National Health Insurance in Poland: A Coach without Horses?

Peter Berman, MSc, PhD
Associate Professor of International Health Economics
Harvard School of Public Health
665 Huntington Avenue, Bldg 1-1210
Boston, MA 02115, USA

April, 1998

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I. Introduction

The formerly communist states of Eastern Europe and the Soviet Union are in the midst of profound political, social, and economic transformations. Within this environment of rapid and deep change, transformation is coming to health care as well. Most of the countries in transition look to western Europe for models of their new health care systems. There is impatience to establish national health insurance schemes in the place of the national health services that have been dominant in the past.

Looking across these countries in transition, Poland has been on the leading edge of economic change (Sachs, 1993), but apparently lagging in health sector reform. The Czech Republic and Hungary established national health insurance (NHI) in 1992 and 1993 respectively and put it into effect almost immediately. In contrast, it took Poland until the beginning of 1997, more than six years after the fall of communism, to legislate national health insurance, with implementation still several years away. However, this inaction in high profile health system restructuring masks a number of important changes that have been underway to put in place the essential building blocks of a new health care system.

Successful health system change requires an artful combination of establishing the right structures for the finance and delivery of health care and developing new behavioral patterns for consumers, providers, and managers within these structures. Much of the work of health economists have been devoted to demonstrating that structural change, embodying, for example, new incentives and regulation, can drive behavior, . However, the converse has also been suggested, i.e. that the absence of appropriate behavioral norms and the conditions for establishing and maintaining them can undermine the most carefully designed structure (Heginbotham and Maxwell, 1991). This paper argues that too rapid structural change in eastern European and former Soviet Union states without the preconditions to establish and test these new behaviors has proved to be risky and has led to some significant negative outcomes. The structure, including the mechanisms to make the structure do what it is intended to do (the coach), must be matched with certain essential basic conditions (the horses), to increase the probability of the achieving the desired outcomes in terms of health care system efficiency, equity, quality, and public satisfaction.

Poland's indecision concerning new structures for health care financing has been the right strategy for health care reform in the current environment, in contrast to the haste of some of its fellow transitional countries. (Whether it is the right political strategy or whether is was intentional is another matter). Health system development in Poland would be enhanced by devoting much more attention to establishing the legal, institutional, and popular basis for transforming health care. Reform efforts to date have been out of balance, with too much attention to the design of new financing institutions at the apex of the system and insufficient effort to develop and test the means needed to make a reformed system work well. It is argued here that simply developing a market friendly environment for health care or even a more directed approach of managed financial incentives may not be sufficient to create an efficient, equitable, and sustainable health care system under current Polish conditions.

This paper first reviews (part II) key dimensions of the system Poland inherited from communism and the major areas where change is needed. Part III reviews the proposals for NHI in Poland and some of the key debates on structure which accompanied them. Part IV describes in more detail the main interventions now underway in Poland to put in place the building blocks of reform. Part V unpacks the logic of how NHI is expected to transform Polish health care and asks whether this logic is sound, given the current conditions. Part VI reviews recent experience in other transitional countries which have adopted NHI, including the Czech Republic, Hungary, and Russia. These cases reinforce the emphasis the conclusion that more emphasis is needed on the supporting elements of reform. The paper concludes with a consideration of how NHI and the supporting elements of reform can be better linked together in the future.

II. The Inherited System

The health care system that Poland inherited in 1990, with the end of communist rule, has many of the characteristics of those in the other transitional countries. To Poland's advantage, it received perhaps an above average share of the positive elements of this inheritance and a below average share of the problems. Nonetheless, the difficulties Poland faces in transforming health care are daunting.

The broad outlines of the system are well known. The state provided universal coverage with a comprehensive program of health care benefits provided through state-owned and run facilities. The system achieved high levels of population health status, even in relation to the other communist states.

Finance. Health care was officially paid for through the state budget. Formally, resources for health care were included as a share of the social insurance contribution made by enterprises on the basis of wages, but these contributions were not officially linked with expenditures on health care. Rather, funds were collected by the state, which then made budget allocations to health care and other sectors. In this sense, the system was not "contributory" by beneficiaries.

Real state health care revenues and expenditures declined during the 1980s, recovering in the early 1990s. In real terms, 1993 state health spending was still below the level of 1987 (Chellaraj et al, 1996). On the revenue side, the economic crisis accompanying transition threatened the contributions of employers, especially the large state employers in declining industries.

On the expenditure side, these fiscal constraints affected state health care providers through reductions in supplies, maintenance, and investment in new equipment. Despite these strains, the state budgeting system continued to allocate resources according to levels of fixed capacity (bed-strength for example), thus retaining incentives for expanding provision capacity while simultaneously under-financing the recurrent and investment cost support of that capacity.

Understandably, this lead to declining quality and rationing of scarce inputs. A system of informal payments emerged and became an important source of earnings for providers. Chawla et al (1997) estimated that, in 1993, these payments along with formal out-of-pocket payments, accounted for 38% of total health expenditures. Informal payments may increase take home pay of all medical personnel by about 15 percent on average, with a much higher impact on physicians' earnings.

This picture of constrained state funding and high fixed capacity is well documented. What has not been so well-documented is the large role of informal payments in health care financing, as real earnings support for health personnel and as a mechanism for patients to secure basic access and quality.

Service delivery. Post-communist Poland inherits a substantial health care delivery system as a result of historical investments as well as the incentives to establish capacity noted above. In international comparisons, shown in Table 1, Poland's health care supply is well above that of non-transition countries at a similar level of income, but modest in comparison with some other transitional countries in eastern Europe and the former Soviet Union. The common perception that there is gross over-supply, for example of physicians and hospital beds, in transition countries cannot be simplistically applied to Poland. Poland does not, like Russia, have a large margin of additional supply over that of OECD countries. Rather, one might say that Poland's state-run supply of health care facilities and personnel exceeds its ability to pay if costs were allowed to be set in open markets.

The composition of health care providers and facilities, rather than their absolute numbers, shows more clearly the legacy of incentives from the communist era. Almost all primary care services

are provided via policlinics. In 1992, 76.5 percent of all physicians were categorized as specialists, as compared with under 50% for OECD member countries (14 countries reporting, OECD, 1996).

Private medical practice existed informally under communism in Poland and was legalized in 1991. NERA (1997) reports that on average 30 percent of all Polish physicians engage in at least part-time private practice, which includes both general and specialty practice. It is likely that the figures in urban areas are much higher than the national average.

Health care consumption. The universal entitlement and sizable health care capacity resulted in generally high levels of health care utilization, as shown in Table 2. Rates of outpatient consultation and hospital admissions are well above those for other countries at similar levels of income as well as many of the OECD countries. There is a high propensity to use health care and a well-developed expectation of referral to specialist and inpatient services.

Political economy. During four decades of communist rule there was little open opportunity to question a system which embodied decisive political and economic structures, such as centralized control, state ownership, and egalitarian entitlements. But this system was imposed on a nation which had a lively history of political pluralism prior to communism. Pre-communist, communist, and post-communist values have emerged since 1990 in intense political and economic debate. Some of these factors significantly affect the health reform debate. These include:

- Sense of consumer entitlement. Polish citizens were promised, and perceive that they paid for, universal access to free health care of good quality. While disappointment with the decaying system is patent, this may not much diminish the sense that people are entitled to what was promised and that it is unfair and illegitimate to impose new costs on the public to provide it. Someone else should be made to bear that burden.
- Distrust of centralized, governmental solutions. Communist rule provided the archtypical experience of the centralized bureaucratic state. Economic reform has meant rapid and widespread dismantling of that state, at least in principle if not always so clearly in practice. Paradoxically, most successful models for health system reform include a strong state role, at least in financing. There is fear that such approaches will simply once again empower the ex-communist bureaucrats.
- Value of local government/governance. Genuinely representative local (commune and municipal -- "gmina") government was introduced in Poland in March, 1990. Local democracy provides a means at hand to balance the recentralizing tendencies of national government, which were highlighted by the election in 1995 of a "post-communist" legislature and prime minister.
- Protection of employment. Historically, health care workers, including physicians, have been relatively poorly paid, for example in relation to industrial workers. Under communist rule, employment was guaranteed. Despite popular frustration with the existing health care system, there remains strong reluctance among health care managers and the public to use staff reductions to increase resources and efficiency.

Key areas where change is needed. Successful reform of Poland's health care system must bring about change at many levels. These include:

- Consumer expectations. Patients have become accustomed to a health care system which they use frequently and which routinely includes use of specialists and easy hospital admissions. While informal payments are common, there is a paradoxical reluctance to accept the notion of formal payment for something which "should" be free. Expectations of quality of care, including use of diagnostic technology and advanced medical procedures,

may also be rapidly increasing with exposure of providers and patients to information from the west.

- Financial resources. At an estimated 6.7 % of GDP in 1994 (Chawla et al, 1998), total health spending in Poland, including informal payments, is probably still insufficient to support the existing system at an adequate cost level to assure quality. Almost 40% of this expenditure is currently not subject to any organized financing mechanism. Sustainable financing will require both some increase in resources as well as some supply reductions as costs find a realistic level in the Polish context. Economic conditions may permit some additional funding for health, but this must be balanced against other pressing needs. Of immediate concern is that additional resources need to be mobilized into organized financing to drive system reform.
- Allocation of resources. Resource allocation could be improved in a number of dimensions. First, inadequate attention is now given to health promotion efforts, which could address many of the causes of Poland's decline or lack of improvement in specific health indicators. Second, there are significant regional disparities in resource allocation. Third, resources within the health care system could be reoriented to greater support to primary care with reductions in unnecessary use of specialists and inpatient services.
- Organization of health care provision. Poland's current structure of health care provision has both positive and negative characteristics. On the positive side, much of Polish health care is provided through publicly-owned integrated health care provision organizations (ZOZs), which combine primary and specialist care and in some cases inpatient services. Such models have experienced some success in several OECD nations, e.g. some HMOs in the U.S. or district health authorities in the U.K. More negatively, however, Polish ZOZ's have operated purely as bureaucratic management units with inadequate funding. Policlinics as the sole providers of primary care may not be able to assure quality and patient satisfaction. Specialist clinics and hospitals have also developed under bureaucratic and budgetary norms which encouraged capacity growth rather than quality or results. Can the quality and efficiency of these integrated units be improved without breaking them apart? Are new modes of health care organization necessary at both provider and administrator levels? What about private health care providers, who currently operate almost exclusively from individual practices?
- Motivations and capabilities of health care managers and providers. Related to but separate from the organization of health care provision are the motivations of providers and managers, the incentives they face, and their skills and abilities to respond to new incentives. Providers and managers may often be motivated by a strong sense of social service, but this is constrained by their need to secure a livelihood on increasingly meager wages and the general lack of incentives to improve quality and efficiency. How will they respond to new market-driven opportunities for private earnings? Even if better incentives could be put in place for public services, managers and providers currently lack the information and the skills to respond to them. Data on costs, clinical processes, and outcomes are lacking in most care settings, as is the experience in responding to them.

Table 3 presents some observations of how these key areas of change are related to the health sector reform goals of efficiency, equity, health improvement, and public satisfaction. This suggests that the level of resources -- aggregate health spending -- may not be the most significant factor in achieving reform objectives. Rather, behavioral changes by managers, providers, and consumers are proposed as salient determinants of reform success.

Reform , in the sense of re-form or giving providing a new form, is an apt term for what must take place in Polish health care, since change will be needed in many aspects of the health care system. But how can such change be achieved? What is the appropriate mix of system-level restructuring and human and facility-level change?

III. The Coach: National Health Insurance in Poland

In an understandable response to the difficulties now faced by their inherited national health services, most of the formerly communist countries are moving "away from a system funded from general taxation with universal entitlement and towards funding from earmarked payroll taxation providing individual entitlement to care." (Ensor, 1993). While the specific elements differ across countries, some type of national health insurance (NHI) based largely on a Bismarckian model (Cichon and Normand, 1994) is widely perceived by national authorities as the best structural solution to common problems. National health insurance involves more than just a mechanism for collecting funds. It is expected to assure adequate financing, improving equity in funding, maintaining universality in coverage, and increasing efficiency and quality through use of a well-designed payment mechanism.

Politically, NHI as a generic structural solution has broad support. It can represent serious reform. It removes important determinants of health care system performance from the direct control of the former state bureaucracy. Yet it maintains, and even offers to improve, most of the popular entitlement of the previous health care system. It offers the promise of a system like those much admired in Western Europe.

Poland passed NHI legislation in January, 1997, after five years of debate. The NHI legislation builds on several earlier pieces of legal action, especially that related to creation of autonomous health care providers, the so-called "independent units". The legislation includes a two-year preparation period before implementation of NHI.

The Polish NHI includes the following major components:

- Eligibility will no longer be automatic for all citizens, but will be based on payment of premia. Premia will entitle the contributor to a defined package of benefits.
- For most Poles, premia will be paid through an earmarked payroll tax collected from employers. Others will either self-pay for eligibility, or have their premia paid by the state. Coverage is intended to be near universal.
- Unitary regional health insurance funds will be established. These will be separate from the state bureaucracy. They will receive premia and pay providers. Various mechanisms for redistributing funds across regions and to other uses are envisaged. Governance structures of these funds and subsidiary units at lower level are also laid out in the legislation.
- Health care services will no longer be provided through bureaucratically controlled health care facilities. Rather, the state provision apparatus will be broken up into "independent units" -- state-owned but autonomous hospitals, clinics, and integrated provider units. These will receive contracts and payments from the insurance funds.
- Private providers will also be eligible to register as approved providers and receive payments through insurance, under certain conditions.

Many elements of this program were debated in the process of developing the final legislation. Alternative proposals were considered. These included provisions to allow competitive public and private health insurance funds and greater competition with private health care providers.

One of the main alternative proposals was put forward by Solidarity, the leading opposition party to the Democratic Left Alliance, which at that time held a parliamentary majority and was led by President Alexander Kwasnieski. Another more pluralistic proposal was advocated by the Freedom Union, under the leadership of Leszek Balcerowicz. The result of the new parliamentary elections in Fall, 1997 was to give a Solidarity-Freedom Union-led coalition a majority in

Parliament, with Balcerowicz as the new Finance Minister. Revisions to the existing legislation which may introduce more pluralism in financing and provision, are now being debated.

While such changes could profoundly affect the performance of any new NHI system in Poland, they do not fundamentally change the intent of the legislation, that is, significant change in the underlying structure of financing, payments, and provision. The arguments over the organization of NHI are mostly relevant to the efficiency of the financing functions, especially collections, claims management, and consumer relations. All of these proposals depend largely on the same menu of provider payment options to bring about changes in health care supply and demand

IV. Supporting Reforms in Poland

Poland debated reform in health care financing for almost seven years before enacting legislation. This contrasts with several other transition countries, such as the Czech Republic, Hungary, and Russia, which established national health insurance much more quickly. However, during this period, Poland initiated a number of important changes in health care, which are essential underpinnings to make financing reform work.

Private practice. Private physician practice was legalized in 1990. Private practitioners can operate their own offices as small businesses. They must register with local authorities, make financial statements, and pay taxes on their earnings. It is estimated that up to 30% of Poland's physicians now engage in private practice at least part time (NERA, 1997).

Family doctors. Physician practice in pre-transition Poland included no formal "general practitioner" in primary care. Policlinics were staffed by pediatricians, internists, and several other basic specialists, with frequent use of referrals to other specialists after an initial consultation. A new "specialty", the family doctor, has now been created. Training as a family doctor is available both to currently practicing physicians as well as to medical students. Family doctors typically open their own private practice as an alternative to primary care provided through the policlinics. There is a substantial program of financial assistance to enable family doctors to rent and furnish office space.

Independent Units. Legislation in 1991 established the legal basis for publicly-owned health facilities to function as "independent units" -- government-owned but substantially autonomous, not-for-profit health care provider units, although the first of these units was only registered in 1996 (Tymowska et al, 1996). These units would operate according to the provisions of Poland's commercial law, rather than the law applying to government bodies. Hospitals, policlinics, and even ZOZs could become independent. Independence includes autonomy in employment decisions, authority to raise funds outside of government budgets, and authority to enter into contracts. It also eliminates the ability of health care facilities to incur debts guaranteed by their supervising government body. In theory, independent units could make surpluses or losses and, if unsuccessful, cease to operate.

Local government ownership. Central government devolved ownership of public sector health care providers to local and provincial governments in 1993. This has involved a substantial devolution of financial management and some introduction of local financing, although most financing for these providers is still received from central budget allocations to the local government authorities. Provincial governments now own most hospitals. Under the provision of a 1995 law "Concerning Changes in the Scope of Activity of Some Cities", Poland's 46 large cities ("gmina") were offered ownership over primary care providers, including policlinics, specialist clinics, public health providers and a few hospitals that were included in the related ZOZs. Most took up this challenge to local, democratically-elected government, despite concerns about the financial and political roles involved. Local government outside of large cities (also called gmina) was given authority over primary care facilities in their jurisdiction. There is also an experiment underway to create new local "social service zones" combining several small gmina into a more manageable size.

Contracting and payment system experiments. Although not entirely legal prior to the introduction of independent units, provincial and local governments were encouraged to experiment with methods for separating finance and provision of services through contracting and negotiated payment methods. Suwalki province, a primarily rural area in northeastern Poland, has been the most advanced in these experiments, introducing a variety of payment methods since 1993 with a number of different types of providers, including hospitals, physicians, dentists, and laboratory technicians. Local governments in Suwalki have also been experimenting as fund-holders, paying

physicians and hospitals for services. In 1996, an official national experiment of contracting with independent units was initiated and these efforts are expanding.

Information systems. Poland has taken steps to develop and introduce some of the new information systems that would be required for management of health care resources. A new standardized cost accounting system for hospitals and clinics has been introduced, which calculates costs based on market prices and includes charges for depreciating capital items. A new patient and encounter based record system is being tested, which would allow analysis of resource use and outcomes for individuals, episodes, and encounters, and traces the patient through different levels of the health care system.

V. The Logic of NHI as the Engine for Poland's Reform

In Poland, as in other transitional countries, NHI is expected to be the principal means through which fundamental health system change will come about. This expectation is based on a tacit or implied logic. NHI will operate mainly through three mechanisms: resource mobilization; resource redistribution through and across the regional insurance funds; and a provider payment system. As noted above, it is the last of these -- the separation of finance from provision and the application of a new provider payment system, with financial incentives to change behavior and performance of providers and consumers, which is expected to be the most potent.

In terms of resource mobilization, NHI provides a means to raise funds for health care through mandating earmarked contributions from the eligible population or from the state for those unable to make such contributions. Since collections will continue to be done through the same state apparatus that now collects taxes, and since direct state subsidies to insurance funds are still envisaged, it is unlikely that this system will perform worse than the current state financing system. That is, if anything revenue sources will be more clearly identified and the state is still available to assure at least historically comparable levels of financing.

Indeed, analysis of health expenditure trends through the mid-1990's in other eastern European countries which have adopted NHI shows that total health expenditure has increased even when resource mobilization via insurance alone has faltered, since governments remain major contributors and feel impelled to make up financial shortfalls as a last resort (Goldstein et al, 1996). Secular growth in health expenditure will depend significantly on economic growth, as it probably would under any system during this period of economic recovery. The ability to raise additional funds will depend on the same state-based mechanisms of collection and compliance. Although one might anticipate some future increase in the willingness of firms and individuals to contribute to a more accountable system, this is most likely to follow better system performance, rather than to anticipate it. Similarly, the resource redistribution across regions or between different types of services envisaged for NHI would be carried out largely under central direction.

It is the creation of financing entities distinct from those providing health care and the creation of new payment systems and associated monitoring and regulation that is expected to have the biggest immediate payoff. It is proposed that the new insurance funds will negotiate contracts with providers (mainly public but some private) which will dramatically change their incentives. The new payment and performance-based incentives are expected to drive far-reaching changes in health care provision, including capacity reductions and reorganization, improving productivity, reducing excess use of higher cost services, increasing service orientation to patients, and improving quality of care. The introduction of co-payments by patients will also operate on the demand side, reducing unnecessary use and increasing patients' sense of entitlement to better treatment.

Can NHI achieve the desired health system reforms?

If NHI does not adequately address some of the specific changes needed to reform Polish health care, or if the conditions are not in place to allow the mechanisms driving change to operate successfully; the assumption that a dramatic restructuring of health care financing arrangements will drive the desired changes in the rest of the health care system may be unsound.

NHI, as now legislated in Poland, will do little to address several important areas of change. The insurance legislation is mostly focused on resource mobilization and resource allocation. Provider payment methods are not specified in detail, but are left to negotiation between insurance funds and independent and private providers. However, it is the provider payment mechanism that is expected to provide the means for changes in health care organization and in the productivity of health care providers and managers. Consumer behavior is also expected to respond to the new incentives faced by providers, which will result in changes in volume and utilization patterns.

There is little experience with new payment methods to date in Poland (see chapters by Dudarewicz and Roslewski in Tymowska et al, 1996) and little guidance provided in the law. There are however, strong demands by some provider organizations, like the Physicians' Chamber, for generous fee-for-service payments.

The resource mobilization and provider payment functions can be addressed in a top-down manner, through the establishment of a few organizations to carry out these functions at national and regional levels. In contrast, reform at the level of individual consumers and providers, or provider organizations, requires changes in organization and behavior by a very large number of dispersed units and individuals. The proposed NHI program in Poland does little to acknowledge or address the micro-foundations of reform. There is little investment planned to support organizational changes or new skills required for health care providers. Nor is there any proposed program of public information or social marketing.

These issues have not received much attention during the political debate over NHI. The parliamentary debate has been preoccupied with disagreements about unitary or multiple competing insurance funds and special provisions for large firms or other groups. These issues have also occupied much of the attention of senior government leaders. This focus may be misplaced. Where are the greatest efficiencies likely to be gained: from better management of the collections and payment functions in a few competing payer organizations or from widespread improvements in provider and consumer behavior? The latter seems more plausible.

The main argument supporting Poland's current approach is that a powerful systemic change, such as the separation of finance from provision and the introduction of new financial incentives via the payment system will, by itself, produce the desired micro-level changes through the decentralized magic of the market. New rules and incentives elicit the rational response of many different actors, resulting in desirable change. But do the conditions now prevalent in Polish health care enable this process to occur? Are the providers and consumers able to respond sufficiently, and in the desired way, to the new conditions being established by financing reform? There is good reason to be skeptical.

VI. The Horses: enabling change among providers and consumers

While NHI may create new financial incentives for managers, providers, and patients to behave in desired ways, these incentives may not operate as expected. Their efficacy is determined both by the inherited environment of values and norms amongst the various players as well as the extent to which supporting conditions are in place to enable them to work.

It is beyond the scope of this paper (and the abilities of its author) to attempt an extensive analysis of values and norms in Polish society. Some of the key elements have been well described by Wlodarczyk and Mierzewski (1991). Their analysis highlights some of the difficult contradictions now prevalent in Poland.

For the public, as consumers of health care, there is frustration at the inability of the existing system to satisfy their wants, but resistance to the notion that they, the public, must do more to support that system. First, there is the notion that they have already paid for social services, both through direct wage-based contributions of enterprises as well as through depressed earnings from decades of socialist economics. Second, they already routinely make sizable out-of-pocket contributions as part of the real cost of public services and there is no immediate prospect that these will be eliminated. Out-of-pocket payments for private or unofficial service may be more acceptable than increased contributions for official care, at least until a new system has proved itself.

Providers face a sharp contradiction between their ethic of dedication within what at one time was a successful national health service and their need to increase their earnings in an environment which increasingly rewards those who follow the habits of the market and punishes those who do not. Polish physicians observe that their colleagues in Western Europe earn far more than they do in absolute terms and also are much more highly placed in the relative distribution of earnings in their own countries. The new market economy rewards entrepreneurs: why not doctors? New formal mechanisms for increasing those rewards will not automatically eliminate the current informal mechanisms. Within health care institutions, other health personnel fear and resent the breakdown of modest differentials in earnings and authority that characterized the previous system.

The ubiquity of Poland's "grey" health care market -- the informal payments to providers and other health personnel for quick access or better quality service suggest that what is needed is not just new payment methods and official incentives, but changes in the meaning to consumers of their entitlement and in the meaning to providers of their service.

Wlodarczyk and Mierzewski conclude: "If they are to meet their goals, none of the proposed changes can be forced against the expectations and hopes of the society and the medical circles. Each of them must find its acceptance, either on the basis of rational arguments, or through trust..."

To put the matter more starkly, can one expect restraint, deferral of self-interest, and increased solidarity from a population that profoundly distrusts organized solutions and feels deceived and exploited by the promises of the past? Will providers voluntarily support an ethos of efficiency when they have become accustomed to transactions outside the formal system? One must at least question how well these changes will occur if one trusts only to the "invisible hand".
There are four other important conditions that enable or constrain the desired response by providers and consumers to the health financing reforms being introduced to Poland. These are:

- Authority: whether the actors, mainly the provider organizations, have the legal and organizational basis for responding to the new finance environment;

- Capacity: whether there exists the necessary factor inputs, such as staff, buildings, equipment, supplies, to respond adequately;
- Capability: whether the managers, service providers, and patients have the knowledge and skills to respond appropriately;
- Information: whether there exists the necessary information to enable payers, providers, and consumers to respond rationally.

Authority. As in most transitional countries, there remains significant uncertainty about some of the legal authority which is currently and which will in the future be vested in public administration and health care providers. Poland has taken steps to address some of these issues, through the devolution of ownership of health care facilities to provinces and municipal governments and through the independent units legislation.

The NHI legislation envisages a payment system built up through contracts between insurance funds and providers. Providers will mostly be publicly-owned independent units, although some will be privately owned enterprises. Legal uncertainty pervades the ability of these providers to respond to new incentives.

There are different interpretations of the meaning and intent of the independent unit concept. On one side, there are those who see independent units persisting as publicly-owned service enterprises, for which the owning authority employs a management team which has significant autonomy. One city manager likened this to recruiting private management to run a city's tram system as a separate cost or financial unit. The primary concern would be to make the system work better through a type of private management contract, while the public entity retains ownership and responsibility. A contrasting view has independent units functioning like not-for-profit private enterprises, fully autonomous in operating and financial matters, but with some uncertainty about their ability to dispose of existing assets (see below). The director of one prestigious cardiac care clinic with a national reputation has been eager to obtain independent status. He expects many new opportunities to raise revenues for new investment.

One specific area of uncertainty concerns the authority of publicly-owned independent units to sell assets, such as buildings or equipment. Since these units are "owned" by provincial or municipal government, sale of assets may not be allowed without action by the relevant government body. There is at present no clear procedure for valuing assets for sale or handling the proceeds of such sales.

In contrast, it is widely agreed that independent units will have the authority to hire and fire staff. However, staff in public facilities possess considerable influence over local governments collectively through their unions, including official union representation in local government management bodies. Will independent units be permitted to exercise this authority over personnel?

Under the law "Concerning Changes in the Scope of Activity of Some Cities", which devolved ownership of primary care facilities, city governments retain the legal responsibility to assure access to health care to their citizens. This has led to providers being able to incur substantial debts (financial obligations in excess of available funds) for example, to purchase drugs and supplies. These debts have, to date, been debts of local government for which they have sometimes received special central government assistance. The independent unit model is intended to put an end to the transfer of these debt obligations, leaving the provider unit financially responsible. In theory, independent units should be vulnerable to insolvency and may be forced to close. But it is unclear whether local governments can be held legally accountable for continued access to services if independent units close. If so, would they not step in to support insolvent units? What is the meaning of the financial "bottom line" faced by these units?

Capacity. Poland's fiscal crisis of the 1980's and early 1990's resulted in declining real health expenditures, despite worsening health status. Hospitals and clinics have operated with inadequate resources for maintenance and investment for some time, and even shortages of recurrent inputs, for some time, with resultant quality declines. A new finance and payment system will, at least initially, not produce dramatic increases in the total amount of resources available. To what extent does the capacity now exist to produce the services that will be demanded under NHI at an acceptable level of quality?

One aspect of this issue concerns the ability of ZOZ and facility managers to respond make available adequate services within the current financing envelope. National health accounts estimates from Poland (Chawla et al, 1998) indicate that about 80% of state ambulatory care spending and 63% of hospital care spending currently goes to salaries. A primary goal of new payment methods is to increase financial incentives for productivity and quality of health worker performance. This implies increasing health worker earnings, at least for those workers who are performing well. It is clear that, without substantial new funds, the current pattern of expenditure leaves little room for filling capacity gaps if wages must also rise. Rising wages and filling the gaps of historical underspending on maintenance, investment, and recurrent inputs can only occur if there is some reduction in personnel numbers. The problem in Poland is not an absolute lack of capacity, but rather that the existing capacity and the available funds are way out of balance, fostered by decades of incentives to increase capacity while costs were artificially held low. The competing claims of those already in this underfinanced system limits its transformation into a health care system suitable to the available funds. Chawla et al (1998) characterized this as "having a developing country health financing system trying to support population demands and health care services of a more advanced country."

Indeed, the result is seen in some of the recent experiments with new payment methods in Krakow city and Suwalki province. In Krakow city, new family physician practices, are paid as an annual capitation per enrolled patient the current per capita primary care budget in the city. This expenditure-neutral payment resulted in dramatic reductions in the support staff per physician in the private family physician practices. This included nurses, clinical assistants, and clerical staff (Chawla, et al, 1997). In Suwalki, the initial wave of contracting was financed by increased budget allocations from province and central funds. Contracted physicians worked as individual practitioners, with much higher earnings, and leaving their "share" of the provincial support staff to be paid by the remaining provincial funds (Dudarewicz and Chawla, 1996). It was clear that while the number of contracted physicians remained small, this situation could be managed. But as the number of physicians under contract increases, the residual funds will diminish. This type of cost-shifting is not sustainable.

One implication of a shortfall in capacity, which is well known from developing country experience with social health insurance, is that covered beneficiaries seek care in the private sector despite their eligibility for insurance-financed services. Poland's already extensive system of informal payments makes this easy to imagine. Another implication could be that unmet demand in the insurance system creates strong pressures on the government to "bust the budget" to finance adequate capacity. The political economy of NHI, which promises a new real entitlement based on individual contributions to replace the unfulfilled entitlement of the previous system will encourage this outcome.

Capability. The effectiveness of a new payment system depends on the capability of health service managers and individual providers to respond to new incentives. To do so, in addition to having the requisite authority they must be motivated in the ways expected and must also have the skills to change the way things are done. This could include developing new modes of service provision such as internalizing procedures that had been handled previously by referral, reducing hospital stays, or moving procedures from inpatient to outpatient care. Or it could include reorganizing service provision in the sense of expanding or contracting physical facilities, changing staff configuration, and integrating or separating previously existing units. New types of

managerial skills are also required. These include such diverse abilities as being able to develop and interpret balance sheets or health care utilization and output data, and organizing and motivating staff or creating a "corporate culture".

It is already evident, even before the shift to NHI, that some Polish managers and providers have such capabilities. But how widespread is this and how rapidly can these abilities be elicited? While there have been a few exciting areas of innovation in Poland, business as usual is far more prevalent to date.

Information. Related to the capability of managers and providers to effect change is their having access to essential information to effect change wisely. As noted above, Poland has taken some steps to address information issues in financial accounting and patient and episode based records. But these have either just been introduced (cost accounting) or remain experiments with limited coverage (patient-based records). In most Polish hospitals and clinics, financial and patient information systems remain very rudimentary.

In each of these, Poland has made some effort to build up the necessary preconditions for positive reform. But these efforts are far from adequate, and many remain experimental.

VII. Lessons from other transitional countries

What are the implications of gearing up the coach, with insufficient attention to the horses? A brief review of the experiences of some of the other transitional countries who were much quicker to implement national health insurance might be instructive.

Two eastern European countries, the Czech Republic and Hungary rapidly moved health care financing to a social insurance model: the Czech Republic in 1992 and Hungary in 1989. The Russian Federation also moved more quickly than Poland to legislate health insurance in 1993. Significantly, both Hungary and the Czech Republic are much smaller countries than Poland in physical size and population, making the rapid implementation of NHI easier, whereas Russia is of course much larger and diverse, compounding the difficulties.

Czech Republic. The Czech Republic established a social health insurance organization, the General Health Insurance Office, in January, 1992. This was followed by significant steps to privatize health care provision, as well as to encourage pluralism in health care financing.

By the end of 1993, 85% of all health care facilities in the republic were under private ownership. Privatization moved rapidly in primary care, with "90% of general practitioners and 70% of pediatricians and adolescent care physicians" in private practice by that time (Filer et al, 1995). Hospital ownership is distributed across local government, joint stock, and individual ownership (Ensor, 1993).

Privatization of financing began simultaneously in 1994. By the end of 1994, in addition to the state-owned General Health Insurance Office, there were 18 competing private insurance companies. Enrollment in insurance is mandatory. Funds are raised through a combination of a wage-based tax (13.5%) split 2:1 between employer and employee and state or individual contributions for certain groups.

A largely fee-for-service payment system was established combining a relative value scale or "point" system for labor and overhead costs but allowing direct cost reimbursement for material costs, such as drugs. The GHIO established the scale and a standard point value, but private insurers are allowed to pay more or less than GHIO point value.

The results of this system were fairly predictable. The population's sense of entitlement to frequent and generous medical care remained unchecked or was even encouraged by the promises of the benefits of the end of communist rule. Newly privatized providers faced strong incentives to increase output and even stronger ones to be generous in their use directly reimbursed material inputs. There were no substantial regulatory checks on this process, since providers were independent and insurance contracts promised benefits. Cost escalation was rapid, bringing the Czech Republic's health spending from 6.5% of GDP in 1991 to 9.5% of GDP in 1995 (Goldstein et al, 1995 and World Bank, 1997). The state was forced to subsidize rising expenditures and several private insurers faced bankruptcy.

In one sense, the rapid movement to NHI was successful, in that it created a viable and productive health care provision sector almost entirely outside of government administration. It also rapidly created the capacity to satisfy population demands for access and quality, which had been repressed by the previous public system. However, without sufficient checks on demand, volume, and quantity, the price in cost escalation was very high. Retrenchment now is also very difficult, with both providers and patients expressing new levels of entitlement.

Hungary. Hungary provides an interesting contrasting case with that of the Czech Republic, since it opted for a more unitary health financing structure with an early introduction of different payment methods. Having established this new structure, Hungarian authorities have tried several different approaches to reforming health care provision with mixed results.

Hungary created a single payer social health insurance system in 1989, but only separated health financing from pension financing in 1992 with the establishment of a national Health Insurance Fund. Health funds are raised through a compulsory earmarked payroll tax.

Hospitals remain under local government ownership. Primary care was officially reorganized in 1992 by administrative rule, renaming district physicians as independent family physician practices. Individuals are free to register with their preferred physician.

In contrast to the Czech Republic, Hungary moved quickly to introduce payment methods which in theory would provide appropriate incentives to improve health care provision and control costs. Hospitals are paid by a "DRG"-type system, although one with fewer items than that found in the U.S. Primary care family practices are paid by capitation and specialists on a fee-for-service basis.

Hungary has avoided so far the very rapid expenditure escalation of the Czech Republic. Since the establishment of the formal health insurance fund in 1992, total expenditures have remained relatively flat, at about 7.5 percent of GDP. (Orosz et al, 1997). The payment methods implemented in Hungary lend themselves more easily to controlling expenditures under a total budget constraint, in that one can adjust the value per unit of payment to accommodate different total spending levels.

Nonetheless, the new health insurance system did experience serious fiscal crises requiring government intervention. These were related to shortfalls in expected collections of premia and the high expectations and demands of providers (for increased income) and patients (for better and more comprehensive service under covered benefits) (Szatmari, 1993). The Health Insurance Fund does not have full authority to set payment rates and contracts independent of government involvement. This has limited its ability to take full advantage of the payer role. Implementation of the scheme was uneven across Hungary's regions, resulting in persistent inequities in health financing and use.

The intended changes in health care provision have, on the whole, not been successful. The nominal change in the role of primary care physicians from district doctors to family doctors, was not preceded by adequate retraining in new approaches to primary care practice. As a result, patterns of use and referral have changed little (Orosz, 1996). Capitation payment encourages early referral to specialists and hospitals.

Restructuring of hospital services, including reduction in capacity, has also not met expectations. The DRG system kept global costs under some control, but individual hospitals still act as if there is greater benefit from increasing their own volume than from reducing excess capacity. Administrative measures were introduced to reduce hospital capacity in 1995. These met with great opposition from providers. Few hospitals were closed. While there was some reduction in bed strength, staff cutbacks were more often avoided, so there was little financial saving. For both hospital and primary care, unofficial payments remain prevalent.

In a recent analysis of Hungary's "unfinished agenda" for health reform, Orosz and colleagues concluded that: the new financing incentives introduced in 1993 were not sufficient for providers to increase the efficiency of health service provision. Furthermore, they observed that the breakdown of financial and professional control led to widespread bending of the new financing rules, including false reporting of performance. “As a consequence,” they remark, “health policy” and health policy makers have lost credibility in the eyes of professionals and the public." (Orosz et al, 1998)

Russian Federation. In light of its size and diversity, Russia opted for a regionalized financing system under national health insurance. Resource mobilization is delegated to the regions, based

on an earmarked payroll tax. Provision is made for contributions to a central fund for redistribution and equalization.
Within the regions, both public and private (commercial and non-profit) insurance funds will compete for enrollees, receiving a risk-based capitation premium for each enrollee from the regional funds. It is intended that provider payment will employ a variety of methods.

A number of regional experiments to develop and test various elements of this scheme were initiated during the late 1980s, before the break-up of the Soviet Union (Ljudmila, et al 1995, Sheiman, 1995. These experiments combined restructuring of finance into regional insurance funds with pluralism in organizing the payer function and intensive work with hospitals and clinics to develop the mechanisms to respond to new incentives. They demonstrated that restructuring of finance and payments could indeed lead to dramatic changes for providers and patients. The Russian health care system had much larger supplies of physicians and beds than those of Poland and eastern Europe, so that the scope for reallocating resources was much greater.

A key lesson of these early as we as subsequent experiments is that much effort must be devoted to strengthening the recipients or objects of these new finance and payment structures. Langenbrunner et al (1996) describes the technical and managerial assistance needed at multiple levels of the health care system in order to achieve significant changes in hospital and outpatient service utilization rates and coverage of public health services.

However, these hard lessons were not heeded in the rush to pass NHI legislation. Russia passed the initial legislation in 1993, during a period in which profound economic and fiscal crises were far from over. As initially described in Chernichovsky, Barnum, and Potapchik (1996), implementation of this new scheme of regionalized insurance was very uneven. The state's ability to collect revenue from enterprises has been severely constrained and highly variable across regions. Since the passage of NHI legislation, there have been periods of hyperinflation. The capability of the central state authorities to enforce laws and regulations in the regions is not assured.

Meanwhile unregulated privatization of health care provision, with out-of-pocket payments proceeds. While some provincial authorities have been able to implement the new NHI system in whole or in part, in many areas it has had little effect. It is unclear whether the state and regional governments will be able to establish sufficient authority and capability to assure widespread adoption of the system before it is overtaken by a spontaneous privatization.

Chernichovsky, Barnum and Potapchik conclude: "The legislation is excessively preoccupied with the mechanism of financing." They also note: "...if health system reforms are to be implemented successfully, supporting institutions, including a functioning banking system, capital markets, a stable currency, and mainly contract and property laws, are required. These institutions do not fully exist yet...The specific design and rate of adoption of reforms should be tied to changes in other sectors of the economy."

VIII. Conclusion

International discussions of health system reform have emphasized structural reforms in health care financing. The debate in the industrialized countries has sought to synthesize diverse experiences into an "emerging paradigm" or "convergence" to a consensus about the conditions of an optimal system (Chernicovsky, 1995, Saltman, 1997). Central to this emerging paradigm is the notion of an important state role in organizing, or at least highly regulating, the financing of health care. The notion of convergence can still accommodate sizable differences in important aspects of national health care systems, such as the level of total spending, size and composition of health care supply, or volume of service consumption. These differences are attributed to national differences in social values, preferences, and the historical development of the institutions of the health care system (Besley and Gouveia, 1994). Successful health care financing structures -- those that produce stable or at least predictable health care systems -- depend on well-developed institutions and patterns of behavior.

The transitional countries, especially those of eastern Europe, look to their wealthier neighbors in the west for models for their own future health care systems. In this search, there is a tendency to seek structures and methods to imitate, without fully appreciating the decades of legal, organizational, regulatory, and human development that have established patterns of behavior amongst the payers, providers, and populations who make up these systems. It is these underlying factors that allow well-regulated financing to succeed. The structures and methods of financing, like NHI and different provider payment methods, are the means or mechanisms of control. Yet the transitional countries have not had the time or opportunity to develop stable institutions or patterns of behavior within a market-oriented health care system.

Lurking behind the health sector reform debates are more fundamental issues concerning the role of the state generally and the particular experience of transitional nations (Kornai, 1998). The contrast between Poland's rapid opening to the market in general economic reform (despite some backsliding since then) and its tentative approach to health care is indicative of deep uncertainty. How relevant is the experience of economic reform in reforming health care? Specifically, what kind of health care system would Poland develop if it simply adapted the strategies of economic reform -- primarily the establishment of essential "market-friendly" legal and regulatory institutions and market-determined prices for inputs and products -- to the health sector? Would the outcomes from greater consumer choice and entrepreneurial behavior of providers be socially acceptable and sustainable in terms of health, equity, and cost? Should health care be treated differently from other sectors of economic activity?

One should be cautious in arguing for the difference of health care, as similar arguments have been made for general economic reform. Are health care providers and consumers any more or less capable than others of responding to a new and different environment? Is the state, or in the case of NHI some new quasi-state entity, likely to function any better in health care than it would in other sectors? Is there any way to "manage" the development of the micro-foundations of an efficient health care system?

International experience suggests a different approach in health care should be considered. The social costs of relatively better or worse regulated systems in terms of total expenditure and equity can be quite large. Poland can ill afford rapidly escalating health care costs today. The human and political value of assuring basic social protection in health may also be an important supporting element for sustained economic reform. This argues for a program of modest and gradual change with a continued strong state role.

For Poland's proposed NHI, the appropriate question is not whether to engage in structural change at all without replicating those decades of micro-level development, i.e. coach or horses? Rather, it is fitting the right coaches and horses together and gradually developing their ability move in harmony.

The experience of the early adopters of NHI in the transitional countries is that there are large risks to constructing a misfit and that the costs these misfits incur may be very difficult to remove. To continue with the coaches and horses analogy, the Czech Republic acquired a very sophisticated coach and hitched it to its fastest horses. It now has great difficulty in steering and may already have broken a wheel. Hungary obtained a more modest vehicle. It was able to move, but finds itself mired in the middle of the river, unable to encourage forward progress. Poland is still trying to get the coach onto the road.

While all the transitional countries face strong political imperatives to introduce dramatic reform, there are benefits to resisting these pressures. In Poland, indecision on NHI has permitted some important work to be done to develop the mechanisms of health system change at the provider and population levels. However, this work has not yet been sufficient to make NHI work well in Poland and the political piper has demanded payment.

There may be alternatives to a hasty leap into national health insurance in Poland. At the national level, Poland could still move rapidly towards an NHI-type system, based on identifiable contributions and taking health spending off-budget. A simple approach to resource mobilization and regional allocation is to be preferred, i.e. refrain from introducing competition into the upstream elements of health care financing. In contrast, diversity of approaches and local competition should be encouraged in the development of provider payment and health care delivery strategies. NHI resources could be used to finance a wide range of transitional strategies, taking advantage of regional diversity and local government autonomy to develop and test payment methods and new approaches to health care organization across a range of public and private non-profit and for-profit ownership.

For example, regional health funds could finance different approaches to managing payment and provision, going well beyond the simple model now proposed of funds contracting with independent provider units in both the public and private sectors. Some local governments, especially in larger cities which have some resource mobilization capability, may be willing to act as financing intermediaries, receiving and managing a capitated allocation from a regional fund and developing their own payment systems. This could also include all or part of the benefit package proposed for NHI. It could include intermediaries functioning purely as payers as well as those integrating finance and provision. Alternatively, local governments may be able to create integrated provider organization who could receive contracts for coverage of the population with a defined package of benefits.

Unitary regional funds with central coordination would also be able to allocate resources to the development, monitoring, and evaluation of alternative approaches within national guidelines. This should include funds for training health financing and health care managers and providers as well as for public information and education.

New approaches to health care financing can help enable the profound reforms needed in health care in Poland. But experience in neighboring states suggests that the desired change is unlikely to follow simply from the creation of a new financing structure. A balanced approach is needed which builds up the micro-foundations of change while putting in place structures to create new resources and incentives. Thanks to caution or controversy, Poland still has time to fit the right coach and horses together.

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Table 1: Health Care Supply in Transitional and OECD Countries

Country	*Year*	*Physicians per 100,000 population*	*Hospital beds per 100,000 population*
Other countries of similar income (around $2400 GNP per capita)			
Thailand***	1992	24	170
Costa Rica***	1990/93	88	250
Poland*	1993	222	560
Other transitional countries			
Czech Republic*	1994	290	980
Hungary*	1994	343	990
Russia**	1993	339	1290
Average: Low and middle income countries in Europe and Central Asia***	Mixed years, first half of 1990s	313	920
Average: High income countries***	Mixed years, first half of 1990s	235	760
United Kingdom***	1993	150	510
United States***	1992/3	250	440
Germany***	1993/4	330	970
Sweden***	1995	310	630

Sources:
* Chellaraj, et al (1996)
** Chernicovsky, Barnum, Potapchik (1996)
***World Bank, (1997), HNPStats database

Table 2: Health Care Utilization in Transitional and OECD Countries

Country	***Year***	***Outpatient consultations per person per year***	***Inpatient admissions per 1000 population per year***
Other countries of similar income (around $2400 GNP per capita)			
Thailand +++	early 1990s	3.2	82
Costa Rica ++	1990	about 3.0	about 100
Poland*	1993	6.4	128
Other transitional countries Czech Republic*	1993	13.4	187
Hungary	1994	14 ***	213 +
Russia**	1992	8.7	209
OECD Average***	1989	5.6 (14 countries)	167 (20 countries)
United Kingdom***	1989	5.7	159
United States***	1990	5.5	137
Germany***	1987	11.5	209
Sweden***	1990	2.8	195

Sources:
* Chellaraj, et al (1996)
** Chernicovsky, Barnum, Potapchik (1996)
*** OECD, 1993
+ Estimated discharges in 1994.
++ Pan American Health Organization Health Conditions in the Americas, 1994
+++ cited in Dept. of Planning, Ministry of Health and Data for Decision Making Project, 1997.

Table 3: The Importance of Specific Health System Changes to Poland's Health Reform Objectives

Areas where change is needed	***Health Reform Objectives***			
	Efficiency	***Equity***	***Health improvement***	***Public satisfaction***
Level of resources	+	+	o	+
Allocation of resources	++	++	++	+
Structure of health care provision	++	o	+	++
Motivation and incentives of providers and managers	++	+	++	++
Consumer expectations	++	o	o	++

++ = very important factor

+ = relevant factor

o = not so relevant factor