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Chapter 6

CAN A TULIP BECOME A ROSE? THE DUTCH ROUTE OF GUIDED SELF-REGULATION TOWARDS A COMMUNITY-BASED INTEGRATED HEALTH CARE SYSTEM

by

Niek Klazinga, Diana Delnoij and Isik Kulu-Glasgow*

Abstract

The Dutch health care system has both in financing and health care provision a hybrid nature. Financing is realized through a mixture of public and private insurance executed by care insurers with a (semi) private status. Health care is provided through professions and institutions that function to a large extent as not-for-profit private entities within a highly regulated context, reimbursed through a mixture of budgetary, pro-capita and fee-for-service schemes. The role of the state has changed over the years. Roughly one can claim that in the fifties and sixties the welfare state was created, in the seventies and eighties government tried to control the growing costs through managing the structure of health care by planning regulation and in the nineties the processes within the system (regulated market) were the main policy paradigm. At the turn of the century the steering paradigm is shifting towards the input (needs assessment) and outcome (performance measurement) of the system. Not only production and costs, but also performance in terms of health outcomes and consumer satisfaction are deemed relevant management factors. This shift is facilitated by the present perceived performance crisis (waiting times are a pressing political issue) and a public call for more transparency. One of the challenges in creating this new steering paradigm lies in linking the various quality management activities set up since 1989 with a stronger public health orientation and community participation. Performance indicators can only be of use if they are part of existing management cycles either set up for internal process control and improvement or for external accountability. This paper will explore the following:

- First the nature of the Dutch health care system and the rationale of the existing policy and management mechanisms will be explained in more detail. Self regulation plays an important part in the Dutch health care system. This is partly due to the historical (not for profit) private nature of the main part of the system and a consensus culture for policy making.
- Secondly the results of a national policy on quality of care will be discussed. This policy, based on the premise that care providers should develop quality systems for internal process control and external accountability towards consumers and insurers, has been in place since 1989. Various components of the national quality policy will be discussed both for health care institutes (*i.e.* quality systems and certification/accreditation) and professions (relicensing, external peer-review, practice guidelines, clinical indicators and audit). The functioning of these various components will be discussed and linked to the debate on performance indicators.
- Thirdly an analysis will be provided of the strengths and weaknesses of the Dutch approach in optimizing the overall performance of the health care system. To do this, data on the public

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health situation will be presented that are collected regularly for the Public Health Forecasting Scenario's (RIVM 1997). By focussing on the performance of individual health care institutes and organized groups of professionals, the overall performance of the system is not an integrated part of the existing management cycles. Although government initiates specific public health policies in areas of concern, the preventative function, the cure and care function and the social care function are to a large extent separate entities. The analyses will show how the development of community-based integrated care takes place in a health care system dominated by self-regulation.

1. What are we talking about: conceptualization and operationalization

In the title of the conference "Measuring Up: Improving Health System Performance in OECD Countries" at least four different concepts are introduced. These are the concepts "health system", "performance", "improvement" and "measurement". The assumption is that the four concepts can be operationalized and linked to one another in a meaningful way. In this paper we will explore to what extent this can be done for one country, The Netherlands. This paper therefore presents a case study that illustrates the complexity of linking the four concepts but it may also contain some lessons for other countries going through similar processes. In a recent paper on the applicability of complex adaptive system theory on health care systems, Plsek argued that it is helpful to speak about health care systems in organic rather than mechanical metaphors (Plsek, 2000). It is for this reason that we decided to present the Dutch health care system as a tulip. The tulip is a national symbol. Its leaves are rather well organised around the stem and, when fresh, it has no smell. Some people like the symmetry of the tulip, others see it as a rather dull flower. The ambition is to turn it into a rose. Flowers with a more compassionate symbolism, a larger amount of loosely but compact integrated leaves and a nice smell. In this paper we will try to describe the route the Dutch health care system takes in turning from a tulip into a rose.

In essence we conceptualize the health care system as the compilation of organized efforts of society (public as well as private) to help its population to produce health. We conceptualize performance as the realization of the common felt goals of the health care system on medical effectiveness, responsiveness, efficiency and equity. We conceptualize improvement as the policies and activities related to quality of care and we conceptualize measurement as the attempts to transform information on the health of the Dutch population and production of its health services into indicators that can be used in the existing management- and policy frameworks. Emphasis in this paper will be on the dimensions of medical effectiveness and responsiveness as this is our own field of expertise but discussions on efficiency and equity of the Dutch health care system, which are usually led by health economists (Van Doorslaer *et al.*, 2000; Elsinga and Rutten, 1997; Scheerder and Schrijvers, 1998), will not be ignored. As with every case-study in international comparative research, the more understanding the reader has of the specific internal dynamics of the system the more prudent he or she will be in drawing generalizable conclusions (Øvretveit, 1998). Therefore we start our paper with a short description of some important characteristics of the Dutch health care system. Then we will present an overview of the results of a national policy on quality of care that has been in place since 1989 and is based on the principles of guided self-regulation. It has resulted in many initiatives in the field of quality system development emphasising the presence of functioning quality systems rather than focusing on indicators. Thirdly the strength and weaknesses of the Dutch approach will be discussed. In the fourth paragraph the Dutch situation will be compared with developments in other OECD countries.

2. The Dutch health care system: becoming a tulip

Like many Western health care systems, the modern Dutch health care system has its roots in the second half of the nineteenth century. Industrialization and the development of the nation state created conditions under which public health issues were addressed collectively and later on regulation of academically trained medical professions and hospitals took place. It should be noted, however, that until the seventies of the twentieth century the role of the national government with

Box 1. Characteristics of and problems in the Dutch health care system

- Health care is financed through a mix of private and public insurance schemes. The public insurance schemes are regulated through the Sick Fund Law (ZWF), covering most of the curative sector (*e.g.* hospitals, physicians) and prescription drugs, and the Catastrophic Illness Act (AWBZ), covering most of the care (*e.g.* nursing homes, homes for the elderly, home care).
- Private insurers and Sick Funds have merged in the past decade into a limited number of care insurers of which the majority works on a regional level.
- The Netherlands has a well-developed primary health care system in which GPs play a gatekeeper role.
- Municipal Public Health Offices who fall under the jurisdiction of (a collection of) municipalities execute preventive care on population level.
- At present there is a labour shortage in many health care professions
- Because of waiting lists, incidents and quality problems health care is high on the political agenda

respect to health care was limited. Major initiatives were taken by the emerging medical profession itself and the transformation of hospitals from care institutes for the poor into science-based cure institutes was mainly the achievement of local communities and the church. During the first half of the twentieth century, government was not able to introduce a common insurance scheme for health care costs. The German occupier introduced the Sick-Fund law, which still forms the basis of the present social health insurance, in 1941. Historically it makes sense that the provision of health care is mainly privately organised on a not-for profit basis. Self-regulation has always been the dominant management philosophy of the Dutch government and a limited set of laws and an inspectorate of health were since 1865 the main ways the government controlled and assessed the performance of the health care system. The annual reports of the inspectorate of health can be read as a compilation of health system performance indicators *avant la lettre*. Box 1 presents the basic features of the Dutch health care system, and the dominant problems it currently experiences.

Government became more interested in health care in the seventies. In addition to the social health insurance act (ZFW, "Ziekenfondswet"), which covered acute care costs for around 61 per cent of the population earning less than two times the average income (the other 39 per cent had private insurance), a national insurance scheme for catastrophic illness (covering the costs of chronic care and mental health care) was introduced in 1967. This law, the AWBZ ("Algemene Wet Bijzondere Ziektekosten"), proved to be an incentive for the development of nursing homes and home for the elderly. Although the AWBZ was based on the changing care needs of an ageing population, the main driving force for the government to become involved in health care policy making was the economic recession and the need for cost containment. Like in other countries in the seventies the quickly rising costs of health care were regarded as an undesirable collective burden and between 1974 and 1987 the Dutch government tried to influence the costs of the system through planning regulation. Various attempts were made to limit the expansion of health care, notably through health manpower planning (*i.e.* the number of yearly medical students dropped from 2000 to 1485), reduction of bed-capacity (4 per cent norms) and a budgetary regime. The enforcement of planning regulation in a health care system in which the majority of services are of a private- not for profit nature and the formal instruments for government control are limited, created a lot of tension. In 1987 it was concluded that the prevailing policies were stifling the health care system. The change was made towards a steering philosophy based on the principles of a regulated market. This philosophy seemed to fit best with the history of self-regulation and the ambitions of providers and patients, as well as those of Sick Funds and private health insurers.

Although policy plans, like the Dekker plan in 1987, embraced the principles of a regulated market, budget systems as the one for hospitals introduced in 1983 remained in place. The performance of the

health care system was increasingly monitored on costs. The annual financial overviews of costs in the health sector were gradually transformed into expenditure targets and caps. The government was changing its monitoring role into a management role. Cost data and production data of the various health sectors alongside data on waiting lists in the nineties became performance indicators that actually seemed to be used for policy making.

Performance indicators on the *effectiveness* of the health care system were developed in the aftermath of the WHO health for all policy but have during the past 20 years never really been taken up as instruments for navigating the health care system (Van Herten, 2001). *Efficiency* of the health care system was not expressed in indicators but the prevailing philosophy was that the internal market would enhance efficiency. Performance data on *equity* were used as part of the discussions on necessary reforms in the insurance system. When attempts to combine the social health insurance for acute care (ZFW) and chronic care (AWBZ) in the late eighties and early nineties were made, the aim to limit the differences between social and private insurance schemes and thus improve equity was one of the driving forces. When these attempts failed politically, it had to wait until 2001 before a Dutch cabinet came with proposals to combine the two insurance schemes in one basic insurance scheme for the whole population executed by care insurers who are a merger of the former social and private insurers (Ministry of Health, Welfare and Sports, 2001). The *responsiveness* of the system is measured *ad hoc* through satisfaction surveys but is operationalized mainly through policies that enforce the role of the consumer. Patient organisations have become a more important player in the health policy field and legislation on patient rights has enforced the position of the individual patient.

So far, however, there is not an overall performance framework that measures the performance of the health care system as a whole on each of the four dimensions; effectiveness, responsiveness, efficiency and equity. There are many policies and mechanisms in place that focus on improvement of the system and within these mechanisms various services (like hospitals, GP's, home-care organisations, nursing homes) are building indicators into their quality systems for either internal or external use.

However, data on health care are mainly collected per sector. Data on health on population level are collected by the Municipal Public Health Offices and by the RIVM (State Institute for Environment and health) the Central Bureau for Statistics (CBS) and the Social and Cultural Planning Bureau (SCP). In addition medical performance data are collected through various national and regional registries set up by the medical profession (*i.e.* oncology, obstetrics, surgery). Table I provides an overview of information sources on the Dutch health care system.

Thus, the health care system resembles a tulip. All leaves are neatly arranged alongside and each by itself monitors its performance. Real integration of all leaves is not taking place. So far government liked tulips, but over the past two decades they became aware that the public (demand), the soil (economic circumstances and epidemiological need) and even the leaves themselves want roses. Emphasis has so far been on fertilising the soil and facilitating integration of the leaves. The art of smelling by performance indicators is developing slowly.

3. Quality policies and quality systems: the promise of a rose garden

The introduction of government policies based on the principle of a regulated market in the eighties caused mixed reactions. On the one hand the corporate bodies in the Dutch health care system such as the Royal Dutch Medical Association, the Hospital Association, the Sick Funds and the emerging patients organisations welcomed the extension of the possibilities for self-regulation. On the other hand they feared too strong commercial interests in health care that would not be in accordance with the predominantly social and equitable culture of Dutch society. With the negative side effects of the planning policies still in the back of their minds, the general opinion was that the introduction of a regulated market should go alongside a nation wide policy on quality of care. Thus the quality of care of professionals and health care services were to be monitored and improved under the new legislative and financial regime. In 1989 the first national conference on quality of care was held, hosted by the medical association with around 40 corporate organisations of providers, patients and financiers present and government and the inspectorate of health attending in an observer role. During this

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Table I. Examples of information sources in the Dutch health system

| Parameter | Types of indicators | Frequency of data collection, type of data | Registration name, collecting institute |
|--------------------------------|---|---|--|
| Demography | <ul style="list-style-type: none"> Age-sex distribution of the population Birth rate, death rate Life expectancy etc. | Continuously, census data | "Bevolkingsstatistiek" (population statistics), CBS (Central Bureau of Statistics) |
| Population health | <ul style="list-style-type: none"> Incidence and prevalence of diseases in the population Incidence and prevalence of diseases in general practice Socio-economic difference in health status etc. | Every 4 years, registrations in nationally representative samples | "Volksgezondheid Toekomst Verkenning", (public health forecasting scenarios) RIVM |
| Utilisation of health services | <ul style="list-style-type: none"> Number of visits to GPs, specialists, physiotherapists per non-institutionalised inhabitant per year | Every year, survey of a nationally representative sample | "Gezondheidsenquête" (health questionnaire), CBS (Central Bureau of Statistics) |
| Production of health services | <ul style="list-style-type: none"> Number of GP contacts Number of referrals by GPs to specialists per diagnosis per 1 000 enlisted patients Number of prescriptions per 1 000 enlisted patients | Continuously, registration in a nationally representative sample | "Landelijk Informatie Netwerk Huisartsenzorg" (national GP information network) (LINH), Nivel/NHG/LHV/WOK |
| | <ul style="list-style-type: none"> Number of hospital admissions per diagnosis Length of stay in hospital per diagnosis Number of procedures conducted in hospital etc. | Continuously, registration in hospitals | "Landelijke Medische Registratie" (national medical registration) (LMR), Prismant |
| Supply of health services | <ul style="list-style-type: none"> Number of visits to hospital outpatient department by speciality | Yearly, survey of all hospitals | "Landelijke Ambulante Zorg Registratie" (national ambulatory care registration) (LAZR), Prismant |
| | <ul style="list-style-type: none"> Number of admissions to nursing homes per diagnosis Length of stay in nursing homes per diagnosis etc. | Continuously, registration in all nursing homes | "SIG Verpleeghuis Informatiesysteem" (nursing home registration) (SIVIS), Prismant |
| | <ul style="list-style-type: none"> Number of clients receiving home care Number of hours home care provided | Yearly (in principle; though absent in recent years), surveys of non-profit home care organisations | "Databank Thuiszorg" (home care registration), Prismant |
| Health care costs | <ul style="list-style-type: none"> Numbers of doctors, nurses, physiotherapists, speech therapists, occupational therapists, midwives etc. Number of hospitals, nursing homes, homes for the elderly, home care organisations etc. Number of hospital beds, nursing home beds etc. | Yearly, combination of registration and survey data | "Rapportage Arbeidsmarkt Zorg" (health manpower report) (RAZ), Nivel/Prismant/OSA, commissioned by the MoH |
| | <ul style="list-style-type: none"> Costs per sector specified by category (<i>e.g.</i> personnel vs material) and by source of financing (public/private) | Yearly, surveys and accounts | Various statistics collected by the Central Bureau of Statistics (CBS) |
| | | | "Exploitatiekosten en opbrengsten" (financial statistics), CBS (Central Bureau of Statistics) |

Source: Author.

Table 2. Number of licensed professionals ultimo 1999

| Profession | Number |
|-------------------------|---------|
| General practitioners | 7 704 |
| Medical specialists | 12 300 |
| Public health doctors | 3 000 |
| Nursing home doctors | 1 007 |
| Dentists | 7 336 |
| Pharmacists | 2 616 |
| Midwives | 1 578 |
| Physiotherapists | 17 150 |
| Occupational therapists | 2 015 |
| Speech therapists | 3 910 |
| Dieticians | 2 201 |
| Nurses | 255 850 |
| Home helpers | 125 102 |

Source: Rapportage Arbeidsmarkt zorg en welzijn 2000, NIVEL/Prismant/OSA.

conference the key points for a national policy were formulated that were officially endorsed during a follow-up conference in 1990.

The main points of the national policy were:

- health care professions and institutions will develop quality systems;
- these quality systems are used for reasons of internal quality improvement as well as external accountability;
- patient organisations and financiers (municipalities, public and private insurers) will be involved in the quality system development process to guarantee mutual trust;
- government will enforce these policies and role of the inspectorate of health will be to control the existence of quality systems.

In 1991 the ministry of health formally underscored these policies and initiated legislation that resulted in a series of new laws, namely on the quality of practice of individual practitioners ("BIG"), a new law on the functioning of quality systems in health care institutes and a law that regulated the formal position of health care providers towards patients/clients ("WGBO"). During the nineties many initiatives were taken to enforce already existing quality assurance mechanisms or to introduce new ones.

When we focus on the initiative taken by professions (Table 2) and institutions (Table 3) the following can be mentioned.

Table 3. Number and capacity of clinical institutions in Dutch health care in 1998

| Type of institution | Number |
|---------------------------------------|--------|
| Acute care hospitals | 143 |
| Number of beds per 1 000 inhabitants | 3.7 |
| Mental hospitals | 79 |
| Number of beds per 1 000 inhabitants | 1.7 |
| Institutions for mentally handicapped | 148 |
| Number of beds per 1 000 inhabitants | 2.2 |
| Nursing homes | 336 |
| Number of beds per 1 000 inhabitants | 3.7 |

Source: Central Bureau of Statistics (www.cbs.nl/nl/kerncijfers/fgwo628a.htm, March 15, 2001).

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3.1. Quality system development amongst professionals

- further formalisation of training programmes;
- further formalisation of practice profiles of various professions;
- further formalisation of continuous education (*i.e.* accreditation of courses);
- introduction of obligatory re-licensing for the medical professions (1989);
- introduction of national practice guideline programmes for medical specialists (1982), general practitioners (1987), allied health professions and nursing professions;
- introduction of visitation programmes (site visits by peers) by scientific societies of the various medical specialities (1985, covering all specialities by 1998);
- peer review and audit programmes for specialists, general practitioners, nursing home physicians, specialists in social medicine, allied health professions and nursing professions (1976);
- development of clinical registries by scientific societies;
- development of clinical indicators (1998).

All these methods have their own dynamics and rationale and several studies have described their development and impact (Casparie *et al.*, 1997; Klazinga, 1996; Van Herk, 1997; Groel, 2001; Klazinga *et al.*, 1998). It is fair to state that the development of these programmes has always been a combination of driving forces within the profession (*i.e.* the need for evidence-based medicine, the need to study effectiveness and the need to explain practice variation) and external pressure (accountability towards patients, financiers and the government). Overall, the professional groups have developed a plethora of quality assurance mechanisms. These mechanisms are partly embedded in the institutions in which the professionals work and have also been used to strengthen the organisational formats in which the professions have organized their work (*i.e.* practice groups for GP's and speciality partnerships and hospital staff cooperatives for medical specialists).

3.2. Quality system developments amongst health care institutes

Health care institutes have been more active in applying industrial quality system models on their work than professionals. Off 1987 various attempts have been made to apply theories such as Total Quality Management and Continuous Quality Improvement to health care services. The most favourite models at the moment are the EFQM model, the ISO model and the North American Accreditation* model (Klazinga, 2000). Dutch health care institutes have since the eighties seen many quality policy plans and an influx of quality co-ordinators.

In 1995 and 2000 follow-up conferences on the national quality policy took place. For this purpose a series of evaluation studies was undertaken that tried to capture the trends in quality system development in the Dutch health care system. Some of the findings are summarised in Tables 4 and 5 that provide an impression of the use of indicators by Dutch health care institutes in 2000. In the year 2000, two-thirds of the institutional health care providers were involved in project-based quality improvement. One third was preparing for the implementation of a comprehensive, coherent quality system. Five per cent of all the institutions already had such a coherent quality system (Sluijs and Wagner, 2000).

Compared to the situation in 1995, progress has been measured mainly in the field of quality of care documents (*e.g.* the use of handbooks), with regard to the development of protocols, and with regard to the development of quality subsystems (that should eventually become a part of a comprehensive total quality system) (Klazinga, 2000).

* The EFQM (European Foundation for Quality Management) model operationalises structure and outcome elements of organisations, in contrast with the ISO (International Organisation for Standardisation) model, which mainly conceptualises an organisation in terms of processes. Both models are rooted in industry, as opposed to the North American Accreditation model, which has been developed specifically in health care.

Table 4. Percentage of institutions in different sectors using indicators in order to monitor quality of care

| Sector | Percentage of institutions |
|-------------------------------------|----------------------------|
| Municipal public health departments | 80 |
| Primary health care centres | 75 |
| Hospitals | 91 |
| Home care non-profit organisations | 93 |
| Home care for-profit organisations | 95 |
| Homes for the elderly | 86 |
| Nursing homes | 85 |
| Social services | 86 |
| Social-paediatric services | 82 |
| Mental health care | 76 |
| Care for the handicapped | 84 |

Source: Sluijs and Wagner (2000).

Table 5. The top-3 of indicators used by health care institutions in different sectors and the percentage of institutions using them

| Sector | Top-3 of indicators | Percentage of institutions |
|-------------------------------------|---|----------------------------|
| Municipal public health departments | Production data | 72 |
| | Formal complaints | 65 |
| | Sickness absence/% of personnel quitting jobs | 52 |
| Primary health care centres | Formal complaints | 61 |
| | Production data | 58 |
| | Sickness absence/% of personnel quitting jobs | 46 |
| Hospitals | Production data | 91 |
| | Formal complaints | 91 |
| | Sickness absence/% of personnel quitting jobs | 90 |
| Home care non-profit organisations | Formal complaints | 90 |
| | Sickness absence/% of personnel quitting jobs | 82 |
| | Waiting lists/waiting times | 70 |
| Home care for-profit organisations | Formal complaints | 75 |
| | Evaluations of care plans | 75 |
| | Incidents | 65 |
| Homes for the elderly | Data on case mix | 74 |
| | Sickness absence/% of personnel quitting jobs | 74 |
| | Registration of incidents | 62 |
| Nursing homes | Sickness absence/% of personnel quitting jobs | 76 |
| | Formal complaints | 75 |
| | Incidents | 72 |
| Social services | Production data | 85 |
| | Waiting lists/waiting times | 64 |
| | Sickness absence/% of personnel quitting jobs | 59 |
| Social-paediatric services | Waiting lists/waiting times | 79 |
| | Sickness absence/% of personnel quitting jobs | 61 |
| | Formal complaints | 61 |
| Mental health care | Waiting times | 55 |
| | Case mix | 50 |
| | Formal complaints | 47 |
| Care for the handicapped | Formal complaints | 79 |
| | Sickness absence/% of personnel quitting jobs | 74 |
| | FONA | 74 |

Source: Sluijs and Wagner (2000).

Table 4. Percentage of institutions in different sectors using indicators in order to monitor quality of care

| Sector | Percentage of institutions |
|-------------------------------------|----------------------------|
| Municipal public health departments | 80 |
| Primary health care centres | 75 |
| Hospitals | 91 |
| Home care non-profit organisations | 93 |
| Home care for-profit organisations | 95 |
| Homes for the elderly | 86 |
| Nursing homes | 85 |
| Social services | 86 |
| Social-paediatric services | 82 |
| Mental health care | 76 |
| Care for the handicapped | 84 |

Source: Sluijs and Wagner (2000).

Table 5. The top-3 of indicators used by health care institutions in different sectors and the percentage of institutions using them

| Sector | Top-3 of indicators | Percentage of institutions |
|-------------------------------------|---|----------------------------|
| Municipal public health departments | Production data | 72 |
| | Formal complaints | 65 |
| | Sickness absence/% of personnel quitting jobs | 52 |
| Primary health care centres | Formal complaints | 61 |
| | Production data | 58 |
| | Sickness absence/% of personnel quitting jobs | 46 |
| Hospitals | Production data | 91 |
| | Formal complaints | 91 |
| | Sickness absence/% of personnel quitting jobs | 90 |
| Home care non-profit organisations | Formal complaints | 90 |
| | Sickness absence/% of personnel quitting jobs | 82 |
| | Waiting lists/waiting times | 70 |
| Home care for-profit organisations | Formal complaints | 75 |
| | Evaluations of care plans | 75 |
| | Incidents | 65 |
| Homes for the elderly | Data on case mix | 74 |
| | Sickness absence/% of personnel quitting jobs | 74 |
| | Registration of incidents | 62 |
| Nursing homes | Sickness absence/% of personnel quitting jobs | 76 |
| | Formal complaints | 75 |
| | Incidents | 72 |
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| | Waiting lists/waiting times | 64 |
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Source: Sluijs and Wagner (2000).

Many activities have been set in motion but a distinction can be made between quality system development focusing on the strengthening of the internal management functions of individual institutes and initiatives focused on creating accountability mechanisms. Of the latter the following developments can be noted:

- In 1996 a council for the harmonisation of external quality assurance mechanisms (HKZ) was set up on the initiative of the insurers, patients and providers associations. This council helps the various sectors in health care to develop certification schemes. These certification schemes are all fully compatible with ISO but are developed by the various health care branches themselves to assure applicability. Once the council approves certification schemes, the national certification body for industry forces certification bodies to use these schemes. Thus the ISO-itis that terrorises some other countries health care systems was contained and integrated in more health care specific accountability models. In 2001 around 20 different schemes are already approved and used for a wide array of services varying from home care, dentistry, centres for dialyses to child care centres.
- Since the early nineties the hospital sector has taken initiatives to develop an accreditation system modelled after the accreditation programmes for hospitals in North America (Joint Commission for the Accreditation of Health Care Organizations in Chicago and the Canadian Council for Accreditation in health Care in Ottawa). In 1999 the Netherlands Institute for the Accreditation of Hospitals was founded and since then a still limited group of hospitals has experienced full accreditation.

Quality system development has so far mainly been attempts to translate models to the reality of health care processes. Indicators are seen as part and parcel of the steering mechanisms implied by quality systems and therefore not as a goal in themselves. By putting the emphasis on getting quality systems in place first it might be that many Dutch health care institutes are lagging behind in indicator development compared to some other countries.

The overall conclusion of the 1995 follow-up conference on national quality policy was that quality systems were developing, but were focusing mainly on internal quality assurance of professions and institutes. The conference concluded that a broader orientation towards the interests of insurers and patients was needed. In 2000 the conference concluded that the principle of self-regulation was still endorsed but that quality system development went slow and was running the danger of freezing the existing positions of professions and institutes instead of being a vehicle for the development of more integrated care arrangements. Both the need for integrated care and more specified mechanisms for accountability were expressed during the 2000 conference. Although the link with performance measurement of the health system as a whole was not made explicitly, it is clear that this is implied by the recommendations of the last national quality conference.

4. The art of cultivation: strength and weakness of a system based on self-regulation

The quality policies of the past decade have enforced the already existing model of self-regulation. Overall the model works fine and The Netherlands seem to have been able to keep the subtle balance between trust and criticism in health care. Although comparative research is scarce, it seems that the amount of quality assurance activities taken up by the medical and nursing profession themselves, the level of quality system development within health care institutes and the active involvement of patients in their care processes stands out favourably internationally. The corporate character of Dutch health care creates a situation of mutual dependencies that favour decision making in health care based on consensus (Van der Grinten and Kasdorp, 1999).

However, the model of self-regulation is also challenged. The Dutch health care system is a typical mix of public and private initiatives. A lot of organisations have a semi-public (independent advisory councils) or semi-private (health insurers executing social insurance schemes) nature. In the policy paradigm of the European Union this is somewhat problematic, as the EU seems to make a rather sharp distinction between public and private activities. As a result the Netherlands Competition Authority (NMA, "Nederlandse Mededingings Autoriteit") is at present questioning the legitimacy of some of the public/private arrangements made in the Dutch health care system.

Another weakness of the Dutch model is its relative inability to work towards integrated care or organised delivery systems. The present self-regulation enforces existing professions and institutes and incentives for mergers and substitution amongst professions and services are weak. The present legislation and financing structure treats prevention, cure, care and social care as separate entities (*cf.* Box 1). As a consequence necessary shared care arrangements and the integration of preventive activities in the regular activities of cure and care are hard to realise. However, the need for integrated care is recognised and recent cabinet plans propose a merger of the AWBZ and ZFW in one basic insurance package for cure and care. This would most probably enhance the further development of integrated care arrangements.

Another consequence of the focus on separate professions or types of services is that data collected for managerial purposes focus on these professions and services separately (*cf.* Table 1). The past years have seen the rise of branch reports issued by the hospital sector, the nursing home sector and the home-care sector. In addition, as a consequence of the Law on Quality of Care, every health care institute (including every group of professionals such as GP practices) is obliged to issue an annual quality report. Although these reports are a big step forward, they do not provide a coherent picture of the quality of care delivered by a regional mix of services and professionals. In this respect there is a wide gap between the performance data issued by the individual services and professionals and the public health data collected by the municipal health services. One of the major challenges ahead will be to link public health data with the performance data of individual services in a meaningful way (Klazinga *et al.*, 2001). A prerequisite is that the health care system is redesigned in such a way that on a local and regional level, the collective of health services and professionals develops a stronger focus on their overall contribution to the production of health. This community orientation is difficult to realise under a self-regulation model when financial and legislative incentives work in the opposite direction. Although the self-regulation model is functioning well in the Dutch health care system with respect to creating mutual trust and stimulating quality improvement activities, government should provide guidance towards the overall goals of health care, take initiatives to safeguard sufficient coherence in the system on a local and regional level, and assure that the system is population based instead of service based.

5. The Netherlands compared to other OECD countries

The WHO and the OECD have over the past two years taken several initiatives to compare the performance of health care systems. Figures 1, 2 and 3 illustrate the performance of The Netherlands on effectiveness (in disability-adjusted life expectancy), efficiency (in health expenditure as a percentage of GDP) and equity (in out-of-pocket expenditure as a percentage of total expenditure), according to WHO estimates.

In addition to these external benchmarks, several reports comparing the Dutch situation with other countries were produced in The Netherlands itself; a report of the ministry of social affairs, the two-annual report of the Social and Cultural Planning Bureau and an extensive research report on socio-economic differences in health. Table 6 provides a summary of the performance of the Dutch health care system based on these reports (Kramers *et al.*, 2001).

The WHO report put The Netherlands on the 17th place. This caused a lot of debate in the Dutch press but the scoring as such is not highly informative due to the calculation methodology applied and the wide confidence intervals (Klazinga *et al.*, 2001; Groenewegen and van der Wal, 2001; Mulligan *et al.*, 2000). It has however, helped to put the phenomenon of performance indicators of health systems on the political agenda. The other report, including the one from the OECD, contained more concrete handles for action. One issue arising is that the increase in life expectancy in The Netherlands is lagging behind the European Union average. This is particularly the case for women and a major cause of this is smoking. Developments in Dutch perinatal mortality are also unfavourable and are associated with a strong increase in the age at which women bear children and the growing importance of a multicultural society.

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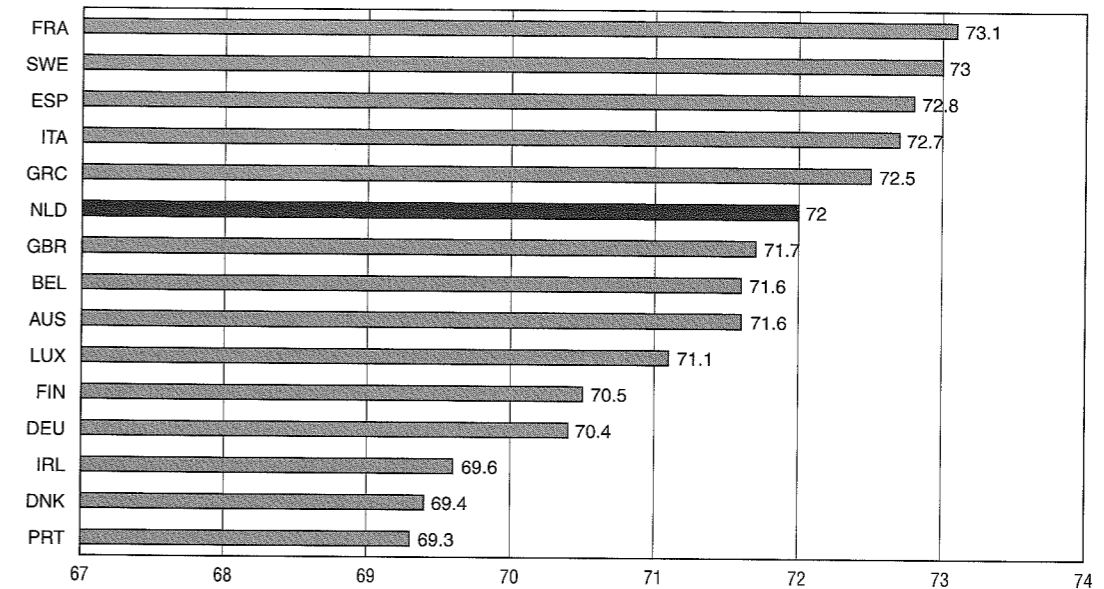
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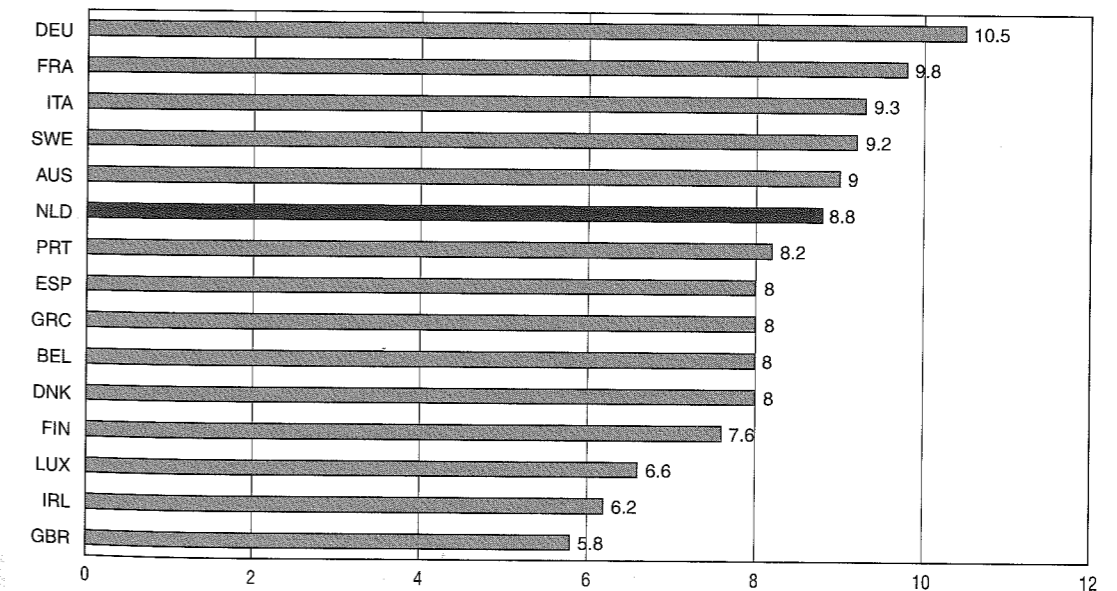
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Figure 1. Performance of the Dutch health care system on effectiveness (Disability Adjusted Life Expectancy) DALE (total population, at birth)



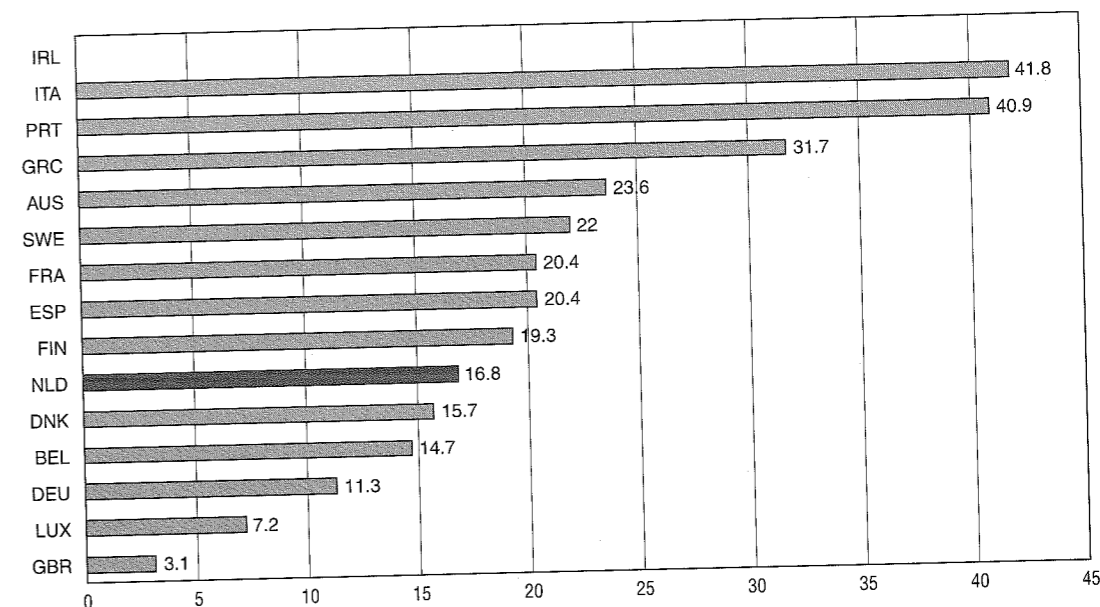
Source: WHO (2000).

Figure 2. Performance of the Dutch health care system on efficiency (% of GDP spent on health) Health expenditure as % of GDP



Source: WHO (2000).

Figure 3. Performance of the Dutch health care system equity (% of care financed by out-of-pocket expenditures)
Out-of-pocket expenditure as % of total expenditure



Source: WHO (2000).

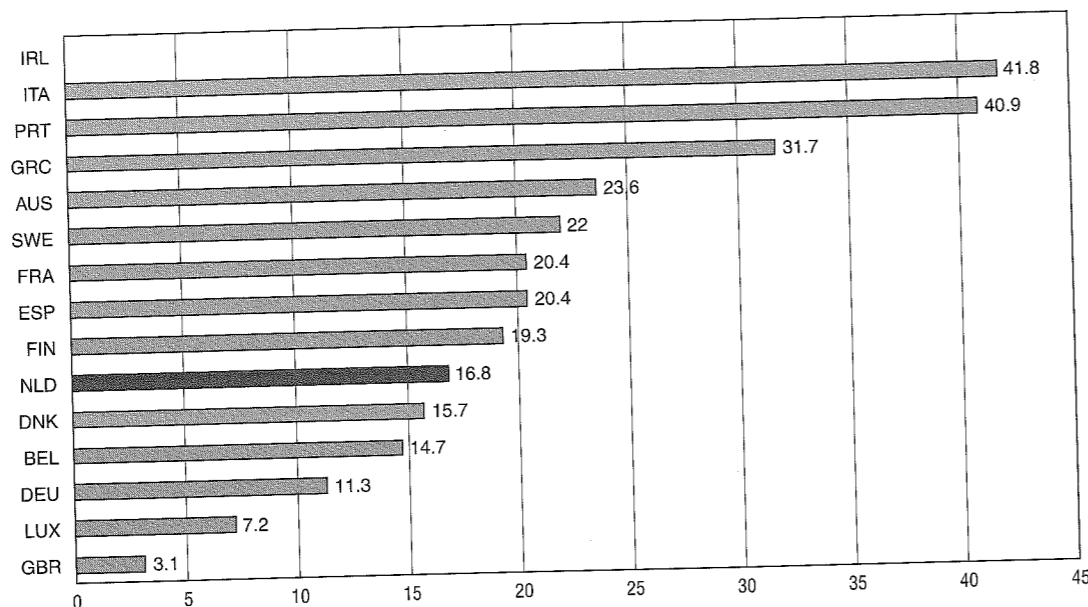
These comparisons enforce public health actions rather than health system reform. The performance indicators used in these reports do not really address the acutely felled problems in the Dutch health care system such as waiting times and labour shortage. Therefore more energy should be put in conceptualising performance measures that measure the performance of the collective of services and professions with regard to their contribution to health. This asks for indicators that are far more specific than the presently used overall public health indicators on effectiveness and the generic

Table 6. Performance of the Dutch health care system on various indicators compared to other countries in the EU and the OECD, as described by the WHO (2000), the OECD (2000), the Ministry of Social Affairs and Labour (SZW, 2000), and the Social Cultural Planning Bureau (SCP, 2000)

| Netherlands perform worse than average on the indicators: | Netherlands perform more or less average on the indicators: | Netherlands perform better than average on the indicators: |
|--|--|---|
| <ul style="list-style-type: none"> • Development of life expectancy (SCP) • Development of infant mortality (SCP) • Development of smoking behaviour (SCP) • Physician density, number of medical students (OECD) • Waiting lists (OECD) • Percentage of health personnel in direct patient care (SZW) • Development of drug expenditures | <ul style="list-style-type: none"> • Level of life expectancy (all reports) • Level of infant mortality (all reports) • Healthy life expectancy (SCP) • Disability adjusted life expectancy (WHO) • Premature death in women (SCP) • Level of responsiveness (WHO) • Fairness of financial contribution (WHO) • Number of consultations of ambulatory care physicians per capita (OECD) • Development of health expenditures (all reports) • Level of drug expenditures (OECD) | <ul style="list-style-type: none"> • Premature death in men (SCP) • Subjective health status (OECD) • Patient satisfaction (OECD, SZW, SCP) • Medical consumption (SCP) |

Source: Translation of table in Kramers et al. (2001).

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Source: Translation of table in Kramers *et al.* (2001).

indicators for responsiveness, equity and efficiency. Apart from looking at outcome indicators one could consider evidence-based process indicators to get a fair picture of the performance of the services in health systems and/or percentages of institutes/professions that are certified, accredited or re-licensed. Above all it must be clear in what type of policy or management cycles the indicators are integrated and unintended consequences of their publication should be avoided. The balance in the use of indicators for internal management purposes versus external accountability is a subtle one.

6. Conclusion: can we smell the rose ?

A health care system is organic and constitutes the result of many social processes. In the Dutch health care system self-regulation has always been one of the founding paradigms. Although government has since the seventies of the twentieth century tried to influence the nature and growth of the Dutch health care system, it has influenced its phenotype rather than its genotype. As a result many policy changes go slowly and depend on mutual consensus. Also, the public/private dichotomy so prevalent in the economic thinking of the EU does not apply smoothly to the Dutch situation. Looking at the ownership of services and insurers the Dutch system is one of the most liberal in Europe. Looking at the extent of not-for profit activities and social character of financing of cure as well as care and prevention activities, it contrasts sharply with the United States. To improve the health system the following conclusions can be drawn looking at national as well as international reports:

The goals of the system are both changing and made more explicit. The five goals in the WHO 2000 report help to reorient the focus of the Dutch health care system. Especially the mix of equity, efficiency, effectiveness, equality and responsiveness is discussed in a more articulate way. Plans are beginning to emerge to develop a national performance framework as in other OECD countries.

The Dutch health care system is still weak in linking public health data on regional and national level with performance data on health services and professions. Data collection and indicator development in public health and health services like hospitals are still separated. Integrating these types of data in one comprehensive framework is vital if we want to monitor both whether we do the right thing (*e.g.* do we provide the optimal mix of services to our population?) and whether we do things right (*e.g.* are these services provided efficiently, in a client-oriented manner, according to evidence-based protocols *etc.*?). The coming years, therefore, additional efforts are needed to develop performance indicators for health care institutes and professions that are population based *i.e.* focused on the contribution of that service/profession to the health of the community. In the Dutch health care system, sickness funds are the most obvious actors to stimulate the self-regulatory uptake of initiatives in this field by health care providers. However, sickness funds currently have few incentives to focus on regions or local communities. The challenge probably lies in triggering sickness funds to compete with each other on the issue of the quality and continuity of care that they contract for their enrolees, rather than having them compete on the issue of costs. To guard and to ensure quality and continuity of the care that is provided by the contracted providers is much easier for sickness funds that are rooted in regional and local communities, than for those operating nation wide with small market shares in many local delivery networks.

A strong division between prevention, cure, care and social care characterises the present health care system. For the near future a more integrated health care system is warranted. Recent policy plans on changes in the insurance and legislative system may help to promote integration and substitution within the system. Performance indicators should be developed to monitor the various integration processes. In the Netherlands, several studies (Persoon *et al.*, 1996; van der Linden, 2001) have provided overviews of interventions and projects aimed at providing integrated care. Also, the developments in the field of physician-hospital integration have received quite some attention (Ploch *et al.*, 1998; Groenewegen and van Lindert, 2001). However, no systematic inventory has yet been made of integrative processes on the level of delivery networks (*e.g.* of the mergers, contracting, and strategic alliances between health care institutions). Consequently, the integration process itself is not monitored systematically on the health system level.

All indicators should be part and parcel of quality systems. It is through quality systems that health care services and professions can assure the quality of their performance. Indicators are an important but surely not the only measurement tool that produces information for quality improvement actions. In the Dutch health care system the development and implementation of quality systems is seen as a prerequisite for indicator development. Although organised delivery systems are not a reality as yet, it seems no more than logical that the quality system thinking will be applied on these new organisational arrangements and on the health care system as a whole. The development of performance indicators should therefore be considered as part of the quality system thinking on health system level. A national performance framework should therefore not only be consistent with the dimensions identified in recent international WHO and OECD reports but should also be consistent with the conceptual frameworks provided by for example EFQM and ISO.

There is a large potential benefit in international benchmarking. We should be careful however in choosing a limited set of indicators too easily. First, the indicators should really reflect the performance of the system but second they should not be isolated from their context. A quality system approach on health system level may help us to develop a performance framework that helps steering the health care sector in a balanced way alongside other sectors in society.

Whether the Dutch health care system will finish its transformation from a tulip to a rose in the near future will partly depend on the weather. The cultivation process is well under way. The scent of performance indicators stimulates many noses, the art will be to keep them in the same direction.

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