth empirical investigation.

### Definition and Scope of Co-operatives

Originally started as a consumer organization by impoverished weavers in 1844 during industrial revolution in England, co-operatives soon evolved into a tool to unleash productive forces. The primary aim of the co-operative, as assumed by many scholars, is to contribute to the welfare of the members by a self-help or mutual-aid process (9). It is also visualized as an open and autonomous organization based on voluntary participation that embodies principles of democratic management.

In the health field, user- and provider-owned co-operatives need to be distinguished. User-owned health co-operatives are set up by community members to help them meet their own health care needs. An equally important aspect is empowerment, as users determine the goals and practices of the health services provided. Co-operatives have to be distinguished from non-governmental organizations (NGOs). Although similar to Health Maintenance Organizations (5), co-operatives are governed by specific conventions and laws. Co-operatives negotiate contracts with health insurance and health care providers, or they operate their own services and hospitals (7). Provider-owned co-operatives are usually formed by physicians or by entrepreneurs who wish to offer a wider range of services, or to contain costs by bulk purchasing and by sharing administrative and technical services. Co-operative members provide shares of capital and subsequently pay premiums to help cover operating costs.

A United Nations Global Survey on co-operative enterprises in the health and social care sectors found that co-operative health services operate in more than 50 developed and developing countries, representing or serving around 100 million households around the world (8). The survey identified three main types of co-operatives, based on their commitment to health and social care: co-operative enterprises whose business goals are solely concerned with health and social care; co-operative enterprises whose business goals include, but are not limited to, the health and social care sectors; and co-operative enterprises whose business goals do not include health and social care but might include the provision of operational support to health and social care co-operatives.

In the following, our analysis will focus mainly on health co-operatives of the first two types.

### Health Co-operatives in Industrialized Countries

In many industrialized countries, health co-operatives came into existence as an alternative mechanism for the delivery of health services. In the 1960s, about 6,000 Japanese agricultural co-operatives were providing health services through public subsidies. Most members of these health co-operatives were elderly (11). Health co-operatives continued to grow in Japan as a response to the inadequacy of public as well as private for-profit services; they were the only means by which low-income communities could afford health care facilities (8). In several European countries, as well as in the United States and Canada, co-operatives were formed in response to a cost explosion in the health sector, or because of deficiencies in care especially for the elderly and for outpatients.

In industrialized countries, provider-owned co-operatives have been particularly successful. In Sweden, co-operatives proved to be a viable alternative after deficiencies in the provision of public-sector health care became evident in the 1990s (8). Italy has the most advanced and extensive co-operatives solely concerned with the provision of health, most of them provider-owned and formed recently (8). It is estimated that about 13% of public spending on health and social services was used for financing social co-operatives (8). Co-operatives as social enterprises not only have the economic goal of providing remunerative work but they promote the physical, social, and mental health of the members (12). Spain has a distinctive type of provider-owned health co-operative in which owners and members are physicians but services are provided to clients holding contracts with the co-operative. This has evolved from a pre- co-operative system, known as "iguala", which existed in the 1930s and 1940s, whereby large number of clients entered into a pre-payment arrangement with a physician. In Scotland, as a part of the reforms in the National Health Service (NHS), local health care co-operatives became a part of the new primary care trusts (13). This "partnership exercise" provides an alternative to the commissioning of services.

Both Canada and the US have a tradition also of user-owned health co-operatives. In the US, they occupy niches within a complex mixed system, serving about 4 million people (8). User-owned health co-operatives are now being envisioned as a new health care delivery model in rural areas and as part of the reforms in health care (14). The co-operative approach is also considered as a way to overcome increasing economic and regulatory stress on rural hospitals (15). Still, the idea of user-owned co-operatives in health is not yet well accepted by physicians, and the underlying potential for empowerment and for a broader approach towards health is not widely appreciated (9).

User-owned co-operatives existed in the Kingdom of Serbs, Croats, and Slovenes (later Yugoslavia) during the 1920s. They became a model for health co-operatives in other countries, including India, prior to the Second World War. The movement was based on a holistic view of health (8), expressed by the following three principles that are still relevant for the public health practice today a) an improvement in health conditions, particularly in rural areas, requires the understanding and active support of the community; b) providing health-related information and advice is not sufficient, and basic material conditions must be created as a prerequisite for health; and c) health problems cannot be resolved in the same way

in the highly diverse rural areas as they can be in urban centers.

In many European countries and in the US, user-owned co-operatives have been an institutional arrangement for accessing comprehensive health care rather than specific or specialized services. Recently, co-operatives are being envisaged as a mechanism to overcome economic barriers in access, which arose as a consequence of health sector reforms. It is also in this context that co-operatives are being advocated in developing countries, undergoing a similar reform process. Sustainability and cost-effectiveness of health co-operatives, however, remain to be studied systematically.

## Health Co-operatives in Developing Countries

Health co-operatives, especially of the first type (primarily health-oriented), exist in several developing countries such as Bolivia, Brazil, India, Panama, the Philippines, South Africa, Sri Lanka, and Tanzania. For example, USIMED, a user-owned health co-operative in Brazil, provides extensive coverage to the population and is complemented by UNIMED, a provider-owned co-operative of about 73,000 physicians. In Sri Lanka and India, the government financially supports co-operatives, which provide services to middle and lower income households (8). Of particular interest are the Chinese experience with co-operative medical services (considered to be successful during the pre-reform period) and the experience of co-operatives in Kerala and Gujarat. We found that these cases illustrated three different types of health co-operatives (Table 1).

### Co-operatives in China

Co-operatives became very successful in socialist China. One example is the experiment with collectives and co-operatives in the pre-1980 period. The post-1980s then witnessed dramatic changes in the structure of co-operatives in the country. The collectives transformed into township and village enterprises. These new enterprises work more like profit-oriented private agencies, and workers do not enjoy the same autonomy as in collectives. Workers who once had guaranteed jobs and enjoyed free or subsidized health care now face lay-offs, have little security and are paid piece rates. In addition, most enterprises are concentrated in the richer coastal suburban areas and in prosperous model villages. Poor regions, particularly those lacking essential infrastructure, have few of these enterprises or other than agricultural co-operatives (10).

The Co-operative Medical Services in China were developed along with the collectives in the 1960s and 1970s to ensure access to basic health care for the rural population. The original function of the Co-operative Medical Services was to collect voluntary contributions from brigades, production teams, and households to reimburse medical expenses to households and to recruit, train, and monitor barefoot physicians (16,17). The participation of the population in Co-operative Medical Services in rural areas increased consistently until the end of the 1970s when it was estimated to be 90% (18). With the market-oriented economic reforms in the 1980s, production systems shifted from the community to the households, which resulted in the discontinuation of the collective financing of health care. The emphasis of health care has since shifted from lower to higher levels, from preventive to curative services, and from planning and management to market forces (19). As a result of reforms, most Co-operative Medical Services stations have been closed. In some places, Co-operative Medical Services stations have evolved into various other types of medical and health care services; in other places, they ceased to operate altogether. Participation declined from 90% of the villages to 10%. Health status, as measured by infant mortality rate and incidence of infectious diseases, has worsened in areas where Co-operative Medical Services have ceased to operate (20). Villagers' expenditure on health care has increased. In the absence of Co-operative Medical Services, the rural population has to pay for health care out-of-pocket, and poor families have greater difficulty in getting access to basic health care (21,22).

#### *Reasons for the Decline of Co-operative Medical Services*

The major reason for the decline of Co-operative Medical Services in China was the change in the financing system and the resulting lack of incentive for the individuals to participate. There was no cash withholding system and no efficient channel to collect health and welfare funds for Co-operative Medical Services operations. By relying on voluntary contributions from households instead of mandatory contribution, it was not possible to sustain Co-operative Medical Services. Apart from this, mixed signals from the leadership changed the attitude towards Co-operative Medical Services in the rural areas (16). Many local administrators perceived that the Co-operative Medical Services no longer enjoyed the backing of the central government. This shows that co-operatives in China, although based on the principle of collectiv-

**Table 1.** Comparison of health-related co-operatives in India and China*

| | Type | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Types/characteristics | NGO sponsored, SEWA (India) | state sponsored, Kerala (India) | collective-commune, China |
| Health orientation | primary care | mainly curative | curative and preventive |
| Function | mainly financing and delivery | mainly delivery | mainly financing |
| Ownership | run by health workers and women | considerable government inputs and control | government support but resources from the community |
| Governance | self-help model | run as private enterprises | decentralized governance |
| Approach | social insurance approach | fee-for-service approach | social insurance approach |

*Abbreviations: NGO – non-governmental organization; SEWA – Self-employed Women's Association.

ism, have functioned largely due to the interest of the State.

*Revival of Co-operative Medical Services*

There still exists in China a positive attitude towards collective medical and health organization, as 90% of the people do not have coverage for curative services (16). Attempts are being made to revive the Co-operative Medical Services and community financing in some counties. The revival of Co-operative Medical Services, however, is not based on the principles of collectivism that prevailed earlier. Even those Co-operative Medical Services that continued to exist after the widespread collapse were kept intact only because of a local capacity to provide funds. Thus, they survived only in the rich areas similar to the township and village enterprises. The new generation of rural co-operative health care schemes has evolved into a medical insurance system under the guidance of health administrators and insurance companies. The current thinking on the re-establishment of Co-operative Medical Services is thus influenced by the basic principles of insurance. The focus is on village-based schemes, with minimal external funding and no reimbursement of drug costs and payments for secondary and tertiary care (23). The experience of a pilot project in 14 counties has not been very encouraging although there were instances of modest reduction in the cost of health care on families in some counties (17). The revived Co-operative Medical Services could also lead to a shift from preventive to curative medicine and higher expenditure for tertiary care (24). It is doubtful whether this experiment can consolidate the three-tier network of health services consisting of countryside physicians, village health center, and county hospitals. The evidence currently available indicates that a re-establishment of Co-operative Medical Services cannot overcome the problem of low access for the poorer households unless there are specific and effective mechanisms to finance their inclusion, and willingness of higher levels of governments to subsidize the services (23,25). More governmental promotion and support and funds from multiple sources would be required for the re-establishment of Co-operative Medical Services (26). As the insurance philosophy dominates the running of the program, it would become more and more inaccessible to the poorer sections of the population.

## Experience from India

The co-operative movement in India can be discussed in the light of the Chinese experience. It is more diverse than that of China, although to a large extent co-operatives in India also functioned as an appendage of the State. In most states of India, co-operatives are the primary testing ground for local level electoral politics. Most co-operatives were based on a so-called "blue print approach" (27), which means that their design followed a universal mould rather than local requirements. The co-operative sector is largely considered as an instrument of production or as an agency which would facilitate production. Therefore, we find credit and marketing co-operatives in sectors such as milk, sugar, tea, agriculture, fertilizers, fisheries, handloom weaving, and so on, and very few in the social sectors. One of the earliest evaluation studies revealed that the factors behind successful co-operatives are their favorable location, good communication facilities besides the presence of a vigorous co-operatives movement, and a helpful central financial agency (28). Co-operatives, whether formal or informal, whether based on grass roots or state planning, are not likely to change the indigenous social structure very much as they do not reach all segments of society equally (29). There is considerable evidence now showing that co-operatives do not provide equal opportunities to different socio-economic groups; in this respect, rural areas and especially the poorest members of society are at a disadvantage (30).

*Emergence of Health Co-operatives*

A health co-operative movement of a limited scale had existed in the 1920s and 1930s in Bengal, Madras, and the Punjab (8). Curative and preventive health activities as well as mother-and-child care were the activities of the user-owned, community-based health co-operatives established in the Birbhum District of Bengal. In the Punjab and the United Province, the activities of the Better-living Co-operative Societies were broadly similar to health co-operatives. However, there was no continuity between the pre- and post- World War movements. Most of the post-war health-oriented co-operatives were established in the western and southern states of Maharastra, Goa, Karnataka, and Kerala.

*Health-oriented Co-operatives – the SEWA Initiative in Gujarat*

In the post-war period, co-operative movements associated with the informal/NGO sector have achieved some degree of success although their goals are not limited to health. The Self-Employed Women's Association (SEWA) of Ahemedabad in the Gujarat state used the co-operative and self-help approach to organize the workers in the non-organized sectors. The SEWA has an extensive and complex organizational structure with an apex union, co-operatives, and support services (31). It comprises about 85 co-operatives, mostly involved in production-oriented activities (32). Women workers provide the share capital and obtain employment in the co-operatives. One woman can become a member of one or more co-operative. A democratically elected executive committee of workers runs the co-operatives.

SEWA has setup training schools for health workers and midwives. Staff trained by these schools carries out health activities in 9 districts of the state. Health workers and midwives have also formed co-operatives, with the aim of improving the health of women workers (33). Within its multi-purpose and multi-faceted approach, SEWA provides community-based integrated primary health care especially focusing on women (Table 2), referral services, health education, cataract operations, immunization, as well as case finding and treatment for tuberculosis (34). However, initially complete coverage of the members could not been achieved even with the extensive organizational structure (31). A recent study has shown

**Table 2.** Outreach of the Self-employed Women's Association (SEWA) health program, 1999*

| | No. of individuals reached | | |
|---|---|---|---|
| Activities | women | men | children |
| Health education | 10,749 | 1,010 | – |
| Curative care through health centers | 49,569 | 40,213 | 27,130 |
| Curative care through health camps | 5,219 | 1,074 | 3,977 |
| Tuberculosis care | 871 | 704 | 231 |
| Immunization | 3,357 | – | 29,400 |

*Source: ref. 32.

that the SEWA community based health insurance approach can function as a risk pooling initiative especially for protecting poor households against catastrophic health expenditures (35).

### Medical Co-operatives in Kerala

Kerala was one of the very few states in India where medical co-operatives were set up in large numbers under government patronage; however, they have not been studied as extensively as the Chinese Co-operative Medical Services (36). The medical co-operatives in Kerala developed during the early 1970s in the aftermath of the Indo-Pakistan war. The war was followed by an acute economic recession, which, in turn, resulted in a severe funding crisis in the social sectors and rising unemployment among graduates from the government-owned medical colleges in the state. About 450 villages in Kerala were medically under-served, and co-operatives were considered as a viable alternative approach for providing basic medical care to the people and, at the same time, for accommodating the new medical graduates (37). The focus of these co-operatives was limited to medical care instead of comprehensive health care. Issues such as equitable access to medical care and the political and social dimensions of co-operatives were not addressed at the time. Although there was some social purpose in this initiative, it was primarily an ad hoc stopgap for providing employment to the medical graduates. Based on the experience during the initial years, cooperative rural dispensaries as self-contained medical units were established in the late 1970s in several districts, with the idea of containing government expenditure for social sectors (38). These dispensaries were expected to supplement the work of the primary health centers and government dispensaries at a lesser cost to the public exchequer.

At present, many of these co-operative institutions, especially the dispensaries in the rural areas, are either not functioning or functioning sub-optimally (Table 3). The proportion of institutions incurring losses has been increasing, and around 65% of the institutions had become non-profitable by 1993-1994, although membership had increased substantially.

**Table 3.** Profile of Medical Co-operatives in Kerala, India*

| | No. of co-operatives in years | | |
|---|---|---|---|
| Profile | 1973-74 | 1983-84 | 1993-94 |
| Co-operatives (including dispensaries and hospitals) | 64 | 72 | 137 |
| Members | 17,976 | 19,930 | 59,066 |
| Profitable (%) | 6 (9.4) | 14 (19.4) | 19 (13.9) |
| Non-profitable (%) | – | 31 (43.1) | 89 (65.0) |
| No loss, no profit (%) | – | 27 (37.5) | 29 (21.1) |

*Source: ref. 36.

### Reasons for the Decline of Medical Co-operatives

The decline of the medical co-operatives in Kerala started in the 1980s, after the coverage of the public sector health services had considerably expanded (39). By that time, at least one government dispensary with a physician was in place in most of the villages. With improved accessibility of public sector health services, the interest of the State in medical co-operatives gradually declined. Furthermore, the private sector grew significantly during subsequent years (40), setting up a parallel, profit-oriented system of health services that competed with the medical co-operatives.

Increasing competition exposed the most important reasons for the failure of medical co-operatives in Kerala, ie, inadequate managerial and technical inputs (37). For example, out of the 92 dispensaries, 82 were functioning sub-optimally due to a lack of working capital and of committed staff, including physicians (37). Employees perceive service conditions as unsatisfactory because of lacking incentives, career paths, and resources. Most of the co-operatives did not have any autonomy in decision-making with respect to its day-to-day functioning, and there was over-politicization and centralization of power in a few individuals (41). Physicians and other technical staff were under-represented on the governing body of the co-operatives.

Structural problems confound the situation: membership of the co-operations is limited, there are no incentives for the institution such as special tax concessions or building assistance, and patients are not channeled to the appropriate level of care as there is no three-tier system divided into primary, central and apex institutions (37). Ultimately, only those co-operative institutions, especially the hospitals, that were managed like private enterprises, could survive. Sixteen co-operative hospitals in Kerala, India, with approximately 1,500 beds, treated more than half a milion patients in only two years, generating a considerable revenue of around 122 million Indian Rupies (36). Out of the 57 co-operative hospitals, 33 are functioning at an optimal level. These co-operative hospitals are profit-oriented; they have sufficiently large catchment areas, and can afford high-tech diagnostic and therapeutic facilities. To a certain extent, they can even moderate the exploitative practices of the private hospitals (41).

### Discussion

Today, there are still scholars who reject the facile assumptions concerning the inevitability of the triumph of a "Smithian market economy" (10) and believe in health co-operatives – not only as an approach to fulfill health needs, but also to empower community members with respect to health care

(7,9). At the same time, however, there is a tendency to "prescribe" co-operatives as a presumably cheap solution to the decline in access to health care after health sector reforms.

*Managerial Issues*

There is a trend in developing countries to introduce market-oriented strategies in the state hospitals as a part of health sector reforms and to create economically autonomous hospitals (42). In India, several state governments have embarked on strategies to privatize public hospitals and even primary care institutions or to hand over government hospitals to the co-operatives (43,44). The undesirable consequences, such as rising costs, increasing inequity, and consumer exploitation, are not often addressed in public-private partnership strategies (45). The experience with the Chinese model of co-operatives before the reform period, which do not exist now, provides evidence that they could achieve universal coverage of basic health services. On the other hand, medical co-operatives failed in Kerala as an alternative due to a strong public sector health service apart from managerial inadequacies. The SEWA experience, on the other hand, does not provide evidence that co-operatives can successfully run hospitals and provide medical care for the general population.

*Sustainability*

Co-operatives can probably play a complimentary role in the transition from governmental to a private health care provision but there is no evidence of their sustainability as both in China and the state of Kerala in India, they required strong government support. NGO-sponsored co-operatives (type 1), which provide preventive and some minimum curative support, do not need much external input and could serve as models for evolving primary care units.

*Viability*

Are medical co-operatives a viable solution in the present context of public health crisis in developing countries? There is no broad evidence base so far indicating that co-operatives can provide comprehensive curative and preventive health services in the same way as the public sector health services. However, they may be able to function as profit-oriented curative institutions but this may not help in alleviating the problem of access of disadvantaged sections.

Is it necessary for the health/medical co-operative to achieve financial viability in the market? If primary health care has to be provided in inaccessible areas and to tribal and weaker sections, profitability cannot become the yardstick for performance. For this reason, the potential of co-operatives should not be judged on the basis of profitability and curative care but on the basis of service viability. Co-operatives cannot be reduced to profit-oriented curative institutions if they have to serve an intermediary role within the new economic scenario. Therefore, financial viability should not be the immediate concern if co-operatives have to be accepted as a model for health services especially where free health services were previously offered.

A positive outlook regarding health co-operatives emerges from descriptive reports rather than rigorous analytical and empirical studies. A number of relevant issues are so far unresolved or not yet supported by sufficient evidence to inform decision-making regarding the role of co-operatives in health care. First, most experience with the risk-sharing concept in the context of health co-operatives derives from industrialized countries. More experience from developing countries with relatively lower and/or less regular incomes and families with larger number of dependants is needed to establish the minimum number of members for such schemes to be operationally viable. The comparative advantages of government health, care such as cost-effectiveness, user willingness/ satisfaction, coverage, and accessibility to the poor and disadvantaged sections are not evident in co-operatives, although this needs to be studied in detail. Evidence from China shows that co-operatives tend to become dysfunctional when state support is withdrawn (unlike in developed countries where they are autonomous entities). Hence, the role of co-operatives as an alternative to government health services is questionable. The advantage of fully autonomous co-operatives over state-controlled co-operatives has also not been systematically studied although international policies prescribe autonomous self-sustaining co-operatives for rural development (46).

With specific reference to India, the withdrawal of the state from the provision of health care, combined with macro-economic uncertainties and a resulting loss in buying power, are not the only constraints that even a well-designed co-operative approach to health care provision. On top of this, there is a projected increase in need for curative care due to the epidemic of non-communicable disease, in particular coronary heart disease, associated with population ageing, urbanization, and changes in lifestyle (47,48). Any model of health care provision will be required to handle the complexity of the existing disease burden combined with the emerging problems. The review of existing experience suggests that the co-operatives are not a general solution that can be "prescribed" to compensate for deteriorating access to health services following market-oriented health sector reforms, particularly not in view of the increasing demand for clinical care in the coming years.

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