Primary health care as a strategy for achieving equitable care:

a literature review commissioned by the Health Systems Knowledge Network

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Background to the Health Systems Knowledge Network

The Health Systems Knowledge Network was appointed by the WHO Commission on the Social Determinants of Health from September 2005 to March 2007. It was made up of 14 policy-makers, academics and members of civil society from all around the world, each with his or her own area of expertise. The network engaged with other components of the Commission (see http://www.who.int/social_determinants/map/en) and also commissioned a number of systematic reviews and case studies (see www.wits.ac.za/chp/).

The Centre for Health Policy led the consortium appointed as the organisational hub of the network. The other consortium partners were EQUINET, a Southern and Eastern African network devoted to promoting health equity (www.equinetafrica.org), and the Health Policy Unit of the London School of Hygiene in the United Kingdom (www.lshtm.ac.uk/hpu). The Commission itself is a global strategic mechanism to improve equity in health and health care through action on the social of determinants of health at global, regional and country level.

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Primary health care as a strategy for achieving equitable care. Executive Summary.

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1. THE HEALTH CARE SYSTEM AS A SOCIAL DETERMINANT OF HEALTH

The health system plays a role as a social determinant of health :

- at the macro-level: through public policy and equitable resource allocation processes;
- at the meso- level (the community): through performance of the decentralized policy;
- at the micro-level: through factors related to the organisation of the health care system (physical, financial, psycho-social, cultural and administrative access) as well as factors related to the health care provider (skills, knowledge, approach to the patient). This is where primary health care systems may contribute to comprehensive care.

2. PRIMARY HEALTH CARE: DEFINITION AND EVOLUTION OF THE CONCEPT

In 1978 the WHO defined the concept “primary health care” as a strategy and a set of activities to reach the goal of "health for all by the year 2000". After the declaration of Alma Ata, two major schools of thought dominated the debate on implementation: those supporting "selective" primary health care (SPHC) and those advocating "comprehensive" primary health care (PHC). This debate extends earlier arguments about whether the best method of health care delivery was "vertical" or "horizontal".
In the post-Alma Ata-period, the countries that signed the declaration adopted different strategies. In the last decade of the 20th century, it became clear that the goal of "health for all by the year 2000" would not be reached. Apart from "intrinsic factors" (the idealistic ambition taking many years to accomplish, the lack of a clear implementation strategy, the underestimation of the need for contextual adaptation of the principles of the Alma Ata Declaration, the underestimation of important powerful actors, the failure to take the clinicians on board, …) a lot of "extrinsic factors" have contributed to the developments: the focus on "selective primary health care" and on "vertical programmes". the organisational and institutional drawbacks of working with donor agency funding, international cooperation agencies and research institutions; the decreasing attractiveness of generalism versus sub-specialisation; the political unattractiveness of decentralisation and "bottom-up"-approach; the erodation during the '80s and the '90s of "solidarity", the ground value of the Alma Ata Declaration.

3. WHAT ARE THE MAIN FEATURES OF PRIMARY HEALTH CARE THAT MAKE IT USEFUL AS A STRATEGY FOR PROMOTING HEALTH EQUITY AND INTERSECTORAL ACTION?

The central attributes of primary care are: first contact (accessibility), longitudinality (person-focused preventive and curative care overtime), patient-oriented comprehensiveness and coordination (including navigation towards secondary and tertiary care). Besides taking care of

the needs of the individuals, primary health care teams are also looking at the community, especially when addressing social determinants of health. The community oriented primary care (COPC) experience integrates public health focus and primary health care. Finally, also important is the interaction of the team with different networks (education, work, economy, housing,…) that are related to important sectors. Using all these methods, primary health care teams promote health equity through their contribution to increased social cohesion and empowerment. The rationale for the benefits for primary care for health has been found in (1) greater access to needed services, (2) better quality of care, (3) a greater focus on prevention, (4) early management of health problems, (5) the cumulative effect of the main primary care delivery characteristics, and (6) the role of primary care in reducing unnecessary and potentially harmful specialist care. Where the PHC-team functions as a "navigator" through secondary and tertiary care and other sectors, it can be a strategy for achieving cost-effectiveness.

4. ENABLING AND LIMITING FACTORS THAT ACCOUNT FOR THE IMPACT OF A STRATEGY BASED ON PRIMARY HEALTH CARE

First of all, a solid basis of the financing of the health care sector is of utmost importance. In developing countries tax-based resources are limited and a social security system based on contributions on wages only reaches a small part of the population. In an increasing number of countries, social security systems are developing. In other countries, the market is left over to "for-profit" private insurance companies. The health policy promoted by international aid-agencies may have played a specific role in this transfer, but in practice it was the underfunding of the public sector in the 1990's that most frequently led to privatisation.

Choices in financing health care have also a big impact on the strength of a primary health care system. In most of the developing countries, the majority of resources go to secondary and tertiary care hospitals, looking after only a small part of the population. In the last 20 years another "antagonism" has become increasingly important: the antagonism between horizontal (perosn and community oriented) and vertical (disease-oriented) care. Although enormous amounts of money are invested in those vertical programmes, the overall-performance of disease control programmes is poor. In order to deal with the disadvantages of vertical programmes, a "code of best practice for disease control programmes to avoid damaging health care services in developing countries" has been established. There is a need to integrate programmes into local health facilities in order to achieve reasonable prospect for successful disease control.

Furthermore, the choice of payment system is important: fee-for-service, capitation, integrated capitation or salary. Out-of the pocket payment by patients at the point of service delivery negatively influences access to care. In most of the countries nowadays there are mixed payment systems: target-payments, infrastructure-related and function-payments. A capitation-based system of payment should form the basis of any system of family physician and primary care team payment. In addition to this financial mainstay a combination of other payment systems will be required to finance most appropriately the work of family physicians and the primary health care team. More recently, "pay-for-performance" has been introduced in order to enhance the quality of primary health care. There have been positive outcomes, certainly in the field of prevention and chronic disease management, but there are also important side-effects, especially in relation to equity and access for the poor.

Equity is also closely linked to "efficiency": implementation of evidence based medicine, taking into account "contextual evidence" and "policy evidence", may contribute to "more health" and more equity.

Next to financing and utilisation, quality of care has to be optimised. Therefore, there is a role for family physicians and nurses operating as the clinical disciplines, together with other providers at the primary health care level. Yet all over the world, but especially in developing countries, there is a problem for recruitment and retention of primary health care providers, especially physicians and nurses. In developing countries, there is a shift of manpower from the local primary health care system towards vertical disease-oriented programmes. Moreover there is a shift from rural areas and townships towards more affluent areas in cities. On a global scale there is increasing emigration of health care providers from developing countries to higher income countries.
A key-prerequisite in order to enhance the development of primary health care, is decentralisation. There is nowadays a consensus that the most appropriate model for organisation of health care services utilises the "district health system": the geographical integration of clinics, health centers and district health hospitals. There is a need for innovative management strategies which effectively address the concerns of all stakeholders when developing the "district health system".

Finally, primary health care operating at the crossroads between the health care system and society is well situated to document the impact of living conditions on health. If adequately transferred to the local political level, this kind of information may underpin inter-sectoral action for health e.g. in the field of economy, employment, housing, environment, traffic safety,…

5. WHAT POLICY MEASURES ARE NEEDED TO ENHANCE THE IMPACT OF PRIMARY HEALTH CARE ON HEALTH EQUITY?

More than ever it will be needed to defend health as a public good and to stress the need for solidarity in order to guarantee access of all to quality health care, even though there is an attempt nowadays to forge a new "common sense" that is rather defined by financial interests. On the other hand, policy measures must be situated against the background of the changing society in a changing world. We're talking here about the ageing population, increasingly rapid scientific progress, development of ICT, patients acting more and more as consumers, multiculturalisation, increasing dualisation between poor and rich, globalisation and glocalisation. Adaptation to the local context is also required. In discussions about the impact of a "primary" health care system on health equity we cannot ignore the concrete political context, where e.g. the presence or absence of representative democracy plays a big role. Realising the differences in existing conceptual and institutional frameworks in countries, and the effect that those differences may have on programmes and policies, means being able to anticipate them in order to realise more successful policies and programmes. Civil society has an important role to play here.

With these general remarks in mind, we conclude that the five following policy measures are needed:

1. To guarantee universal access to (primary) health care through an adequate health system (social security system, national health system,…).
2. To make a shift from "vertical disease oriented programmes" towards a "horizontal-community oriented" approach.

3. Education, recruitment and retention of adequate staff, improving the clinical and population oriented performance of the primary health care system.
4. Establishment of a performant primary health care service, integrated in the district health system.
5. Organisation of health systems in an intersectoral network, with cross links to environment, economy, work and education at the different institutional levels, and with use of a bottom-up approach (intersectoral action for health), involving civil society.

In conclusion: primary health care has potential to address the social determinants of health through universal access and through its contribution to empowerment and social cohesion. The multidisciplinary team (nurses, family physicians, social workers,…) and the involvement of the local community is essential for the development of intersectoral action for health.

Primary health care as a strategy for achieving equitable care

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1. INTRODUCTION AND BACKGROUND: CHANGING SOCIETIES IN A CHANGING WORLD.

In this paper we want to explore the contribution that primary health care can make to address the social determinants of health in the context of a changing society. The concept of primary health care, endorsed by the World Health Organisation in the Alma Ata Declaration in 1978, has been implemented in very different ways all over the world. We look at the main features of primary health care: what are the conditions that enable the introduction of primary health care, what is the evidence of the primary health care approach to promote health equity and inter-sectoral action and how may the health systems enhance the impact of primary health care on health equity, taking account of contextual factors. The aim is to draw an operational framework that may contribute to further developments in health systems contributing to more equity.

Addressing social determinants of health should take into account the actual evolutions in the changing society, in order to assess adequately the changing needs that will be presented to the health care system.

a. demographical and epidemiological developments

Firstly, the world population is gradually getting older. The percentage of old people in the population will continue to increase in all EU-member states in the period up to 2020, by 3 to 6%[1]. Moreover, the proportion of over-75s in the over-65 age group will also increase in a number of countries, particularly Germany and the Southern European countries. At the same time the percentage of young people in the overall population will gradually decline.
The health forecast shows that the world will experience dramatic shifts in the distribution of deaths from younger to older ages and from communicable diseases to non-communicable diseases during the next 25 years. In 2005, 19% of all deaths were among children, 29% were among adults aged 15-59 years and 53% were among people aged 60 years and older. By 2030 the respective proportions will have changed to 9%, 29% and 62%. The proportion of all deaths due to communicable, maternal, perinatal and nutritional causes is expected to decrease from 30% in 2005 to 22% in 2030, while the share of non-communicable diseases is likely to increase from 61% to 68%. Injuries are estimated to account for 9% both in 2005 and in 2030[1].

Secondly, there are considerable differences in healthy life expectancy all over the world: for the African region, the healthy life expectancy is 40 years for males and 42 years for females, for the South-East Asian region 45 and 55, for the Eastern and Mediterranean region 53 and 55, for the region of the Americas 63 and 67, for the Western Pacific region 63 and 66, and for the European region 62 and 68 years[2].

There are clear indicators that the Millennium Development Goals (MDGs) will not be met by 2015. All regions are off track on at least some of the goals and the 2 regions that are most seriously behind (South-Asia and sub-Saharan Africa) are off track on all of the goals. Children's nutrition is worst in many parts of Africa; a majority of countries are not making sufficient progress to reduce child mortality and maternal mortality; and HIV/AIDS continues spreading across the world. In many countries much more needs to be done to reach the poor[3]. There is a need for a new global commitment to child survival in order to achieve the Millennium Development Goal 4: to reduce under-5-mortality by two-thirds between 1990 and 2015[4].

b. scientific and technological developments

Increasingly rapid scientific progress brings the prospect of new prevention and care possibilities in fields such as genetics, cardiovascular disease, replacement medicine, neuro-sciences, cancer care and mental health care. In the decades ahead, a growing scientific understanding of the role that genes play in the development and progress of many different diseases will have an enormous influence on health care, especially in terms of diagnosis and prognosis and these developments will open new horizons in fields such as pharmacotherapy, gene-therapy, stem cell therapy and vaccine development. However, nowadays it is clear that there are very few health needs that have a major genetic component, at least from the point of view of attributable risk in the population.

Further, the development of the information and communication technology (ICT), e.g. the use of internet, will enhance communication, but here once more there is a huge inequality especially with respect to sub-Saharan Africa.

Worldwide, there is a concern about what will be the "driver" for these scientific and technological developments: how will the needs of the developing countries be taken into account in the agenda setting? And more in general: how much will these developments be driven by the needs rather then the market?

The development of Evidence Based Medicine provides an important tool to better underpin health care practice and organisation. However it is clear that apart from "medical evidence", we will need more research about "contextual evidence" (looking at "effectiveness" in the relevant practice-context) and "policy evidence"[5] (looking at "efficiency" from an equity perspective). An adequate balance between fundamental, clinical and health services research is required: the question "How can an effective therapy reach a larger group of the population?" is as relevant as the search for new therapies.

c. cultural developments

Nowadays, patients are acting more and more as consumers. This transition of the "user/patient/beneficiary" to "client/consumer" perspective has important consequences for the interaction at the point of service delivery. Both in Western countries and in developing countries, there is an increasing "medicalisation" of daily life e.g. the making of new diseases[6]. An increasing number of domains of daily human life is subjected to medical definition and intervention (e.g. education, "deviant behaviour",…) and is being heavily driven by vested interests in selling new products. Finally increasing mobility and migration leads to multiculturalisation, requiring an ethno-sensitive approach from health care providers.

d. socio-economic developments

Looking at the global evolution there is an increasing dualisation between poor and rich, and, more important, there is a growing concentration of wealth (and consequent power over health policy decisions) at the very top of the income distribution.
Inequality in mortality between continents began to rise shortly after inequality in gross domestic product per capita began to diverge most clearly. Africa has been most affected by the widening global inequality in mortality, probably as a result of the AIDS pandemic, which is exacerbated by inequality in wealth. For the 2 most extreme continents (North-America and Africa), the gap in life expectancy fell from 30.6 years in 1950-5 to less than 24 in 1985-90 but has since risen to 28.6; it is now almost at the same level as in the 1950s.[7]
However, also within the richer parts of the world, there are important socio-economic inequalities, both in mortality and morbidity[8]. In Sweden, the difference in life expectancy between a 20-year old man from the highest socio-economic group and a man from the lowest socio-economic group increased between 1980 and 1997 from 2.11 years in 1980 to 3.97 years in 1997[9]. Socio-economic differences are demonstrated for coronary heart diseases[10], mental health[11], oral health[12], low back pain[13], …

Moreover, worldwide, for an increasing number of people, access to health care becomes more and more problematic and this does not only apply to developing countries, but is also true for industrialised countries such as the United States[14].

e. globalisation and "glocalisation"
Much of the world and especially the low- to middle-income countries have seen in the last 2 decades a number of important changes in economic policy that fall under the common definition of globalisation (e.g. the removing of tariff and non-tariff barriers to trade) and capital account liberalisation (e.g. the removing of restrictions on internal investment flows). In general, these policies have led to the increasing participation of low- and middle-income countries in the global economy. However, when comparing the period of 1960-80 with the rapidly globalising period of 1980-2000, a slower growth of the per capita GDP is noted, as well as a lesser progress in health outcomes, and a lesser progress in educational outcomes. This indicates that globalisation has been associated with diminished progress in several domains[15].

Another consequence of globalisation is that multinational corporations have spread over the world but have not been as thorough in controlling industrial hazards in developing countries as they were in their "home"-countries (the "double standard")[16].

Finally, the increasing mobility and migration on the one hand and the concentration of the world population in big cities on the other hand (by 2030, 70% of the world population will live in an urban context) means the healthcare system will be faced with new challenges as the global problems become apparent at the local level (glocalisation). These developments lead to the need for "preparedness" focussed on the prevention and/or the rapid and appropriate response to disease outbreaks and disasters (e.g. pandemic influenza, bioterrorist activity). However, most of the preparedness plans have a lot of weaknesses: they do not adequately address operational responsibility at the local level, for example, logistical aspects such as vaccination and anti-viral stockpiling, distribution, delivery and the maintenance of essential services. Many countries do not have health systems that are strong enough to take on such a large task, therefore there will be a need to reinforce the capacity of health systems in these countries, as they will probably be

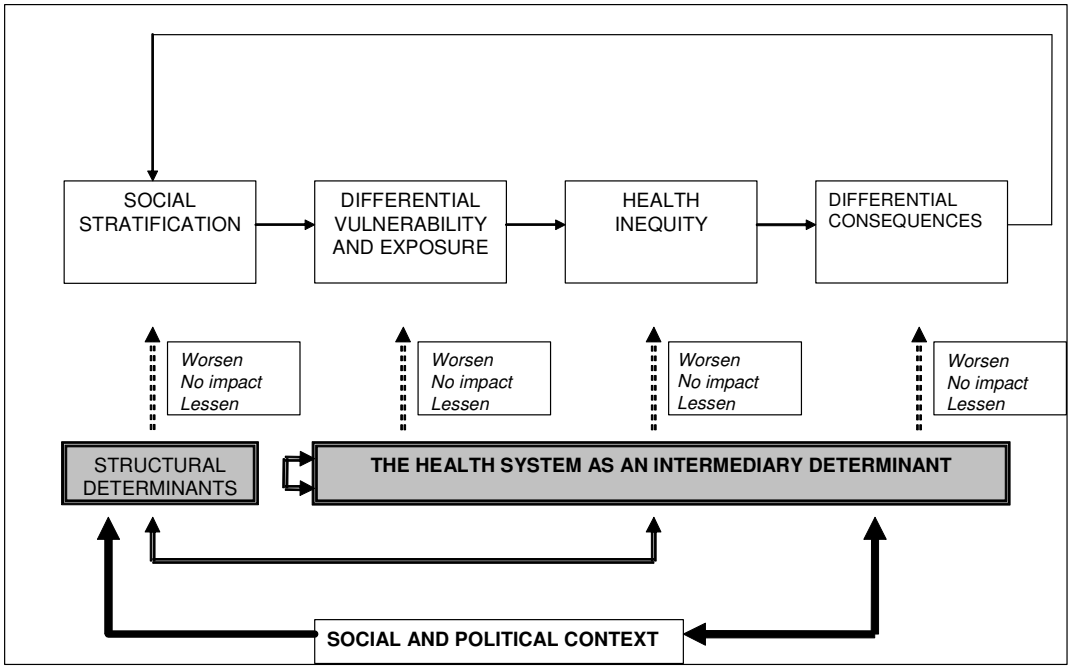
affected early when a pandemic occurs. Also important is the need to monitor the allocation of scarce resources in a globally equitable fashion[17].

In some way all these developments in the changing society, should be taken into account when improving health systems. Their complexity will require a multi-axial strategy.

2. SOCIAL DETERMINANTS OF HEALTH: THE HEALTH (CARE) SYSTEM AS A SOCIAL DETERMINANT OF HEALTH

According to Doherty and Gilson[18] the health system plays a role as a social determinant of health (see figure 1).

Fig. 1: Framework demonstrating the role played by the health system as a social determinant of health



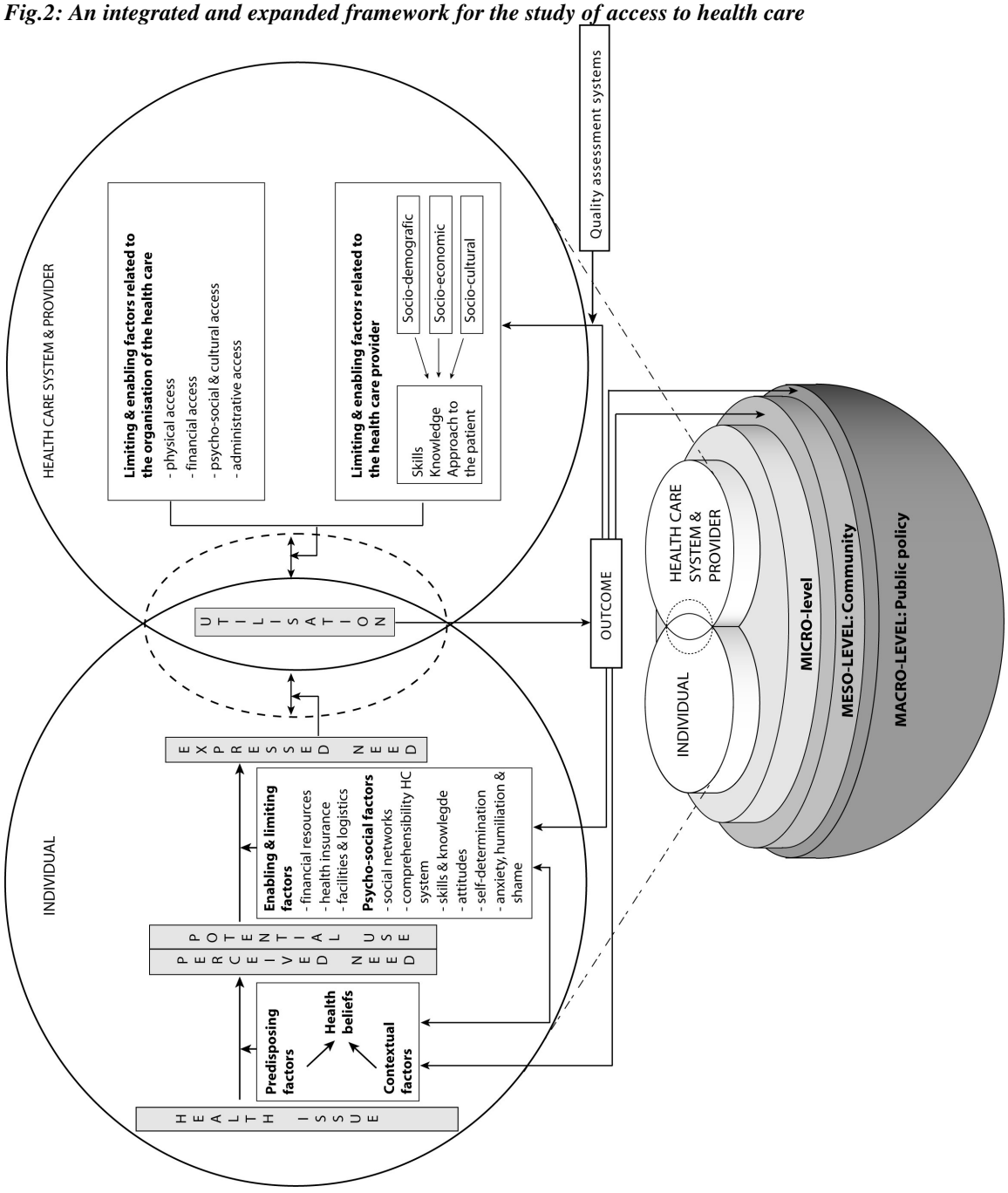
The framework described in figure 1 is appropriate in order to analyse developments

- at the macro-level: public policy (e.g. the existence of a national social health insurance, moving towards universality) and equitable resource allocation processes;
- at the meso- level (the community): the performance of the decentralized policy;
- at the micro-level (the interaction between populations and the health care system): where primary care service may contribute to comprehensive care and support systems.

Concerning the micro-level, Willems et al. demonstrated, through a qualitative research using focus groups with people living in poverty, that also the provider-patient interaction may to a large extent influence the access to care. Figure 2 depicts a model illustrating the different predisposing, contextual, enabling and limiting factors and also the psycho-social factors both at the level of the individual and the health care provider. This model shows that, apart from administrative, geographical, physical, financial and organisational determinants of access to

health care, the skills, knowledge and approach to the patient by the health care provider may also have an important influence on access to care[19].

Fig.2: An integrated and expanded framework for the study of access to health care



Also at the primary health care level, the availability, organisational features, psychosocial and cultural openness of the healthcare facilities may be important factors to either enable or limit access to the health care system.

3. PRIMARY HEALTH CARE: DEFINITION AND EVOLUTION OF THE CONCEPT

Primary health care has always existed as it was the description of the point of first contact between patients and the health care system. The term "primary care" is thought to date back to about 1920, when the Dawson report was released in the United Kingdom[20]. That report mentioned "Primary health care centers", intended to become the hub of regionalised services in that country. However, it was only in 1978 that WHO defined the concept “primary health care” as a strategy to reach the goal of "health for all by the year 2000". At the Alma Ata conference “primary health care” was defined as: "Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community by means acceptable to them at a cost that the community and the country can afford to maintain at every stage of their development in a spirit of self-reliance and self-determination. It forms an integral part of both the countries health system of which it is the central function and the main focus of the overall social and economic development of the community. It is the first level of contact of individuals, the family and the community with the national health system, bringing health care as close as possible to where people live and work and constitutes the first element of continuing health care process". [21]
The Alma Ata conference further specified that the core components of primary health care were health education; environmental sanitation, especially of food and water; maternal and child health programmes, including immunisation and family planning; prevention of local endemic diseases, appropriate treatment of common diseases and injuries; provision of essential drugs; promotion of sound nutrition; and traditional medicine.

Vuori suggested that primary care should not be seen as a set of activities, but as a level of care, as a strategy for organising health care and as a philosophy that permeates health care[22]. Hereby Vuori stressed the importance of the paradigm-shift from primary medical to primary health care (see table 1).

Table 1: From Primary Medical to Primary Health Care

Conventional	*New*
Focus	
Illness	Health
Cure	Prevention, care and cure
Content	
Treatment	Health Promotion
Episodic Problems	Continuous care
Specific problems	Comprehensive care
Organization	
Specialist	General Practitioners
Physicians	Other personnel groups
Single-handed practice	Team
Responsibility	
Health sector alone	Intersectoral collaboration
Professional dominance	Community participation
Passive reception	Self-responsibility

Adapted from Vuori (1985)[25]

Shortly after the declaration of Alma Ata, a debate on the possibilities for implementation was opened. Two major schools of thought dominated the debate: those supporting "selective" primary health care (SPHC) and those advocating "comprehensive" primary health care (PHC). The advocates of selective primary health care stated that the large and laudable scope of the Alma Ata Declaration was unattainable due to its prohibitive cost and the numbers of trained personnel required to implement the approach. A more selective approach would attack the most severe public health problems facing a locality in order to have the greatest chance to improve health and medical care in less developed countries[23]. The advocates of comprehensive primary health care emphasised that the improvement of health care delivery systems is only one aspect of the reforms needed. It incorporates a philosophy of health and health care as basic human right that, if necessary, also requires the re-shaping of global developmental designs to include community participation in the decision-making and the implementation of primary health care activities. Although improvements in the health sector are very important "most improvements in health have been due to changes in economy, social and political structures rather than changes in the health sector"[24].

There are deep-rooted philosophical and practical differences between the two positions. A first difference relates to the role of medical intervention: the major aspect in SPHC but only one of a number of important elements in PHC. Secondly, the "comprehensive" proponents accept the need for potentially radical changes on "both the level of social, economic and political structures and on the level of individual and community perceptions"[25]. In a semantic sense, the "selective" method is based upon a short-term programme while PHC is carried out through a comprehensive, long-term process. This debate extends earlier arguments about whether the best method of health care delivery was "vertical" or "horizontal"[26]. The "horizontal approach" seeks to tackle the overall health problems on a wide front and on a long-term basis through the creation of a system of permanent institutions commonly known as "general health services". The "vertical approach" calls for the solution of a given health problem through the application of specific measures. In essence, horizontal programmes are person- and community-focused, whereas vertical programmes are disease-focused. The selective strategy has been favourably received by international agencies such as World Bank and Unicef, academic institutions and research centres (e.g. Centres for Disease Control), bilateral aid-agencies like US-Aid, and private institutions[27].

In the post-Alma Ata-period, the countries that signed the Declaration adopted different strategies:

1. Negation: no concrete steps were undertaken to put the declaration into practice.
2. Legislation: the Alma Ata Declaration was copied into a lot of National Legislations. Sometimes this was a starting point for action, but in other countries, it was the start for a continuous process of "lip-service" to the ideas of primary health care, without concrete political commitments.

   When action was undertaken four strategies emerged:

   a. Implementation: for some countries e.g. Cuba, rural areas in China, … the implementation of the Declaration was in continuity with already existing developments.
   b. Adaptation of existing health system: many countries opted for health care reforms, trying to implement the Alma Ata Declaration by a process of change of the existing structures in health care (e.g. the Netherlands).

c. Innovation: countries opting for starting a primary health care structure, apart from the existing (private) system (e.g. Spain).
d. Importation: the primary health care system was "imported" in the framework of bilateral cooperation, multi-lateral agencies or non-governmental organisations.

In the last decade of the 20th century, it became clear that the goal of "health for all by the year 2000" would not be reached. This has led to an analysis of why the Alma Ata approach was not successful. In summary the most important hypotheses that have been formulated in order to understand the developments were:

1. The focus on "selective primary health care" and on "vertical programmes" was disruptive for the development of a horizontal primary health care approach, taking care of individuals, their families and the communities they live in (see also 5.b.). The HIV/AIDS pandemic has been a major cause of shifting the majority of the budgets towards "vertical programmes" and has been detrimental to investment of resources in the development of primary health care locally.
2. The primary health care-strategy underestimated the power of hospitals in the health care system, of the pharmaceutical industry, and failed, to a large extent, to take the clinicians on board. Although the concept of the multidisciplinary primary health care team was present in all documents, in practice there was no clear strategy to train primary health care doctors ("family physicians") who were able to contribute to the PHC-development. Generally speaking the openness of the public towards interventions from public health (campaigns for prevention, health promotion) is influenced positively by the presence of efficient clinical curative services because they contribute to the creation of "trust" towards the health system. The primary health care-services were relying to a large extent on nurses for the clinical work, but very often they were faced with diagnostic responsibilities that they were not prepared for[28].
3. Donor agency funding requires results within the period of the funding cycle or the agency's mandate. This encourages short-term planning and readily measured programme objectives. This rules out the engagement in PHC-development looking at bottom-up approaches and participatory structures, involving civil society; it also slows the creation of health infrastructure. Institutionally, international cooperation agencies and research institutions seek to respect the financial and institutional status quo of recipient nations; this favours the adoption of health programme strategies that place little constraint upon national health budgets and make only minimum demands upon the existing institutions of the recipient nations[27].
4. The decreasing attractiveness of generalism versus sub-specialisation. In the 1990s the development in health care was towards more sub-specialisation, not only in the medical sector, but also nurses, physiotherapists, public health agents, … Students are more attracted by the "safe environments" of a (sub)-specialty, than by the comprehensive generalist approach of primary health care. Also at the level of the public, the appreciation goes to high-tech achievements of medical specialists, rather than towards long perspective continuous community oriented developments at the level of primary care.
5. Implementation of the Alma Ata Declaration also faced a political problem: PHC requires decentralisation (District Health System) and "bottom-up"-approach which may be "threatening" for certain political constellations.
6. The ground value of the Alma Ata Declaration was "solidarity", on a global scale. This value came under pressure in the '80s and the '90s. The disappearance of the "Iron Curtain", the "war on terror", the growing "individualisation", the globalisation with increasing

migration,… have all eroded the value of "solidarity" that had been growing in the late '60's and in the 1970's.

7. The content of the declaration was to a large extent filled with ideology: the declaration told people what to do, but not how to go about it. Too many professional and government people believed that the PHC-principles were more than rhetorical policy, and that these idealistic principles alone would suffice as programme and elements that could be directly transferred to the field. Even WHO stated that: "In their post Alma Ata-enthusiasm many decision-makers assume that, since primary health care is supposed to use simple methods, it would be simple to implement"[29].
8. The need for contextual adaptation of the principles of the Alma Ata Declaration was underestimated. The PHC-approach was expected to act as a flexible model that, in principle, allows for re-adaptation to local needs and situations. In reality, partly because of its conceptual appeal, partly because of its heavy international promotion by WHO and other international bodies, and partly because the desperate health situations in many countries demanded immediate action, it was often adopted without first exploring and defining the socio-cultural environment on to which it had to be grafted in each country. Health planners in WHO and national governments have failed to grasp the complexity of social organisation within rural settings and have failed to "construct research foundation adequate for describing health and illness as processes constituted as much by forces of languages, socio-cultural structure, political and economic organisation as biological and psycho-physical events"[30]. This lack of context organisation have caused problems for international agencies, national governments, ministers of health, local authorities, who were defining their central objectives by the theoretical framework of PHC. For example, as many researchers have noted, rural inhabitants generally wanted curative care as much as their urban counterparts. But advocates of PHC often ignore this socio-cultural reality, instead labelling the villagers "stubborn and ignorant" for not quickly perceiving the true advantages of preventive health care, something that took international health care professionals decades to grasp. Here, the perspective narrowed by cultural bias perpetuates "the illusion that PHC is delivering new, valuable messages into a social vacuum"[31].
9. The enormity of the worldwide problems that the PHC-approach is attempting to tackle are mind-boggling. There is no panacea that will quickly turn wide-spread, global social economic inequalities into a better world. Problems have risen because the lofty, idealistic, rational principles of the initial concepts are difficult to translate into practical action. The proponents of primary health care have understood that, in re-defining and re-orientating human efforts to achieve some measurable improvement in global health status, they will face up to a process that will take many years to accomplish. The process will be completely dependent on inter-digitating aspects of health, society, equity, politics and world order.

All these factors have resulted in the fact that primary health care has been introduced at very variable levels in the countries worldwide. Apart from "intrinsic factors" (the idealistic ambition, the lack of a clear implementation strategy, the underestimation of important powerful actors,…) a lot of "extrinsic factors" have contributed to the actual result. Therefore, the analyses and conclusions need nuance.

4. WHAT ARE THE MAIN FEATURES OF PRIMARY HEALTH CARE THAT MAKE IT USEFUL AS A STRATEGY FOR PROMOTING HEALTH EQUITY AND INTERSECTORAL ACTION?

The central attributes of primary care are: first contact (accessibility), continuity and longitudinality (personal-focused preventive and curative care overtime), patient-oriented comprehensiveness and coordination[32] (including navigation towards secondary and tertiary care). This means that the primary health care team deals with continuous care for all unselected health problems in all patient groups, irrespective of social class, religion, ethnicity,… The team deals with early signs and symptoms and combines cure, care and prevention. The emphasis is on effective and efficient diagnostic and therapeutic interventions. Continuity of care is essential and contributes to cost-effectiveness[33]. Primary health care starts from the exploration of the expectations of the patient and focuses on the empowering of the individual health and strength (health promotion), addresses individual and cultural norms and values, and takes, when needed the advocacy role. Moreover, a primary health care team acts as the hub in the navigation of the patient in the health care system.

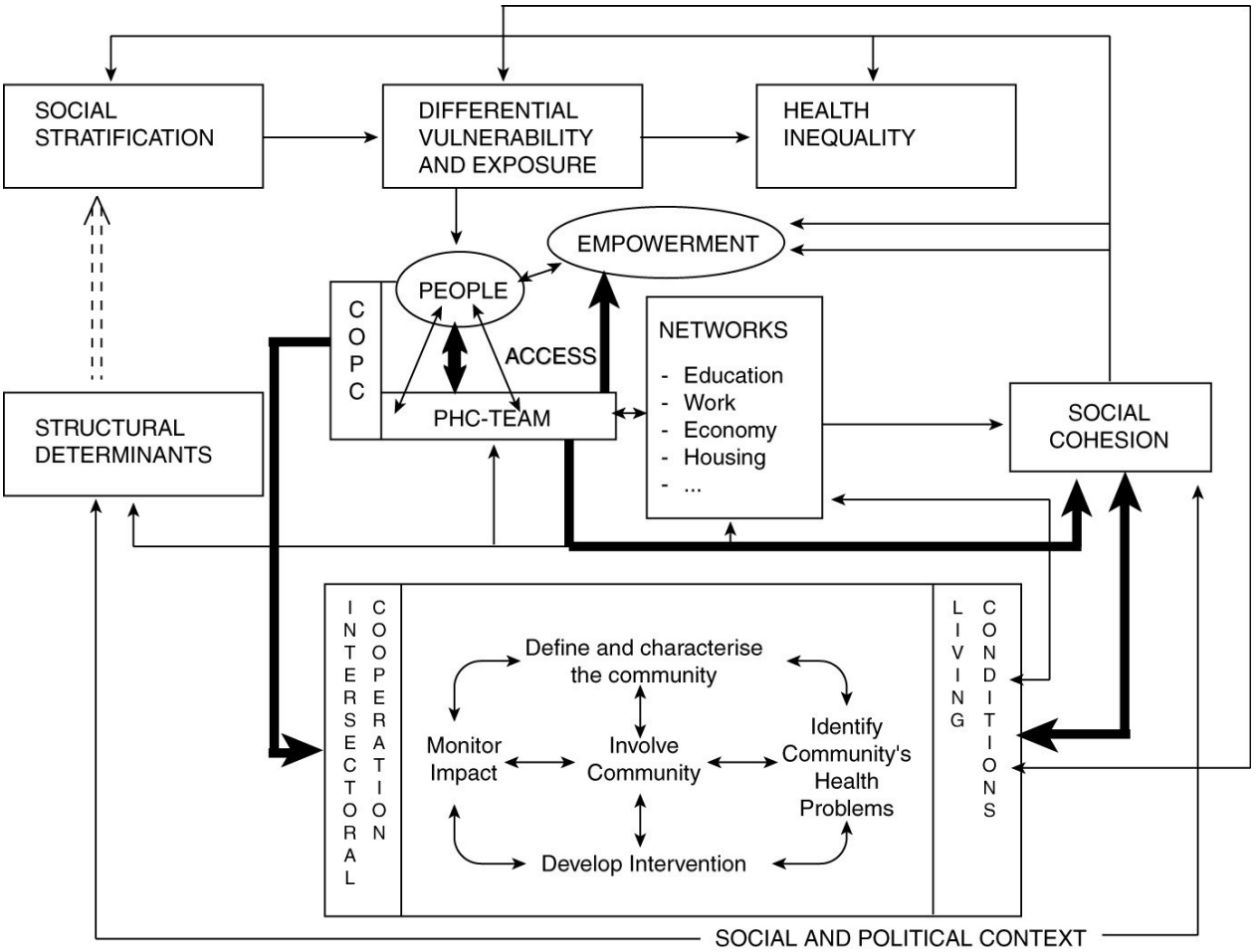
Primary health care teams do not only address the needs of the individuals, but are also looking at the community, especially when addressing social determinants of health. Therefore, there is an increasing interest in integration of primary health care with public health-approaches. Community Oriented Primary Care (COPC) consists of a systematic assessment of health care needs in the practice population, identification of community health problems, implementation of systematic interventions, involving the target population (e.g. modification of practice procedures, change of life-style, improvement of living conditions) and monitoring of the impact of the changes to insure that health services are improved and congruent with community needs[34]. COPC-teams design specific interventions to address priority health problems. A team consisting of primary health care workers and community members assesses resources and develops strategic plans to deal with the problems that have been identified. COPC integrates individual and population based care, blending the clinical skills of the practitioner with epidemiology, preventive medicine and health promotion. By doing so, it tries to minimise the separation between public health and individual health care. As Epstein et al. explain:

> *One of the best documented experiences of COPC has been implemented for nearly 3 decades in the Hadassah Community Health centre in Jerusalem, Israel. A family medicine practice and a Mother and Child Preventive Service provided the frameworks for this programme. The health needs of the community were assessed, priorities determined and the intervention programmes were developed and implemented on the basis of detailed analysis of the factors responsible for the defined health states. Repeated evaluations throughout a period of 24 years of a cardio-vascular control programme integrated in the family medicine practice showed the programme to be effective in the increase of hypertension control and reduction on cigarette smoking at the community level. Evaluations at a Mother- and Child health Service revealed that child development in the community improved through an early stimulation programme, an increase in breast-feeding rates and decrease in anaemia prevalence*[35].

In figure 3, we formulate a hypothesis about how primary health care can be a strategy for promoting health equity and intersectoral action. A first prerequisite is a high level of accessibility of the primary health care team. A second is: the team should deliver high quality care. Moreover, the team should interact with different networks (education, work, economy, housing,…) that are related to important sectors. Apart from an approach to individuals and families, the primary health care team should also address the community, utilising the

Community Oriented Primary Care-strategy. The COPC, the direct action of the primary health care team, and the intersectorial networking will enhance the social cohesion in the community. Both the actions of the primary health care team (curative, preventive) and the increased social cohesion in the community will lead to empowerment of the people. This empowerment is situated at different levels: physical, psychological, social, and cultural. The empowerment of the population will decrease the vulnerability to factors that may contribute to health inequity. Moreover, as the COPC-action will address the living conditions of the local population, the exposure of the people to factors that may be a threat to their health will diminish and the differential vulnerability will decrease. Finally, a better education, better working conditions and decreased unemployment, better housing conditions, access to save food and water, will improve the structural determinants that influence the social stratification. In summary, the multidisciplinary primary health care team, operating in a network with other sectors will promote health equity through increased social cohesion and empowerment.

Fig. 3: Primary health care as a strategy for promoting health equity and intersectoral action.



Cuba is a good example of how this can work. Health is considered as the principal component for the quality of life and the strategic aim in the development of the society. The health system in Cuba is based in the sense of the value as a human right and the appropriation of the community. The pillars of the system are: multi-sectoral approach (all sector: health, education, accommodation, culture,…); multidisciplinary approach; participation of the population[36]. This system shows success in access of care and in health outcomes. The infant mortality rate, life expectancy, and other health indicators in Cuba match those in the world's richest countries. A study shows that while secondary and tertiary care suffered in the early years of the crisis because of interruptions in access to medical technologies, primary care services expanded everywhere, resulting in improved health outcomes. Cuban's people reported equal access to health care services or resources and were particularly happy with their primary care services. These findings are consistent with official health care statistics[37].

Is the hypothesis that primary health care through its contribution to social cohesion and empowerment addresses the social determinants of health, illustrated in figure 3, documented by research findings?

In an excellent article, Barbara Starfield et al., gave an overview about the contributions of primary care to health systems and health[38]. There are some studies that look at the impact of primary care on reductions in disparities in health: studies of physician supply, studies of the association with a primary care physician, and studies of the receipt of services that fulfilled the criteria for primary care delivery. Higher ratios of primary care physicians to population are associated with relatively greater effects on various aspects of health in more socially deprived areas (as measured by high levels of income inequalities). Areas in the USA with abundant primary care resources and high income inequality have a 17% lower post-neonatal mortality rate (compared with the population means), whereas the post-neonatal mortality rate in areas of high income inequality and few primary care resources was 7% higher. For stroke mortality, the comparable figures were 2% lower in mortality when the primary care resources were abundant and 1% higher when the primary care resources were scarce. These findings are even more striking in the case of self-reported health. Income inequality and primary care were significantly associated with self-rated health, but the supply of primary care physicians significantly reduced the effects of income inequality on self-reported health stages. People in high income inequality areas were 33% more likely to report fair or poor health if the primary care resources were few. As in state-level analyses, the adverse impact of income inequality on all-cause mortality, heart-disease mortality and cancer mortality was considerably diminished where the number of primary care physicians in county level analysis was high. Eleven years of state-level data found the supply of primary care physicians to be significantly related to lower all-cause-mortality rates in both African American and white populations, after controlling for income inequality and socio-economic characteristics (metropolitan area, percentage of unemployed and educational levels). In these state-level analyses, the supply of primary care physicians had a greater positive impact on mortality among African Americans than among whites. The association between a greater supply of primary care physicians and lower total mortality was found to be 4 times greater in the African American population than in the white majority population, indicating a reduction in racial disparities in mortality in the U.S. states.

The equity-related effect of having a good primary care source also was found in the study that examined the degree of primary care-oriented services that people received. Good primary care experiences were associated with reductions in the adverse effects of income inequality on health, with fewer differences in self-rated health between higher and lower income-inequality areas where primary care experiences were stronger. Another study showed that among both white and African American populations in both urban and rural areas in the United States, the rates of low

birth weight were lower, in both absolute numbers and ratios of rates, where the source of care was a community health centre. A study comparing the situation of diabetes-related lower-extremity amputation in the United Kingdom and in the United States concluded that in the United States blacks had rates 2 to 3 times higher than in the white population, whereas in the United Kingdom, the rates were lower in black men than in the white population. The findings persisted even after controlling for socio-economic differences, thus confirming other findings that a health system oriented towards primary care services (such as in the United Kingdom) reduced the disparities in health care so prominent in the United States.
Primary care programmes aimed at improving health in deprived populations in less developed countries, succeeded in narrowing the gaps in health between socially deprived and more socially advantaged populations. A matched case-control study in Mexico found that some aspects of primary care delivery had an important independent effect on reducing the odds of children dying in socially deprived areas. These processes included adequate referral mechanisms, continuity of care (being seen by the same provider at each visit) and being attended in a public facility designed to provide primary care[39].

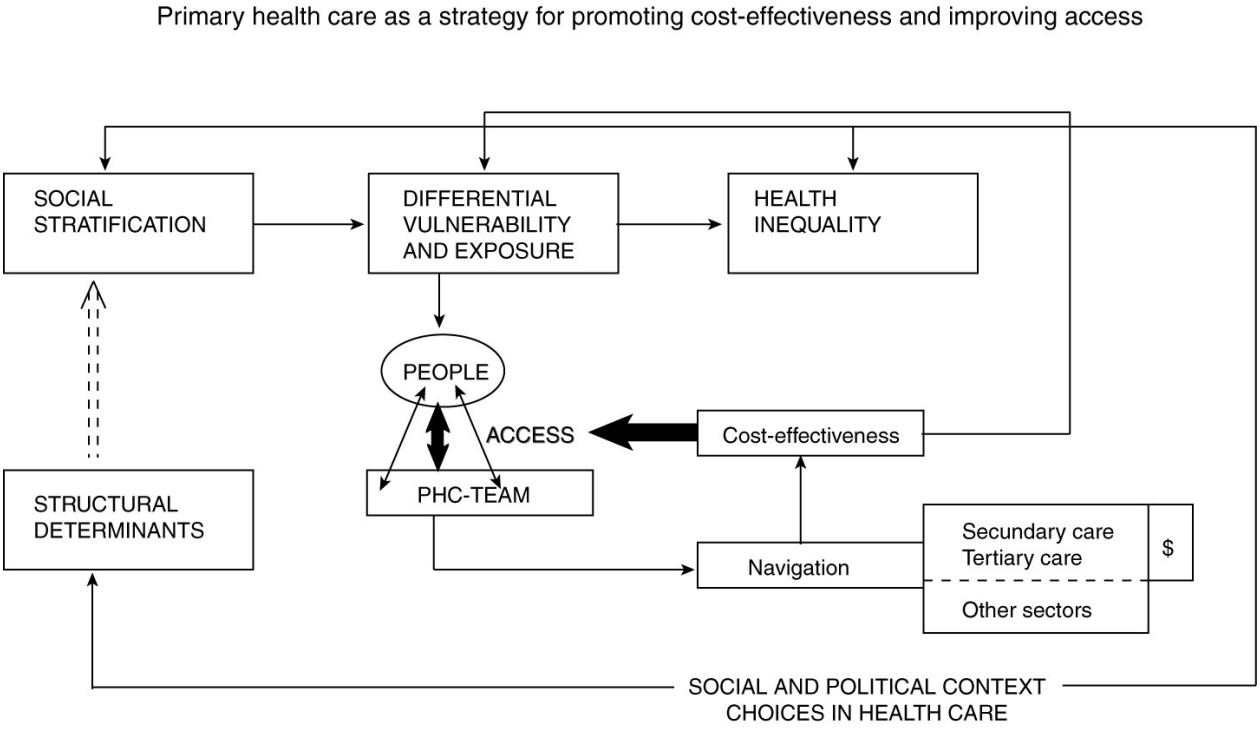
A study in Bolivia found that the community based approach to plan primary health care services in socially deprived areas lowered the mortality of children under age 5 compared with adjacent similar areas of the country as a whole[40]. In Kerala (India), 74% of the population lives in a village with a primary health care center. Their infant mortality rate is 16 per 1000 live births. By contrast, in Uttar Pradesh State , only 4% of the population has access to PHC, and the infant mortality rate is 87 per 1000 births[41].
Studies in other developing countries showed considerable potential of primary care to reduce the large disparities associated with socio-economic deprivation. In 7 African countries, the wealthiest 20% of the population receives well over 3 times as much financial benefit from overall governments spending as does the poorest 20% of the population (40% versus 12%). For primary care services the ratio of rich to poor in the distribution of government expenditures was notably lower (23% to the top group versus 15% to the lowest group), leading one international expert to conclude that "from an equity perspective, the move towards primary care represents a clear step in the right direction"[42]. An analysis of preventable deaths in children concluded that in the 42 countries accounting for 90% of child deaths worldwide, 63% could have been prevented by the full implementation of primary care. The primary care interventions included integrated care addressing the very common problems of diarrhoea, pneumonia, measles, malaria, HIV/AIDS, preterm delivery, neonatal tetanus and neonatal sepsis[43].

Starfield et al. find a rationale for the benefits for primary care for health in (1) greater access to needed services, (2) better quality of care, (3) a greater focus on prevention, (4) early management of health problems, (5) the cumulative effect of the main primary care delivery characteristics, and (6) the role of primary care in reducing unnecessary and potentially harmful specialist care. The "evidence" for this impact can be found in the original article by Starfield et al[41]. Within the scope of this paper we limit ourselves to the first point: primary care increases access to health services for relatively deprived population groups. Primary care is the point of first contact with health services, facilitates access to the rest of the health system. In the United States, socially deprived population subgroups are more likely than more advantaged people to lack a regular source of care. Analysis reported by Weinick and Kraus[44] and Lieu, Newacheck and McManus[45] confirm the finding that there is less or no difficulty in access to care when the source is a primary care source. Once people do have access to adequate primary care services,

deprived coloured minority groups often report better experiences with their care than the white majority population does, particularly when the studies were conducted in organised health care settings that, by design, eliminated many of the access barriers to primary care services.

In figure 4 we formulate the hypothesis that primary health care can also be a strategy for promoting cost-effectiveness and access to health care.
At present in many countries health care is uncoordinated access to hospital and specialist care is unrestricted for those who can afford it. Yet, direct specialist care often leads to a very costly cascade of diagnostic and therapeutic interventions, with even some potential for iatrogenic peril. In figure 5 we propose that the PHC-team is the point of access to medical care for the whole community and functions as "navigator" through secondary and tertiary care and other sectors. The vast majority (over 90%) of presented problems – all the "common" illnesses – are managed at the inexpensive primary care level[46]. Difficult or uncommon problems are referred by the navigator-PHC-team which leads the patients through the complicated medical maze of specialists and procedures, thus making sure that the patients receive the most appropriate care and avoiding unnecessary costs due to a mismatch of specialist and medical problem. This leads to better health outcomes[44] and at the same time makes health care much more cost-effective. The expensive inadequate use of specialist care will diminish and the use of financial resources will be optimized. Money saved by avoiding unnecessary health care expenditures becomes available for further development of and improved access to primary care and for making secondary care affordable for those who need it. Maximal access to primary care with sufficient referral opportunity will decrease health inequality and the differences in vulnerability.

Fig. 4: Primary health care as a strategy for promoting cost-effectiveness and improving access.



Research has shown that in industrialized countries health expenditure per capita is on average less in countries with a strong primary care orientation, including the navigator function[47]. For developing countries research data are lacking, but there is no reason why results would be different.

5. ENABLING AND LIMITING FACTORS THAT ACCOUNT FOR ACHIEVEMENTS AND FAILURES OF A STRATEGY BASED ON PRIMARY HEALTH CARE

A lot of factors contribute to the strength of a primary health care system in addressing the social determinants of health.

a. the need for adequate resources for health care

In the Western-European countries, either a tax-based "Beveridge"-system or a social contribution-based "Bismarck" system is used, or a combination of both. In developing countries, however, tax-based resources are limited, and, as a large part of the economy is situated in the "informal sector", a social security system, based on contributions on wages only reaches a small part of the population (e.g. in Bolivia, the "CAJA" only reaches 15% of the population). Therefore, a solid basis of the financing of the health care sector is of utmost importance. In an increasing number of countries, social security systems are developing. In other countries, the market is left over to "for-profit" private insurance companies. They are active in large parts of the world: Eastern-Europe, Latin-America, Western Africa,…

Box 1: The establishment of a reimbursement system for health care costs in Ecuador: the experiment of "Salud de Altura" - Johan Herteleer (Belgium)

According to ENDEMAIN survey, the poorest 20% of the Ecuadorian population spend 40% of their family budget on health, while the 20% wealthiest people only spend 6%. This difference reveals the deep inequities in Ecuador's health system where poor sectors have access to expensive and bad quality services while richer sectors have access to better services and pay proportionally less.

The introduction of the universal health insurance (Aseguramiento Universal de Salud -AUS) represents a proposal to breakthrough the inequitable health system and to create new opportunities for the entire population to get access to low-cost and good-quality health services. The AUS will provide a comprehensive package of health promotion, prevention and curative care through health services at first and second level, which will cover the poorest 20% of the population with public financing, to incorporate progressively the whole of the population with a mix of public and private financing.

The AUS will not only change the demand side characteristics because it will include underprivileged sectors of the population, but will also create changes on the supply side with separate roles for regulation, funding, insurance, provision of services, and local management. Incentives should ensure more efficient and better quality services.

The Project 'Salud de Altura', which is part of the Belgian Cooperation, collaborates with the Municipality of Quito to implement the AUS in the Metropolitan District, with a target population of 350.000. The project also facilitates the merge of the Municipal Health Insurance system, which covers middle-class people based on private funding, with the AUS, and aims to expand the coverage of the AUS population to groups such as illiterate women, their children, and disabled people.

The health policy promoted by international aid-agencies may also have played a specific role through the promotion of the private sector. Five different, sometimes complementary, ways in which the transfer of health care delivery to the private sector has been fulfilled are distinguished[53]:

1. Governments underfinanced public services, allowing the private sector to offer care without having to deal with subsidised competition. Typically, this was the scenario adopted by Sub-Saharan Africa and Andean countries.

2. Governments, accepting the efficiency arguments of the international agencies, gradually reduced the operational role of the public sector to a greater focus on disease control programmes. International agencies financed such programmes.
3. Governments sub-contracted health care to the private sector (in a very limited number of countries such as Lebanon, Colombia, Zambia). In Latin-America international financing institutions also promoted and financed the privatisation of health care.
4. Governments leased or sold public hospitals to the private sector. The best known experiences, promoted by World Bank authors as options of public-private partnerships, are Stockholm's St.Goran's and a few converted Australian hospitals. In low and middle-income countries, this pathway (leasing or selling public hospitals to the private sector) was the exception rather than the rule. Examples included the former Soviet-Union and Albania.
5. Governments granted managerial autonomy to public hospitals, blurring the boundaries between public and for-profit objectives.

In practice, it was the underfunding of the public sector that most frequently led to privatisation. This under-funding happened in many countries in the 1990's as evidenced by the gap shown by the WHO Macro Economic and Health Commission Report[48]. The World Bank and the International Monetary Fund effectively reinforced the liberalisation of services by starving them of public resources.

b. choices in health care: hospitalo-centrism versus primary health care; horizontal (person and community oriented) versus vertical (disease-oriented)

In most of the developing countries, the majority of resources go to secondary and tertiary care hospitals, looking after a small part of the population. As in Western countries, the attractiveness and the "power" of hospitals in the health care system are quite strong[38]. A hospital is more "visible". Primary health care is much more dispersed in the community, under the form of clinics, community health centers, district health hospitals. In the last 20 years, another "antagonism" has become increasingly important: the antagonism between horizontal (person and community oriented care) and vertical (disease-oriented) care. Shortly after the Alma Ata Declaration, the concept of selective primary health care underpinned the vertical "disease-oriented" programmes. The AIDS-epidemic in the 1980's gave a strong impetus to this development of vertical programmes. The World Bank, IMF, the Global Fund, Bill and Melinda Gates Foundation, US-Aid,… all of these organisations have concentrated on vertical programmes. Although enormous amounts of money are invested in those vertical programmes, the overall-performance of disease control programmes is poor[49]. For tuberculosis, for HIV and for malaria the Millennium Development Goals will not be met in Latin-America, Sub-Saharan Africa, South and South-East Asia. An overview of the literature on vertical versus horizontal programmes found very few studies providing empirical evidence in this area, and the overall quality of the studies was less than desirable. The authors conclude that vertical and horizontal approaches do not have to be seen as mutually exclusive but rather as complementary strategies, thus pointing to the need to discard the dichotomy of the one versus the other[50]: "Given the capacity constraints of existing services, expansion of access to priority interventions which can feasibly be delivered independently of the health service infrastructure, may need to rely on vertically delivered programmes in the first instance". This is in contradiction with other literature that demonstrates clearly that there is a need to integrate programmes into local health facilities in order to achieve reasonable prospect for successful disease control[51],[52],[53]. These

authors point to the merit of integrating curative and preventive care. Examples include the potential for detecting a patient with tuberculosis amongst those with cough, or suggesting vaccination to a patient or to a population with whom the practitioner (e.g. a family physician, a nurse clinician,…) has established trust.
The problem with vertical programmes is that they address only a fraction of the demand or need for health care. Patients are likely to demand a range of treatments, spanning curative care, relief from suffering, reassurance, prevention and advice on use of health services – not just a control of one single cause of ill health. In contrast, vertical programmes focus on restricted objectives, largely ignoring patient's demand for access to wider health care. This dialogue between "programme", professional and patient is limited to matters of education and information – one-way communication – to promote the campaign objectives[54]. A report prepared for the Swiss Agency for Development and Cooperation identifies other disadvantages of vertical programmes: they create duplication (each single disease control programme requires its own bureaucracy), lead to inefficient facility utilisation by recipients, may lead to gaps in care, are incompatible with decent health care delivery and, where funded externally, undermine government capacity by reducing the responsibility of the state to improve health care in its own services[55].

Recently, a new phenomenon is influencing the developments in a negative way: vertical disease-oriented programmes, funded by international donors, "extract" the skilled local health personnel out of the local primary health care system in order to employ them, at much better financial conditions, in vertical programmes (see 5.d.). This type of internal "brain-drain" has devastating consequences.

In order to deal with these problems, a "code of best practice for disease control programmes to avoid damaging health care services in developing countries" has been established[54]:

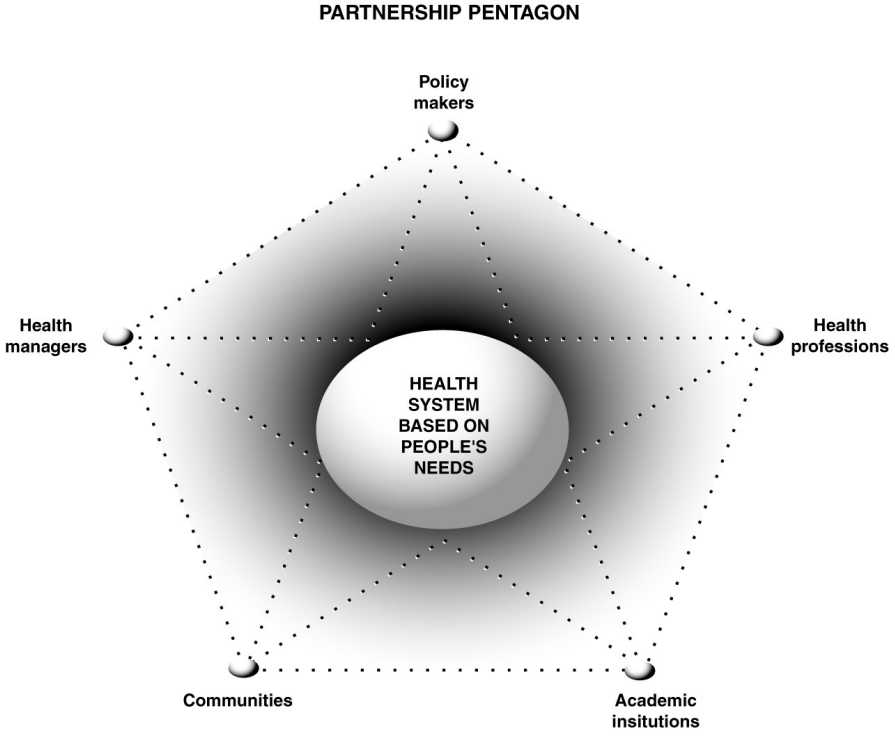
1. Disease control activities should generally be integrated, with the exception of certain well-defined situations. They should be integrated in health centres, which offer patient centred care.
2. Disease control programmes should be integrated in not-for-profit health facilities.
3. Disease control programmes should plan to avoid conflict with health care delivery.
4. The administration of disease control programmes should be designed and operated to strengthen health systems.

c. administrative and organisational aspects

Decentralisation is a key-prerequisite in order to enhance the development of primary health care, but the politics of decentralisation are sometimes difficult to put into practice, especially in those countries with a strong central political power. On the other end, there may be disadvantages with decentralisation in the absence of well defined objectives from the national health policy.
There is nowadays a consensus that the most appropriate model for organisation of health care services utilises the "district health system". The geographical integration of clinics, health centers and district health hospitals in order to take care of the preventive and curative needs of a population has been successful in many countries e.g. South-Africa. There is a need for innovative management strategies which effectively address the concerns of all stakeholders, when modernising health policies. From research it is clear that extended community and patient participation models, national frameworks for inter-professional education and representation, mechanisms for multiple funding and accountabilities and the diversification of non-governmental organisations and their roles are needed[56]. One of the approaches formulated in the

1990s is the "Towards Unity for Health"-approach. This approach advocates that the challenge of setting up a sustainable health system based on people's needs, calls for the active contribution of the stakeholders, or health partners. Although there may be others, five principal partners have been identified: policy-makers, health managers, health professionals, academic institutions and communities. (see figure 5) [57]

Fig. 5: The TUFH approach: the partnership pentagon



All partners have their own features and references, strengths and constraints, expectations and agendas. But this heterogeneity can be mitigated if the partners share a common set of values such as quality, equity, relevance and cost-effectiveness, as well as a certain vision for future health services delivery. The pentagon illustrates the richness of possible permutations in establishing working relationships among partners with the common aim of creating a health service based on people's needs. Examples of TUFH-projects are: forging partnerships between a community women's collective in Londrina, Brazil, with a local university and a primary care clinic to employ community health needs; designing a malaria prevention and economic development project in Eldoret, Kenya involving school children, local community and university[58].

Box 2: Developing primary care in Chile with parity of stakeholders interests.
Authors: Montero J - Moore P. Department of Family Medicine, University Catolica de Chile

The Chilean health reforms propose a fresh approach to interprofessional education and representation through a new organizational model of primary care. The reforms aim to reduce marked inequalities in health, to modernize the health system in response to demographic and epidemiological changes and to improve the overall management of the health system.
One of the main projects associated with the reform creates a non-governmental organization that manages six model family-health teaching centres in the poorest areas of Santiago. These provide more effective health care and create a training centre for primary care professionals. Each centre has a health team consisting of doctors, nurses, social workers, psychologists, midwives, physiotherapists, dieticians and health administrators working in relative equivalence in the executive committee. Lay members participate in this and in the community committee. With the support of computerized clinical and administrative information, the teams create appropriate solutions, both for local problems and for multidisciplinary primary care teaching programmes.
There has been close collaboration in the development of this project between local municipal government and the university. Each institution provides support including financial resources, both in the initial investment and for the running costs.
For example:
- The Ministry of Health provides resources on a per-capita basis, on the condition that the centres provide a fixed "basket" of services. It will also provide scholarships for post-graduate training in the centre.
- Many of the members of the health team have academic posts at the University and divide their time between clinical work and teaching.
- The municipality provides the land where the centres are being built and facilitates the running of the centre and the community work.
- Whether Chile needs specialists in primary care has been questioned, and there has been resistance to NGO involvement. However, thanks to collaboration, there is broad-based support for multiprofessional primary care.

Box 3: The Bromley by Bow Health Centre. London. United Kingdom.
Author: Dr Sam Everington - WONCA - Europe - five star doctor 2006.

The Bromley by Bow Health Centre has developed over a number of years as a partnership between public, private, voluntary sector and patients. It started as a church which was converted in 1984, the Health Centre building opened in 1997, The Café and Art wing in 2000 and the "Enterprise Bar" in 2005. Its philosophy is integration of over 100 different projects, a sharing of all spaces and a living building that matches the functions of those working and using the centre. The centre is contracted by the local authority to manage the two acre Park it sits in, and delivers a safe and beautiful space for the local community. The philosophy is, to improve the health of the community you have to address not just traditional health issues, but peoples other health needs – employment, education, the environment and creativity. The centre is owned by the community and with a "can do" culture supports all to manage and improve their health and to become social entrepreneurs. The centre integrates all ages and cultural groups and supports all in the community, to be partners as much as users and actively participate. It backs people before structures. The local community is 50% Bengali and 25% other ethnic minority groups. At least a third of the community use the centre on a regular basis and 90% at least once a year. The users of the centre completely reflect the demography of the area.

d. manpowerplanning for primary care: education and training, recruitment and retention

All over the world, but specifically in developing countries, there is a problem for recruitment and retention of primary health care providers, especially physicians and nurses. Nowadays there is a "brain-drain"-carrousel worldwide. In developing countries, there is a shift of workforce from the local primary health care system towards vertical disease-oriented programmes, sponsored by international donors. Moreover there is a shift from rural areas and townships towards more

affluent areas in cities. In Africa, there is a constant brain-drain of doctors from central Africa towards Southern African countries (Zambia, Zimbabwe, South-Africa,…). In South-Africa one out of 4 physicians trained in the country emigrates towards the United Kingdom, Canada, United States, Australia. Also from Asia (especially India) there is an important move towards Western countries. Nowadays 25% of the physician-workforce in the United States consists of international medical graduates, and in New-Zealand this is even 34.5%[59]. In the United Kingdom, 10.9% of all medical doctors are from India. In the Philippines, doctors are "re-trained" to become "nurses", which allows them to emigrate to the United States. In Latin America, there is an overproduction of doctors and moreover an inability to pay them, which leads to an internal "brain-drain": doctors becoming taxi-drivers; in Jamaica 41.4% of all doctors trained, emigrate. Although some Western countries (e.g. the United Kingdom) stopped active recruitment of doctors and nurses in developing countries, there are still "opportunities" e.g. for migration of physicians to the United States: graduates in Africa can apply in Kampala, in Cairo,… to pass the American "entrance examination". Looking at the health migration crises, it is clear that we have to avoid exploitation of the training expenditures of poorer countries. At national level in higher income countries we need, importantly, to bring into consideration:

1. Demand that is ever increasing (as a result of the familiar forces of growing economies expanding technologies and aging population) but that is also highly responsive to public expenditure plans, cost containment policy and political support for health care delivery models such as managed care;
2. Numbers in training are largely market-determined;
3. Pay and employment conditions, which in countries such as the United Kingdom are largely determined by policy makers and in countries such as the USA, where private sector employment dominates, are largely market-determined[60]. The major challenge remains to answer the question of how people who are locally trained can be motivated to work in the areas were the poor and underserved live. An investigation on the situation in Ethiopia illustrates the complexity of the processes[61] . There are two main determinants of the willingness to work in a rural area: income of the parents' household and the students' willingness to help the poor. It seems that women are significantly more likely to want to help the poor than men and having attended a NGO-school can also have an effect. In Ethiopia 2/3 of the nursing students and 90% of the medical students want to work in an urban area in the long run. From a simulation experiment it became clear that where starting nurses and doctors can choose between two opportunities, an urban post with basic salary or rural post where they receive basic salary plus premium, it does not have to be very expensive to get all starting health workers to take up a rural post. The WHO has addressed the brain-drain problem in the World Health Report 2006: "Working together for health"[62]. A plan of action describes the 10-year goal in all countries to build high-performing workforces for national health systems to respond to current and emergent challenges. Globally a range of evidence-based guidelines should inform good practice for health workers. Effective cooperative agreements will minimise adverse consequences despite increased international flows of workers. Sustained international financing should be in place to support recipient countries for the next 10 years as they scale up their workforce.

In many developing countries there is a search for "mid-level health care workers": they should have clinical skills and be positioned somewhere between the work nurses are doing and the work of primary care physicians.

Box 4: Development of training programmes for primary health care workers in Southern and Eastern Africa
Authors: Prof. Jannie Hugo – Family Medicine – University of Pretoria (South-Africa).

The District Health System (DHS) is the mode to deliver basic health care in South Africa. The district health authority delivers basic care in coordination with private and NGO health care and integrates vertical health programmes at the level of individuals, their families ad the communities.
Family medicine in South Africa is the clinical discipline for primary care, district health, general practice and rural health. An important role of the family physician is to facilitate integration of patient care throughout the district providing continuity of care between home, clinic and hospital and also to integrate vertical programmes at the level of the family and the clinic. A national programme for development of family medicine and district health care includes the creation of family medicine departments in districts, development of a national training programme in family medicine and the development of district based learning complexes. A project funded by the Belgian Government VLIR-ZEIN 2003 PR290, coordinated by Prof. J. De Maeseneer (Ghent University), assisted the Family Medicine Education Consortium (FaMEC) since 2003 to collaborate with government and other organisations to support these developments. At least 52 district based training complexes are being developed in underserved rural and urban areas at the moment.

In response to the policy of the DoH, FaMEC took the lead in the development of a new category of midlevel medical worker, namely a "clinical associate". The clinical associate will work as an assistant to the doctor with procedures in the district hospital. Training of clinical associates will be in health science faculties and based mostly in the same developing district learning complexes.
District learning complexes are developed jointly by university health science faculties and provincial health departments and include learning infrastructure with e-learning and skills laboratories. Inter-professional learning for district based health workers already includes programmes in nurse clinician, post-graduate family medicine, undergraduate district health and community obstetrics, occupational therapy and physiotherapy training. Community health worker and management training is being planned. Service improvement and service learning are integral parts of the development of learning complexes. Discussions have started to develop these learning complexes into fully fletched district based health science faculties.
In a south to south collaboration between South Africa and 4 East African countries (Uganda, Kenya, Tanzania and DRC), a new Belgian funded project VLIR-ZEIN 2006 PR320 supports a project that aims to integrate above developments with similar initiatives in those countries.

Box 5: The contribution of primary health care in remote rural areas in Australia.
Author: Dr Vladislav Matic- MBBS (Syd) FRACGP FACRRM - Board Member RARMS

The problems of the region were extreme. Social and professional isolation, 55% Aboriginal population, an average community life expectancy below many third world nations and a long term shortage of medical practitioners and an absence of allied health services.
The state wide rural doctor support agency, RDN, then facilitated a gathering of stakeholders comprising doctors, practice staff, community representatives, local government, hospital and area health service representatives, aboriginal health service, commonwealth government and public health organizations. Out of this gathering the following strategies, structures, systems and solutions were created:
1. that these stakeholders would meet on at least a quarterly basis guaranteeing strong community and regional input into, and guidance of, the primary care system;
2. that the RDN would form a not for profit corporate structure, with representatives of the main stakeholders forming the board of the company, titled Rural and Remote Medical Services Pty Ltd (RARMS), and that RARMS would seek Commonwealth funding to facilitate the machinery of a medical practice, thereby removing

the onus for doctors to have to own and run a medical service, effectively removing the risks and obligations inherent in owning and operating a business. RARMS would then tithe a percentage of doctors' earnings to allow return on investment and ensure sustainability. The underlying premise was that the structure and system would return an operating profit which would then be kept in trust for the community of origin, to ensure long term survival, allow for replacement of equipment and the development of new services as possible or identified as required.

3. That doctors would be assisted to relocate to the community, be supported in establishing their medical practice, and possibly most importantly be allowed to leave at any time without penalty or negativity. This philosophy is entitled - Easy Entry / Gracious Exit.

4. That the contribution of each practitioner would be considered as valuable and not be measured against some arbitrary minimum or expectation.

5. That each practitioner would be considered in the context of a family unit and that as such the transition of the whole family unit would be assisted with employment opportunities for spouses, assistance with housing and schooling if required, and that community introductions and support networks would be encouraged and actively supported.

6. This initiative in short time was expanded to include an adjacent community with similar problems, thereby improving the economies of scale for management and board.

In the relatively short time of 5 years, there are now nine doctors in these two communities where there were previously two, there are regular podiatry, exercise physiology, dietetics and speech therapy services in each community where there were none, practice nurses in each practice and most notably of all, admissions to the local hospital have fallen by 70% .

I believe this demonstrates that even in the most remote, disadvantaged and difficult of communities and regions, a broad involvement of all stakeholders, the removal of business imperatives and obligations, acknowledgement that health workers are parts of family units, and an underlying philosophy that all contributions are valuable and that no fixed expectations of service should be foisted upon health professionals, will lead to a stable and sustainable health workforce.

The next major learning is that this experiment clearly demonstrates that an effective and focused community guided primary care system can dramatically improve the immediate and long term health outcomes of the community, and perhaps most importantly for all of us, as health care becomes less affordable for governments and individuals, that an effective primary care structure will dramatically reduce the need for, and demand pressures upon, secondary care resources such as hospitals.

e. financing primary health care

There is not much literature about the effects of different payment systems in primary health care on provider, patient and society. In a literature review De Maeseneer et al.[63] describe different payment systems: fee-for-service (payment is made for units of service), capitation (unit paid for the patient), integrated capitation (a payment for services delivered by different providers or at different levels of care, all of which are incorporated into a defined amount of money), salary (payment for units of time and a contractual arrangement). In most of the countries nowadays there are mixed payment systems: target, infrastructure-related and function-payments. Table 2 gives an overview of the effects of payment system on provider, patient and society.

Table 2: Effects of payment system on provider, patient and society

	Mode of payment				
	Fee for service	Capitation	Integrated capitation	Salary	Essential conditions
Provider of care					
- activities	++	+	+	0	
- income security	?	+	?	++	Manpower-planning
Patient					
- humanity	++	+	+	-	Workload
- access	+	++	++	++	Management of waiting lists for salary system
- free choice	++	+	+	0	
Society					
- accountability	--	++	+++	++	
- equity	-	++		++	
Boundaries	cost-sharing		risk selection	scarcity	Health information system

Key
"-" to "---" degree the objective is hindered
"0" effect nutral
"+" to "+++" degree the objective is aided

The authors conclude: "Our analysis suggests that a capitation-based system of payment should most appropriately form the basis of any system of primary care physician payment. In addition to this financial mainstay a combination of the other payment systems will be required to finance most appropriately the work of GPs and the primary health care team. The most suitable combination will depend upon the budget available and the particular country in question. The complexity and variety of tasks undertaken by the members of the primary health care team are considerable and require a similar flexible and innovative system of payment".

More recently, "pay-for-performance" has been introduced in order to enhance the quality of primary health care. There have been positive outcomes, certainly in the field of prevention and chronic disease management, but there are also important adverse effects, especially in relation to access for the poor[64].

Box 6: Pay-for-performance in Costa Rica.
Author: Werner Soors, Institute of Tropical Medicine, Antwerp – Belgium.

Performance Agreements (*Compromisos de Gestión*) are a distinctive feature of the Costa Rican health reform. The steady introduction of primary health care clinics (EBAIS, *Equipos Básicos de Atención Integral en Salud*) within a district framework (*Áreas de Salud*) since 1994, and the transfer of all service provision from the Ministry of Health to the Costa Rican Social Security Fund (CCSS, *Caja Costarricense de Seguro Social*) are the fundamentals of this reform. Both measures affirmed the country's commitment to universal coverage and consolidated the option of public service provision. Back in the 90s, none of them was favoured by the World Bank, which persisted in dividing the CCSS into separate financing, purchasing and providing institutions, and advocated the introduction of private insurance companies. The Costa Rican government rejected the Bank's proposals, but eventually agreed on a purchaser-provider split within the CCSS in the form of embryonic management contracts.

Performance Agreements, introduced in Costa Rica since 1996, aimed at improved service delivery by gradually replacing historical financing by payment for performance. The agreements consist of a yearly negotiation between a CCSS central body and CCSS providers on a list of indicators and targets for a limited number of programme items. At EBAIS level, initially 10% of the budget was assigned to per capita payments adjusted for the pattern of service use as determined by mortality rates and the sex and age structures of the population served. On occasions, external observers have pinpointed the increasing complexity of the agreements, which may militate against their objectives[65,66] (for an in-depth discussion, see Adolfo Rodríguez Herrera 2006). An ongoing research in the Huetar Atlántica region, conducted by a team from the Antwerp Institute of Tropical Medicine (Jean-Pierre Unger, Pierre De Paepe and Werner Soors) in co-operation with the medical division of the CCSS, reveals a series of side effects of Performance Agreements (PA) at EBAIS level:

- As far as clinical examination and diagnosis are concerned, the coincidence between registered and observed activities is lower in PA than in general care consultations;
- Consultation time dedicated to note taking only is higher in PA than in general care consultations;
- Indicators of patient-centred care score lower in PA than in general care consultations;
- A handful of PA-items consumes on average 56% of all available consultation time;
- Between 43 and 90% of the population refers difficulties to access general care not covered by the PA.

Obviously, the poor are the first to be directly affected, as they have little options (they can wait, go to an emergency ward, or simply forego consultation). In the end they might suffer even more. Middle classes are pushed towards the private sector, thus eroding the solidarity that has been the foundation of the Costa Rican social policy for over fifty years. To avoid the disruption of an exceptionally successful public health system, Costa Rica might need to scale down its Performance Agreements.

f. equity – access – quality – efficiency

In this paper we have argued that primary health care may contribute to equitable care through improving access on the one hand and through a contribution to social cohesion and empowering people on the other hand, so that they become less vulnerable. This only occurs when quality of care is optimised. Accessibility without quality, may be even dangerous. In a recent field study in Limpopo (South-Africa) it became clear that in 24.3% of the patients diagnosed with upper respiratory tract conditions, at the level of the clinics, nurses prescribed antibiotics. Of course, the nurses are not responsible for this problem, but it makes clear that diagnostic performance may be as important as accessibility of therapeutics. So there is a need for increasing clinical competence at the level of primary health care, in order to avoid that developing countries become "over-treated" e.g. with antibiotics, with the resulting resistance problems[28]. Therefore, there is a need for family physicians operating as the clinical discipline, together with other providers at the primary care level. Finally, equity is closely linked to "efficiency": implementation of evidence based medicine, taking into account "contextual evidence" (including

e.g. traditional medicine) and "policy evidence", may contribute to "more health" and more equity. This will of course require a re-orientation of the health care utilisation by the public: in a lot of big cities in developing countries, one can visit local health centers, including a maternity department, where the last delivery took place 5 or 10 years ago. In the meantime hundreds of pregnant women are queuing at the obstetrical department of the tertiary university hospital. So, involving the public in this change of utilisation patterns will be very important.

g. primary health care and intersectoral action

As we described, the primary health care team is in itself multidisciplinary, and addresses both health and well-being. In order to do so it has to establish close links with education, work, economy, environment, socio-cultural sector,… Primary health care operating at the crossroads between the health care system and society is well situated to contribute to a process of information gathering that could be of high societal relevance. The utilisation of adequate classification instruments (e.g. the International Classification of Primary Care)[67] for the collection of data at the primary care level, may document clear indications about where people experience problems with their living conditions. If adequately transferred to the local political level, this kind of information may underpin inter-sectoral action e.g. in the field of economy, employment, environment, traffic safety,…

6. WHAT POLICY MEASURES ARE NEEDED TO ENHANCE THE IMPACT OF PRIMARY HEALTH CARE ON HEALTH EQUITY?

a. introduction

Discussions about the impact of a primary health care system on health equity always take place in a concrete political context. There are indications that institutions that operate in a democratic country might therefore relate to health through, for e.g., alleviation of social disparities and income inequalities, which results from greater political voice and participation. Improving the health of the worst-off can in turn improve a country's aggregate performance in health. Political institutions might also affect health through their general impact on universal health policy issues, such as universal access to high quality services. By contrast, the absence of representative democracy provides few incentives for political elites to compete for votes, resulting in less political responsiveness and fewer incentives to spread benefits universally or to the poor. Authoritarian regimes suppress political competition and tend to have an interest in preventing human development, because improved health, education and economic security mobilise citizens to advocate for greater participation and more resources[68]. The important policy characteristics for building a primary care infrastructure are: efforts to distribute resources equitably, universal access to financing under government control or regulation law or no co-payments, high proportion of health care expenditures from public rather than private sources.

b. "the political reconstruction of common sense"

Nowadays, ideologically, there is an attempt by financial interest groups to forge a new "common sense". Many of those referred to as experts in the health care environment contribute to the construction of this new common sense by promoting the following eleven fundamentals from which to rethink the system[69]:

1. the crisis in health stems from financial causes;
2. management introduces a new and indispensable administrative rationality to resolve the crisis;
3. clinical decisions should be subordinated to this new rationality if cost control is desired;
4. efficiency increases if financing is separated from service delivery, and if competition is generalized among all subsectors (state, social security, and private);
5. a market approach to health should be developed because it is the best regulator of quality and costs;
6. demand rather than supply should be subsidized;
7. making labor relationships flexible is the best mechanism to achieve efficiency, productivity, and quality;
8. private administration is more efficient and less corrupt than public administration;
9. payments for social security are each worker's property;
10. deregulation of social security allows the user freedom of choice, to be able to opt for the best administrator of his or her funds;
11. the transition of the user/patient/beneficiary to client/consumer assures that rights are respected.

It is important to show that these interpretations are rather the imposition of views defined by financial interests. More than ever it will be needed to defend health as a public good and to stress the need for solidarity in order to guarantee access of all to quality health care.

c. changing societies in a changing world.

The policy measures must of course be situated against the background of the changing society in a changing world. They will have to take in account demographical and epidemiological developments, scientific and technological developments, cultural and socio-economic developments, and globalisation. As the situation may differ quite a lot in different countries and different parts of the world, there will be need to adapt the policy measures to the local context (see 1. and 3.).

d. policy measures that may enhance the impact of primary health care on health equity.

From this research, we conclude that the five following policy measures are needed:

1. To guarantee universal access to (primary) health care through an adequate health system (social security system, national health system,…).
2. To make a shift from a "vertical disease oriented programme" towards an "horizontal-community oriented" approach. Wonca (the World Organisation of Family Medicine)[70] is discussing the launch of a campaign "10 by 2010", "15 by 2015", aiming at the objective that by 2010, 10% of the budgets of the vertical disease oriented programmes have to be invested locally in the strengthening of the primary health care system (and by 2015, 15%). There should be a signal for international organisations and donors to re-orientate the resources towards the strengthening of primary care.
3. Education, recruitment and retention of adequate staff, improving the clinical and population oriented performance of the primary health care system. The action plan defined in the World Health Report 2006 may be a good starting point. There is a need for training of family physicians, operating in the framework of a primary health care team.
4. Establishment of a performant primary health care service, integrated in the district health system. This primary health care should act as the first point of contact for the population, should be able to deal with more than 90% of all the presented problems, and should act as a filter and help patients to navigate in a cost-effective and high-quality way through the health care system. This team should have an interdisciplinary composition, including family physicians, nurses, health promotion-workers, social workers, nutritionists, and addresses the physical, psychological and social needs of patients, their families and the communities they live in. Through intersectoral cooperation, they should contribute to a "Community Diagnosis", illustrating the underlying structural problems that contribute to ill health. The role of the primary health care in the process of clarifying the importance of social structures and in understanding the social determinants of health may contribute to the transformation of the social quality of the lives of individuals and communities[71].
   There is a need for integration between public health and primary health care because primary health care is needed to integrate in a comprehensive way the messages and interventions from the public health approach.

5. Health systems should be organised in an intersectoral network, with cross links to environment, economy, work and education at the different institutional levels (national, province, district). For primary health care, the full participation of the local community in the designing of services is of utmost importance, which requires a bottom-up approach. Such a primary health care system could contribute to eradication of diseases and, through its effect on social cohesion and empowerment, decrease the vulnerability of populations and strengthen communities in addressing the social determinants of health.

In conclusion, primary health care has a high potential to address the social determinants of health, as it can contribute to improvement of access, especially for those most in need. Moreover it contributes to empowerment and social cohesion, and is oriented towards the improvement of the living conditions of the local community. Primary health care needs a multidisciplinary team with nurses and family physicians (the clinical disciplines of primary health care), midlevel primary care workers when appropriate, health promotion workers and social workers. Primary health care puts into practice, in the framework of the district health system, the health policy goals, involving the local community and contributes to intersectoral action for health. In order to make the primary health care approach successful, investment of resources is needed, with a shift from vertical disease-oriented programmes towards the strengthening of the local primary health care system.

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