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RECERTIFICATION OF PRIMARY HEALTH CARE PROFESSIONALS

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Contents

Preface

This bibliography contains literature about *certification* and *recertification* of health care professionals in *primary* care.
Certification- and recertification systems are used for quality assurance. A certificate assures that the professional possesses the qualifications specified in that same certificate.
Certification is normally used when professionals enter the profession or when courses or examinations are passed successfully. Recertification is a repetitive process of certification with the purpose to monitor the quality of the health care professional periodically.

(Re)certification does fit in with the current developments towards quality management and the introduction of quality systems in health care. Just like in industry quality management and quality systems are meant to improve and assure the quality of care. The aim is that in health care - comparable to industry - systematic quality control procedures are used to prevent or discover shortcomings and, if necessary, that improvements are made when certain criteria are not met. Health care organizations and health care professionals are increasingly concerned with developing such procedures, e.g. with regard to continuous education, peer review, patient advocacy, and (re)certification.
Recertification can be viewed as a systematic quality control procedure to assure that health care providers permanently meet professional standards. Besides, recertification may serve as a kind of *umbrella* system. It has the potential to integrate various requirements and quality enhancing activities, e.g. peer review and continuing education. Participating in such activities can be a requirement for recertification.

At present, recertification is not used in a very widespread manner, and there are uncertainties about the desirability to introduce any such systems at all. In the Netherlands, for example, it is as yet unclear how recertification of health care professionals relates to certification of health care organizations. The organizations strive for total quality management, including quality control procedures for the occupied professionals. Health care professionals, however, claim professional autonomy and are eager to develop their own quality control procedures. The question is if these two systems should be integrated at all, and how one should go about it.
Secondly, recertification can take many forms, with different pros and cons connected to them. The requirements can be difficult or easy to comply with. Besides, recertification can be based on either re-examination, auditing or self reporting. Some methods are very time consuming and costly, while others are not. The benefits are difficult to measure and the weighing of costs and benefits is not always easy.
Before a recertification system is introduced, decisions should be made about the aforementioned matters. Therefore, we hope that this bibliography will be useful for researchers and policymakers who are interested in the advantages and disadvantages of recertification.

Introduction

Global definitions

First let us describe the way in which certification and recertification differ from related concepts as accreditation, registration and licensing.
A certificate literally signifies 'an official document which states that the facts written on it are true'. In US health care the term certification is defined as 'the procedure for formal recognition of the qualifications of an individual in a professional or occupational field by an established group of professional peers'.[1]
Recertification is a repeated acknowledgment that certain conditions are met, and it is granted at regular intervals.
In the Anglo-Saxon literature the term certification is used for professionals whereas the term accreditation is reserved for institutions and programs.

Accreditation refers to the same idea. Literally, it is an official declaration that certain required standards are met. The *Joint Commission on the Accreditation of Healthcare Organizations* (JCAHO) defines accreditation as 'attest(ing) to an institution's compliance with accepted standards'.[2] A slightly different definition is used by Selden: 'accreditation is the process whereby an organization or agency recognizes a college or university or a program of study as having met certain predetermined qualifications or standards'.[3]
In general, the terms accreditation and certification are used to declare that something is good and that certain standards are met.

Certification and accreditation are voluntary activities. In this sense there is an important difference with both registration and licensure. The latter two are not voluntary but statutory, and regulated by law.[4]
Registration and licensure are official systems which give permission to 'do something', i.e to practise a profession. Licensure is defined as 'the process by which an agency of government grants permission to an individual to engage in a given profession or occupation upon finding that the applicant has met qualifications standards'.[5]

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1 NRV Rapport certificatie van beroepsbeoefenaren. Zoetermeer: NRV, 1989. p. 7.

2 Pagliarulo, M.A. Accreditation: its nature, process, and effective implementation. Physical Therapy; 66, 1986, no 7, p. 1114-1118.

3 Selden, W.K. Accreditation: a struggle over standards in higher education. New York, NY, Harper Brothers Publishers. 1960, p.3, 6.

4 Sketris, I. Health service accreditation: an international overview. London: King Edward's Hospital Fund for London (KEHF), 1987. 64 p., bijln., grafn., lit. opgn.

5 NRV Rapport certificatie van beroepsbeoefenaren. Zoetermeer: NRV, 1989. p. 7.

Ambiguity of the definitions

The difference between certification and accreditation on the one hand and registration and licensing on the other, seems clear: voluntary versus obligatory.
The literature about these subjects, however, is not always unambiguous and some overlap exists. We mention three problems.

Firstly, although certification and accredition are voluntary activities they can have far reaching consequences. The Home Care Organizations may serve as a good example here. In the US formal quality assurance mechanisms for home care include voluntary federal certification, mandatory state licensure and voluntary accreditation. Federal certification may be voluntary, but home care agencies are still required to fulfil certain conditions in order to participate in the *Medicare* and *Medicaid* programs.[6] The same goes for accreditation, which, formally spoken, is voluntary as well. At the same time, however, it is a condition for reimbursement by *Medicare*.[7] Therefore, it should be clear that neither certification nor accreditation - although not obligatory - are without consequences.

Secondly there is some overlap in the terms certification and recertification. Recertification refers to a repetitive process of periodic certification, but the term *certification* can have the same meaning. Certification can also be time-limited, meaning that after some period of time a new certificate is needed. Literally what we have here is *recertification* but the term *certification* is also used for this repetitive procedure. Thus, the term may denote either a once-only activity or a repetitive one.

Thirdly, ambiguity exists about the terms *certification* and *self-certification*. The point here is the degree of independence of the certifying party. Self-certification indicates that the certifying party is *not* independent, whereas certification implies that the certifying party is. In the Netherlands *certification* is used for this *third party certification*, but in the US it is possible for an 'established group of professional peers' to certify. Thus, when the term *certification* is used one should bear in mind the degree of independance of the certifying party involved.

Historical development

The development of licensing

Untill roughly 1850, regulation of medical professions in the United States of

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6 Hankwitz, P.E. Quality assurance in home care. Clinical Geriatric Medicine; 7, 1991, no 4, p. 847-863.

7 McCann, B.A., Lehmann, R.D. Voluntary accreditation for home care organizations: the Joint Commission's new standards. QRB. Quality Review Bulletin; 13, 1987, no 10, p. 351-354.

America was in the hands of the professional groups. They set up organizations to formulate criteria for admission, for professional codes, and for the way in which professions should be practised. However, professionals that did not qualify could not be denied the right to practise because the rules were not statutory.
In order to prevent gross incompetence among physicians, a system of licenses evolved in several states, for the execution of which state regulatory boards were set up, governed by professionals from particular fields in medicine.
Around 1900, licensing systems existed in dentistry, medicine, pharmacy and veterinary medicine. In 1970, 13 professions were legally structured in all 50 states.
The requirements for getting a license usually concern education and examination. To keep a license certain *license-fees* must be paid. Also, the professional rules should be observed, and sometimes additional education is requested.

The development of (re)certification
In 1973, the *American Board of Medical Specialties* (ABMS) accepted voluntary periodical recertification as an integrated part of all medical specialty certification programs, to be effected roughly in three ways. Firstly it was the Board's intention to establish reexamination of medical specialists every five or ten years. Secondly, it set out to oblige medical specialists to attend continuing education programs and/or visit clinical conferences. Thirdly, it wanted to introduce outcome evaluation by means of peer review, i.e. the idea was to use a specialist's actual performance as a basis for recertification.
In 1985, the *American Board of Internal Medicine* (ABIM) effected a certification system based on recognition by reputable colleagues who possess higher qualified skills. The following principles were adopted: a candidate may be excluded from a certification exam if his or her humane, moral, or ethical behaviour within an institution is not appreciated; a candidate must be able to demonstrate clinical competence over a period of three years in an institution; a candidate who is judged incompetent by an institution's adviser in his or her final year, will be excluded from certification exams.
In 1987, a continuing medical education requirement for relicensure of physicians was established in about half of the 51 states in the US.[8]
In 1990, 17 of the 23 specialty boards were committed to time-limited certificates requiring recertification every seven to ten years.[9]

European policy is directed at the standardization of certification, which coincides with the strife for an integrated European market. This requires harmonization of regulations concerning public safety, public health and environment. Therefore, certificates must be internationally recognized and a

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8 Chan, L.K. Recertification: the specialist. Singapore Medical Journal; 28, 1987, no 3, p. 263-265.

9 Langsley, D.G. Medical specialty credentialing in the United States. Clinical Orthopaedics and related Research; 257, 1990, Aug, p. 22-28.

European platform for inspection and certification must be created.
Standardized norms for certification are for example the ISO-norms, developed by the *International Organization for Standardization*. With regard to certification these ISO-norms demand that: 1. it is tested whether certain previously formulated conditions are fulfilled; 2. it is also tested whether these conditions are observed throughout the entire period for which a certificate was issued.

Until now, as far as we know, no certification systems of individual health care professionals exist in Europe. Health care professions in Europe are regulated by licensing or registering systems. These systems are mainly directed towards assuring the quality of those who enter the profession. Re-licensure, however, is drawing near.
In the Netherlands, for example, the *Royal Netherlands Medical Association* (KNMG)[10] has developed an integrated model for re-registration of medical specialists, general practitioners, nursing home physicians and social physicians.[11] This was completed in 1990.
In 1991, a consistent overall quality policy was developed for general practitioners, which included re-registration.[12] Further requirements for re-registration will involve: having practised for a certain minimum amount of time, having participated in peer review, having attended a certain amount of continuing education activities and, eventually, having passed a re-examination test.[13] A legal framework for re-registration will be created by means of planned changes in law.[14] It is argued that (re)certification should be an integrated part of a consistent quality management policy of professionals to show to full advantage.[15]

Costs and benefits of (re)certification

In general, the (increasing) costs of certification will go hand in hand with the (increasing) number of certificates that are granted. It is useful to distinguish

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10 i.e. 'Koninklijke Nederlandse Maatschappij tot bevordering der Geneeskunst'.

11 KNMG Commissie Kwaliteit. Kwaliteitsborging door herregistratie van medische beroepsbeoefenaren. Utrecht: KNMG Commissie Kwaliteit, 1990. 28 p., bijln., lit. opgn.

12 Verdenius, W. Organisatie van kwaliteit binnen de kring van huisartsen gezien vanuit de koepel (LHV). Den Haag: VUGA. 1992. In: Handboek kwaliteit van zorg, p. B II 1.1.1-1.

13 Landelijke Huisartsen Vereniging

14 Kooij, L.R. De wet BIG en de (her)registratie van huisartsen en verpleeghuisartsen. Medisch Contact; 47, 1992, no 21, p. 661-662.

15 Nationale Raad voor de Volksgezondheid. Rapport certificatie van beroepsbeoefenaren. Zoetermeer: NRV, 1989. 57 p., bijln., lit. opgn.

the costs of certification procedures from the costs of measures to be taken by the professional himself. A recurrent question, in this respect, is who will have to pay for these costs.
Another recurrent question in the literature about (re)certification deals with the requirements concerning *continuing medical education* (CME), and, more particularly, the question whether it should be voluntary or mandatory.
As was mentioned above, in the US CME is required for relicensure of physicians in half of the 51 states. It is argued, however, that self-directed learning can be equally effective, and should be acknowledged as a valid alternative form of satisfying specialty board recertification requirements.[16]

In some states of the US, *mandatory continuing education* (MCE) is required for relicensure of physical therapists. However, in 1988 the alledged positive effects of MCE on the quality of practice, are still not demonstrated sufficiently, according to Finley.[17] The increased costs are often cited as a disadvantage of MCE. Still, there is a growing concern for a system that would ensure the quality of clinical practitioner competence.

A study by Puetz supported a resolution to introduce a system of mandatory continuing education for nurses in the state of Indiana.[18] The study indicated that the least educated nurse was least likely to attend CME. It was thought that a mandatory system should prevent this problem.

In pharmacy, a general lack of uniformity exists among US state boards regarding *continuing education* (CE) crediting policies. Some boards require specific pharmacy education programs for relicensure, others accept general medical education (i.e. intended for physicians) credit also. Some states are in the process of reviewing submitted requests for CME credit.[19] According to Osterhaus a relicensure examination is considered to be the best method to ensure competence.[20]
In dentistry, it is argued that credentialing activities may have repercussions on the cost-effectiveness of health care delivery. The criticism concerning

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16 Manning, P.R. et al. A method of self-directed learning in continuing medical education with implications for recertification. Annals of Internal Medicine; 107, 1987, no 6, p. 909-913.

17 Finley, C. Mandatory continuing education: a survey of current activity: a special communication. Physical Therapy; 68, 1988, no 3, p. 374-377.

18 Puetz, B.E. Legislating a continuing education requirement for licensure renewal. The Journal of Continuing Education in Nursing; 14, 1983, no 5, p. 5-12.

19 Gardner, S.F. et al. Medical versus pharmaceutical continuing education: are both appropriate for the pharmacist? DICP, The Annals of Pharmacotherapy; 25, 1991, no 12, p. 1336-1338.

20 Osterhaus, J.T., Gagnon, J.P. A survey of state board of pharmacy members and continuing education providers' views on continuing education. Drug Intelligence and Clinical Pharmacy; 19, 1985, no 2, p. 134-138.

existing systems of licensure is that too much attention is being paid to the quality of resources and to competence tests, and too little emphasis is placed on actual patient outcome. Burakoff and Milgrom argue that there is little hard evidence of the efficiency of *mandatory continuing education* in promoting competence.[21] The effects are also seldom carefully evaluated.[22]

In sum, it seems that the effectiveness of *mandatory continuing education* is difficult to assess.[23] According to Dunn, the very hypothesis that the quality of care is at all related to continuing education activities, can not significantly be established because few studies actually measure patient outcome.[24] Haynes' review of the literature, however, demonstrated that physician behaviour had indeed improved as a result of *continuing education*, although only a few articles assessed the impact on patient outcome.[25]

Contents of this bibliography

The first chapter contains general literature about (re)certification. Legislation is the subject of the second chapter. Chapter three contains publications that deal with continuing medical education as far as it does not relate directly to any of the six primary health care professions. Therefore, these are brought together in a separate chapter. The chapters four to nine are organized according to a number of professions in primary health care, i.e. general practitioners, pharmacists, dentists, paramedical professions, midwives and home health care.
Beside the list of contents there are three more entries to this bibliography, i.e. an author index, a subject index, and the footnotes used in the introduction. Also, a list of organizations in health care is included.
The literature collected in this bibliography was gathered from searches in MEDLINE (CD-ROM version) and in the NIVEL catalogue. It was also checked in the NIVEL RWO-database (Registratie Wetenschappelijk Onderzoek) whether any ongoing research is being done on (re)certification.

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21 Burakoff, R.P., Demby, N.A. Quality assurance: historical perspective and critical issues. Dental Clinics of North America; 29, 1985, no 3, p. 427-436.

22 Milgrom, P. et al. Quality assurance and the role of self-evaluation and continuing education. Dental Clinics of North America; 29, 1985, no 3, p. 531-544.

23 Todd, D. Continuing medical education. Annals of the Academy of Medicine, Singapore; 16, 1987, no 2, p. 366-369.

24 Dunn, E.V. et al. Study of relation of continuing medical education to quality of family physicians' care. Journal of Medical Education; 63, 1988, no 10, p. 775-784.

25 Haynes, R.B. et al. A critical appraisal of the efficacy of continuing medical education. JAMA; 251, 1984, no 1, p. 61-64.

1. General

BERWICK, D.M.
Continuous improvement as an ideal in health care.
New England Journal of Medicine; 320, 1989, no. 1, p. 53-56.

The article starts off with an example of how quality can be improved in an industrial setting, which can be translated directly to modern American health care. Essentially, there are two ways: *inspection* (and discipline) of the work that is being done (*The Theory of Bad Apples*) on the one hand, and *understanding* it on the other.
The view behind the first theory is that problems concerning quality are caused by poor intentions, i.e., that people are the cause of trouble. Here, deterrence is the way to improve quality because intentions need to be changed. People must be made to care, and will consequently prove that they care.
Another, more valid way to focus on quality was discovered by the Japanese. They used the term *kaizen* to refer to a continuous search for opportunities for all processes to go better. In its modernized version *kaizen* was adapted by Deming and Juran[26], who established the so-called *Theory of Continuous Quality Improvement*. They discovered that problems with quality have nothing whatsoever to do with motivation or effort, but rather with poor job design, failure of leadership and/or unclear purpose. Quality can be improved much more when people are assumed to be trying hard already, and are not accused of sloth. Some of the measures that need to be taken in order to implement *kaizen* in health care are:
- Substantial investment must be made in quality improvement. Lateron cost reductions will result.
- Respect for the health care workers must be re-established. Their motivation should not be an issue.
- A dialogue must be maintained between customers and suppliers of care.
- Modern technical, theoretically grounded tools for improving processes must be put to use in health care settings.
- Health care organizations must develop new structures to fit the newly implemented quality improvement programmes.
- Individual physicians must participate in the programmes. Especially in institutions, little can be improved without the help of the medical staff.

GLASSER, M.A.
Certification and recertification: a consumer's view.
Clinical Orthopaedics and Related Research; 257, 1990, Aug, p. 38-42.

A lot of research into methods that may contribute to the improvement of the quality of patient care, is directed towards the effectiveness and appropriateness of clinical treatment methods. This provides added emphasis

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26 See references 4,5,9 and 10 listed in Berwick's article.

on consumer needs for certification and recertification. While there are multiple factors involved, the first and foremost question a consumer would ask is: 'How good is the physician and how good is the surgeon'? The combination of increased services delivered on an outpatient basis and in doctor's offices gives added weight to the importance of peer-approved physician competence. So, too, are the *Health Care Financing Administration*'s (HCFA) efforts to report on the quality of services in nursing homes. Research programmes that are aimed at selecting preferred treatment methods are currently underway by a host of organizations, including the *RAND Corporation* and the *American Medical Association*, private sector insurers, and agencies of the federal government. The effects of these programmes, however, are ultimately dependent of the competence of the individual physician to put into clinical practice the knowledge and standards of recent research developments.

KANE, R.A., KANE, R.L.
Long-term care: variations on a quality assurance theme.
Inquiry; 25, 1988, no. 1, p. 132-146.

Quality assurance in *long-term care* (LTC) diverges from approaches in acute care because of the specific inherent features of LTC: the slower pace, the reliance on 'low technology' services, the goals of LTC, and the multiple transitions across care sites, which is typical of LTC users. LTC quality assurance activities should focus on *outcome*, using process measures only when they are related to desirable outcomes or when they are intrinsic to respectful treatment of patients. Outcome measures should compare what is achieved with what can be reasonably expected. Because LTC services can be given interchangeably at various LTC sites (e.g. home care, day care, nursing homes), a database must be developed that permits monitoring and comparing outcomes across different LTC programmes.
Quality assurance programmes in LTC can be found mostly in the public sector, where the following mechanisms operate:

- Licensure of facilities. Most states set minimum staffing levels, and safety and fire codes.
- Certification of facilities to receive payment from the Medicare and/or Medicaid programme. State certification agencies perform annual inspections to ensure that federal conditions are met. Federal inspectors check the adequacy of this inspection process.
- Inspection of care, which - if reimbursed by Medicaid and Medicare - must both be medically necessary and of acceptable quality. The states fulfil this requirement by annual review of the care of each Medicaid recipient.
- Ombudsman programmes, which receive complaints, act as advocates for nursing home residents, and serve as mediators between residents and facilities.
- Regulation of personnel by means of licensure or certification of professionals.

A number of weaknesses that still exist in this regulatory apparatus are mentioned, of which the last one is the worst: the problems identified through the processes of licensure, certification and inspection of care tend

to remain uncorrected and to recur.
Three components of quality assurance in LTC are dealt with in this article, i.e. defining quality and establishing the criteria; assessing the adequacy of care in view of these criteria; and assuring the quality by correcting the deficiencies that were found.
In conclusion, a number of criteria for a regulatory system are suggested and the necessity of a way to monitor its continuing adequacy.

KASDORP, J.
Certificatie: een keurmerk voor gezondheidszorg.
[Certification: a hallmark for health care.]
Medisch Contact; 44, 1989, no. 20, p. 673-676, refs.

The *International Organization for Standardization* (ISO) defines certification as follows: 'activities on the basis of which an independent organisation demonstrates that there is a justified confidence that a clearly described subject of certification agrees with a certain criterium or with a document which involves certain requirements that have to be observed'.
In the Netherlands, the *National Board of Public Health* (NRV)[27] defines the process of certification of health care professionals as follows: 'activities on the basis of which an independent organisation demonstrates that a person fulfils certain criteria that are formulated in advance, and are related to the manner in which a certain profession should be practiced'.
A certificate is issued for a certain limited period of time (1-3 years). It must be done by an organisation that is independent and impartial. That is why the Netherlands' *Board of Certification*[28] uses the term *third party-certification*.
There is a long tradition of self-regulation by health care professionals in the United States, where necessary supported by law. The NRV refers to this phenomenon as a form of *self certification* by the own branch (i.e. not by an independent organisation). In America, the term *certification* is usually reserved for health care professionals; *accreditation* applies to institutions.
The certification programme of the *American Board of Internal Medicine* (ABIM) may serve as an example. In order to qualify for certification by the ABIM, an internist should have six basic qualities or skills: reliable clinical judgement, broad medical knowledge, good diagnostic skills, personal integrity and humanity, a professional attitude and behaviour, and the ability to provide suitable and complex medical care of high quality, which truly answers the needs and wishes of the patient, and is efficient in the use of laboratory tests and diagnostic procedures.
In a number of European countries, including the Netherlands, certification programmes for health care professionals are being developed. It seems that especially *self certification* is concerned, directed towards stimulating continuing education and supervision by colleagues.

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27 i.e. 'Nationale Raad voor de Volksgezondheid'.

28 i.e. 'Nederlandse Raad voor de Certificatie'.

KNMG COMMISSIE KWALITEIT
Kwaliteitsborging door herregistratie van medische beroepsbeoefenaren: voorstel ter ontwikkeling van een integraal model voor herregistratie van specialisten, huisartsen, sociaal-geneeskundigen en verpleeghuisartsen.
[Quality assurance by re-registration of medical professionals: proposal for development of an integrated model for re-registration of specialists, general practitioners, social physicians and nursing home practitioners.]
Utrecht: KNMG Commissie Kwaliteit, 1990. 28 p., encls., refs.
nivel (R 5242)

The integrated model of recertification[29], which is described here, elaborates on the existing system of continuing education and registration. This means that there are institutions that formulate educational criteria, and also that there are registration committees and boards of appeal. The term *integrated* implies that the model is valid both for medical specialists, and for general practitioners, nursing home specialists and social physicians.
In the model four separate functions are being distinguished, i.e. a legislative, an executive (recertifying), a supervising, and a professional function. This last function is used to decide in conflicts between health care professionals and recertifying organisations. The functions should be fitted in with already existing organisations of recertification and postgraduate education.
In this report the relevant activities concerning the model of recertification are being adjusted for the different professions mentioned above.[30] It roughly comes down to a growth model with a number of succeeding phases: introduction to, voluntary participation in, acception of, and obligation of recertification. These phases will go hand in hand with the gradual introduction of the developed model in the different health professions.
It is assumed that the costs made by the professional will have to be paid for by the consumer through his or her employer or by means of increased insurance premiums, and tariffs. The professional group could then cover the costs of the organisation and of the development of the recertification system.

LANGSLEY, D.G.
Medical specialty credentialing in the United States.
Clinical Orthopaedics and Related Research; 257, 1990, p. 22-28.

Specialty boards serve to define qualifications and issue credentials to assure the public of the specialist's preparation and skills. Over the past 72 years, 23 such boards have been approved, and now issue 31 different types of general specialty certificates and 57 types of subspecialty credentials. For 50 years, the *American Board of Medical Specialties* has encouraged a system of recertification to demonstrate that the certified

29 i.e.: 'herregistratie'.

30 Zie v.w.b. huisartsen de drie artikelen van Brands et al in het hoofdstuk 'General Practitioners'.

specialist has maintained his skills and has incorporated the new knowledge associated with advancing medical science. Presently, 17 of the 23 boards are committed to time-limited certificates requiring recertification every seven to ten years, and others are currently planning such a process. New methods of performance assessment are being used for recertification processes.
In addition to recertification, the other major change in specialty credentialing can be found in the number of subspecialty certificates sought and authorized. These have increased dramatically over the past 20 years, and reflect the advances in science as well as new styles of practice. As a consequence, some specialties are moving towards accreditation without certification in order to improve training, even if there is no authorized type of certification. Another consequence of subspecialty proliferation is the concern about fragmentation of medical care and its effect on the costs of health care.

PAGLIARULO, M.A.
Accreditation: its nature, process, and effective implementation.
Physical Therapy; 66, 1986, no. 7, p. 1114-1118.

The purpose of this article is to describe what *accreditation* is, how it operates, and how it can be used effectively for self-improvement. The nature of accreditation is presented in terms of its definition, purpose, type, and governmental interference. Accreditation is presented as a four-step process, of which self-study is the foremost step. Seven principles for a successful self-study are discussed. When accreditation is viewed and administered appropriately, it can be an opportunity for self-improvement and a tool for quality assurance.
Selden's definition of accreditation is: 'the process whereby an organization or agency recognizes a college or university or a programme of study as having met certain predetermined qualifications or standards'.[31] This means that the process is conducted by an external organization; that it is also possible for programmes to be accredited, and that certain standards have been established.
Accreditation is voluntary. Most educational institutions and programmes are not mandated to be accredited. If they want to be eligible for federal funds, to receive state chartering, or to permit their graduates to take professional licensing examinations, however, they must be accredited by an agency which is recognized by the *Council on Postsecondary Accreditation* or by the *US Department of Education*.
Two types of accreditation can be distinguished. *Institutional accreditation* focuses on the entire educational system and is organized primarily by regions. It emphasizes ascertaining whether the institution actually meets its goals and can continue to do so.
The second type of accreditation is known as *specialized* or *programmatic*

31 Selden, W.K. Accreditation: a struggle over standards in higher education. New York, NY, Harper Brothers Publishers. 1960, p.3, 6.

accreditation. It involves programmes within the institution, and is organized nationally rather than regionally. Its emphasis is on ascertaining whether the programme meets professional standards of good practice. It was Kells who first described accreditation as a four-step process, with a crucial place for self-study.[32] This concept is described in detail.

PISACANO, N.J., VELOSKI, J.J., BRUCKER, P.C., GONNELLA, J.S.
Classifying the content of board certification examinations.
Academic Medicine; 64, 1989, no. 3, p. 149-154.

A system of medical classification, based on the fundamental dimensions of body system, etiology, and stage of disease, was evaluated by a classification of the content of some specialty board's examinations. Ten physicians encoded 2310 test items that constituted three previously administered certification/recertification examinations of the *American Board of Family Practice*. Analysis of the data for the major content of one of these certification examinations suggests that a profile based on this classification system might provide a specialty board, the residency programmes, and candidates for certification, with important information not produced by discipline labels or disease names. This classification system may allow a board to define more effectively the contents of its examinations, monitor other requirements for certification, and communicate its standards to the medical profession and society.

SCHLACKMAN, N.
The quality care cycle.
QRB. Quality Review Bulletin; 17, 1991, no. 11, p. 360-364.

This paper describes an American *Health Maintenance Organisation* (HMO). It shows how an individual patient interacts with the cycle of care in terms of risk evaluation, health education and prevention, diagnosis, treatment, referral, case management, and outcome. Other components of the cycle of care include primary certification and recertification of providers, criteria for procedures and site appropriateness, and evaluation of the professional qualifications of providers.
The cycle of care, or *quality care cycle*, consists of a number of phases.
The first phase involves a member risk assessment in which the history of members is recorded and continually updated. Health and lifestyle needs data are collected and programme information and educational materials are sent to new members.
In the second phase the primary care physician, who functions as an intermediate between HMO-members and the health care system, is confronted with a number of quality standards that should point out if a physician should be admitted to the HMO or not, and to periodically assess

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32 Kells, H.R. Self-study processes: a guide for postsecondary institutions, ed. 2. New York, N.Y. Macmillan Publishing Company, 1983.

his functioning within the system. For annual recertification, the physician should be evaluated by a *Quality Assurance* (QA)-committee, in which collegues participate.
Phase three is when this committee formulates diagnostic protocols for this procedure. Next, it develops treatment protocols (phase four). Before treatment is started, a *Quality Process Review* (QPR) should confirm that the most suitable treatment is in fact administered. In phase six it is established whether the patient does actually receive the most suitable care in the most suitable place. The QA-committee is also responsible for certification and recertification of specialists (phase seven).
When all conditions are met so far, the treatment can begin (phase eight). When the patient is hospitalized, his or her situation is constantly being evaluated by *nurse-case managers*. The outcome of treatment (phase ten) serves as an instrument with which the quality of care can be measured. It also determines what the patient's risc-status is (phase one), which may generate yet another round of the *quality care cycle*, if necessary, i.e. the whole process starts again.

SKETRIS, I.
Health service accreditation: an international overview.
London: King Edward's Hospital Fund for London (KEHF), 1987. 64 p., encls., refs.
nivel (R 4826)

In 1987 there is still no system in the UK which allows quality of care to be measured against any national standard.[33]
Accreditation is a method used for the evaluation of the quality of the health services that are being provided. It is defined by Lewis as the 'professional and national recognition reserved for facilities that provide high-quality health care. This means that a particular health care facility has voluntarily sought to be measured against certain professional standards, and is in compliance with them'.[34] It differs from both registration and licensing in that it is not a statutory but a voluntary system. Essentially, all accreditation systems share the same elements:
- An accreditation board consists of representatives of professional and health care organisations, and in some countries of the government and of those representing consumer interests.
- Comprehensive standards are developed which reflect the current practice in services. These are extensively reviewed by practitioners with expertise in the area.
- Surveyors are chosen and trained to apply the standards to a specific health care service. This involves site visits by the surveyors, who then make suggestions for improvement and finally make a recommendation to

33 Griffiths, R. Report of the NHS management inquiry. London, DHSS (Leaflets: PO Box 21, Stanmore, Middlesex. HA7 1AY), 1983)

34 Lewis, C.E. Hospital accreditation. New Zealand Hospital, 36, 1984, no. 8, p. 15-17.

the board on whether or not to grant accreditation.
Some pilot surveys in the UK have suggested that a system designed to assess the quality of health care should contain the following elements: it should be voluntary, the surveys should be comprehensive, the survey teams should be multidisciplinary, based on peer review, and the surveying methods, approaches and standards should be stated openly, for public scrutiny and challenge.
This report compares the respective accreditation systems in the US, Australia, Canada, New Zealand, The Netherlands, Spain, and Yugoslavia. The objective is to develop a system for the UK.

STEWART, J.H., TULLI, C.G. JR
Some unexpected benefits of accreditation: a case study.
Alabama Medicine; 58, 1988, no. 6, p. 18, 21-22, 24.

A case study was done in the *Capstone Medical Center* (CMC), which is an ambulatory health care facility on the campus of the University of Alabama. It is at the same time a family practice residency training unit.
In 1983 a number of improvements were made in the CMC, which opted for accreditation by the *Joint Comission on the Accreditation of Healthcare*'s (JCAH's) Ambulatory Health Care Programme. A quality assurance programme was written and a *Quality Assurance Committee* established. In 1985 the accreditation took place. Certain conclusions were drawn with regard to accreditation benefits as defined by JCAH (in 1982):
- Ambulatory health care accreditation demonstrates compliance with nationally recognized standards for ambulatory care programmes.
- It provides a programme with individualized consultation and education, based on national experiences, and meant to help physicians in their self-improvement efforts.
- The accreditation programme uses a quality assurance process that serves as a management tool. It also involves an ongoing self-monitoring process to assure patients and families of quality care between surveys.
- Accreditation facilitates the recruitment of professional staff.
- It motivates ambulatory care staff to improve services and care within programmes.
- It also facilitates reimbursement from insurance companies and other organizations and agencies.
- Accreditation demonstrates an ambulatory care programme's commitment to quality care.

Inviting expert consulting physicians to visit and assess the quality of care provided at the CMC was a little threatening, particularly to the physicians. But their agreeing did demonstrate a willingness to objectively look at the center's possible deficiencies. It also reflected the physicians' confidence in the quality of the care provided at the CMC.
Some unexpected benefits were, e.g., the dialogue, which developed among the staff. Also, questions were raised as to what rights patients should have, what the minimum standard of care should be in individual cases, and how committees should be structured to deal with internal issues. Accreditation also improved the opinions physicians had of the center.

2. Continuing Medical Education

CHAN, L.K.
Recertification: the specialist.
Singapore Medical Journal; 28, 1987, no. 3, p. 263-265.

It is stated that in 1987 no recertification programmes existed in the United Kingdom, Australia, New Zealand, Switzerland and France. In 1969 the *American Medical Association* (AMA) set up the Physician's Recognition Award, which is given to doctors if they satisfy certain credit hours of medical education annually or bi-annually. Nowadays, this continuing medical education requirement for relicensure of physicians exists in about half of the 51 states in the US. In 1973, the *American Board of Medical Specialties* (ABMS) prescribed that its member specialty boards should develop recertification programmes: 'The ABMS adopt, in principle, and urge the concurrence of its member boards with the policy that voluntary, periodic recertification of medical specialists become an integral part of all national medical specialty certification programmes, and further, that the ABMS establish a reasonable deadline when voluntary, periodic recertification of medical specialists will have become a standard policy of all member boards'. Today, 13 of the 23 boards have done so.
In 1987, Singapore did not have any recertification programme yet. Suggestions are made by the author of this article.

HAYNES, R.B., DAVIS, D.A., MCKIBBON, A., TUGWELL, P.
A critical appraisal of the efficacy of continuing medical education.
Journal of the American Medical Association; 251, 1984, no. 1, p. 61-64.

In order to determine the efficacy of *continuing medical education* (CME) 248 original articles that described CME intervention studies were collected. The articles were reviewed for applicability and scientific credibility by means of preset methodological criteria. Thirteen percent of the articles described randomized trials, but only 7 percent of all the articles and 20 percent of the randomized trials assessed the actual impact of CME on patient outcomes. Seven articles met all set criteria and were reviewed in detail. These studies provided convincing evidence that CME can indeed improve physician behavior. However, only three of these methodologically sound studies assessed patient outcomes, of which only one demonstrated some improvement in these outcomes.

MANNING, P.R., CLINTWORTH, W.A., SINOPOLI, L.M., TAYLOR, J.P., KROCHALK, P.C., GILMAN, N.J., DENSON, T.A., STUFFLEBEAM, D.L., KNOWLES, M.S.
A method of self-directed learning in continuing medical education with implications for recertification.
Annals of Internal Medicine; 107, 1987, no. 6, p. 909-913.

This method of self-directed learning for physicians, which can be used to satisfy a portion of specialty board recertification requirements, integrates contract learning (self-formulated learning plans), information brokering (linking physicians with consultants and community resources), and collegial networking (discussion groups). The method encourages physicians to focus on educational objectives; it supplies learning resources, and promotes interactions with colleagues in study groups. Fifty-nine (53%) of the 102 learning goals update physicians' knowledge. Print sources and discussions with experts were the commonest resources used. Forty-five (49%) of 91 participants completed their learning plans. Forty-nine (74%) completed projects were judged successful in achieving their goals. Twenty-five (45%) of 56 physicians responding to a questionnaire stated that the method was superior to traditional continuing medical education. Fifty-two percent of the participants found the method as effective as traditional continuing medical education. Proof of accomplishment allows this method to be used as part of a specialty board recertification process.

MANNING, P.R., PETIT, D.W.
The past, present, and future of continuing medical education. Achievements and opportunities, computers and recertification.
Journal of the American Medical Association; 258, 1987, no. 24, p. 3542-46.

Changes in *Continuing Medical Education* (CME) over the past three decades have been controversial and complex. A 1950s-style, small-scale, voluntary activity has evolved, in 1987, into broad-scale programmes with accredited sponsors and with ties to relicensure. Within the next three decades, CME will be directed by methods chosen by specialty boards for recertification and by exploitation of computer and telecommunication technology. Written recertification examinations can waste physicians' time studying material that will not improve care of their patients. It is hoped that improved methods of analysis of individual practices, on-the-spot access to pertinent medical information, and better communication among physicians, can be incorporated into recertification procedures. Policies that are being established now will shape CME for decades to come. The authors encourage coordination of efforts by medical specialty boards, medical societies, hospitals, medical schools, computer corporations, telecommunication firms, granting agencies, and the National Library of Medicine to ensure the most effective and efficient recertification and CME policies.

PUETZ, B.E.
Legislating a continuing education requirement for licensure renewal.
Journal of Continuing Education in Nursing; 14, 1983, no. 5, p. 5-12.

This study compares the attendance patterns of registered nurses to *continuing education* (CE) programmes which were found in a study in Indiana in 1975, to those of a study conducted in that same state three years later. It appeared that four out of nine personal/professional characteristics of registered nurses studied, did significantly influence attendance. Those were

employment status, the highest level of education that was completed, position, and field/place of employment. They showed to be related significantly to attendance. Variables such as age, marital status, basic educational preparation in nursing, clinical area of nursing practice, and the number of years since graduation from the basic educational preparation or the length of employment (either full- or part-time) were nòt significantly related to attendance. There is some indication that the more nurses work and the more the work is related to nursing, the more they attend CE activities.
It was also established that CE attendance increased significantly since 1975. However, this study indicates that the least educated nurse was least likely to attend CE in Indiana both in 1975 and in 1978. Therefore, the results of this study do support the argument in favour of mandatory continuing education, a proposition in fact introduced by the *Council on Continuing Education* into the *House of Delegates* at the 1979 *ISNA Biennial Convention*, and subsequently adopted. In 1981 this resolution was introduced into the *Indiana General Assembly*.

RIBBLE, J.G., BURKETT, G.L., ESCOVITZ, G.H.
Priorities and practices of continuing medical education program directors.
Journal of the American Medical Association; 245, 1981, no. 2, p. 160-163.

A survey was conducted among programme directors in *continuing medical education* (CME), in order to determine the priorities and practices of the people who actually develop the CME programmes. Respondents from community hospitals, medical schools, specialty societies, state medical societies, and other organizations thought that the most important issues related to the measurement of educational needs and outcomes.
A high degree of congruence was found between programme directors' ideal priorities and those they thought were actually being attained in their organizations. Differences between groups of CME providers were infrequent, but medical schools were significantly more concerned about funding and accountability than any of the other groups. Community hospitals were especially concerned about needs assessment and training for programme directors, and specialty societies were so about methods for adult learning. The majority of directors thought that CME credits, recertification, and relicensure (but not reexamination) should be mandatory.

TODD, D.
Continuing medical education.
Annals of the Academy of Medicine, Singapore; 16, 1987, no. 2, p. 366-369.

With the rapid advances in medical science and increasing complexities of patient care, the need for *continuing medical education* (CME) is widely accepted by the profession. CME follows general and higher professional training, and should be a life long process. Teaching hospitals and postgraduate professional institutions are playing a vital role in the organisation, promotion, and monitoring of this activity. CME directorates should be esta-

blished. University authorities must recognise the important role of medical teachers in both postgraduate and continuing medical education, and the staff establishment and terms of service should be held regularly. Medical libraries should have easy borrowing facilities. Self-assessment and audio--visual material are particularly helpful to the busy practitioner and quality journals should provide pertinent and up-to-date information. All charges for attending scientific meetings and educational material should be tax deductible or subsidized.
The effectiveness of CME is difficult to assess and participation is almost impossible to enforce. Much depends on the standard of medical practice desired by society. Recertification, both of general practitioners and of specialists, poses many problems. On the other hand, completion of self-assessment programmes, active participation at medical meetings, contributions to scientific literature, and membership of medical societies with built-in peer review could be monitored and regularly used to evaluate professional status.

VYSOHLID, J., WALTON, H.J.
Development of continuing medical education in Europe: a review.
Medical Education; 25, 1990, no. 5, p. 406-412, refs.

This review sets out some general facts and features concerning the development of *continuing medical education* (CME) in Europe. The review is intended as a basis for proposing plans and actions for CME in the future. Europe was the birthplace and cradle of both scientifically based medical education in general and CME in particular. Three stages of development are distinguished. The first stage involves the development of CME from the 19th century up to the beginning of the Second World War. The second stage deals with developments after 1945, whereas the last stage concerns CME in the present.

3. Legislation

GAUMER, G.L.
Regulating health professionals: a review of the empirical literature.
Milbank Memorial Fund Quarterly/Health and Society; 62, 1984, no. 3, p. 380-416.

Existing systems for regulating health professionals are being scrutinized as part of the search for an effective approach to health care cost containment. From the combination of a federalized system of control mechanisms for credentialing and a number of accreditation procedures, the institutional rationing of practice privileges, peer review, malpractice actions and the like, results a complex and often redundant array of regulations.
These devices are manipulated by several agencies, by all 50 states, by professional groups, and by several private organisations. The regulations are perceived by many to be a significant barrier to ongoing efforts to encourage cost containment through a more widespread use of competitive incentives in the health care industry.
This article reviews literature that deals with credentialing and the effects it has on the occupational freedom of choice. Also, studies concerning the effects of licensure on provider income, fees, and health care costs are reviewed. Some of the ethical prohibitions in credentialing are touched upon. Requirements for licensure may be too invasive, e.g. bans on advertising, which limit the operation of competitive forces. Also, the effects of credentialing practices on the quality of care are reviewed, as well as other ways in which competence can be ensured.

GELLHORN, A.
Periodic physician recredentialing.
Journal of the American Medical Association; 265, 1991, no. 6, p. 752-755.

The quality of health care services is a major concern of consumers and commands a lot of attention in the national health policy debate. Both government and business world emphasize quality medical care because of its immediate relevance to cost containment. Federal legislation has been introduced to regulate mandatory physician recertification. Almost all (19 of 23) specialty boards require periodic recertification, and it has been proposed that reimbursement for physician services be contingent on compliance with certain standards of medical care. In the past 3 years, New York State has implemented periodic physician recredentialing for medical relicensure. The emphasis lies on peer review of guidelines developed by specialty societies and educational enhancement - not loss of license - if a need to correct deficiencies is felt.
In Ontario, the medical association carried out an indepth, personal examination of a group of physicians who had solo practices and were over 65. Deficiencies were identified and appropriate remedial education was made available. However, this process was costly, and over a period of ten years only thousand physicians were examined. The Ontario experiment

cannot be transported to the New York situation, though, because of differences mentioned also in the article.

KATZ, R.
Kwaliteitsborging grijpt overal om zich heen: Europese certificatie-piramide voor gezondheidszorg pas in 't verre verschiet.
[Quality assurance is spreading everywhere: European certification pyramid for health care only in the far distance.]
Het Ziekenhuis; 19, 1989, no. 20, p. 900-903.

The *Consumers Union* and the *Board of Certification*[35] of the Netherlands were present on a seminar about the quality of care after *Dekker*, which was organized by the University of Utrecht. The Dekker Committee advised the government to replace the existing recognition system for intramural health care by a system of accreditation and certification. The *Consumers Union* should like this to be realized according to the American example. There was some disagreement about the question whether this system should at all have a strong legal basis or not. A number of independent certification organisations should be concerned with establishing the quality criteria to be fulfilled. In turn they should be checked by the coordinating *Board for Certification*. The certification organisation should be part of a triangular relationship (pyramid) with both providers and consumers of health care. The system should also be uniform, be valid for the entire system of health care as a whole, and should consist of a dynamic, repetitive process. Furthermore, insurers should not be able to determine which services, offered by certificated providers of care, should be chosen by patients or consumers.

KOOIJ, L.R.
De wet BIG en de (her)registratie van huisartsen en verpleeghuisartsen.
[BIG and the (re)registration of general practitioners and nursing home practitioners.]
Medisch Contact; 47, 1992, no. 21, p. 661-662

The so-called *Wet BIG*[36] puts an end to the legal protection of professions, and with it - a few conditionalized actions[37] excluded - to the ban on illegal practice of medicine. The protection of professions is replaced by protection of titles. Only those who are registered according to the directions of the *Wet BIG*, enjoy this form of protection.
The *Wet BIG* leaves a possibility for recognition of specialty registers that were installed by organisations of health care professionals, with the

35 'Consumentenbond' and 'Raad voor de Certificatie', resp.

36 Wet BIG: Law on professions in individual health care.

37 i.e. 'voorbehouden handelingen'.

purpose of acknowledging the specialized professional training facilities and the knowledge that is generated there (e.g. general practitioners, nursing home practitioners, medical specialists and social physicians).
The *Wet BIG* does in fact follow the *Royal Netherlands Medical Association*'s (KNMG's) regulation of acknowledgement and registration, but at the same time it offers to grant recognition for a limited period of time. The professional group must itself determine the criteria to be fulfilled by a professional in order for him or her to qualify for recertification ('herregistratie'). However, the *Wet BIG* does create the necessary legal framework.

NATIONALE RAAD VOOR DE VOLKSGEZONDHEID
Rapport certificatie van beroepsbeoefenaren.
[Report certification of health care professionals.]
Zoetermeer: NRV, 1989. 57 p., encls., refs. NRV, Publication 9/'89.
nivel (R 4084)

In this report, the term *certification* refers to activities on the basis of which an independent organisation acknowledges that a person fulfils certain criteria that are set in advance, and that concern the manner of practice. When these activities are not being organized by an independent organization, but by an organization of the professional group itself, the term *self certification* is used.
The *National Board of Public Health* (NRV) posits that external judgement of the quality of care by means of certification is of no use whatsoever if no structural internal quality management programme exists and is also operational. An inventory of both national and international (United States of America and Europe) experiences with quality improvement made clear that health care professionals are in the process of developing mechanisms that seem to involve *self certification*, but it says nowhere that the quality of the care provided is actually tested by an independent and impartial organisation.
In Europe, the *International Organization for Standardization* (ISO) has published uniform criteria (ISO 9000-9004) for quality assurance. Two important features of certification mentioned here are:
- the test to determine whether criteria are actually met;
- the assurance that during the period for which a certificate was issued, these criteria are continually being fulfilled.

It appears from the government paper '*Verandering verzekerd*', that certification is intended as a supplement on already existing mechanisms of quality assurance. Many health care professionals do in fact observe certain minimum criteria, especially with regard to education. These criteria are fixed, either legally or by the profession itself, and serve as a condition for registration as a member. (Self) certification is primarily directed towards improving the quality of practice, and involves testing according to certain *ideal* criteria. These go much further then the aforementioned minimum criteria.

ZIEKENFONDSRAAD
Advies inzake nota "kwaliteit van zorg".
[Advice concerning note 'quality of care'.]
Amstelveen: Ziekenfondsraad, 1991. 134 p. encls. Ziekenfondsraad, 531.
nivel (R 4995)

The *Board of Health Insurance* (Ziekenfondsraad) advised the State Secretary of the *Ministry of Welfare, Public Health and Culture* (WVC) in the Netherlands about the relationship between the new system of health insurance and the quality of care. More in particular, it concerns the role of contractual agreements and of certification in this system. The board subscribes to the so-called *aspect approach* of this paper, in which quality of care is subdivided into four separate categories: coordination of demand and supply of care, level of care, efficiency of care and the extent to which patient outcome is concerned.
In the advice, another distinction is made concerning quality management: it deals with a certain acceptable level of quality on the one hand, and with the optimalization of quality on the other. Whereas the former is really a matter of the government, the latter should be organized according to the principle of *self-regulation*.
One of the conditions of effective execution of quality management is that model agreements between providers and insurers of care contain certain explicit quality paragraphs. Added to that, it is also necessary to have a means for visualizing the actual quality of care on behalf of both insurers and insured. Finally, the insured must be able to chose from different insurances and insurance policies.
In her advice, the board also pays attention to regions of care that need further regulation in order to guarantee quality. However, the intention is still to hold on to the aforementioned system of self-regulation.
The board feels that no great benefits may yet be expected from a certification system that still needs to be further developed and is rather expensive to boot. As yet, it will not make the choices of providers of health care any easier. Benefits are certainly to be expected in the field of optimalization of quality. Certification is an important - though not the only - factor for the insured as well as the insurers to chose between different health care providers. Therefore, the board advices that a certification system must not be made obligatory yet, and must also not be used as a condition in contracts with health care insurers.

4. General Practitioners

BOGAARD, C.J.M. VAN DEN
Kwaliteit huisartsgeneeskunde: mogelijkheden om te komen tot een garantie voor kwaliteit van de door de huisarts verleende zorg.
[Quality general practice: possibilities to arrive at a guarantee of the quality provided by the general practitioner.]
Rijswijk: Geneeskundige Hoofdinspectie van de Volksgezondheid, 1988. 162 p., figs., encls., refs.
nivel (R 3810)

This report includes a model that has certification fitted into a quality care system. It is explained how this model may contribute to a professional group's internal quality management. First, those involved are mentioned, i.e. the professional group, patients, financiers and government. They determine what the criteria will be concerning the definition of quality and how corrective measures should be applied. The general practitioner's certificate must show that the care he or she provides does fulfil certain quality criteria. He or she will be checked regularly by the certification organisation, which reports, gives advice, calculates the costs and finally decides whether or not to grant the certificate. Reward or correction of provided care can be effected by means of a certificate, of a financial reward, or by means of sanctions. These procedures are evaluated first by the certification organisation, and, secondly, by the *Board of Certification*.[38]
The model also includes procedures for patient advocacy.
The certification organisation is the linking cornerstone of two pyramids. In the first pyramid the other two corners are made up by the *Board of Certification* and by society at large. The second pyramid is formed with the general practitioners and the patients.
The certification organisation issues certificates to general practitioners. This serves two purposes: first, a certificate guarantees that a patient will get good care. Secondly, it is a quality mark for the general practitioner to assure him or her that the care he or she provides, fulfils the criteria.
Certification has two aspects. A certificate is granted to show that certain criteria are fulfilled, but at the same time it is valid only for a limited period of time.
It is also possible to make a distinction according to the group for which the certificate is made up. In the case of general practitioners this results in an *internal certificate* (intern certificaat). When it concerns both the professional group and other primary and secondary health care workers, a so-called *partial certificate* (deelcertificaat) results. When all interested parties are involved in the independent certification organisation, a *real certificate* (eigenlijk certificaat) is granted.

38 i.e. 'Raad voor de Certificatie'.

BORGIEL, A.E., WILLIAMS, J.I., BASS, M.J., DUNN, E.V., EVENSEN, M.K., LAMONT, C.T., MACDONALD, P.J., MCCOY, J.M., SPASOFF, R.A.
Quality of care in family practice: does residency training make a difference?
Canadian Medical Association Journal; 140, 1989, no. 9, p. 1035-1043.
nivel (C 2734)

As the proportion of physicians who enter residency training in family practice steadily increases, so does the need to evaluate the impact of their training and postgraduate education on the quality of care in their practices. In Ontario, the practices of 120 randomly selected family physicians were audited. To do this, they were divided into four groups: nonmembers of the *College of Family Physicians of Canada* (CFPC), members of the CFPC with no certification in family medicine, certificated members who had had no residency training in family medicine and certificated members who had. The practices were assessed according to certain predetermined criteria for charting, procedures in periodic health examination, the quality of medical care and the use of indicator drugs.
Generally, the scores were significantly higher for CFPC members who had had residency training in family medicine than for those in any of the other groups. Nonmembers scored the lowest. Patient questionnaires indicated no difference in satisfaction with specific aspects of care between the four groups. It may be the case that self-selection into residency training and CFPC membership accounts for some of the results. Nevertheless, the findings support the contention that residency training in family medicine should be *mandatory* for family physicians.

BRANDS, P.J., OUDKERK, R.H., VERDENIUS, W.
Toetsing: "killer" of "saviour"?
[Audit: 'killer' or 'saviour'?]
De Huisarts; 1, 1990, no. 7, p. 18-20.

In the first of a series of three articles, the authors are concerned with one aspect of the *National Association of General Practitioners* (LHV)[39] quality management policy, i.e. testing. Testing is useful with regard to efficient continuing education. The object is of course to establish a certain level of competence and performance.
Two forms of testing can be distinguished: *formative* testing, and *selective* testing. In the first case, the test results may motivate the general practitioner's choice for continuing education. In the second one, i.e. the selective test, *passing* or *failing* has more drastic consequences. From the year 2001 on, failure to pass a selective re-examination will result in loss of certification. The third article will go more deeply into this matter.

39 i.e. 'Landelijke Huisartsen Vereniging'.

BRANDS, P.J., OUDKERK, R.H., VERDENIUS, W.
Formatieve toetsing versterkt positie huisarts.
[Formative audit strengthens position general practitioner.]
De Huisarts; 1, 1990, no. 8, p. 17-19.

In this article attention is paid to the second phase of the LHV's quality management programme, which concerns the period of 1996-2001. In this phase the concept of *formative testing* will be introduced as a fourth requirement for the recertification of general practitioners. The first three requirements being:

- A general practitioner must have worked as such for a certain fixed minimum number of years (five).
- The candidate must have participated in peer review programmes. (is being done in some groups already).
- A certain minimum of continuing education-activities in the field of improvement of expertise must be attended, which are approved by the *Foundation for Quality Improvement of General Practitioners* (SDH)[40]. Participation must be evident from declarations of the CE organisation, and an examination must be part of it. Examination results, however, do not influence recertification.

The fourth requirement concerns formative testing. This kind of testing is identical to selective testing, both with regard to content and to structure. However, contrary to selective testing it bears no effect on recertification. It is meant solely to allow the general practitioner to get used to the idea of testing. Added to that, an advice for CE may be included.
At present, certification and recertification ('registratie en herregistratie') every five years is a task of the so-called *Registration Committee for General Pracatitioners and Nursing Home Practitioners* (HVRC)[41]. With the help of visitation committees, this organisation checks whether preset criteria are being fulfilled. In doing so, it forms a link between a legislative (formulates the criteria) and an executive level. The latter relates to vocational training, where in fact lies the central point of testing. This is meant to change in as much that registered general practitioners will also be visited. They should subsequently be tested and educated further by the SDH.

BRANDS, P.J., OUDKERK, R.H., VERDENIUS, W.
Selectieve toetsing: aandacht besteden aan je zwakke kanten.
[Selective audit: paying attention to one's weaknesses.]
De Huisarts; 1, 1990, no. 9, p. 17-18.

In the third phase of the LHV's quality management policy (2001-2006) a fifth requirement for recertification will be added, i.e. *selective testing*.
On the basis of formative testing results, a Five-Year plan for improvement of competence and performance will be developed. This plan will have to

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40 SDH: Stichting Deskundigheidsbevordering Huisartsen.

41 HVRC: Huisarts en Verpleeghuis Registratie Commissie.

be approved of ('accredited') by the SDH. Each part of the curriculum which is designed by each region, will be closed with a selective test. The test will have to be taken every five years, preceding recertification. Attending continuing education activities and passing formative tests could serve as a replacement of the selective test. Should one not attend CE activities or fail a formative test, then one is no longer exempted.

CHERKIN, D., DEYO, R.A., BERG, A.O., BERGMAN, J.J., LISHNER, D.M.
Evaluation of a physician education intervention to improve primary care for low-back pain; 1. Impact on physicians.
Spine; 16, 1991, no. 10, p. 1168-1172.

In an effort to improve the cost-effectiveness of primary care for low-back pain, the authors developed, implemented, and evaluated a physician education intervention. The programme was designed to provide family physicians with specific information, tools, and techniques that the authors' previous studies and the literature suggested should be associated with more satisfying and cost-effective care for low-back pain. The in-clinic educational intervention included feedback of the findings of previous studies of care for back pain (comparing family physicians and chiropractors) performed by the same authors, an up-to-date summary of scientific knowledge relevant to the management of back pain in primary care, a videotape contrasting ineffective and effective patient encounters, and a clinical assessment form for low-back pain. The back pain-related beliefs, attitudes, and behaviors of 15 primary care providers in a large health maintenance organization (hmo) clinic and of 14 family physicians in six group practices were assessed before and after intervention. Significant increases were noted in the proportions of providers who felt confident they knew how to manage low-back pain, who believed their patients were satisfied, and who claimed they reassured patients that they did not have serious disease. The intervention, however, had little impact on the prevalence of negative feelings about patients with back pain or frustration with patients who wanted their doctor to 'fix' their problem. The intervention had a similar impact on health maintenance organization and fee-for-service physicians.

CHERKIN, D., DEYO, R.A., BERG, A.O.
Evaluation of a physician education intervention to improve primary care for low-back pain: 2. Impact on patients.
Spine; 16, 1991, no. 10, p. 1173-1178.

A physician education intervention was previously found to have significantly improved perceived physician knowledge, confidence, and patient-reassuring behavior in the treatment of low-back pain. This study examined whether this intervention, presented in a *Health Maintenance Organization* (HMO) clinic, had an effect on patient outcomes. Outcomes of care for 148 patients seen for low-back pain before the intervention were compared with outcomes of care for 157 patients seen after the intervention. Patients were

telephoned 2-4 weeks after their back-pain visit and were asked about symptom improvement, amount of disability, and satisfaction with care. Satisfaction was measured with a three-dimensional instrument for low-back pain developed specifically for this study, which was found to be valid and reliable. The preintervention and postintervention patient cohorts were similar in terms of key baseline variables. Despite its apparent benefit to physicians, the intervention did not result in significant improvements in any patient outcomes, even for the subset of patients whose physicians had perceived the greatest benefit.

CURRY, L., WOODWARD, C.
A survey of postgraduate training for family practice.
Canadian Medical Association Journal; 132, 1985, no. 4, p. 345-349.

This article reports the results of a survey of Canadian primary care physicians for the *Canadian Medical Association Task Force on Education for the Provision of Primary Care Services*. Recent Canadian medical school graduates in primary care practice claimed that the three major training routes (rotating (1) and mixed (2) internships and family medicine residencies (3)) each prepared them differently for practice. The graduates of two-year family medicine residencies were more satisfied with their preparation than were the graduates of the other major training routes. A two- or three-year family medicine residency was preferred by 50% of the respondents, although only 33% of them had actually taken one of these routes. There was considerable agreement in the respondents' assessments of the types of postgraduate education needed for primary care practice. The results of this survey were consistent with the recommendations in the final report of the CMA's Task Force.

DUNN, E.V., BASS, M.J., WILLIAMS, J.I., BORGIEL, A.E., MACDONALD, P., SPASOFF, R.A.
Study of relation of continuing medical education to quality of family physicians' care.
Journal of Medical Education; 63, 1988, no. 10, p. 775-784.

A random sample of 120 physicians in Ontario was studied to test the hypothesis that the quality of (primary) care was related to *continuing medical education* (CME) activities. After reviewing the literature on quality of care and CME both Berg in 1979[42] and Haynes and colleagues in 1984[43] found that this relationship was not significantly established. Haynes et al concluded, after having reviewed 248 studies of CME intervention, that -

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42 Berg, A.O. Does continuing medical education improve the quality of medical care?: a look at the evidence. Journal of Family Practice; 1979, no. 8, p. 1171-1174.

43 Haynes, R.B., Davis, D.A., McKibbon, A., Tugwell, P. A critical appraisal of the efficacy of continuing medical education. JAMA; 251, 1984, p. 61-64.

while many studies demonstrated increased knowledge and several studies provided convincing evidence that CME can improve physician behaviour - only three scientifically valid studies actually measured patient outcome of any kind. And only one of these studies presented evidence of improved patient outcome.
In this study in Ontario the quality-of-care scores were obtained by an in-office audit of a random selection of charts. The scores were global scores for charting, prevention, the use of 13 classes of drugs, and care of a two-year period for 182 different diagnoses. There were no significant relationships between global quality-of-care scores based on these randomly chosen charts and either the type or quantity (number of hours devoted to specific types of activities) of the CME activities of the physicians. These activities consisted of reading journals, attending rounds, visiting scientific conferences, having informal consultations, using audio and video cassettes, and engaging in self-assessment. The implications of these findings are significant for future research in CME and for planners of present CME programmes.

EVANS, C.E., HAYNES, R.B., BIRKETT, N.J., GILBERT, J.R., TAYLOR, D.W., SACKETT, D.L., JOHNSTON, M.E., HEWSON, S.A.
Does a mailed continuing education program improve physician performance?: results of a randomized trial in antihypertensive care.
Journal of the American Medical Association; 255, 1986, no. 4, p. 501-504.

Evidence is sparse concerning the value of educational material that physicians receive in the mail. A randomized trial was conducted of a mailed *continuing education* (CE) programme on hypertension for primary care physicians. Although formal pretesting documented that the programme led to significant improvements in physician knowledge over the short term, the current study showed no lasting effects on physician knowledge (the mean scores on an end-of-study questionnaire were 50% and 52% for study and control physicians respectively). Added to that, no influence could be detected on their performance in lowering the blood pressure of patients who were referred to them from screening (the mean blood pressure drop for study patients, 12.2/10.4 mm Hg vs 13.0/10.6 mm Hg for control patients).
The chance that a difference in diastolic blood pressure as great as 3 mm Hg was overlooked, is less than 5%. Resources spent on instructional materials that are mailed to physicians may be wasted.

FAITHE, M.E., REIMER, R.L., ARSDALL, J.E. VAN, MOUTRIE, R.R., SCHENKEN, J.R.
The cost of continuing medical education for family physicians.
Journal of the American Medical Association; 242, 1979, no. 5, p. 449-50.

Family practitioners who participated in a two-week review course at the *University of Nebraska College of Medicine* provided information regarding the number of years they had practiced, the size of their communities, and

the type of their practices. This was necessary in order to be able to determine the direct and indirect costs of one kind of *continuing medical education* (CME). The results indicate that although this type of review course incurs considerable costs to the family physician, it may nevertheless present a small investment in terms of improved patient care.
Twenty-four states have passed legislation requiring participation in CME as a condition for reregistration of the license to practice medicine, and more states are drafting such legislation. An important question that emerges is whether the costs of CME can be balanced by the potential value of the educational programmes for practitioners and their patients.
A survey questionnaire was developed and sent to 300 physicians who attended both of the *Family Practice Review* courses in 1976. The data included information about the physicians' age, the number of years they had practiced, the size of their communities, the location of their practices, and whether their practices were in fact solo or group practices. Direct expenses requested by the survey included tuition, room and board, and travel expenses. Indirect expenses included a visiting physician hired to cover the registrants' absence from practice, office overhead expenses that continue with the office closed, and loss of revenue as a result of not seeing patients.
It is concluded that for a national *Family Practice Review* meeting, the costs (both direct and indirect expenses) for a one-day, eight-hour programme are $428.27 for the average general practitioner. This figure corresponds with those reported by Miller in 1978.[44]

JENNETT, P.A., HAYTON, R.C., SWANSON, R.W., SPOONER, H.J., WICKETT, R.E.Y., LAXDAL, O.E., KLAASSEN, D.J., WILSON, T.W., MAINPRIZE, G.W.
The effects of continuing medical education on family doctor performance in office practice: a randomized control study.
Medical Education; 22, 1988, no. 2, p. 139-145, refs.

A randomized controlled study was conducted to determine if specifically designed *continuing medical education* (CME) in the fields of cardiovascular and cancer medicine could change doctor office behaviour significantly. Thirty-one volunteer family doctors from 25 offices participated.
Six (three cardiovascular and three cancer) learning objectives were defined. Two educational formats were selected as the independent variables:
1. group interaction opportunities (face-to-face and teleconference).
2. concisely written newsletters.
Chart measures of doctor performance prior to education, and also 6 months following it, and again 6 months after that, served as the dependent variables.
Six months after they had received education the family doctors were found to perform the recommended behaviours significantly more as compared to

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[44] Miller, L.A. Sharp boost in CME cost cited. American Medical News; 1978, dec. 22/29.

those who had not received education ($P < 0.05$). This difference was maintained at the 12-month post-educational period for one of the educational programmes offered.
It shows that a carefully planned programme of CME will result in favourable changes in office practice behaviours of volunteer doctors. These changes can persist for as long as 12 months. Adherence to several essential learning principles is required.

LEEUWEN, Y.D. VAN, POLLEMANS, M.C., VERWIJNEN, M.
Heiligt het doel de middelen?: toetsing met het oog op selectie en (her)registratie.
[Does the end hallow the means?: audit with regard to selection and (re)-registration.]
Medisch Contact; 46, 1991, no. 23, p. 732-734, refs.

Suggestions are being made for testing the general practitioner's competence. Before testing is used for selective purposes, criteria should be established about what exactly are goal, subject and method of selection. Also, it is important to establish what is the worth of certain means of selection.
It has been suggested that negative criteria should be formulated, both for admittance to the education programme and for recertification. These criteria should be directed towards rejecting those who are truly unsuitable, in stead of describing what exactly makes a good general practitioner. There should also be agreement as to what should be tested at all, i.e. what specific competence a practitioner should have. A number of aspects of that competence concern knowledge, technical skills, how a consultation is given, how one practises his or her profession, how one is able to cooperate with colleagues, as well as a number of personal qualities.
Research into the validity of certain means of selection, e.g. the interview preceding admittance to a training college, the visitation of educators, competence and performance tests, and observations in the practice, should be motivated and stimulated.

LEIGH, T.M., JOHNSON, T.P., PISACANO, N.J.
Predictive validity of the American Board of Family Practice In-Training Examination.
Academic Medicine; 65, 1990, no. 7, p. 454-457.

Most research into the validity of graduate medical education in-training examinations is focused on construct validity and concurrent validity issues. The study reported here examined the predictive validity of the *American Board of Family Practice In-Training Examination* using multivariate analysis of all U.S. family practice residents who took the certification examination in either 1987 or 1988.
The results of these two certification examinations were analyzed for the cohorts of physicians who had taken in-training examinations as first-, second-, and third-year residents. Multiple regression analysis showed that the composite score, and all but one part-score, of each in-training ex-

amination were independently predictive of performance on the certification examination. This study also found that the older residents did less well on the certification exam, and that men and women each did better on selected portions of the examination. A discussion is presented of the implications of these findings for in-training examinations in other specialties and for programme directors and residents.

SAWA, R.J.
Assessing interviewing skills: the simulated office oral examination.
Journal of Family Practice; 23, 1986, no. 6, p. 567-571.

The *College of Family Physicians of Canada* uses a simulated office oral examination to test candidates for certification in family medicine. This examination has been highly successful. It involves a 15-minute encounter with an actor, actress or physician who simulates a patient. An analysis of this instrument provides a description of skills required for a certificant of the college. Its basic outline can be used to assess the interviewing skills of the residents during training and to help prepare them for practice. Three categories of skills are tested:
- Cognitive (knowledge) skills, which involve problem definition and problem management.
- Affective skills.
- Coordination of professional skills.

VERDENIUS, W.
Organisatie van kwaliteit binnen de kring van huisartsen gezien vanuit de koepel (LHV).
[Organization of quality within the circle of general practitioners, from the point of view of the coordinating organization (LHV).]
Den Haag: VUGA, 1992. In: Handboek kwaliteit van zorg: ontwikkelingen, hulpmiddelen, projecten.
nivel (B 2854)

The *National Association of General Practitioners* (LHV) has only recently (1991) implemented a consistent and detailed overall quality management policy. A distinguishing feature of this policy is that the LHV has not only formulated new statutory goals concerning the improvement of skills of general practitioners, but that it also actually dedicated to creating the necessary structures and preconditions. Part of this is the system of recertification ('(her)registratie').
The article also contains a historic account - up to the eighties - of the development of thinking about the quality of care within the professional group. Added to that the present situation is conscientiously represented. Attention is paid to the LHV's policy for the nineties, and to different groups that are involved in making that policy, i.e. government, financiers, educators, scientific research and patient/consumer organisations.
A number of quality projects are mentioned in chapter four. One of those projects concerns the internal reorganisation needed to realize the quality

management policy. LHV, the *Netherlands Society of General Practitioners* (NHG)[45], the *Foundation for Quality Improvement of General Practitioners* (SDH) and the *Ministry of Welfare, Public Health and Culture* (WVC) are involved in this process. Also, independent organisations will be established, with regard to the settlement of complaints. A new system of peer review will be implemented, and much attention will be paid to so-called big city issues[46]. Many of these activities are still in a developing stage, though.

WOODWARD, C.A., COHEN, M., FERRIER, B.M., GOLDSMITH, C., KEANE, D.
Correlates of certification in family medicine in the billing patterns of Ontario general practitioners.
Canadian Medical Association Journal; 141, 1989, no. 9, p. 897-904.

There is conflicting evidence as to whether physicians who are certified in family medicine practise differently from their noncertified colleagues and what those differences are. Subject of study was the extent to which certification in family medicine is associated with differences in the practice patterns of primary care physicians. This was done by means of analyzing their billing patterns.
Billing data for 1986 were obtained from the *Ontario Health Insurance Plan* for 269 certified physicians and 375 noncertified physicians who had graduated from Ontario medical schools between 1972 and 1983, and who had also practised as general practitioners or family physicians in that same city. As a group, the certificants provided fewer services per patient and billed less per patient per month. They were more likely than noncertificants to include such things as counseling, psychotherapy, prenatal and obstetric care, nonemergency hospital visits, surgical services and visits to chronic care facilities in their package of services. They also tended to bill in more different service categories.
Another difference between certificants and noncertificants was that the first group was shown to bill more for prenatal and obstetric care, intermediate assessments, chronic care and nonemergency hospital visits, and less for psychotherapy and after-hours services than did the noncertificants. Many of the differences that were detected suggest a practice style consistent with the objectives for training and certification in family medicine. However, it can not be directly assessed whether the differences observed in this study and in previous studies are related more to self-selection of physicians for certification or to the types of educational experiences.

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45 i.e. 'Nederlands Huisartsen Genootschap'.

46 i.e. 'grote-stedenproblematiek'.

5. Physical Therapists

FINLEY, C.
Mandatory continuing education: a survey of current activity: a special communication.
Physical Therapy; 68, 1988, no. 3, p. 374-377.

The purpose of this article is first to present a review of the literature addressing issues related to *mandatory continuing education* (MCE) and second to report the responses (not draw conclusions) from three surveys conducted by the *Task Force on Mandatory Continuing Education of the Florida Physical Therapy Association, Inc.* These were done to gather information and opinions about MCE. Therefore, questionnaires were sent to the appropriate representatives in:
- *American Physical Therapy Association* (APTA) chapters of all states where MCE is required for relicensure,
- APTA chapters of all states where MCE is not required for relicensure, and
- state headquarters of nine other health-related associations where MCE is required for relicensure in Florida.

The increased costs that are an extra burden to state, practitioner, and patient are often cited in the literature as a disadvantage of MCE.
In this article also opinions are presented from respondents concerning questions like e.g. whether the MCE requirement for relicensure should be added to the state practice act of Florida; how MCE should be organized, and what the overall sentiments of the membership were concerning this requirement. In general, both the states where MCE was required for relicensure and the selected associations in Florida which held on to this requirement responded positively toward MCE, whereas states that did not have the MCE requirement responded negatively. A major theme in all survey responses was the concept and importance of continued clinical development to maintain practitioner currency. The respondents indicated a growing concern for a system that would ensure clinical competence.
Additional research should be implemented to determine whether changes do occur at all in physical therapy practice after participation of the therapist in an MCE programme.

GARDNER, D.L.
Mandatory continuing education or periodic reexamination?
Physical Therapy; 61, 1981, no. 7, p. 1029-1034.

A descriptive study was undertaken among physical therapists in the southeastern parts of the United States. Its purpose was to determine their opinions concerning *mandatory continuing education* on the one hand and reexamination for license renewal on the other. The majority of the 1.187 respondents favored continuing education (CE) rather than reexamination. Of those who favored CE, most therapists prefer a minimum requirement of at least 10 hours a year, a three-year review cycle, and sharing of the costs between therapists and employers. The courses should be provided by the

national association, and approved of by the district or state association. There should also be some kind of credit awarded for those who are able to demonstrate improved performance at the course.
Of those favoring periodic reexamination, a majority preferred a five-year review cycle, the development of self-assessment methods that should be available prior to reexamination, a sharing of costs by therapists and government, and an oral examination that the national association would compose but that should be administered by the academic institutions. Both groups favor probationary status for noncompliance. Based on the findings of this study, some implications for adoption and implementation of either system for the physical therapy profession are discussed.

JENSEN, G.M.
The work of accreditation on-site evaluators. Enhancing the development of a profession.
Physical Therapy; 68, 1988, no. 10, p. 1517-1525.

This study was initiated to explore the work of on-site evaluators in the physical therapy accreditation process. Specifically, investigations were made into the question of how the accreditation on-site visit may come to serve as a method for defining the dominant values of a developing profession. A set of criteria that were selected from the literature describing the process of professionalization served as an operational model of professional values for this study. The model served as a framework for analysis and categorization of the professional values that evaluators emphasized during the on-site visits. The qualitative data collection methods of interview, nonparticipant observation, and document analysis, were used in constructing case studies of five physical-therapy-education-programme-accreditation visits. Results of this research indicated that on-site evaluators represent an elite community within the field and share similar values about the profession. These shared values about the professionalization of physical therapy formed the basis for interpretation of the accreditation standards by the evaluators. The fact that they emphasize the professional values that focus on defining and validating existent knowledge in physical therapy and faculty endorsement of the norms of the academic work place have implications for the continued professionalization of physical therapy.

ZAUTCKE, J.L., LEE, R.W., ETHINGTON, N.A.
Paramedic skill decay.
Journal of Emergency Medicine; 5, 1987, no. 6, p. 505-512.

To determine the amount of skill deterioration in paramedics, 40 graduates from three consecutive classes of *Chicago City-Wide Paramedic* training programmes were tested. The examinations consisted of the practical aspects of airway management, spinal immobilization, and intravenous fluid therapy, and were identical to the school final examinations. As a group, the study scores were significantly lower than the graduation scores. However, in only two areas were there individuals who performed below

acceptable levels. These areas were in spinal immobilization with extrication and extremity immobilization.
Continuing education (CE) and the recertification process are needed to develop reliable methods for identification and subsequent correction of any occurring deficiencies in the performance levels of system participants.
Problematic, however, is that there is only little scientific evidence to verify the benefit of recertification and *continuing medical education* for practitioners.
It is also difficult to trace deficiencies in the system and in the individual skills by means of cognitive testing. However, this is exactly what a quality care system should do: point out deficiencies. Subsequently, suitable educative facilities should be provided for.
It is being suggested that the model by Pons[47] et al could be modified for paramedics who have been practicing for longer periods of time. Another suggestion was that directors of medical training institutes should also be tested.[48]

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47 Pons, P.T., Dinerman, N., Rosen, P., et al. The field instructor program: quality control of prehospital care, the first step. Journal of Emergency Medicine; 1985, nr. 2, p. 421-427.

48 Skelton, M.B., McSwain, N.E. A study of cognitive and technical skill deterioration among trained paramedics. JACEP; 1977, nr. 6, p. 436-438.

6. Pharmacists

GARDNER, S.F., STANEK, E.J., MUNGER, M.A.
Medical versus pharmaceutical continuing education: are both appropriate for the pharmacist?
DICP, The Annals of Pharmacotherapy; 25, 1991, no. 12, p. 1336-1338.

Continuing Education (CE) courses in pharmacy and medicine often overlap with regard to their informational content. At the present time, however, it is possible that two pharmacists attend the same national meeting that has *Continuing Medical Education* (CME) approval status, whereas only one of them would receive CE credit from his or her state board of pharmacy. Therefore, a survey was made of the policies of 51 state boards of pharmacy regarding their inclination to accept CME. Forty-five of these require CE for relicensure. Twenty percent of the state boards requiring *CE* accept CME credit without review, whereas 24 percent of them does not accept CME credit, and the remaining 56 percent is momentarily reviewing submitted requests for CME credit.
It is concluded that a general lack of uniformity exists among the state boards regarding CE crediting policies. If CME credit were universally accepted, pharmacists would benefit from the increased availability of CE, the building of collegial relationships with other healthcare professionals, and the cost savings of combining courses which mutually benefit both pharmacists and physicians.
If CME- and *American Council on Pharmaceutical Education* (ACPE) programmes show so much similarity, why then do individual boards of pharmacy hesitate to cooperate? Part of the reason may be that CME does not deal exclusively with topics related to drug therapy. Another reason might be that the boards want to strengthen pharmaceutical education as an individual entity, for reasons of autonomy. However, from a financial point of view it would be wise to consider cooperation after all. The costs of CE will certainly decrease if access is made available to multiple healthcare disciplines.

OSTERHAUS, J.T., GAGNON, J.P.
A survey of state board of pharmacy members and continuing education providers' views on continuing education.
Drug Intelligence and Clinical Pharmacy; 19, 1985, no. 2, p. 134-138.

Being legally accountable to the public, state boards of pharmacy are continually confronted with the problem of maintaining the quality of pharmacy practice. One approach to accomplishing this task has been to implement *mandatory continuing education* (MCE) requirements for relicensure. This study evaluates the perceived effectiveness and deficiencies of various states' *continuing education* (CE) regulations. A 40-question survey was mailed to 600 pharmacy board members and CE providers to determine their attitudes toward CE, their inclination to support MCE, and their opinions of alternative methods for improving the quality of pharmacy

practice.
Responses from approximately one half of those surveyed indicated that board members and CE providers were positively disposed towards CE. However, there was still room for improvement in the MCE regulations of most states. It was considered that a relicensure examination would be the best method to ensure competence, while *mandatory continuing education* was viewed as acceptable to pharmacists, and relatively easy to administer. A discussion is included of the consequences of the study's findings for modifying state CE regulations.

VAART, F.J. VAN DE
Kwaliteit van farmaceutische zorg.
[Quality of pharmaceutical care.]
Den Haag. VUGA, 1992. In: Handboek kwaliteit van zorg: ontwikkelingen, hulpmiddelen, projecten.
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Focus of attention is the way pharmacy is organized in the Netherlands, and the part played by the *Royal Netherlands Association of Pharmacy* (KNMP)[49]. Recent developments in Dutch health care have shown that formulating and implementing an explicit quality management policy is very important. Added to this, the government is inclined to take a back seat and intervene only if it should turn out that providers of care, insurers and patients/consumers prove incapable of arriving at a mutual understanding independently.
This is the reason why the KNMP has formulated a quality management plan in 1991 for the years to come. It mainly boils down to development and implementation of a quality system for pharmacists. Also, standards are being developed, as well as a system for peer review. Continuing education of pharmacists and dispenser's assistants is advertised strongly. This is because of the registration regulation for pharmacists, which was introduced by the KNMP in 1986. Pharmacists can be registered after a one year postgraduate education programme, which is centred on the subjects of the registration programme. Registration is stopped if a pharmacist has not practised his professiona regularly over a period of five years. Registration is still optional, but the KNMP is all for a continuing education requirement with registration made obligatory.

ZIJDERVELD, D. VAN
Apothekers voeren certificatie in.
[Pharmacists introduce certification.]
Kwaliteit in de Eerstelijnszorg; 2, 1990, no. 2, p. 7-9

The KNMP has started issuing certificates in 1990, during the fourth examination round, which lasted two years. The examination consists of an

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49 i.e. 'Koninklijke Nederlandse Maatschappij ter bevordering der Pharmacie'.

inspection of the involved pharmacy. After that, there is an interview by colleagues concerning the method of working. Two contacts are appointed for each region. They represent the *Central Accompanying Committee for Peer Review* (CBIT)[50], and they form a peer review committee of four other pharmacists. The subsequent interview is directed towards establishing whether the so-called AWEK-criteria[51], formulated in 1980) are fulfilled by the pharmacist who is being tested. At the end of the examination round, certificates will be issued to those pharmacists that have been judged positive with regard to three major subjects, i.e. presentation of the pharmacy practice, medication counselling, and individual preparation of drugs. Added to that, the pharmacist must meet certain requirements concerning equipment. The certificate will be valid until the next testing round.

50 i.e. 'Centrale Begeleidingscommissie Intercollegiale Toetsing'.

51 'Apotheek-Werk-En-Kontrolenormen', i.e. Control Criteria for Pharmacists and their Work.

7. Dentists

BURAKOFF, R.P., DEMBY, N.A.
Quality Assurance. Historical perspective and critical issues.
Dental Clinics of North America; 29, 1985, no. 3, p. 427-436.

Emerging challenges to the traditional practice of dentistry have created a receptive environment for the introduction of *quality assurance systems*. This article underscores some of the historical perspectives as well as the critical issues facing dentistry with regard to quality assurance.
Dental quality assurance can be thought of as a continuum. At first there are the aptitude tests, developed to screen potential dental school applicants. Then follow the credentialing procedures. In the last resort there is the legal domain of malpractice. Malpractice can be viewed as the inadequacy of quality assurance efforts.
Credentialing - along with procedures of accreditation, institutional granting of practice privileges, peer review, and malpractice actions - presupposes a complex body of regulations. While this is beneficial for the quality of care on the one hand, it will at the same time limit the numbers, mobility, and activities of professional dentists and their practices. This restricted availability of dental services may have serious repercussions on the cost-effectiveness of health care delivery.
Some of the criticism concerning existing systems of licensure is that there may be undue emphasis on the quality of resources and on competence tests, and too little emphasis on the actual patient outcomes.
One contemporary licensing tool, which is used to promote continuing or lifetime competence, is *mandatory continuing education*. There is, however, little hard evidence of its efficiency in promoting competence. Their have been proposals to introduce *mandatory relicensure* at periodic intervals, in order to improve competence and keep up with technological changes in dental practice.
The article concludes with a number of recommendations for future research into the subject of quality assurance activities. Among them are e.g. the implementation of developed quality assurance methodologies, the gathering of cost data, the efficiency of *continuing education*, and the role of quality as a marketing tool or strategy. Also the exploration of comprehensive quality assurance activities by third party payors is to be encouraged.

COTTON, F.
Quality control, or just control?
Journal of Dental Hygiene; 64, 1990, no. 7, p. 320, 322.

This article discusses the dichotomy of state dental association/licensing boards that are subjecting out-of-state oral health professionals to clinical board exams, while at the same time pursuing the possible introduction of preceptorship training for dental hygienists. Reciprocity and licensure to perform all functions for which the operator has been educated are subjects

of discussion.
If licensing bodies were truly interested in quality control, preceptorship should not be sought, because it is inconsistent with that goal. From an educational perspective it would be logical for dentists to take part in apprenticeship programmes when dental assistants and dental hygienists are capable of obtaining licensure through this model. Licensing bodies may then become redundant, and the professionalism of the oral healthcare community brought into question. Issues of reciprocity and preceptorship have nothing to do with quality control, but rather with the outright control of one profession over another.

MILGROM, P., CHAPKO, M., MILGROM, L., WEINSTEIN, P.
Quality assurance and the role of self-evaluation and continuing education.
Dental Clinics of North America; 29, 1985, no. 3, p. 531-544.

There is no accepted overall standard for competence that can be applied to a dental practice. Of course there are individual differences in proficiency at graduation. Much is forgotten lateron, however, and certain procedures are performed so rarely that hardly any proficiency can be developed on account of lack of experience. Attitudes towards the profession are changing and much of the dentist's motivation is dependent of personality factors such as achievement orientation, problem solving skills, and interaction with peers.
Mandatory continuing dental education still suffers from the same deficiencies as it dit in the 1970s. Almost all programmes are shallow and expensive; they lack a particular orientation, and are not carefully evaluated.
Maintaining a practice at optimal competency can only be effected by an ongoing process of planned change. Most models for planned change include the following steps:
- Identification of the area (procedure, service) that needs change.
- Specification of the objectives and a plan for change.
- Implementation of the change (taking courses, reading, modifying the practice).
- Monitoring and evaluation of the change.
- The making of additional changes based upon this evaluation.

A few questionnaires are included that were used in the *Dental Auxiliaries Project*, a dental education programme in practice management that was conducted from 1979 to 1980. The goal of this project was to increase the efficient use of auxiliaries through changes in delegation, communication, and scheduling.[52]
Suggestions for alternative approaches to acquiring new skills and knowledge are made. Before choosing a continuous dental education course it is

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52 See also: Bergner, M., Milgrom, P., Chapko, M. et al. The Washington state dental auxiliary project: quality of care in the private practice of dentistry. Journal of the American Dental Association; 107, 1983, p. 781-786.
See also: Milgrom, P., Bergner, M., Chapko, M. et al. The Washington state dental auxiliary project: delegating expanded functions in general practice. Journal of the American Dental Association; 107, 1983, p. 776-781.

recommended that dentists conduct a self-assessment test, make an analysis of their community and find out what the needs are, and make extensive use of library facilities for new information.

8. Midwives

BUTTER, I.H., KAY, B.J.
Self-certification in lay midwives' organizations: a vehicle for professional autonomy.
Social Science and Medicine; 30, 1990, no. 12, p. 1329-1339.

The recent resurgence of lay midwifery in the United States has been intimately connected with the establishment of grassroots organizations which address women's health issues.
This paper describes the organizational structure of 32 lay midwive organizations and compares them to a model of alternative women's health groups as well as to more traditional health professional organizations. The question is whether lay midwive groups are the beginning of new professional organizations, which will eventually become part of the dominant system, or that they model themselves after existing alternative women's health groups. Voluntary *self-certification* in five lay midwive groups is described in detail as a means of determining how a group handles the question of integration with or separation from the existing medical care system. Certification plays a critical role in promoting acceptance and credibility of midwifery practice and is seen increasingly as a mechanism to preempt regulation by other institutions.
A two-phase survey was developed of local and regional midwive organisations. Phase one consisted of a short mail questionnaire requesting information about group structure, membership, purpose and function. Phase two was a longer mail questionnaire focussing on the actual process of certifying practicing midwives. A number of similarities were found among midwife organisations in five states concerning the way they organized *self-certification*. This pattern of uniformity is also reinforced by criteria for certification developed by the *Midwives' Alliance of North America* (MANA). The certification procedures focus on two key aspects, namely, what makes a midwife eligible for certification and what are the standards of practice which must be upheld by certified midwives.
At present certification is voluntary in some states whereas states with midwifery laws have systems of mandatory certification/registration. Both types, however, include provisions for revocation of certification on grounds of fraud, incompetency or unprofessional conduct.

FULLERTON, J.T., THOMPSON, J.E.
Recertification in nurse-midwifery: a critical analysis of use of a written examination.
Journal of Nurse-Midwifery; 30, 1985, no. 2, p. 71-78.

The Division of Examiners of the *American College of Nurse-Midwives* (ACNM) conducted a study to determine the feasibility of using an entry-level certification examination as a tool for reassessment of cognitive competency. A current valid and reliable form of the ACNM national certification examination was administered to a sample of midcareer nurse-

midwives, stratified according to the number of years that have passed since their first examination and focus of employment. The effects of selected demographic variables on examination outcome performance were assessed. Interpretation of the data was limited by the effect of small sample size and by the voluntary nature of the sample itself. Data did seem to suggest that the midwives' focus of employment had the most relevant effects on the examination scores. The failure rate was higher for the recertification subjects than for the control group of entry-level candidates. The recertification group represented a norm group significantly different from the norm group of first-time candidates.
Conservative interpretation of these data suggests that further consideration should be given to reassessment of competency over time, and that the entry-level certification examination can be used as a tool for reexamination.
In preparation of this study a MEDLAR search was done of the literature from 1970 to 1982. It appeared that reexamination alone, as a means of reassessment, might be inappropriate for long-time practitioners who have developed specialized skills or who have limited their scope of practice.
Furthermore, it was suggested that standardized testing, self-assessment, formal course work, and practice audits, as outcome measures of didactic and clinical performance, together might provide a more accurate picture of current competency than any single measure. On the other hand, reexamination for recertification, with the use of a current examination form, would present a rather accurate assessment of current didactic competency.

FULLERTON, J.T., HOWELL, B.B., KIM, P.T.
Assessment of one alternative to an essay format certification examination.
Journal of Nurse-Midwifery; 31, 1986, no. 2, p. 105-108.

This article reports of an investigation into the feasibility of an alternative format for the *American College of Nurse-Midwives* (ACNM) essay format certification examination. A 92-item multiple-choice examination was constructed that paralleled the content of an essay examination form. This was administered to a sample of 138 candidates who also took the parallel essay format examination. Statistical evaluation of the multiple-choice format provided data to support the assurance that it was possible to construct a content-valid and reliable (KR21 = .73) multiple-choice format examination. Performance of the candidates on both forms of the examination provided data in support of the assertion that the multiple-choice format had no adverse impact on candidate performance. A modest correlation between the scores on the two forms was demonstrated. Differential pass/fail rates could not be assessed because no basis for a cut-score on the multiple-choice format could be determined.

FULLERTON, J.T., GREENER, D.L., GROSS, L.J.
Criterion-referenced competency assessment and the national certification examination in nurse-midwifery.
Journal of Nurse-Midwifery; 34, 1989, no. 2, p. 71-74.

The paper presents an overview of the recent change from norm-referenced to criterion-referenced score interpretation for the *American College of Nurse-Midwives* (ACNM) certification examination for entry level practice in nurse-midwifery. The advantages of criterion-referenced interpretation are presented. A successful adaptation of the Nedelsky method for the calculation of the minimum pass index, based on the identification of acceptable error, is discussed. Implications for the nurse-midwifery profession and for the national certification examination in nurse-midwifery are considered.

FULLERTON, J.T., GREENER, D.L., GROSS, L.J.
Scoring and setting pass/fail standards for an essay certification examination in nurse-midwifery.
Midwifery; 8, 1992, no. 1, p. 31-39.

Examination for certification or licensure of health professionals (*credentialing*) in the United States is almost exclusively of the multiple choice format. The certification examination for entry into the practice of the nurse-midwifery profession has, however, used a modified essay format throughout its twenty-year history. The examination has recently undergone a revision in the method for score interpretation and for pass/fail decision-making. The revised method, described in this paper, has important implications for all health professional credentialing agencies that make use of the modified essay, oral or practical methods of competency assessment.
This paper describes criterion-referenced scoring, the process of constructing the essay items, some methods for assuring validity and reliability for the examination, and the manner in which standards are set. In addition, two alternative methods for increasing the validity of the pass/fail decision are evaluated, and the rationale for decision-making about marginal candidates is described.

SULLIVAN, D.A.
Four years' experience with home birth by licensed midwives in Arizona.
American Journal of Public Health; 73, 1983, no. 6, p. 641-645.

In 1978, Arizona began to license lay midwives under regulations designed to maintain adequate standards of care for women desiring a home birth. During the four years of this programme, 3 per cent of the home birth clients were hospitalized for complications and another 15 per cent received postnatal outpatient care, primarily for second degree lacerations. Five per cent of the newborns required medical care after delivery; half of these were hospitalized. Complications declined over the period due to increased experience, close supervision, and continuing education.
The *Bureau of Maternal and Child Health* (BMCH) organized a number of workshops by obstetricians, neonatologists, neonatal nurse-practitioners, and paediatricians. All *licensed midwives* attended these workshops, and many of them also took part in the annual *Perinatal Update* programmes that were organized by the *Arizona Perinatal Trust*. With the help of the

BMCH the *licensed midwives* organized their own workshops on resuscitation, pelvic examinations, and physical assessment of the female patient.
The BMCH also initiated a two-year certification-programme in 1981. Current problems that confront the programme mainly concern keeping up the standards. The BMCH is very much against deregulating the midwifery profession.

9. Home Health Care

HANKWITZ, P.E.
Quality assurance in home care.
Clinical Geriatric Medicine; 7, 1991, no. 4, p. 847-863.

The current increasing role of home care in the United States of America has brought with it the need for developing standards which address the quality of home care services. Home care poses quality assessment difficulties because of the broad spectrum of in-home procedures and services that are available. Both home care professionals (including physicians) and medical organisations (local, as well as on a state or national level) play a significant role in developing and enforcing quality assurance standards in home care.
The *Health Care Financing Administration* (HCFA) has called for a greater emphasis on *outcome* studies to assess the impact of home care services on patients. Many home care quality assurance programmes have subsequently developed *structure*, *process* and *outcome* indicators in order to enable them to evaluate their care on the basis of Donabedian's quality health care model of 1966.[53] However, the patient's attitude, his or her physical and social conditions, and family situation also influence outcome scores. This may result in difficulties of interpretation. Outcome information must always be linked to process-of-care information and to structure-of-care information.
Formal quality assurance mechanisms for home care include voluntary federal certification, mandatory state licensure and voluntary accreditation. Federal certification may be voluntary, but home care agencies must still meet certain conditions in order to participate in the Medicare and Medicaid programmes. These conditions are mentioned in the article.

HARRIS, M.D.
The revised survey process.
Home Healthcare Nurse; 9, 1991, no. 6, p. 52-53.

Implementation of the requirements of the *Omnibus Budget Reconciliation Act of 1987* (OBRA 87) has resulted in many changes for *Home Healthcare Aides* (HHA's) and *Home Healthcare Nurses*. Among these are the patient bill of rights, the training and competency evaluation of HHA's, and the revised certification/recertification process. It is important that sound structural and process criteria be in place in an HHA. These will provide the foundation for successful site visits during which patient-focused outcomes can be identified. Increased knowledge should also decrease the nurses' apprehension about the revised process.

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53 Donabedian, A. Evaluating the quality of medical care. Milbank Quarterly; 4, 1966, p. 166.

MALLOY, J.A.
Home care accreditation through Joint Commission on Accreditation of Healthcare Organizations.
Journal of Intravenous Nursing; 13, 1990, no. 3, p. 185-187.

As home care has become an increasingly viable alternative to inpatient care, the need for industrywide standards has become a major concern for consumers and payors of health care. The *Joint Commission on Accreditation of Healthcare Organizations* (JCAHO) has developed standards which measure the quality of care and services provided by a home care organization.
This article outlines the basic standards that a home infusion therapy service must meet in order to earn accreditation. These standards concern among others: patient/client rights and responsibilities, patient/client care, safety management and infection control, quality assurance, management and administration, and the presence of a governing body.

MCCANN, B.A., LEHMANN, R.D.
Voluntary accreditation for home care organizations: the Joint Commission's new standards.
QRB. Quality Review Bulletin; 13, 1987, no. 10, p. 351-354.

The *Joint Commission on Accreditation of Healthcare Organizations* (JCAHO) is developing new standards for the survey and accreditation of hospital-based and community-based home care organisations. These standards concern four of the major categories of services that are currently being provided in the home. Among these are the traditional home health services, personal care and support services, pharmaceutical services, and equipment management services.
Accreditation is voluntary, but at the same time it is a condition for reimbursement by Medicare of medical services.
Seven *overview* chapters of the standards of accreditation emphasize the quality of patient/client care in areas common to all types of services, and four *optional* chapters apply to major types of home care services.
The *overview* chapters deal with patient/client rights, patient/client care, the governing body involved, and with certain management and administrative services. Attention is also paid to quality assurance, safety management and infection control, and to home care records.
The *optional* chapters are concerned with home health services, personal care and support services, pharmaceutical services, and equipment management services.
When a home care organisation is surveyed, all aspects of the seven *overview* chapters are usually applied plus at least one of the aspects of the four *optional* chapters.

MORGAN, K.J.
National certification for home care RNs.
Nursing Manager; 22, 1991, no. 9, p. 63-64.

In 1973 the *American Nurses' Association* (ANA) established a certification programme to provide recognition for professional nurses' accomplishments in well-defined clinical and/or functional areas of nursing. The certification examinations consist of multiple-choice tests that last half a day to a day. The certificates that can be obtained are valid for five years and can be renewed by submitting evidence of having followed continuing education (CE) courses or by re-taking the examination. These examinations can be divided over four programmes: the programme for *generalists*, for *nurse practitioners*, for *clinical specialists* and the programme for *nursing administration*. The candidate must hold an active RN-license[54] in order to be allowed to take the examination.
The ANA does not offer a certification examination for home care RNs, who are forced to take examinations in general nursing, community health nursing or the one for clinical specialist in community health nursing. These are judged not to define adequately the scope of professional home care nursing practice in the 1990s. The ANA is developing a more specific examination for home care RNs.

ROONEY, A.L., BIERE, D.M.
Demonstrating excellence in home care through Joint Commission accreditation.
Journal of Nursing Administration; 22, 1992, no. 9, p. 31-36.

Nurse administrators responsible for developing and managing home care delivery systems need to understand the eligibility criteria for accreditation, key components of the standards, survey, and accreditation decision process, and directions for the future including external recognition of accreditation and the use of an indicator monitoring system. The authors highlight the major components and benefits of the home care accreditation programme of the *Joint Commission on Accreditation of Healthcare Organizations*. They also suggest how the nurse administrator may use accreditation as a valuable management tool.

54 i.e. 'Registered Nurse'.

Subject Index

Author Index

List of Organizations

The Netherlands

CBIT	Centraal Begeleidingsorgaan voor de Intercollegiale Toetsing [Central Accompanying Committee for Peer Review]
KNMG	Koninklijke Nederlandse Maatschappij tot bevordering der Geneeskunst [Royal Netherlands Medical Association]
HVRC	Huisarts en Verpleeghuis Registratie Commissie [Registration Committee for General Practitioners and Nursing Home Practitioners]
KNMP	Koninklijke Nederlandse Maatschappij ter bevordering der Pharmacie [Royal Netherlands Association of Pharmacy]
LHV	Landelijke Huisartsen Vereniging [National Association of General Practitioners]
NHG	Nederlands Huisartsen Genootschap [Netherlands Society of General Practitioners]
NRV	Nationale Raad voor de Volksgezondheid [National Board of Public Health]
RC	Raad voor de Certificatie [Board of Certification]
SDH	Stichting voor de Deskundigheidsbevordering van Huisartsen [Foundation for Quality Improvement of General Practitioners]
WVC	Ministerie van Welzijn, Volksgezondheid en Cultuur [Ministry of Welfare, Public Health and Culture]
Zfr	Ziekenfondsraad [Board of Health Insurance]

Abroad

ABFP	American Board of Family Practice
ABIM	American Board of Internal Medicine
ABMS	American Board of Medical Specialists
ACNM	American College of Nurse-Midwives
ACPE	American Council on Pharmaceutical Education
ANA	American Nurses' Association
APTA	American Physical Therapists Association
BMCH	Bureau of Maternal and Child Health
CFPC	College of Family Physicians of Canada
CMA	Canadian Medical Association
HCFA	Health Care Financing Administration
ISO	International Organization for Standardization
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
MANA	Midwives' Alliance of North America

Nivel Bibliographies

WILLEMSEN, R.
Wijkverpleging/kruisvereniging. 1986, no. 1

LEEUW, A.K. DE
Ouderen (I, II). 1986, no. 2 en 3

WILLEMSEN, R.
Relatie eerste en tweede lijn. 1986, no. 4

LEEUW, A.K. DE
De apotheker. 1986, no. 5

VELDE, A. VAN DER
Alternatieve geneeswijzen. 1986, no. 6

KUIJLEN, H.
Preventie en de eerstelijnsgezondheidszorg. 1986, no. 7

LEEUW, A.K. DE; VOS, A.
Communicatie (huis)arts-patiënt. 1986, no. 8

WIEMAN, F.
Zelfzorg en mantelzorg. 1986, no. 9

KUIJLEN, H.
Methoden en technieken binnen gezondheidszorgonderzoek. 1986, no. 10.

DIJKHUIS, K.
De fysiotherapeut. 1986, no. 11

LEEUW, A.K. DE
De Nederlandse verloskundige zorg. 1986, no. 12

HEIJDEN, P. VAN DER
Technology assessment. 1987, no. 13

WIEMAN, F.
Life events. 1987, no. 14

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De diëtist. 1987, no. 15

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Logopedisten. 1987, no. 16

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Verzekeringsstelsel en medische consumptie. 1988, no. 17

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Patiëntenrechten. 1988, no. 18

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Honoreringssystemen in de gezondheidszorg. 1988, no. 19

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Wijkverpleging in het buitenland. 1988, no. 20

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E.M. SLUIJS
Patient compliance: a survey of reviews (1979-1989). 1989, no. 21

RENGELINK-VAN DER LEE, J.H.
A. DE MOL-VAN DER VELDE
Kwaliteit van verloskundige zorg. 1988, no. 22

SCHRIJNEMAEKERS, V.
De psychologie en de eerstelijn. 1989, no. 23

GOOSSENS, J.M.A.W.
Huisarts en huisartsgeneeskunde: historie en ontwikkeling. 1988, no. 24.

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Algemeen maatschappelijk werk. 1990, no. 25

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Exercise therapy and musculoskeletal disorder. 1992, no. 42

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Massamedia en medici. 1991, no. 43

BLEIJERVELD, P.P.
Thuiszorgtechnologie. 1992, no. 44

BOERINGA, F.H., SLUIJS, E.M.
Recertification of Primary Health Care Professionals. 1993, no. 45