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A Reform Vision on Quality Healthcare

for Hong Kong People

Positions and Recommendations on

Healthcare Reform in Hong Kong

The Hong Kong Association of The Pharmaceutical Industry

July 1999

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Executive Summary

Background

1. The Hong Kong Association of The Pharmaceutical Industry (HKAPI), representing 47 research-based pharmaceutical companies in Hong Kong, is dedicated to enhance the efficiency and quality of Hong Kong's health care services, so as to improve patients' quality of life. We support a visionary and comprehensive reform in Hong Kong to establish a healthcare system that is patient-centered, quality of care-focused and accessible to all.

Critical Issues

2. The Harvard Report is a good starting point in initiating discussion on healthcare reform. However, we are concerned that some critical issues have not been discussed thoroughly. Hence, to ensure a comprehensive reform, HKAPI advocates that a broader discussion beyond financing is needed.

3. First of all, health targets need to be established to guide the reform process. Secondly, best quality healthcare services should be aimed at, rather than compromised. By enhancing efficiency, best quality care is both attainable and affordable to Hong Kong. Thirdly, the value of medicine, as a tool that can enhance efficiency and quality of healthcare services, should be underscored.

Principles

4. HKAPI stands by a number of fundamental principles in healthcare reform, from which derived our recommendations. These principles are:
   - Commit to a comprehensive reform
   - Adopt a system-wide approach to healthcare budgeting
   - Promote innovation in medicines and therapies
   - Ensure unrestricted access to medicine
   - Encourage increase in patient rights and responsibilities
   - Develop market-driven competition

Recommendations

5. To build a healthcare system that is patient-centered, accessible to all, efficient and of high quality, HKAPI considers it important to focus on both the public consultation process and the contents of the reform. Both are important in achieving a healthcare system that can match the needs of the Hong Kong community and amass public support.

6. On the public consultation process, views from different stakeholders on issues of the entire healthcare system, not just on financing, should be collected and respected. A transparent and representative top-level commission should be established to manage the consultation and reform process. A specific, long-term reform timeline should be derived to synchronize public Inputs and the momentum of reform.

7. On the contents, a systemic approach to healthcare reform and budgeting should be envisaged. This will ensure that interrelated, rather than compartmentalized, considerations on reform can be made. The new system needs to provide built-in incentive to coordinate health services around patients. The initial step for strategizing reform is to establish specific health targets for Hong Kong. Healthcare outcomes of various reform options should be specified as the benchmarks for evaluation.

8. In particular, as illustrated in International research provided in the appendices of this submission, the value of medicine should be underscored as an effective tool that provides cost-effective healthcare. Medicine should be considered as an agent that enhances healthcare efficiency, lowers total health costs and improves patients' quality of life. In addition, accessibility of medicine should be made available to the private and public sectors. Also, in support of early disease detection and treatment, public education in preventive care and medicine should be greatly strengthened.

1. Background

The Hong Kong Association of The Pharmaceutical Industry (HKAPI) was formed in 1968 and represents 47 research-based pharmaceutical manufacturers. It is a long-standing, dedicated player in the Hong Kong healthcare community, committed to enhancing the quality of healthcare service in Hong Kong. By advocating efficient and effective treatments, our efforts have helped improve the Hong Kong people's quality of life.

In April 1999, the Government released the Harvard Report (the Report) "Improving Hong Kong's Healthcare System: Why and For Whom?" HKAPI underscores the importance of reforming the healthcare system for the benefit of the community. Hence, the reform is the priority of the Association this year. The Association is glad to share these opinions and recommendations with healthcare professionals, politicians, the Government and the public, with a view to building a better healthcare system for the future.

This position paper represents a statement of the research-based pharmaceutical industry to build an efficient and effective healthcare system for Hong Kong. As a summary, we advocate that Hong Kong should establish quality of healthcare as the benchmark and recognize the value of medicine as the tool for reform.

1.1 Health Policy is Needed

HKAPI is glad that the community has finally recognized the importance and need to reform Hong Kong's healthcare system. The last review of the healthcare system was conducted in 1993 resulting in the publication of the report "Towards Better Health". However, the report did not receive community-wide support and was not acted upon by the Government.

It has long been recognized that Hong Kong lacks a comprehensive healthcare policy. The healthcare system is now under great stress. A visionary and comprehensive reform is needed in order to put in place the direction for future development. Hence, the current reform provides a very precious opportunity for all healthcare stakeholders to review fundamental issues in our healthcare system and services provided. Because this is of immense importance to Hong Kong, we are very eager to share our opinions and concerns, with a view to facilitating and contributing to the reform process.

1.2 Visionary and Comprehensive Reform Required

The reform should be visionary and comprehensive in nature. It must aim at establishing a system that can satisfy the needs of Hong Kong into the 21st Century. In achieving this, two points are essential:

- **Patient-Centered Reform**

  We support the Report's spirit in taking a "patient-centered approach" in diagnosing the critical issues facing Hong Kong's healthcare system. This positions the patient as the ultimate purpose and focus of the reform, which is the fundamental objective of any healthcare system.

- **Access to Quality Healthcare**

  For the Hong Kong community, we consider that accessibility to quality healthcare service for all is both important and attainable. Our vision is that both accessibility and quality of healthcare should be taken as the benchmark targets of the entire reform initiative.

2. Critical Issues - Healthcare Reform & the Harvard Report

Over the past few months there has been Intensive discussion on the Harvard Report and healthcare reform. HKAPI considers that the Report is a good starting point from which the community can begin a wider and more intensive debate on what healthcare system Hong Kong needs. Under this context, it is important that the Report should provide a clear and embracing framework to foster public debate.

What Hong Kong needs today is a comprehensive reform with vision. Hence, ***we are concerned about the omission of issues critical for the discussion.*** Without them, the scope of debate may be limited or more importantly, may be misguided. If not fully explored, unnecessary constraints will have been applied to the reform strategy and options for consideration. We believe the critical issues are as follows:

2.1 Broaden Discussion Beyond Financing

It is understood that the commissioning of the Harvard study was initiated from the Government's concern about the long-term financial sustainabllity of the healthcare system. The purpose of the study was to assess the present system and develop options to improve the financing and delivery of healthcare. We consider that financing issues are important. However, there is a lack of balance in discussion on other fundamental issues that a comprehensive reform requires.

Because of Hong Kong's need for a comprehensive healthcare reform for the 21st Century, HKAPI considers that a wider scope of Issues should be discussed. Given the complex, interrelated considerations within the healthcare system, the following are major issues for discussion. These issues are not exhaustive, but many of which have not been raised in the Report and public discussion in depth:

- The values that provide the foundation for the future healthcare system
- Hong Kong's health target priorities, and respective funding allocations and evaluative processes that will help provide cost effective and affordable care
- Innovations in medical technology that could lead to fewer, shorter hospital stays and lower hospital expenditures
- Aging, and the need for alternative types of care, and
- Incremental reforms that could be introduced to achieve greater relevance, efficiency, equity and sustainability.[1]

[1] *"Developments Intemationally that have Relevance to Health Care Financing Reform in Hong Kong"*, Address by Paul Gross, Hong Kong Hospital Authority Convention, April 1999.

2.2 Health Targets Essential

In answering "Why and For Whom?", the Report is unclear as to "How And To What End?" the reform is heading. The report proposed the destination of reform as "Integrated Healthcare", but the public is not provided with an assessment on the ultimate outcome of reform. Therefore it is difficult for the public to comprehend the issue and to support the reform options. In the end, people do not know the service benefits they are asked to pay for.

Logically, healthcare financing strategy should be about how the funding is generated to pay for a health policy that has defined priorities.

Health targets are a key element for the development of health policy in general and for priority setting in particular. They can help governments meet their dual responsibility for allocating resources wisely and for improving public health. Health targets are an explicit end point in health gain, with a clear deadline and systematic monitoring. They are specific, quantifiable, and measurable objectives to improve health as part of a comprehensive health care strategy on a national level.[2]

Health targets have the potential to shift the balance of healthcare decision making from an emphasis on short-term costs to the attainment of long term public health goals. They may be viewed as a technical tool for making policy decisions with an optimal balance between effect (health gain) and allocation of available resources. The attractiveness in setting health targets lies in the direct relationship with the health status of a population. They place the focus where it belongs - on improving people's health.[3]

Priority setting for health policy is a means of getting best value for money.

There are good economic reasons for improving public health

In the United Kingdom alone, 187 million working days are estimated to be lost every year due to sickness, a 12 billion pound tax on business.[4]

[2] Australia Department of Human Services and Health. *Better health outcomes for Australians: national goals, targets and strategies for better health outcomes into the next century.* Canberra: Commonwealth of Australia; 1994.

[3] Van der Water, Hairy and van Herten, Loes, *Health Policies on Target? Review of Health Target and Priority Setting in 18 European Countnes.* Public Health Division, Netherlands, 1998, pp. 24-27.

[4] UK Department of Health. *Our Healthier Nation: A Contract for Health.* London: HMSO; 1998.

2.3 Emphasis on Quality

The guiding principle for the Report may misguide Hong Kong's reform.

The 'guiding principle' that the Report relied upon in developing the reform options reads "Every resident should have access to reasonable quality and affordable healthcare". HKAPI considers that this has made too early a trade-off on the quality of healthcare, likely due to financial concerns. This principle, therefore, may restrict discussion on reform strategies and plans. We believe that achieving high quality and sustainable affordability in the healthcare system do not necessarily conflict with each other. Therefore, we advocate that "striving for the best quality health system" should be used as the yardstick for reform.

Quality of care is "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with professional knowledge".[5]

Coupling quality of care directly with concerns about costs leads policy makers and purchasers to talk about the 'value' for health care expenditures - avoiding overuse of inappropriate or unnecessary care, ensuring timely provision of appropriate and needed care, and minimizing misuse of services in the form of poor technical or interpersonal performance of healthcare professionals or providers. Ultimately, value is measured in the outcomes that patients experience. Therefore, quality-of-care issues are ones of effectiveness.[6]

2.4 Enhance Efficiency of the System

The Report's view of how to improve the cost-effectiveness of healthcare was limited by its focus on "cost reduction". It suggested that the cost-effectiveness of healthcare in Hong Kong can be improved by actions that focus only on cost reduction namely, compartmentalized service provision, drug dispensing practices, and relatively high private physician earnings and fees. Actually, there is no evidence produced to show how all or any of these three measures, if modified, would change any measure of total healthcare costs. It does not automatically follow that an improvement in operational efficiency in these particular areas will improve cost effectiveness in aggregate.[7]

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[5] Lohr, KN, editor, *Medicare: A Strategy for Quality Assurance,* vol 1. Washington DC: National Academy Press, 1990, p.21.

[6] Chassin, MR. "Assessing strategies for quality Improvement", *Health Affairs* 1997;16(3):151-61.

[7] *"Developments Internationally that have Relevance to Health Care Financing Reform in Hong Kong",* Address by Paul Gross, Hong Kong Hospital Authority Convention, April 1999.

In addition, the Report and the public's focus on financing accept the spending and resultant costs as they are, rather than as variables that can be managed. If strategies to enhance the efficiency of the healthcare system are devised, not only can total healthcare costs be lowered, but the savings can also be reinvested in the system to provide better healthcare services for more people.

An effective program of reform must be framed in recognition that the health system consists of interrelated parts. ***It is vital that the focus of reform be placed on allocating existing resources more efficiently rather than purging the system's potential to serve patients through further cuts in spending.***

2.5 Value of Medicine - A New Look at Drug Expenditures

There has been virtually no mention of the role of innovative medicine as a major means to improve the efficiency of the healthcare system. For instance, apart from its costing of antibiotic use, the Report said nothing about the current use rates, cost and contribution of modern medicines for the major diseases and disorders, including the role of pharmaceuticals in primary health and chronic health care.

Through appropriate use of medicine, reliance on more expensive treatments like hospitalisation can be minimised.

In particular, there is a lack of understanding that medicine can:

- Improve the efficiency and lower the total costs of healthcare system,
- Enhance the effectiveness and quality of treatment, and;
- Enhance the quality of life of patients.

A New Look at Drug Expenditures

Cost-effective, innovative medicines are bringing a sea of change to health care, radically altering the way diseases are treated. The treatment of ulcers illustrates this change.

Prior to the advent of H2 antagonist therapy in 1977, 97,000 ulcer surgeries were performed each year. By 1987, that number had dropped to about 18,000. The average annual cost of drug therapy per person amounted to about $900, compared to $28,000 for surgery. The discovery of the *H pylori* bacterium as the principal cause of ulcers led to the use of antibiotics in combination with H2 antagonists to treat ulcers. At a cost of about $140 per patient, combination therapy now decisively eradicates the cause of most ulcers.[8]

As treatment changes, the way the health care cost pie is sliced will also change. As expenditures on ulcer surgery and hospitalisation decline, expenditures on drugs to treat ulcers will go up. But the total treatment expenditures for ulcers will shrink. This same principle of increased drug use and lower overall costs holds true for many other diseases.

Over time, higher spending on drugs will not only bring better patient outcomes - it will also often lower overall treatment costs and reduce the toll of disease.

2.6 Benefits of Market Forces

Generally speaking, the Report was ambivalent about the use of market forces in the healthcare system. As Hong Kong has been renowned for its culture supporting free markets, we consider that the Report and the reform should have a deeper analysis of this area. It should arrive at a clear positioning on the positive impact of utilizing market forces for the benefit of building an efficient, high quality and cost-effective healthcare system.

[8] Boston Consulting Group, *The Contribution of Pharmaceutical Companies: What's at Stake for America.* September 1993. [9] The Value of Pharmaceuticals, PhRMA

3. Health Systems Reform Principles[10]

A constructive and workable approach to the reform of health systems must be founded on the recognition of a few basic principles. HKAPI believes that the focus of all reform initiatives must rest squarely on what is in the best interest of the patient.

(a) Commitment to Comprehensive Reform

Because of the complexity of interconnected components in healthcare there must be a commitment to conduct a comprehensive change. Piecemeal reform - the component management approach - has failed the patient by preventing the efficient control of healthcare costs and accentuating problems of access, equity, quality and choice.

(b) System-wide Approach to Healthcare Budgeting

Healthcare budgeting should be approached from a system-wide perspective, with decisions on spending based on outcome assessments integrating all elements of care. Recognition should be granted to the idea that pharmaceutical therapy has value as a cost-effective tool applicable at all points of the health service chain. Incentives must exist for coordinating care around the patients' needs.

(c) Innovation in Medicines and Therapies

A reform program should promote innovation in medical care through market pricing for pharmaceutical products and continued protection of the rights of intellectual property holders. Decision-makers should apply evidence-based approaches to foster appropriate innovation and diffusion of technology that provide benefits to the patient and the healthcare system.

[10] Adopted from "*Health System Reform Principles, Cost Containment Issues"*, PhRMA International Section, Economic Policy Task Force, June 1997.

(d) Unrestricted Access to Medicine

Reform should ensure access to medicines. Physicians should be given the freedom to prescribe medicines based on his or her assessment of the individual therapeutic profile of each patient. The government must guarantee timely approval and unrestricted access of medicine in both public and private markets.

(e) Increased Patient Rights and Responsibilities

Patients should be encouraged to take more responsibility for their own health. Cost sharing promotes this goal as long as a safety net exists for the indigent, and maximum limits are established for out-of-pocket spending. Expanded patient access to information about alternative courses of treatment is essential to ensure patient choice.

(f) Market-driven Competition

Market-driven competition should be encouraged among providers to benefit the patient and promote efficiency of the system

4. Recommendations for Health System Reform

In order to build a healthcare system that is patient-centred, accessible to all, efficient and of high quality, HKAPI offers recommendations to both the public consultation process and the actual reform.

4.1 Recommendations - Public Consultation Process

By adopting a good public consultation process, the reform will be able to tap the best knowledge and the most representative opinions available. This also helps gather the greatest support from healthcare professionals, politicians and the public.

(a) Reform - Not Merely Financing

The Government needs to comprehensively collect and respect the opinions and recommendations of different stakeholders in order to foster a joint effort for reform. Reform needs to be conducted on the entire healthcare system, not merely on financing.

(b) Transparent and Representative Reform Commission

HKAPI supports the Report's recommendation that a top-level commission be established to manage the reform process and ensure the views of stakeholders are well considered. The body and mechanism should be transparent and representative.

The research-based pharmaceutical industry, an important and integral constituent of the healthcare system, understands diseases, treatments, costs and healthcare overall, will be glad to lend the needed expertise to such a Commission.

(c) Reform Timeline Needed

Public consultation activities such as surveys, expert forums, and public seminars must have established, clear time frames. These activities have the important benefit of focusing the reform debate and arousing public attention and eventually, building consensus.

In addition, a specific, long-term "reform timeline" should be devised so that the professionals and the community know the phases, pace and direction of the reform program.

4.2 Recommendations - Health System Reform

(a) Systemic Approach to Healthcare Reform and Budgeting

The traditional approach to component management and budgeting must be changed. Each component of the health system must be considered interrelated, rather than compartmentalized. Therefore, these constituents must be considered together rather than alone in planning reform.

A system should be established that has various built-in incentives to coordinate health services around patients. Management of the system should take a long-term view on the value of the various components of the system rather than on the short term cost. The system then becomes focused on attaining health targets, delivering best quality treatment, maximizing healthcare efficiency, and minimizing total overall healthcare costs

(b) Establish Hong Kong Health Targets

HKAPI considers it important for Hong Kong to follow the international trend and develop community health targets in order to improve the health of the population. This is an essential initial step of the reform process that will ensure that a health policy is established for Hong Kong. Only then can the decisions be made to allocate resources most effectively.

This involves conducting and/or commissioning further studies required to achieve integrated health outcomes through effective public healthcare policy. This would include:

- Analyze the health needs and trends of the Hong Kong population

- Review WHO statistics on the disease states found in the population
- Develop community health targets for Hong Kong (See Appendix D)
- Determine how to manage the priority disease states effectively
- Devise strategies and plans to execute and build the new system
- Study and monitor development and effects of the new system

(c) Healthcare Outcomes

The healthcare outcomes of reform options should be researched and specified. They should be taken as one of the benchmarks and evaluation criteria for the reform. The Report states that we have no benchmarks or tools to measure quality of healthcare services in Hong Kong. These must be established upfront when defining reform options.

(d) Medicine - A Solution to Cost-effective Healthcare

In making reform decisions, the Government must refer to the "best practices" and the wealth of information currently available on the value of medicine in enhancing the efficiency of the healthcare system and improving the quality of life. (See Appendix B)

The Government should ensure that the following issues are integrated into the future debate and government recommendations for further consultation:

- Ways by which the efficiency of the healthcare system can be improved, and
- The role of medicine in improving the quality of life of patients and reducing the total health costs.

(e) Accessibility of Medicine

All medicines registered in Hong Kong should be made available to both the public and private sectors to ensure patients' complete access to quality medicine. The system of using restrictive formularies impacts the quality of life.

To ensure optimum quality in healthcare, "component management", and restrictive formularies, or any mechanism mimicking them, must not be tolerated. It is unethical to deny a patient the access to medicine that has already gone through HKSAR's regulatory process.

(f) Emphasize the Role of Preventive Medicine

- The focus of the reformed system must be on early treatment and detection of diseases.
- Pharmaceuticals have a role to play in preventive care.
- Public education in healthcare should be substantially strengthened. The patient should have the education and knowledge to know when they should be treated. Through public education, patients and their family members are better informed in taking and choosing appropriate healthcare services and medicines.
- We support the Report's recommendation that the Department of Health establish an Office of Patient Education.

5. Conclusion

Hong Kong is now at a critical time in building a new healthcare system for tomorrow. HKAPI considers that a major reform is needed. Because of its importance to the Hong Kong community, this reform should be comprehensive in scope.

We consider that the Harvard Report has initiated momentum by creating public debate. However, the Report and the public debate have focused too much on the financing side of the reform, falling short of the expectation that other important areas like quality of healthcare and efficiency enhancement are addressed in a comprehensive way.

In this context, we are especially concerned about the lack of recognition of the value of medicine. Medicine has been recognized internationally as a tool to enhance efficiency of the system and effectiveness of treatment, thereby improving the quality of life for patients.

HKAPI trusts that this position paper will provide the Government and the public a fresh perspective to approach healthcare reform. We appreciate the opportunity to contribute to the development of concrete plans and options for future public consultation and eventually, health system reform. Through stakeholders' opinions leading to the enactment of a comprehensive health policy, Hong Kong will be able to build a successful healthcare system that matches and responds to the needs of Hong Kong's people.

Appendices

Appendix A

Quality of Health Care:
An Integral Element in Health Care Reform

Appendix A includes international practices and research information that illustrate the important position of quality of health care as an integral element in health care reforms.

Appendix A1

Medicines have fundamental value for Hong Kong people. They save lives, cure disease and improve the quality of life.

Medicines keep people, both the patients and their caregivers, healthy to remain in the workforce and stay in their jobs.

Cases

- The influenza epidemic of 1918 killed more people than all the battles fought during the First World War. Since that time, medicines have helped reduce the combined US death rate from influenza and pneumonia by 85 percent.[11]

- Deaths from heart disease decreased more than 30 percent from 1980 to 1990. Nearly 50 percent of the decrease was due to advances In medicines.[12]

- Medicines have not only saved lives and added years to life expectancy - they have also improved the quality of life for millions - cancer patients can endure chemotherapy better thanks to anti-nausea drugs; stroke patients can escape brain damage thanks to clot-buster drugs; people can be freed from the dark trap of mental illnesses by innovative medicines.[13]

- A study showed that a new migraine drug saved employers $435 per month per employee due to a reduction in lost productivity costs, while the monthly cost of the drug per employee was only $43.78.[14]

- A study published in July 1996 by a team headed by the Nikkei Disease Prevention Center concluded that current and future projected advances in pharmaceutical therapy would reduce the number of deaths form coronary heart disease by 117,000 over the 25 year forecast period. The lower death rate from pharmaceutical advances would in turn yield a cumulative productivity gain of 1.1 trillion yen due to the recovery of projected lost wages from workers that would ordinarily have succumbed to the disease without access to pharmaceutical care.

- For diabetes, the study projects that improved pharmaceutical therapy would help reduce the total number of cases in Japan from a standard projection of 2.21 million cases in the year 2020 to 1.88 million - a drop of 331,000. This figure has important implications for policies to manage health care costs for the aged, as well over half of all deaths attributed to diabetes occur in persons 70 years and older.[15]

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[11] The Value of Pharmaceuticals. PhRMA

[12] Hunick, Marla GM, et at., *"The Recent Dedine in Mortality from Coronary Heart Disease, 1980-1990," Journal of the American Medical Association,* February 19, 1997, Vol. 277, No. 7.

[13] The Value of Pharmaceuticals, PhRMA

[14] Leg, RF et al., "Cost-effectiveness of Sumatriptan in a Managed Care Population," The Journal of Managed Care. Vol. 3 No. 1, January 1997.

[15] Nameketa, T., Ohashi, Y., Brown, R., and Luce, B; Japan Disease and Economic Forecast Study; Volume One; 1996.Cited in Looney, W. (1997). Japan's Health Care System Today; New Challenges and New Opportunities (p. 38).

Appendix B

The Value of Medicine in Improving Efficiency and Effectiveness of Treatment

The following sections of Appendix B include international practices and research information that illustrate the value of medicine in terms of improving efficiency and effectiveness of treatment, as well as lowering total overall healthcare costs.

Appendix B1

Pharmaceuticals add value as a cost-effective element in healthcare.

Spending on pharmaceuticals can lead to lower, overall healthcare costs.

High price should not be equated with high cost.

Cases

- Use of beta blockers following heart attacks resulted in an annual cost saving of up to $3 billion in preventing second heart attacks and up to $237 million in treating angina.[16]

- According to a study published in the New England Journal of Medicine, the use of ACE inhibitor drugs for patients with congestive heart failure reduced mortality by 16 percent, avoiding $9,000 in hospital costs per patient over a three-year period. Considering the number of people at risk for congestive heart failure, additional use of ACE inhibitors could potentially save $2 billion annually.[17]

- An 825-patient study on patients with coronary artery disease taking a specific calcium channel blocker showed that morbidity and mortality events were reduced by 31 percent. The reduction for angioplasty and bypass surgery was 46 percent and there was 35 percent fewer hospitalizations for severe chest pain. The overall cost to treat this disease in the US is estimated at $95.6 billion per year, and standard angioplasty or bypass surgeries cost about $20,000 and $44,500 each.[18]

- Prior to 1997 and the advent of the H2 antagonist therapy, 97,000 ulcer surgeries were performed each year. By 1987, that number had dropped to about 18,000. The average annual cost of drug therapy per person amounted to about $900, compared to $28,000 for surgery.[19]

[16] Levy, RA, "What to tell patients about the cost-benefit of medications,"Wellcome Trends in Pharmacy, January 1993.
[17] The SOLVD Investigators, The New England Journal of Medicine, Vol. 325, No. 5, pp. 293-302, 1991; Walsh America/PDS.
[18] Pfizer press release, November 11, 1998.
[19] Boston Consulting Group, *The Contribution of Pharmaceutical Companies: What's at Stake for America.* September 1993.

Appendix B2

Even costly, *new* innovative medicines can help reduce suffering and bottom-line healthcare costs by avoiding prolonged and more expensive, alternative treatments.

Cases

- According to WHO, there is still no adequate therapy for three-quarters of the 2,500 medical conditions currently recognized. According to the organization, there is an urgent need for new and better medicines.[20]

- A study published in the American Journal of Managed Care found that the total costs of treating patients for migraine headaches declined 41 percent as the result of a new drug treatment.[21]

- At an initial look, it costs more to administer a new clot-busting drug. It costs an additional $1.7 million to treat 1,000 patients with a clot-busting drug, but that expense is offset by a $1.3 million saving in rehabilitation costs and a $4.8 million savings for every 1,000 patients treated with a clot-buster.[22]

- In a study presented at the 12th World AIDS Conference in 1998, the Department of Veterans Affairs found that giving patients full access to new AIDS drugs helped a net savings of $18 million In AIDS treatment costs last year.[23]

- A report by the Battelle Medical Technology and Policy Research Centre found that new medications saved an estimated 671,000 patients with coronary heart disease in the US between 1968 and 1976. New pharmaceuticals were found to have prevented nearly 500,000 stroke deaths and as many six million nonfatal strokes in the US between 1970 and 1986.[24]

- In addition to saving lives, new pharmaceuticals save money. The US realizes $14 In savings for each dollar spent on childhood immunization.[25]

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[20] WHO (1994). "*Global Comparative Assessments in the Health Sector*".
[21] Leg, RF et al., "Cost effectiveness of Sumatriptan in a Managed Care Population," The Journal of Managed Care, Vol. 3 No. 1, January 1997.
[22] Fagan, SC et al. "Cost-effectiveness of Tissue Plasminogen Activator for Acute Ischemic Stroke." *Neurology, Vol, 50, 1998, pp. 883-889.*
[23] *Alliance for Aging Research, Washington DC.*
[24] *Brown, RE and Luce. BR. The Value of Pharmaceuticals: A Study of Selected Conditions to Measure the Contributions of Pharmaceuticals to Health Status*. Report prepared by the Battelle Medical Technology and Policy Research Center for Schering-Plough Corporation, March 1990.
[25] Plotkin, Mortimer. *Vaccines.* Philadelphia, WB Saunders Co., 1998.

Appendix B2 (cont)

Cases (cont)

- More than 900,000 hospitalizations occur in the US each year for congestive heart failure, at an average cost of $10,500 per stay, but clinical studies of a new medication which costs less than a dollar a day showed that it reduced the number of hospitalizations by 30 percent.[26]

- A study of a new anti-asthma drug showed that it reduced trips to the emergency room by 96 percent and hospital admissions by 62 percent.[27]

- A new drug for schizophrenia, which costs $4,500 annually, has dramatically reduced treatment costs by permitting many patients to avoid hospitalization costs in excess of $73,000 a year.[28]

[26] "Studies of Left Ventricular Dysfunction". *American Journal of Cardiology* 66:315-322. 1990; *New England Journal of Medicine* 325 (5):293-302, 1991.

[27] "Cost Effectiveness of Including Cromolyn Sodium in the Treatment Program for Asthma". *Clinical Therapeutics* 10:188-203, 1988.

[28] Revlckl, et al.: "Cost Effectiveness of Clozapine for Treatment Resistant Schizophrenic Patients." *Hospital and Community Psychiatry* 41 (8):850-854, 1990.

Appendix B3

Underutilisation of pharmaceuticals *decreases* quality of life and *increases a community's overall healthcare costs.*

Cases

- Increased use of drugs may be able to prevent some strokes entirely. A study by the Agency for the Health Care Policy and Research concluded that *increased* use of a blood-thinning drug would prevent 40,000 strokes a year, saving $600 million annually. The lifetime cost of a stroke for a single patient exceeds $100,000, while the average annual cost of treatment with the blood-thinning drug, including monitoring is $1,025.[29]

- The American College of Cardiology found that an anti-clotting drug significantly reduced heart attacks and other serious complications among patients undergoing angloplasty and stent treatments to clear clogged coronary arteries. Researchers said the findings were so compelling that the drug should routinely be given to the vast majority of the 800,000 heart patients in the US and Europe who are treated with angloplasty and stents each year. The study showed a 54 percent reduction in heart attacks and deaths 30 days after treatment.[30]

- A drug was found to significantly reduce the rates of recurrence and death from breast cancer among a wide range of women. In the US, it was found that wider use of the drug could save 2,500 lives a year and prevent recurrence of breast cancer in an additional 5,000 women annually.[31]

- A study sponsored by the National Institutes of Health found that treating stroke patients promptly with a clot-busting drug nets an average saving of $4,400 per patient by reducing the need for hospitalization, rehabilitation and nursing home care. According to NIH, greater use of this medicine could save the health care system more than $100 million a year.[32]

[29] Secondary and Tertiary Prevention of Stroke Patient Outcome Research Team: 9th Progress Report, March 1996; Cited in The Value of Pharmaceuticals, PhRMA.

[30] Presented at a meeting of the American College of Cardiology in March, cited in *New Drug Approvals in 1998*, PhRMA.

[31] Early Breast Cancer Trlalist's Collaborative Group. "Tamoxlfen for early breast cancer; an overview of randomised trials." *Lancet, Vol 351,* May 16, 1998, pp 1451-1465.

[32] Fagan, SC et al. "Cost-effectiveness of Tissue Plasminogen Activator for Acute Ischemic Stroke." *Neurology*, Vol. 50. 1998, pp.883-889.

Appendix B4

Medicines save healthcare costs of acute and chronic illnesses in the community by reducing the need for more expensive hospitalization or A&E visits.

Cases

- A five-year study of more than 6,500 middle-aged to elderly men and women shows that people with average cholesterol levels can substantially reduce their risk of heart attack by taking a cholesterol-lowering drug known as a statin. Those who had taken the statin had a 37 percent fewer heart attacks and other serious signs of heart disease than those who received placebo.[33]

- The Virginia Health Outcomes Partnership program for Medicaid asthma patients demonstrated that increased use of asthma medications resulted in fewer emergency room visits and a major cost savings to the program. Emergency room and urgent care visits dropped by 42 percent in demonstration program.[34]

- Drugs effective against infectious diseases, peptic ulcers and mental illness have greatly reduced the numbers of the duration of hospital admissions. These conditions, together with nine others, today account for only 22 percent of hospital-bed occupancy compared with 40 percent in 1957.[35]

- Osteoporosis causes over one million hip fractures each year, containing otherwise healthy and independent women to long-term institutional care and costing over $14 billion each year in hospitalizations and nursing home admissions and care.

- Medicines available today - both hormonal and non-hormonal - can help women remain active and independent, while saving health care dollars. A single hip fracture costs an estimated $41,000, while 15 years of treatment with a leading medicine to prevent osteoporosis costs only $3,000.[36]

- A study of prescribing in various disease conditions showed that increased, appropriate prescribing resulted in fewer hospital admissions, reduced hospital stays, fewer in-patient surgeries, and reduced mortality, In addition, pharmaceuticals were cost-effective: every dollar spent on prescription medicines was associated with $3.65 in reduced hospital costs[37]

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[33] Downs, JR. Clearfield M. Weiss S, et al. Primary prevention of acute coronary events with lovastatin in men and women with average cholesterol levels. *The Journal of the American medical Association,* May 27, 1998;279(20); 1615-1622.

[34] Virginia Health Outcomes partnership; A Demonstration Project, The Williamson Institute, Virginia Commonwealth University and The National Pharmaceutical Council, 1997.

[35] John Vane, Honorary President, The William Harvey Research Institute, "Value of New Drugs is Above Price", *Times Newspapers Limited,* January 15, 1999.

[36] Clark, N and Schuttings, JA, "Targeted Estrogen/Progeterone Replacement Therapy for Osteoporosis; Calculation of Health Care Cost Savings," *Osteoporosis international,* Vol. 199922, pp. 195-200.

[37] Frank Lichtenberg. "Do (More and Better) Drugs Keep People Out of Hospitals?" AEA, May 1996.

Appendix C

The Value of Medicine: In Support of an Integrated Approach to Healthcare Budgeting

The following sections of Appendix C include international practices and research information that illustrate when other countries' government policies that slashed public spending on drug reimbursement not only failed to accomplish their intended objective of realizing substantial and permanent reduction in costs, but also harmed the interest of patients and increased the bureaucracy of healthcare services.

Appendix C1

The conflict between cost containment and quality is epitomized by the "Drug Budget", which conditions payers to regard pharmaceuticals solely as a cost input without considering the results of their use in terms of integrated health outcomes, crossing the budgetary boundaries between drugs, hospitals, ambulatory and other forms of healthcare.

To improve health and fulfill the needs of the patients in this reform initiative we must look at the savings generated as a result of components of the healthcare budget.

The following list is a compilation of the pharmaceuticals' contribution to overall health outcomes.

Table 1. The Pharmaceutical Quality Offer to Healthcare

Rising drug expenditure can help to:
Cure infectious diseases
Control or palliate chronic diseases
Correct genetic causes of ill health
Improve tolerability/efficacy of existing therapy
Replace surgery
Avoid or shorten hospitalisation
Reduce frequency of office visits
Maintain physical interdependence/ability to work
Satisfy patients who prefer drug treatment
Pay for advances in innovative drug therapy
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[38] Redwood, Heinz. Pharmaceutical cost containment and quality care, conflict or compromise? *Pharmacoeconomics 1998;* Suppl. 9-13.

Appendix C2

In healthcare experiences worldwide, government policies that slashed public spending on drug reimbursement failed to accomplish their intended objective of realizing substantial, and permanent reductions in cost.

Formularies, like prescribing budgets, only yielded their "savings" by shifting costs to other parts of the system.

Formularies and restrictive drug lists also tended to shift health care dollars from patients to bureaucracies.

Cases

Germany:

- A study published in 1993 by the Institute of Insurance Studies at the University of Hanover found that physicians reacted to the budget constraints on drug therapy by increasing the frequency of referrals to specialists. Comparing data for 1993 - the first month of the reform - to January 1992, the authors found the change in the frequency of referrals was more than 11%; for the first seven months of 1993, the average increase was 9%. There was a similar pattern, although not as large, In the rate of admissions to hospitals. The study concluded that the government had been forced to pay an additional DM 1329 billion in health care costs over the first seven months of 1993 due to the effects of physicians to compensate for the disincentives imposed on drug prescribing.[39]

- The German government acknowledged the toll that reference pricing takes on new product innovation by exempting all patented products from the reference system as of January 1, 1996. This decision provided the pharmaceutical industry with a guarantee that a future innovation will not be subject to reference prices until after the patent on it expires. Reference pricing fails to accommodate the fact that individual patients will have physiologically distinct responses when administered the same drug. When the reference priced products do not work, it is the patient who must bear the cost of seeking an alternative outside the system that does meet his needs.[40]

[39] Schulenburg, J. Matthias Graf, and Schoffski, Oliver. *Impllcations of the Structural Reform of Health Care Act On The Referral and Hospital Admission Practice of Primary Care Physicians,* University of Hanover, Institute of Insurance Sciences; November 1993. Cited in Centre for the New Europe. (June 1995). Drug Budgets; The Hidden Costs of Control. Impact of European drug payment reform on access, quality and Innovation (p. 21).

[40] Looney, W, (1997). *Japan's health Care System Today: New Challenges and New Opportunities* (p. 45).

Appendix C2 (cont)

Cases (cont)

United States:

- A US survey on the financial impact of restrictive formularies used by the states to control Medicaid prescription costs found that a 13% average reduction in prescription expenditures was completely offset by increased expenditures elsewhere in the system.[41]

- A new study on the impact of a limit on Medicaid reimbursement for psychotropic drugs in the US state of New Hampshire discovered that while the policy cut the average drug costs per patient by more than $5 per month, overall costs per patient rose by $139 per month due to more frequent use of emergency mental health centers and partial hospitalizations. These latter increases totaled some $390,000 - or more than 17 times the savings realized from the cap on psychotropic reimbursements.[42]

- After New Hampshire discarded the cap, overall treatment costs for the test group reverted to the less expensive levels that existed prior to introduction of the policy and which were also the norm in a New Jersey patient population, which had placed no limit on access to pharmaceutical therapy.

- A number of US states require physicians to obtain approval before they can prescribe certain drugs to recipients of publicly subsidized medical insurance. A 1992 study on a prior authorization scheme administered by the state of Kentucky concluded that each authorization pushed up the total cost of the average prescription by $8.50, resulting in additional administrative overhead charges of $1.246 million for the 156,000 such requests processed during the two year period under review. The overwhelming majority - 94 per cent - of the requests was approved.[43]

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[41] Moore, William J, and Newman, Robert J; "Drug Formulary Restrictions as a Cost Containment Policy in Medicaid Programs". *Journal of Law and Economics*, 36: 71-97, 1993. Cited in Centre for the New Europe. (June 1995). Drug Budgets: The Hidden Costs of Control. Impact of European drug payment reform on access, quality and Innovation (p. 25).

[42] Soumerai, Stephen B.; "Effects of limiting medicaid drug reimbursement benefits on the use of psychotropic agents and acute mental health services by patients with schizophrenia," *New England Journal of Medicine*, September 8, 1994; pp 650-655. Cited in Centre for the New Europe. (June 1995). Drug Budgets: The Hidden Costs of Control. Impact of European drug payment reform on access, quality and innovation (p. 26).

[43] Looney, W. (1997). *Japan's Health Care System Today: New Challenges and New Opportunities* (p. 42).

Appendix C2 (cont)

Cases (cont)

- A survey of some 30 separate academic studies that examined the link between restricted access to pharmaceuticals and the costs of drug therapy or health costs overall found that the restrictions most often simply shifted costs by increasing utilization of other health services; not one of the 30 studies was able to provide evidence that the reduced access had led to verifiable savings in these other services.[44]

[44] National Pharmaceutical Council; *Component Management Falls to Save Health System Costs; The Cost of Restrictive Formulanes,* 1996. Cited in Looney, W. (1997). Japan's Health Care System Today: New Challenges and New Opportunities (p. 41).

Appendix C3

If budgets are cut for pharmaceutical therapy, or choices of different drugs are limited, it will not achieve reduced costs. On the contrary, welfare of patients will be sacrificed and costs saved will be offset by other expenditures.

Cases

- A recent survey of a broad cross-section of patients distributed among five US health maintenance organizations (HMOs) found that the limits on prescribing not only result in higher benefit costs, but in "suboptimal" levels of therapy for the patient as well. The Managed Care Outcomes Project of the Institute for Clinical Outcomes Research in Utah tested the effect of prescription drug formularies on five different variables - prescription costs, prescription counts, office visit counts, emergency room counts, and hospital admissions - for approximately 13,000 patients with five diseases - arthritis, asthma, epigastric pain/ulcer, hypertension, and otitis media - and where intensive pharmaceutical therapy is standard treatment.

  Its principle conclusions from comparisons among the various types of formularies used in the HMOs are:

  1. a higher formulary limitation on drugs was associated with greater utilization of health care services for four of the five diseases, including a higher patient prescription count and costs, as well as higher numbers of office visits, emergency room visits and hospital admissions;

  2. higher use of cheaper, multi-source drugs in formularies was associated with higher drug costs, higher number of office visits for three of the surveyed diseases (hypertension, otitis media, and arthritis) and higher hospitalisations for patients with epigastric pain/ulcers.[45]

[45] Horn, S., et al; "Intended and unintended consequences of HMO cost containment strategies: Results from the managed care outcomes project;" *American Journal of Managed Care*, 1996, vol, II, number three. Cited in Looney, W. (1997). Japan's Health Care System Today: New Challenges and New Opportunities (p. 46).

Appendix D

Establishing National Health Targets

The following sections of Appendix D include international practices in establishing national health targets.

Appendix D1

History - International Health Targets

In 1974 the Canadian Minister of Health, Marc Lalonde, presented a perspective on health when he issued a "A New Perspective on the Health of Canadians: A Working Document". It did not focus directly on the structure and organization of health care, but on the health status of a population as a whole. This innovative idea advocated a shift away from the mere planning of health care services towards better planning for health.[46]

Health targets were introduced by the World Health Organisation (WHO) 20 years ago and began to gain momentum in the European countries in the late 1990's as they searched for new approaches to health system reform and improved health for their citizens.

	Time Line	Document
1977	WHO*	"Health for All by Year 2000"
1990	United States**	"Healthy People 2000"
1992	UK	"Health of the Nation"
1994	Treland	"Shaping a Healthier Future"
1994	Australia	National Health Policy, title not available
May 1998	World Health Assembly	"Health for All in the 21st Century
September 1998	European Region, WHO	"21 Targets for the 21st Century"

* *WHO's Alma Ata Declaration of 1978 urged all countries to formulate national policies and plans to ensure primary health care as part of a comprehensive national health system.*

***The first country to institute health targets as part of a national healthcare policy.*

[46] Van der Water, Harry and van Herten, Loes, *Health Policies on Target? Review of Health Target and Priority Setting in 18 European Countries.* Public Health Division, Netherlands, 1998, p. 34.

Appendix D2

Considerations for Setting Health Targets[47]

Countries must take into account the following health policy considerations when setting health targets:

1. ***What is the present state of population health?***

   Epidemiological insight into the health of a population, which not only implies the present health status but also an understanding of the trends, is the starting point for setting health targets.

2. ***How can we decrease (future) burden of disease?***

3. ***How can we cope with existing burden of disease?***

   This question concerns those for whom prevention comes too late, like the growing number of people suffering from disability. This challenge has to be addressed through curative services, patient care, and rehabilitation.

4. ***What are the necessary organizational changes?***

5. ***How should the activities needed to achieve health targets be financed?***

   Priorities established in the form of health targets must be translated into financial consequences. Financial considerations should also include not only the estimated expenses of concrete interventions but also such aspects of cost effectiveness and the potential savings.

6. ***How should the policy be implemented?***

   This question implies decisions on the collection of the necessary data (monitoring), the most appropriate time frame for evaluating a particular policy, and the formulation of the criteria for success and failure.

[47] Van der Water, Harry and van Herten, Loes, *Health Policies on Target? Review of Health Target and Priority Setting in 18 European Countries.* Public Health Division, Netherlands, 1998, p. 37-38.