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health centres and group general practices in the netherlands

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Introduction

Health centres and group general practices are now an established part of the Dutch medical scene. Although there are few recent research results[1] to hand that show unambiguously that this particular form of health care is superior to the more traditional forms, most recent figures show that almost 1.5 million of people (out of the total of 14 million inhabitants of the Netherlands) are concerned with this form of health care (January 1982).

The development has been rapid: the first health centres and group practices are good ten years old and the number increases yearly.

Before describing this phenomenon in detail it is worth making a few preliminary remarks.

We must first make clear what precisely we understand by the terms 'health centres' and 'group general practices'.

Secondly one can only understand the developments (and the delays in development) when one has some knowledge of the peculiarities of the Dutch health and welfare system.

Then we shall try to give a bird's eye view of the social circumstances in which the 'health centre phenomenon' arises.

Finally we shall go over the same ground again and show some figures from the Registration-system for health centres and group general practices that has been kept by the Netherlands Institute of General Practitioners.

Health centres and group general practices: some terms, definitions and alternatives

To begin with the simplest definitions: a group general practice is an establishment of three or more physicians; you have a building with three or more name plates on the door. In general terms these physicians have e group practice: they share one or more assistants and share the complex diagnostic apparatus (an electro-cardiograph for example) and they consult one another when problems arise in the course of their practice.
The degree of co-operation can vary considerably; the above may be taken as a 'modal' example.
With health centres it is again a question of the joint establishment in one location of medical personnel, but here, in addition to the general practitioner several sorts of health care workers are available including a minimal number of 'district nurses' and 'social workers'. Furthermore health centres often include: physiotherapists, midwives, family care workers, chemists, dentists, psychologists and sometimes even an errant priest.
The essential features are then a common location and the presence of the three 'central disciplines' in the persons of the GP, the district nurse and social worker.
The cooperation that obtains between these 'disciplines' again can vary considerably in extent and intensity. There will at least be group conferences about shared patients or

clients. There are often separate meetings to discuss organizational problems and the development of an overall policy in respect of the general services offered and primary medical care.

As far as group general practices as well as health centres are concerned it is a question of fairly carefully defined forms of medical care. They are not, though, the only form of medical care. Out of approximately 5500 Dutch GPs well over 60% practise independently. Of the rest approximately 25% have a two-man practice (generally called an 'association'), and the remaining general practitioners work partly in group practices and partly in health centres. Other professions in primary medical care (physiotherapists, dentists) can also operate on a group practice basis. However, we have little information on these professions. The same is true of various other kinds of practitioners; in so far as they don't belong to the trio of 'general practitioner, district nurse and social worker'.
For example we don't know how many joint practices of GPs and physiotherapists there are and there is no systematic record of this. The many forms of single- and multi-disciplinary co-operation that take place *without* a shared location, and there are a good many of them, are beyond the scope of this study. Home-teams, observation groups,

and in service training societies have not been systematically investigated by us. In this paper we are describing therefore a rather limited, but extremely important form of single- and multidisciplinary cooperation in the first echelon of Dutch medical practice.

In order to understand the place of group general practices and health centres within the framework of Dutch medical practice as a whole, it is worth summarizing the principal features of the Dutch medical scene.

The place of GP in Dutch medical practice

As of January 1982 the Netherlands had 14.3 million inhabitants and 28,000 medical practitioners (19.6 per 10,000 inhabitants). Of these medical practitioners about 5,500 were general practitioners and 9,700 clinical specialists, the latter active principally within the hospitals.

The number of clinical specialists has grown faster in the last few years than the number of general practitioners. In 1961 there were 3,900 specialists and 4,400 GP's - by 1982 the number of specialists had grown by about 150% (9,700), and the number of GPs had increased by 25% (5,500); an increase that scarcely exceeds the increase in population (that is from 11.6 million to 14.3 million = 23.2%). The reason why the number of GPs has not fallen despite the explosive rise in the

hospital sector, as has been the case in other countries (the United States for example), has to do with the insurance system responsible for the operation of Dutch medical care.

HEALTH INSURANCE SYSTEM

The Netherlands do not have a National Health Service employing physicians and nurses to practice their professions, but has a comprehensive system of compulsory insurance and fixed remuneration for medical practitioners. Approximately 70% of the Dutch population is insured under the Medical Insurance Act,[2] for the greater part these are 'compulsorily insured people', from whose wages an insurance premium plus an employer's contribution is deducted. These premiums constitute the basis of a fund, from which the Health Insurance Fund pays the cost of medical care. For the 70% of the Dutch population who are insured under this system, there are no extra financial impediments to medical care. GPs and hospitals are (still) availble without additional charges to the patient; and the cost of hospital care is refunded in full. Retrenchments in health care expenses may shortly put an end to this situation. Health Fund insured will then have to pay for the use of several facilities. An initial step recently taken in this direction was the introduction of a patient-paid contribution towards the price of medicines. Consul-

tation of a hospital or clinical specialist therefore does not yet involve extra expense to the patient, but it is not however completely free.

A *clinical specialist* may only be consulted on *referral from a general practitioner*, thus after a *consultation with the general practitioner*.

This condition gives the GP an important place in Dutch medical practice or rather, the clinical specialist is not allowed to replace the GPs completely. It is true, however, that it has not prevented the number of patients referred to specialists per 1000 compulsorily insured patients from rising from 330 (1960) to 508 (1980), but the increase in the number of specialists must be taken into account.

The Dutch general practitioner therefore has an important function as filter or selector in the medical care system. One cannot get round him. He is not compelled to refer patients to a specialist, though he would be reprimanded were he to be too late in his referral.

The remuneration of GPs and clinical specialists is essentially along quite different lines (as far as the Health Fund insured are concerned). A GP receives a fixed sum per insured patient per year, irrespective of the demand upon his services made by the patient in question. Specialists on the other hand are paid for treatments that

they actually carry out. The first arrangement, 'subscription-system', has a restraining effect on the phenomenon of multiple prescription, but is sometimes considered unfair by those involved because there is no extra reward for extra effort.

A GPs practice, however, is not restricted to Health Fund insured patients; the remaining 30% (we are here concerned with the avarage - variations are considerable, depending on the prosperity of the community where the practice is established) pay the GP by consultation or treatment. In this case they are commonly not insured, the so-called 'private insurance' generally covers specialist and hospital care alone.

The GP tends to be a private practitioner, in the sense that he is self-employed (scarcely 2% are in fact in the service of some agency). He is not, however, a private practitioner in the sense that he only accepts private patients, although this might infrequently be the case. This means that his income is for the greater part determined by the number of his patients who are Health Fund insured[3] and by the number of services rendered to privately insured patients.

It is unusual for GPs to be employed by another GP.

The Royal Dutch Medical Association (KNMG) considers a maximum period of six months ethical; principally to give young doctors

an opportunity to gain some practical experience.
In practice, however, one does find an increasing number of situations in which the six-month period is exceeded. (As on 1.1.1982 this was the case for 5.4% of the total number of GPs. Soucre: Registration system of GPs at the Netherlands Institute of General Practitioners).

ESTABLISHMENT AS A GP

Not all physicians may call themselves general practitioner. Since about 1975, there has been a compulsory one-year post-graduate course to be taken after completing one's medical qualifying examination: the transitional period from the old system, in which the medical qualifying examination in itself was sufficient, has now come to an end. Virtually all GPs who are at this moment establishing themselves in practice, have completed the post-graduate course in general practice. The demand for the course is considerable. Each year approximately 425 physicians graduate from the course, although there are no more than approximately 325 new GPs establishing themselves in practice. Further, as a result of established physicians leaving practice (40% retiring, 50% taking up another position, and 10% specialising) there are no more than 200 free places. The additional places must be created by GPs deciding to share their practice with

a new partner or by GPs establishing themselves in new practices, that means that they will not be taking over patients from an already established GP.
In most cases the establishment of a practice is accompanied by the take-over of patients for a fee of, for example, the health insurance fee for one year. For this sum, the 'goodwill', there are certain maximum norms (90% of the gross yearly income according to the Royal Dutch Medical Association (KNMG)) but in a period when many physicians wish to become general practitioners and when few practices are available this goodwill percentage cannot escape from the law of supply and demand and as a consequence the percentages are somewhat higher.
In addition to the sum for the goodwill, living accommodation and accommodation for practice must also be taken over. Thus, in order to set oneself up in general practice, the required investment is such that finance companies do not regard a practice of less than 2200 patients as financially viable.
In order to give an impression of the workload of Dutch general practitioners one can, as a rule of thumb, assume that for 2500 patients there are approximately 10,000 contacts per year (approximately 40 per working-day - of which 30-35 take place during surgery hours). The average length of consultation during surgery hours is

between 4 and 6 minutes. One should also realize that the patient population in a GPs practice is not strictly local. Except in places where there is only one doctor, patients belonging to different practices live all randomly mixed up. This is not an unimportant detail when the question of cooperation with other medical practitioners arises.

Thus far then this statistical portrait of the general practitioner. An important man (and in fact 95% of Dutch GPs are men) in the world of medical practice; it is he who gives access to specialised hospital care. On average he has the care of approximately 2450 patients. That means that he has approximately 40 contacts per day which last from 4 to 6 minutes. He is self-employed, and almost two-thirds of the time he works alone and only exceptionally in a salaried position. His income is largely determined by the extent of his public insurance practice, and for the care of these patients he receives a fixed amount from the Health Insurance Fund and for the rest (and so far as one does not take into account subsidiary activities - that is income from his private dispensary for the 1300 country GPs, and confinements and deliveries) by the scale of fees for services to his private patients.
The GP has a place in the front line of medical health care, this means that he is

directly accessible, there are no barriers between him and the patient. In addition to the GP there are a number of other practitioners who belong to this front line of medical health care and we shall try to describe the characteristics of these practitioners now.

Other practitioners in primary medical health care

The description of the other medical health care practitioners in Dutch primary health care will be somewhat less extensive than that of the GP. In addition to a short description of the tasks and numbers of practitioners we will just deal with those characteristics which are important for the cooperation under discussion.

INDEPENDENT AND EMPLOYED PROFESSIONALS

A useful characterization of primary health care practitioners is in terms of their economic status. Thus, there are the independent professionals and those health care workers who are in the employment of institutions of one sort or another. As far as the professionals are concerned they are all paid for services rendered. Dentists, physiotherapists and midwives are paid by the Health Insurance Fund or (occasionally) by private insurance for the number and type of treatment which they carry out (for example physiotherapists and dentists) while

chemists receive specified sums on the amounts of medicine they provide.
District nurses on the other hand receive a fixed income; and the same is true for that area of medical care that is perhaps not strictly a part of medical care proper, but is in fact very closely associated with it, that is social work.
In the following chart the most relevant characteristics are schematically represented. There are large differences in the manner in which practitioners of the various branches of the medical profession establish themselves in practice; the differences also concern the number of patients/clients that may be listed and the extent of their dealings with the GP. Contact between GP and dentist is minimal; neither in theory nor in practice have they at all much to do with one another. Physiotherapists on the other hand receive a good many of their clients on referral from the GP. Further, although physiotherapy in principle is an independent profession, its members are only partially (25%) independently established in primary care and as such paid by the Health Insurance Fund by a scale of fees for services rendered. The independently established physiotherapists employ an unknown (but theoretically unlimited) number of physiotherapists who are either in their salaried service, or work for them on a contract basis. A limited

Chart: Practitioners in the primary health and welfare care

	Generally private practitioners					Generally in salaried service		
	General Practitioner	Physiotherapist	Dentist	Chemist	Midwife	District nurses	Social Work	Family Care (teamleaders)
number 1.1.1982	5814[1]	±6000[2]	5970	1394	947	±4500[3]	2250[2]	4270 (1.1.1980)
function	general med.care with no restriction of access	rehabilitation, of motor and muscular systems	dental care	distribution of medication	non-pathological deliveries	nursing of the chronically sick, mother and child care	solution of social problems	family care and care for the aged
source of income	regular subscription payments for health fund patients, by scale of fees for private patients	for the independent practitioner by scale of fees remainder on hourly basis	limited treatment for health fund patients, extensive for private patients	profit % of turnover	for each delivery + ante- and postnatal care	salaried	salaried	salaried
setting up in practice	by taking over patients independent established in princ.possible	mostly in service of an independently established therapist	generally independent established except in areas with many dentists	controlled by Soc.of the Promotion of Pharmacy independent establishment sometimes possible	see general practitioner	employment based on national norms	see district nurses	see district nurses
territory	practices in general not strictly territorial	non-territorial	see GP	strictly related by district to municipal boundaries		strictly limited to district or municipality	mostly strictly limited to district or municipality	see social work
peculiarities	in country districts, GP has private dispensary, attends confinements and deliveries	two types of physiotherapists: 1.independent practitioner 2.in the service of one		pharmacists gradually taking over distribution in country areas			no new opening between '77 and '79	quite different serv. 'intake' taken care of by teamleaders

1 Including 314 so called assistent GPs, employed by another GP.
2 Estimate; exact number is not known.
3 Including not qualified district nurses. Besides there are ± 950 health care workers active in the first echelon.

number is in the service of a health centre. The chemist and midwife assume a intermediate position here. The work of the chemist has a great deal to do with that of the GP (the price of the prescribed medicaments makes up part of the chemist's income; the chemist is responsible for the prescription in that he must spot (dangerous) mistakes; furthermore those GPs who have their own dispensaries, and are responsible for the distribution of medicaments in the country, have a somewhat tense relationship with the chemist) but both are able to do their jobs perfectly well when only strictly necessary contacts take place.
GP and midwife are in a certain sense competitors in those areas where the GP attends to his own confinements and deliveries. Health Fund patients are insured for the services of the midwife only in a non-clinical, normal delivery and when there is a midwife in the area. If here is no midwife (or should there be insufficient midwives) in the area, then the delivery by the GP will be covered. In addition the private patient is free to seek the service of the GP or midwife.

PROFESSIONAL FREEDOM

Independent medical practitioners have a certain amount of freedom to choose the form of organization and manner of practice that suit them best. They are under restrictions

on account of their social and material circumstances and the (in most cases not binding) guidelines of their professional organizations, but they may resist the pressure excercised by these organizations and in an extreme case can escape by giving up their membership (the Netherlands is not familiar, in medical circles at least, with the compulsory membership of a prefessional organization). Recently the Society for the Promotion of Pharmacy (the professional organization of pharmacists) had strong objections to the situation in which extramurally employed chemists were to be in salaried service. However, an exception has been made for the foundations which operate health centres. Those practitioners who, as a rule, work in the salaried service of institutions are much less free to choose the circumstances in which they work. The district nursing service has a fairly tightly controlled territorial organization which obtains at national, provincial and local level.
The organization of social work is less streamlined and still has the character of local organizations for the relief of the weaker members of the community; but, here too, one finds that the 200 local organizations are not in the position to counter the centrally established guidelines. As to the practitioners in the service of such an organization, their work is somewhat

different from that of practitioners of the independent medical professions. They are confronted with the problem of deciding to whom they must acknowledge responsibility for their services when they start to work with other people. In summary one can say that independent medical or paramedical practitioners, who have overcome the resistance in their professional organizations, do have a great deal of freedom to experiment, which practitioners in the service of institutions do not have. This is of very great importance to the experimental phase prior to the development of co-operation.
There is of course another side to this freedom: a certain laxness of organization which can seriously frustrate a systematic and planned approach. When the development is in its post-experimental phase and the decision to adopt a planned approach is taken, then there are considerable problems.

Towards better co-ordination in Dutch primary health care

The various sectors of health care are insufficiently adjusted among themselves and to the present needs. Fresh statutory enactments are intended to be the means of improving co-ordination among health care facilities and obtaining a more equal distribution over the country.

Under the Health Care Facilities
in 1982, responsibilities in heal
decentralized to the level of go
which is compatible with the service
involved. Thus, provincial and municipal authorities will get a part to play in the planning process. These local authorities will be required to define priorities and conditions and determine the supply-side capacity of the various health care facilities in four-year plans. In practice, primary care will come within the competency of municipal authorities.
The said Act differentiates between services coming from persons and such as come from institutions. If their services are to be eligible for reimbursement, institutions need to be approved. For approval to be granted, checking against the provisions of the four-year plan will be required. Patient care given by persons is not within the scope of the plan. Persons are bound only by regulations for the establishment of practices, enabling them to pursue a profession under a licensing system. In this, at the national level decisions are taken as to quantitative norms for the number of inhabitants to each practitioner, norms aiming at an efficient distribution, and norms in respect of practice operation. Such norms are laid down in consultation with the professional organizations while concerning the implementation of policy

decisions and conduct of affairs, the local authorities receive advice from representatives of the practitioners, consumer organizations and Health Fund and health insurance companies.
This Health Care Facilities Act also affects health centres and group general practices. Health centres are considered institutions and must therefore be approved by the municipal authorities. In how far practitioners working in a health centre will in addition need an individual license to set up practice is unclear as yet. In the case of partnerships, which are not deemed to be institutions, the GPs will in fact need a practice licence.
The Act will gradually become operative as from 1 January 1984. From that date onwards all over the country a licensing system for GPs and physiotherapists will be in force. As on the same date the Act will be put into full operation in a few experimental areas, i.e., it will at once apply to other sectors of health care as well.

Problems in co-operation between practitioners

We already made a remark about problems encountered in single or multidisciplinary co-operation.
These may roughly be divided into two groups: problems that have to do with the contents, as it were, of the health services and

problems that have to do with the framework within which the service operates.

CONTENTS
It is easy enough to imagine the problems that arise in consequence of the contents of health care. Every sort of service consists in a more or less worked out totality of ideas about the reasons why people need help and contain a number of practical guidelines in respect of how one should deal with these problems.
The degree to which these ideas are worked out, differs in accordance with the type of practitioner (this is more the case in medical science than in physiotherapy or nursing) and, furthermore, the most generally used explanatory principals differ (compare medical science with psychology or sociology). Co-operation takes for its point of departure the view that the varying ideas about the origin and solution of problems should complement one another and that out of the Babel of linguistic confusion a new practitioner's Esperanto should spontaneously arise. In practice, however, there is a very difficult process of searching for points of agreement and accepting differences.

FRAMEWORK
The problems concerned with the framework within which the medical service operates

are of a more concrete type and easier to summarize.
Actually they arise from the earlier mentioned features: on the one hand it is a question of the problems that arise when independent medical practitioners work closely together with salaried personnel, on the other hand problems have to do with the difference in social status of the various practitioners. Finally, co-operation within the group as a whole makes certain demands in the area of setting up practice, consultation and support. When, for example, the GP, district nurses, social workers and physiotherapists start to work more closely together and choose a communal establishment, the following practical problems can arise:

1. the total of clients/patients of the practitioners overlap, but only partly (as of 1.1.1982 they did in 24% of the cases for the four disciplines).
2. There is no common employer. Even where a health centre is administered by a legally constituted body, which employs the independent medical practitioners, the district nurses and social workers are only 'lent out' by their employers. In the case of conflicts, this is a disabling disadvantage.
3. In a typical situation there is a hotch-potch of working and material relations. The GPs may practice independently and personally employ the assistants in the

practice. The independent physiotherapist has colleagues in salaried service and working on a contract basis. Practitioners in salaried service are in the service of their respective organizations.
One of the organizations is, for example, the owner of the building, the others hire space. A foundation may have been instituted to promote co-operation and might be the employer without owning the building or exercising control.

4. The differences in income and remuneration that arise from this situation can be very considerable. The closer one gets to an integration of the various services and the more equal the contributions of the various practitioners become, the trickier the problem itself becomes.
5. Co-operation costs money. Part of the time is spent on consultation and verbal agreement about the services to be rendered. The chances of resolving a series of knotty problems at top speed, are extremely limited. A good part of the extra cost is caused by the high level of investment necessary for adequate housing.
6. Furthermore, existing housing is seldom suitable for other than a strictly temporary solution. New buildings are required. This is an investment that is scarcely possible without additional financial support (the present price per square meter is about 2500 guilders -

this would mean a total of 2 up to 3 million guilders in foundation cost for a relatively modest centre with four GPs, four district nurses, two social workers and two physiotherapists).

7. Co-operation under the above conditions often brings about tension between the members of the team; as a consequence the help of experts in small-group-communications is sought to solve such problems and this help in turn has to be paid for.

SOLUTIONS

A good many of the problems are not relevant when the team is employed by a legally constituted body or individual, who employs the practitioners and owns the building. Furthermore, when the establishment of the practice takes place in a new residential area, then the chance that the vested interests of local practitioners will be damaged is as small as possible.
Other GPs cannot be prevented from establishing themselves in such an area (as has recently happened in a number of cases), nor can people who have moved from the city to a new estate, be prevented from staying with their old GP.
Added cost is inherent in collaboration. Consultation takes time that is not paid for under the current remuneration schemes, often additional support staff is needed (e.g. for

overhead duties) while the common accommodation in particular has vast financial consequences.
Governmental grants under the so-called district health centres promotion scheme offer opportunities of covering the cost of co-operation. For teams on which the professional workers are engaged as employees, permanent regulations for the reimbursement of expenses have been in force since 1978, which are charged to the AWBZ (General Act concerning Special Cost of Sickness, administrated by the Health Fund Board).
This arrangement was created because moneys proceeding from the abovementioned promotion scheme turned out insufficient to bear all of the financial consequences of co-operation. To these regulations an increasing number of centres appealed, which often involved considerable sums of money. Nevertheless a number of centres continued to experience severe difficulties in balancing their budgets: not all of the deficits were thought acceptable by the Health Fund Board and as a consequence some centres have got into financial distress on account of uncovered deficits.

THE SURPLUS VALUE OF COLLABORATION

It is not easy to determine what is the 'yield' of collaboration. As we observed earlier, at first sight it is just expensive. The question as to what compensation there

is, is being asked with greater and greater insistence. After ten years the modernity has worn down and people get curious to know what has been realized of all that was claimed for it. Much of this can neither be expressed in terms of money nor measured in any other way. Attempts to compare the work results of collaborating and non-collaborating practitioners are still in the initial stages. Chiefly the GP is focused upon as yet. For a start it is intended to test the assumption that intensively co-operating GPs refer patients less often to specialists than their colleagues who work single-handedly. The first results would seem to confirm the hypothesis. They also give evidence that the patients of collaborating doctors possibly have shorter stays in hospital on average. However, it has not yet been ascertained that it is the co-operation that is responsible for these differences. Other factors that may affect the figures have not yet been sufficiently considered; these include: distance to the hospital, degree of urbanization, health of the practice population and the range of medical specialists and hospital beds in the area. Besides referral figures and figures on lengths of stay in hospital, other standards that are fit for a quantitative evaluation may be thought of, such as the frequency of prescriptions and figures on absenteeism on account of sickness,

unfitness for work and the like (in which connection once more other relevant variables must be taken into consideration).

Why co-operation then?

One may well ask oneself how any co-operation between practitioners has come off at all when there are so many problems involved. What are the forces that are stronger than the unfavourable circumstances? The basis of the multidisciplinary co-operation between GPs and other practitioners is the increasing doubt on the part of the GPs about the value of the classical medical approach to many of the problems that the GP encounters. This train of thought, which developed within the framework of the Netherlands College of General Practitioners in the sixties, and was, paradoxically enough, the basis of a revival of general medicine, as can be seen in the establishment of University chairs of general practice, can best be illustrated by following the evolution of ideas about 'the general practitioner and sickness'. The Dutch general practitioner began to realize that a great many of the cases awaiting him in his surgery each morning (colds, sore throats, headaches, pains in the lower back, tiredness/weakness and general listlessness), were from the viewpoint of classical medicine so trivial, or at any rate so difficult to

place within a medical framework, that the physician had to ask himself not so much "what is the diagnosis, or what is wrong with this patient", but "why has he come to see me with this complaint at this time". One also began to realize (particularly after the pioneering work of Huygen and his team) that the watchword, that had obtained up to that time "if it does not do any good, at least it does not do any harm", on the basis of which a good many vague complaints had been passed on for specialist examination to exclude potential dangers, in a number of cases did in fact damage the patient, even if it was nothing worse than someone with undifferentiated complaints being confirmed in his belief that he was sick by virtue of his visit to the specialist and hospital, and therefore requiring extra attention from his immediate social environment.

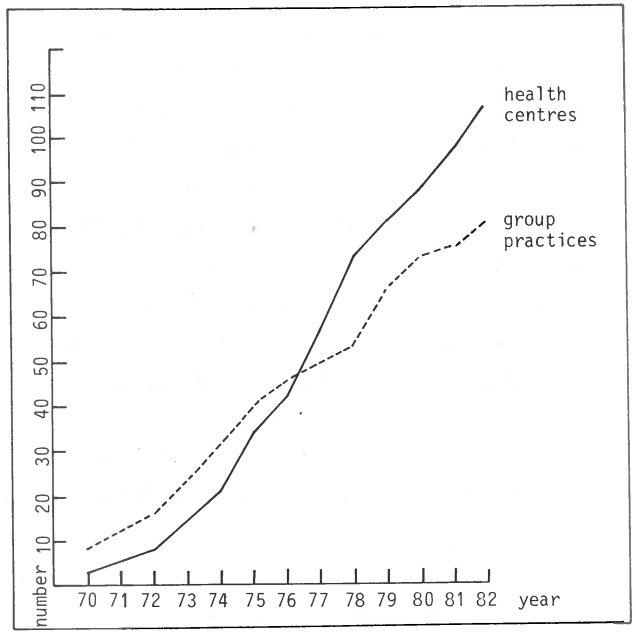
When GPs (of whom it can justifiably be said that they have been the motive force behind the developments in the area of co-operation. as sketched above) come to these conclusion, then it is not so surprising that they seek support among fellow-practitioners who have gone through a different kind of training. The feeling is that the sort of classical medical knowledge that was served up to one as a student, is inadequate, but there is no clear perception of the way to tackle the many problems that have to be faced

in general practice. (This is not to say that other practitioners have a ready answer to these problems, on the contrary, but as the proverb has it, 'many hands make light work' and the idea is that a co-operative approach may well lead to some solutions). This is a synopsis of what in our view are the most important background features of the phenomenon of intensive multidisciplinary co-operation in primary medical care, which is prospering in spite of opposition. We shall now give some statistical information.

Some statistical information on the progress of health centres and group general practices in the Netherlands

Disregarding for the moment the fact that the Philips Electronics Concern set up a health centre for its workers as early as 1920, we can say that the first health centres and group practices appeared in the Netherlands at the end of the sixties. Our review starts in 1970 with 4 health centres and 8 group practices. Since then the number has systematically increased, with health centres growing faster than group practices. A number of the group practices have developed into health centres, and this probably partially explains the slowing growth of the group practices. The graph below sketches the development, starting in 1970.

Graph 1.: Numbers of health centres and group general practices in the Netherlands for the period 1.1.1970 to 1.1.1982



As from 1976, there have been more health centres than group practices. Despite the sombre prognosis on the viability of this new form of health care, only three health centres have failed. The number of group practices which have failed is no more than four. We do not know how many plans have come to nought in an early stage because of the pressure of circumstances.

DISTRIBUTION IN THE NETHERLANDS

Generally speaking health centres and group practices are situated in the more densely populated areas of the country. An exception to this is formed by the health

centres which have been set up according to plan in newly reclaimed areas (polders), namely the IJsselmeerpolders where three fourth of the GPs are employed in health centres.

Table 1 presents numbers of GPs working in health centres and group practices in each area. Furthermore, these figures are contrasted with the total number of GPs.

Table 1.: Geographical distribution of GPs in health centres and group general practices as of January 1982

	number health centr.	number group pract.	number GPs health centr.	number GPs group pract.	total number GPs	% GPs in health centr.	% GPs in group pract.
North Gron.Friesl. Drenthe	7	6	28	21	682	4.1	3.1
East/middle Overijs. Geld. Utr.	23	26	76	91	1464	5.2	6.2
West N.H., Z.H. Zeeland	50	17	161	58	2397	6.7	2.4
South N.Brabant Limburg	18	32	55	106	1232	4.5	8.6
IJselm. polders	9	-	30	-	39	76.9	-
the Netherlands total	107	81	350	276	5814	6.0	4.7

* included GPs employed by another GP for more than 6 months.

Proportionally fewer group practices are found in the west and more in the south. Health centres, except for the polder areas as mentioned, are more common in the densely populated west of the country.

THE COMPOSITION OF HEALTH CENTRES AND GROUP PRACTICES

An examination into the composition of health centres and group practices yields widely varying answers. As far as group practices are concerned, it is only a question of the number of doctors and assistants in the practice. For health centres it is much more a question of composition in terms of the *type* of medical and non-medical practitioners.

On January 1, 1982 (the most recent date for which we have figures in the registration system of group practices and health centres at the Netherlands Institute of General Practitioners 55 (68%) of the 81 group practices comprised no more than three physicians and just 5 (6%) comprised five or more physicians. A group general practice in the Netherlands is therefore a comparatively small scale phenomenon; the average number of GPs is between 3 and 4. The average number of assistants per group practice is 2.9.
The average number of total personnel is 4.2. The entire practice generally comprises no more than 7 persons.

With health centres the situation is somewhat more complex. We shall first consider the development in terms of the number of medical and non-medical disciplines represented and then we shall consider the number of

practitioners of each discipline.

Table 2.: Frequency distribution of the number of disciplines in health centres in 1975 and 1982

number of disciplines	1975		1982	
	number of centres	% of centres	number of centres	% of centres
3	10	29	23	21
4	6	18	20	19
5	7	21	20	19
6	3	9	26	24
7	5	15	10	9
8	2	6	6	6
9	-	-	2	2
11	1	3	-	-
number of health cent.	34	100	107	100
average number of disc.	5.0		5.1	

Merely 23 of the 107 health centres (21%) were staffed by personnel from the three central disciplines. On average about five disciplines are represented, together with their assistants, which all goes to make a health centre a somewhat complicated whole.

NATURE OF THE DISCIPLINES REPRESENTED

What sort of practitioners are to be found in a health centre now?
In addition to the GPs, social workers and district nurses, one often encounters physiotherapists, midwives and family care workers. In tabel 3, we present an overview

of the 1970 total. We give figures for the centres that include more than three disciplines.

Table 3.: Distribution of the disciplines among health centres with 4 or more disciplines 1975 - 1982

discipline	1.1.1975		1.1.1982	
	health centres		health centres	
	number	%	number	%
physiotherapy	18	55	71	66
midwifery	9	27	35	33
family care	8	24	27	25
dentistry	9	27	26	24
pharmacy	7	21	22	21
care of the aged	4	12	10	9
dietetics	5	15	8	7
psychology	2	6	7	7
other disciplines*	4	12	15	14
number of health centres	34		107	

* these are: remedial education, maternity care, community organization, pastoral care, school-medicine and legal aid.

Obviously physiotherapy is the profession most commonly found besides the three central disciplines. In two out of every three health centres physiotherapeutical care is offered at present; in 1975 in no more than 55%. The centres accommodating more than three professions, of which there were 84 in 1982, have one or more physiotherapists in 85% of cases.

At some distance obstetrics follows, which is

found in one third of the centres.
Next come family care and dentistry, in about a quarter of the centres while in about a fifth of them a chemist's is found.

NUMBERS OF PRACTITIONERS IN HEALTH CENTRES AND GROUP GENERAL PRACTICES

Besides the number of co-operative situations, a review of the numbers of practitioners working in them is important as well. These are shown in the table and graph below. The table presents the absolute numbers of practitioners and the adjusted numbers (i.e., the numbers converted to full-time equivalents). The graph presents the absolute numbers for the four professions with the highest incidence.

Graph 2.: Numbers of practitioners in health centres and group general practices, January 1970 to January 1982.

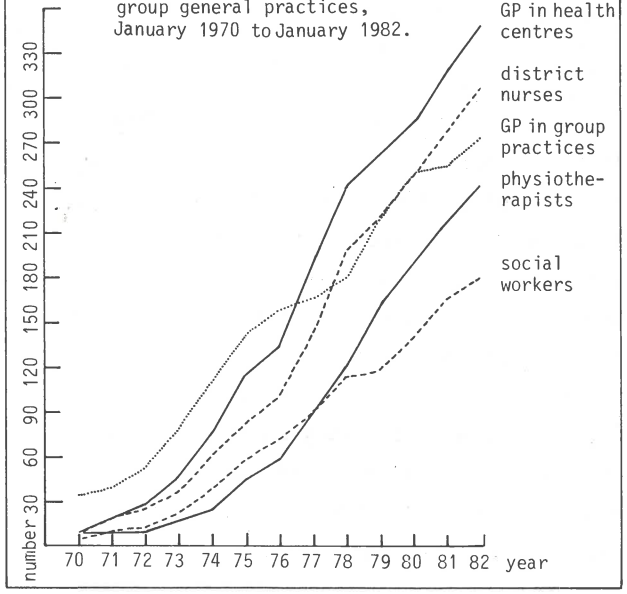


Table 4.: Number of practitioners of the various disciplines in health centres and group general practices

practitioners	absolute number	converted to full-time equivalents
in health centres:		
- general practitioners	350	310
- district nurses	308	277
- social workers	181	123
- physiotherapists	243	193
- dentists	52	42
- midwives	49	28
- family care workers	49	35
- sick attendants	29	23
- chemists	27	26
- old people's welfare workers	18	12
- dietists	8	3
- psychologists	8	4
- auxiliary practitioners	36	31
total in health centres	1358	1107
in group general practices		
- general practitioners	276	259
total in health centres and group practices	1634	1366

The graph shows a remarkably slow increase in the number of social workers if compared with the other disciplines. Particularly in 1978, hardly any growth is to be observed. This had to do with a stop on vacancies in General Social Work which prevented positions that had become vacant from being filled. The interrupted growth has been resumed now. Physiotherapy is strongly on the increase. The number of health centres in which its practitioners are represented is growing steadily and even more rapidly

than the number of centres.
In 1975 55% of health centres offered physiotherapy, in 1981 65%. The number of physiotherapists in a centre also increases: thus, in 1975, there was only one centre (6%) with over four physiotherapists while there were 18 of them (29%) in 1981.
The introductory chapter already mentioned the flexibility with which physiotherapists can expand their activities: any one so-called 'practice-operating' therapist can employ a not inconsiderable number of colleagues on a contractual basis; in addition to the rapid increase of the aggregate of physiotherapists (each year the schools turn out something like 1000 or 1500 new therapists to the total number of close to 15,000 who have been registered up to now; however, not nearly all of them are engaged in primary care) and a pay system based on services rendered, this has led us to anticipate further rapid growth.
The number of district nurses is neatly in line with the number of health centres; neither does stagnation occur, nor explosive growth.

PROPORTION OF LISTED PATIENTS/CLIENTS TO PRACTITIONERS

Not much research has been conducted into the distinguishing features of multidisciplinary collaboration under one roof as compared to more loosely organized work associations or single practices.
We can, however, examine differences in the

work situation of practitioners in health centres and those practising otherwise. One of the differences concerns the number of patients (or clients, as those seeking help from social work are called) for whom a practitioner works. For health centres their number is sometimes somewhat smaller than the national average. For example, the Dutch GP has a list if 2450 on average (as of January 1982). In health centres list size tends to be 2100 (on the basis of the number of GPs converted to full-time equivalents it is 2370), and in group general practices list size is 2400 (converted number: 2575). In this connection we must, however, bear in mind other differences between the several groups of doctors beside the mere fact of co-operation under one roof. Doctors in health centres are younger as a rule and more often they are still in the process of building up a practice.

District nurses in health centres have more patients than their colleagues working outside them.

Nationally the average is about 3200 inhabitants. This is less than the general financing norm which normally allows of one district nurse to every 3450 inhabitants. In health centres the average is about 3175. This is more than the norm for district nurses in health centres which is 3000 inhabitants. Besides district nurses are not

always full-time available to the centre. On the basis of the number of district nurses in full-time equivalents the average number of inhabitants is even 3500 in health centres. Thus practically in health centres district nurses are working for a much greater number of inhabitants than they are allowed to under the financing norms.

Social workers have many more (potential) clients: nationwide the number (January 1982) is approximately 6350 to each social worker. In health centres the average appears to be lower on a first inspection, viz.5890, but the comparison does not hold good. In healt centres like district nurses social workers are frequently only part of the time available to the centre while they are yet in the full-time employment of their foundation.

Should we adjust the figure on the basis of the number of social workers converted to full-time equivalents, then the average number of clients in health centres has suddenly risen to 8665. This is not realistic either, since it is to be expected that all over the country social workers will be working on a part-time basis. In short: in our estimate the average is not far form the national average.

INTEGRATION OF WORK DISTRICTS

Finally we shall shed some light on one of

the most important practical problems in co-operation between practitioners from differing organizational backgrounds. This is the problem of territory as related to fields of activities. The Dutch health and welfare system offers practically no possibility of agreement on territories other than on the basis of free choice by a great many individuals and institutions.
Choice of doctor is free and the establishment of a practice is also free in principle; even when all parties are agreed that a health centre is to be set up in a particular area, it is still impossible to prevent an individual from setting up a practice in that area.
For those practitioners who are organized on a territorial basis, such as district nurses and social workers, it is not impossible for them to adapt themselves to the patient population of the GPs. But it does have a very disturbing effect on the organization.
Take, for example, a new housing estate in town A, where the local government together with medical and paramedical practitioners has established a health centre.
Of the 15,000 inhabitants 10,000 are the patients of the 4 GPs belonging to the centre. The addition of a fifth GP to the total at the centre is endangered by a recently established new GP, who in the space of one year has managed to acquire 1000 patients. Furthermore, there are 3,000 patients who

are unwilling to leave their 'old doctor' in the part of the town where they originally came from. And of the 1000 remaining patients (private patients in this case, because they are not registered with the Health Insurance Fund), no one knows whose patients they are. In any case they make no claim on the centre. The district nurse and the social worker are responsible for the whole district, but they cannot discuss the problems of a third of their clients in the team conferences and so have to create another forum for discussion, not only with the independent GP, but also with twenty different GPs from the old part of the town, as these people have the care of 3000 of their patients. This is just an example. The situation can be even more complicated when the GPs have not limited their intake of patients to a certain area. If one tries to get a complete overview then, as of January 1982, the following picture emerges.

Table 5.: Comparison of patient/client totals in health centres per GP, district nurse, sociale worker and physiotherapist as of January 1, 1982

comparison of patient/client totals	number of centres
1. GP = distr.nurse = soc.w.= phys.	17
2. (GP = distr.nurse = soc.w.) ≠ phys.	23
3. (GP = distr.nurse = phys.) ≠ soc.w.	1
4. (GP = soc.w. = phys.) ≠ distr.nurse	2
5. (distr.nurse = soc.w. = phys.) ≠ GP	23
6. two identical totals or none	41
total number of health centres	107

The situations under 1. and 6. are clear enough. In the first case integration of the totals has been achieved (albeit at the cost of organizational problems in respect of the district nurse and social worker), in the latter case almost all of the totals differ from one another which causes problems within the team.
In the second category the three central disciplines operate in the same district while that of physiotherapy is out of step. The situation under 5, in which the GP is the only one to have a divergent group of patients, is commonly found in new residential areas.
From the above table we infer that in 40 centres the districts of the three central disciplines have been integrated. In 41 centres this is not the case at all.

IN CONCLUSION

We have given a bird's eye view of some aspects of health centres and group practices in the Netherlands. A great deal of attention (more actually than to the centres themselves) has been paid to the situation within which the development of health centres and group practices has to be placed.
The Dutch health and welfare system has certain characteristic features, which have assisted the rise of health centres and multidisciplinary co-operation. We hope that we have given some insight into these factors.

Notes

1. Attempts at research are generally unsuccessful because of the incomparability of the various forms of medical care. Health centre workers are 'pioneers' and are thus not a representative sample of the population of the medical sector. Furthermore there is a tendency to compare health centres with one of the most traditional forms of medical care, namely the independent general practitioner. If any differences between the two emerge it is impossible to discover to what aspect of the new form of medical care they may be attributed.

2. This figure can be broken down into 50% of the population who are salaried employees earning less than a certain maximum amount (which is adjusted annually), 7.5% old-age pensioners and 11.5% socalled 'voluntary insured', mostly self-employed people with a taxable income that is below the maximum.

3. The health insurance fee is made up of a sum to cover costs, that is costs arising from running the practice, (in general these are refunded for the first 1800 patients) and a sum to cover the 'subscription' itself - that is the capitation fee. This latter sum is paid for all those insured.