



NEDERLANDSE VERENIGING VAN ARTSEN IN DE ZORG VOOR MENSEN MET EEN VERSTANDELIJKE HANDICAP

Dutch Society of Physicians for People with Intellectual Disability
(NVAZ)

CURRICULUM

**MEDICAL SPECIALIST TRAINING
FOR PHYSICIANS FOR PEOPLE WITH INTELLECTUAL DISABILITY
(AVG)**

DATE
BY THE DIRECTION OF
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12TH MARCH 1998
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TRANSATION JANUARY 2002:

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Introduction

This curriculum of the specialist training for General Practitioners for People with Intellectual Disability (AVG) is based on the teaching objectives and final attainment level established by the Dutch Society of Physicians for People with Intellectual Disability (NVAZ) in 1995. It was developed by a steering committee of doctors with much experience over many years in the institutional and community care for people with intellectual disabilities, together with 2 advisers. This was further reviewed by another group of colleagues to reinforce the support within the medical profession and within this field of care. Their solidarity is important, because the steering committees' educational model has to be practised by teachers and staff functionaries who come from this professional group. Moreover, the views about the AVG's methods and manners, which will be the core business of the specialist training, have to be propagated by colleagues in the field and especially by the supervisors of the trainees in the institutions. Financial support to promote this curriculum was provided by the Board for the Handicapped Administration of the Ministry of Health.

The intended training is a 3-years' practice based programme. During the 1st and 3rd year the trainee works in an institution for people with intellectual disabilities. Besides providing primary health care, in the 3rd year the consulting tasks and advising skills are being emphasised in day care centres, group homes and in future outpatient clinics as well. Traineeships during the 2nd year are meant for widening expertise in the field of etiologic diagnostics, hearing and visual impairments, motor disabilities, psychiatric disorders and ageing. During weekly training days at the University a supervised group of 10-12 trainees systematically integrates their obtained experiences builds on a professional attitude by supervision and intermission. Professional knowledge and skills are offered by means of day seminars and workshops. Last but not least development of scientific skills is being stressed in the curriculum, as it concerns a medical field in progress.

Especially in the beginning of the specialist programme much attention is paid to instruct the supervisors of the trainees. Besides the tutors and teachers on the weekly training days, who are mostly attracted from this field of medical practice, the daily supervisors in the institutions join in as well. These medical doctors who themselves have been taught during one-way monologue lectures; have to be trained in new principles of didactic attitude and skills. They are expected to adopt a critical attitude towards the quality of their own medical practice and even to be willingly to reform. Also the NVAZ has made it to her task to stimulate, organise and accredit postgraduate education.

A completed curriculum does not imply that the training can start right away. Overall consent of various Dutch organisations like NVAZ, KNMG, VGN and the Minister of Health is needed for realisation. Formal arrangements have to be made with the medical Faculty of the University where the postgraduate specialisation will be installed. When all are in agreement the actual installation of the training programme and selection of participants and institutions can take place.

The steering committee would like to thank all parties involved for their constructive and enthusiastic contributions.

On behalf of the steering committee,
Mrs. H. M. Evenhuis, MD, PhD, Chairman
March 1998

Chapter 1: Responsibility: The necessity of a specialist training for the AVG

1.1 Medical care for people with Intellectual disabilities

At the moment approximately 120.000 people with intellectual disabilities live in The Netherlands. Some 30.000 live in institutions of whom 6.000 live in group homes associated to institutions. Regular primary and specialist care is provided to people who live in grouphomes or with families. Besides that, approximately 150, mostly part-time, non-specialised, general ‘team doctors’ are attached to group homes and day care centres operating consultatively rather than curatively. Medical care in institutions is given by 200 full and part-time working, non-specialised general practitioners.

The medical field of the AVG has developed gradually by practice-based experience at first, later based on 1-year post graduate part-time training programme (SSG, Netherlands School of Public Health) and recently on scientific research in co-operation with medical specialists and researchers from adjacent fields (of medicine)/areas.

Despite of the fact that medical care for people with intellectual disabilities shows much interface with family medicine, paediatrics, clinical genetics, neurology and psychiatry, it yields an exclusive speciality for more than one reason.

That is the main reason for the Minister of Health and the KNMG to recognise a new medical specialism. During the past decades the social tendencies have gradually moved in favour of the concept of ‘de-institutionalisation’: children with intellectual disabilities live with their parents at home with some additional assistance if necessary, while the care for adults has increasingly moved to small-scale homes integrated in society. This also means a transition of the profession and working conditions of the AVG.

On the one side the AVG will provide specialist care for people with multiple complex handicaps, serious psychiatric and behavioural disorders and psychogeriatric problems who will probably stay in the institutions in the future. On the other side much more emphasis will be laid on advising and consultative tasks for outpatients.

Results from both Dutch and foreign research on people with intellectual disabilities living in small-scale integrated homes show serious under diagnosis of many prevalent disorders, especially sensory impairments, and therefore stress the urge for specialist advising and outdoor patient care.

The medical care for people with intellectual disabilities is progressing rapidly. Since the relationship with GP’s is becoming more important the AVG-function of adviser, consultant and medical attendant in specific areas is improved by local research experiments and refresh training courses.

1.2 Different frequency distributions of disorders and impairments

There is an epidemiological difference between people with intellectual disabilities and the overall Dutch population. Since the 30’s lifetime has increased with over 30 years thanks to ameliorated care and medical attendance. This is explicitly illustrated in the group of people with Down’s Syndrome. Nevertheless lifetime for the disabled is still shorter in comparison with abled people. The more serious the intellectual disability, the greater possibility of additional disorders. Thanks to small scale

research insight in disorders that appear during the course of life, is growing, related to etiology and gravity of the intellectual disability. For example: the sensory impairments, thyroid disorders, depressions and dementia with people with Down's Syndrome. Furthermore, people with Prader Willi Syndrome (PWS) suffer from unstable mood disorder, depression and narcolepsy, and are a high-risk group for diabetes and cardiovascular disease because of their overweight. More epidemiological research in larger populations is necessary. Evidence based medicine is an incentive to improve the quality of medical care in early detection and prevention.

1.3 Etiological diagnosis of intellectual disability

Etiological diagnostics in young children is of great importance for genetic counselling to families and is performed by paediatricians, mostly in co-operation with paediatric neurologists and clinical geneticists. Early referral and coordination by an AVG is beneficial to more and earlier diagnosis of concurrent motor neuron and sensory impairments, which is essential to treatment and care. The initiative for etiologic diagnostics in later life, when new diagnostic procedures are available is in the hands of the GP. Since the genetic defect of Fragile X Syndrome has been identified, these new diagnostic procedures have to be carried out to catch up in adults with intellectual disabilities, both men and women. It takes scientific know-how and skills to set up diagnostic screening procedures.

1.4 Neurological and psychiatric disorders

AVG's are often consulted for many neurological and psychiatric disorders. Diagnosis and treatment may often make high and specific demands. Epilepsy is often complicated to manage. Various reactions on anti-epileptics should be taken into account. During the course of life many motor disorders may co-exist with secondary complications. Children and adults with cerebral palsy often suffer from feeding problems, constipation, incontinency, decubitus, scoliosis facilitate respiratory infections and gastric reflux and painful luxations of the hips. The expressive and communicative impairments in people with intellectual disabilities troubles psychiatric diagnosis. Despite the intensive co-operation with medical specialists, paramedics and behavioural specialists. The AVG plays a key role in detection and coordination. Prevalence and incidence of dementia also increases in the population of people with intellectual disabilities due to ageing, especially in people with Down's Syndrome. This means additional tasks and duties in the care both in and outside the institutions. The process of diagnostics and care needs special know-how and experience.

1.5 Difficulties in diagnosis and treatment

Difficulties in diagnosis because of an absent or aberrant presentation of complaints and because of lack of cooperation, leads to probably many unrevealed health problems in people with intellectual disabilities. We will name a number of typical examples. Despite of the fact that visual and hearing impairments frequently occur with people with developmental disorders, several researchers report under diagnosis. Mul et al have recently detected a large number of unrecognised hearing problems by audiometric screening in 8 Dutch family group homes. In most cases the problems of deafness had not been suspected by the caretakers at all. This proves that a lot of effort should be put into developing, implementation, evaluation of appropriate diagnostic and management methods and procedures. The same goes for introduction of and treatment with for example hearing devices.

Gastro-oesophageal reflux is another health problem that frequently occurs, but is often unrecognised until complications arise. Specific complaints of pain or discomfort are rarely expressed, even by people with little intellectual impairment. The same reason why people with intellectual disabilities have hardly benefited from the strongly improved diagnostic and therapeutic possibilities of chronic pulmonary diseases. Lung function assessment and inhalation treatment are often proved difficult or impossible. Nevertheless, pulmonary problems are the most frequent cause of mortality in this group. Prognosis of pulmonary problems could probably very much be improved by application of new techniques for lung function assessment and inhalation adjusted to this specific group of patients.

1.6 Medical specialisation

Since more than 15 years the NVAZ has devoted itself to expertness and recognition as a specialism. This aspiration has been supported by the Inspection, the Dutch Organisation in the Care for the Handicapped and Parent's Association of Institutions. In 1993 an attendant committee was installed by the General Board of the KNMG to support the whole process of professionalisation and reported in November 1995. Based on the recommendations of this committee the NVAZ has come forward as a scientific organisation, established teaching objectives and a final attainment level for the AVG specialisation and opened a register for physicians for people with intellectual disability. NVAZ diagnostic and therapeutic guidelines on the most prevalent health problems have been commenced. Methodological support and attendance has been provided by the CBO institute. Also other scientific organisations have been formally involved. For example, in the Visual Impairments' group the NVAZ worked closely together with other professional organisations like NHG, NOG, NVJ, NVO and NVK. By now the formal admission of the AVG specialism is in preparation in a committee of the Board of Physicians of the KNMG. (translator's note: realisation in February 2000)

1.7 Research and academic achievements

Scientific research in this field that has come up with few, but relevant data so far, has recently received a great impulse. Following the advice by the Committee for Health Care Research, NWO's Regional Board for Medical Sciences installed a committee to enhance a special programme "Chronic Diseases". One of the subcommittees 'Chronic Neurological and Psychiatric Disorders' was instructed to make a proposal for a major research programme to indulge and support scientific research on certain specific neurological and psychiatric disorders. Although the subject of intellectual disabilities was classed under psychiatric disorders at first, the Chronic Neurological and Psychiatric Disorders Committee decided to survey this topic as a separate field in the research programme. The highest priority has been given to epidemiological research, research into etiological diagnostics, co-morbidity and mortality and treatment of sensory impairments, diagnostic and therapeutic guidelines for psychiatric diseases and dementia.

Furthermore a 3-year's grant has been provided to stimulate a more coherent structure for medical scientific research into developmental and intellectual disabilities as a whole. That has already resulted into several multidisciplinary scientific study groups (Down's Syndrome and Ageing, Hearing impairments, Visual Impairments, Pulmonary Diseases, Ethical Assessment and Evaluation of Scientific Research in people with intellectual impairments), of which some also work on developing practical guidelines. Also a scientific round table conference was organised on PWS and a preliminary discussion was held to make the first step towards improving etiological diagnostics. In January 1998 in conclusion of the positive results the financial grant has been decreed to be extended with one year. A special professorial chair at the university has almost become a fact.

In December 1997 a physician for the mentally handicapped was appointed to the programme committee “Innovation in the Care for people with intellectual disabilities” by Care Research Netherlands. Research projects that study the effects of innovation of care on living, working and use of leisure in people with intellectual disabilities are financed by the programme. The role of impairments and disabilities in self-employment will be stressed during the programme.

1.8 Postgraduate education

Postgraduate education has been organised during the NVAZ meetings and PAOG courses at the Erasmus University Rotterdam. Since 1986 a 1-year part-time training programme for physicians for people with intellectual disability has been provided by the Netherlands School of Public Health (NSPH, formerly SSG). This training scheme is compact and supplementary for people that already have experience with medical care for the intellectual disabled. Skills are only addressed superficially and practical attendance by an expert is not provided, unfortunately, because that should be an essential part of the professional expertise. Therefore the NVAZ edited the report “Development of postgraduate education for the specialist for the mentally handicapped” in 1992-1993. In succession comments on this report were published illustrating the core business of this medical field and the specialised physician. Both publications have been widely distributed and discussed with Parents’ Associations, VGN, Department of Public Health and the Inspection. This was met with multilateral acknowledgement and support. The KNMG noted the reports as well. In January 1995 the General Board of the KNMG consented with the final terms of the postgraduate specialisation set up by the NVAZ.

1.9 AVG Assessment and future planning

Because of all the social and ideological tendencies in the care for people with intellectual disabilities towards de-institutionalisation and decentralisation, the number of future AVG’s seems somewhat unclear. In a policy motion that has recently come out a phase like process of decentralisation of 30% of the present institutional capacity and redistribution over the existing health care system regions is pleaded. This means that allowance should be made for a decrease from 30.000 towards 15-20.000 institutional places. Moreover the Department of Public Health underlines the necessity of “continuous availability of specialist and professional expertise whilst increasing separation of living and care, transmuralisation and individualisation. It is suggested that regional centres of expertise should be formed for both clinical and policlinic purposes like diagnostics, observation and treatment. This vision agrees very much with the views of the NVAZ. The NVAZ promotes the idea to bring AVG’s into action by means of regional teams of experts to facilitate and consolidate the work of the general practitioners in out-patient clinics and the clinical specialists in hospitals. The AVG has got tasks in diagnosis, treatment and consultation and advising. Their attendance and expertise can be used in both cases of somatic and psychiatric disorders and diagnostic and screening programmes (etiology, sensory impairments, lung function). The future AVG on the one hand will take part in the daily, integral, primary health care of patients who remain institutionalised and on the other hand will assist the general practitioners with expert advice for the de-institutionalised patients in the region. This means that the AVG has to be trained in consulting skills. Closer cooperation between GP and AVG has to be modelled and developed via practice investigation. A balance has to be found between screening and other anticipating medical activities that people will benefit from on one side and activities that may burden and harm the patient on the other. In this sense it is no use to diagnose without consequences for treatment or even managing the problem.

Based on preliminary estimations, the need of AVG's is counted by the NVAZ on a number of 175-200.

Chapter 2: The profile of the physician for people with intellectual disabilities

2.1. Why a profile?

The teaching objectives and final attainment level of the educational programme are the starting-point in developing the curriculum. The outline defines the characteristics of this profession and works as a guideline in choosing didactic methods and techniques concerning theoretical contents and practical training. Teaching objectives, final attainment level, curriculum and profile tried to each other continuously.

2.2. Characteristics in intellectual disability medicine

Medicine for people with intellectual disabilities features:

- specialist because of distinguished population
- longitudinal
- deviant distribution of diseases and impairments
- atypical presentation of complaints
- particular diagnostic and therapeutic hazards
- mostly multiple request for help
- limited patient's will competence, specific ethical/juridical aspects
- contacts with relatives/caretakers is essential
- multidisciplinary cooperation
- institutional and outpatient oriented
- both doctor and advisory expert (shifting to the latter because of social tendencies)
- growing domain of expertise

2.3. Characteristics in attitude in physicians for people with intellectual disability

Attitude of the physician for the mentally handicapped is marked by:

- patient/client directed while system orientated
- trained on multidisciplinary cooperation
- research and curiosity when in doubt
- active and convincing from medical competence

Patient/client directed while system orientated

Like in familymedicine, medicine for people with intellectual disabilities is longitudinal and not limited to one particular organ system. The basic attitude of the physician for people with intellectual disabilities will be more or less comparable with the manner of the family doctor with the special interest in people with intellectual disabilities as a starting-point taken for granted. Like Mc Whinney

says: a family doctor is ‘committed to the person rather than to a particular body of knowledge, group of diseases, or special technique’. This principle also implies that a patient is autonomous. Otherwise when a doctor does not actually treat, but gives an advice one should rather refer to the term ‘client’. Medicine for people with intellectual disabilities is to restore the autonomy (responsibility, self-employment, competence) if necessary, and develop if possible. To put the patient in a dependent role and position is the last conceivable care option. This means that physicians undertake everything in contact and dialogue with the patient, unless the patient is not conscious. To care about a ‘mature’ relationship between the person who provides and receives assistance is not only a fundamental condition, but also a mean of care. Contact is even a methodical principle rather than a communicative or ethical stipulation. Moreover: patient-directed does not mean that the customer is king, but that he is taken seriously.

Both children and grown-ups with intellectual disabilities are often not self-sustaining and therefore live with their families or in a group with other disabled people. Severely handicapped people often live in an institution or centre. In such an institution a physician for people with intellectual disabilities carries the medical responsibility alone, while in smaller group homes this responsibility is shared with the GP or is even primarily in the hands of the GP when the AVG gives advice. Although the handicapped patient is the central figure in the care process, the AVG has to be skilled to deal with the systems that the patient is part of: families or professional networks.

Communication with people with intellectual disabilities requires special skills. History taking goes hand in hand with close observation. Besides that many people with intellectual disabilities are scared or uneasy during medical examination. Medical action has to be placed within a clear and present context. Many things happen non-verbally. It is crucial that a doctor realises what action and reaction his personality and his manner may cause. Also the limited mental competence of these patients should be continuously taken into account.

During most contacts the doctor will have to do with patients and their networks at the same time. Both parents and caretakers have existential questions. These questions often lie directly under the actual request for help and play through in weighing the importance of diagnostic and therapeutic interventions for a patient. The doctor has to be able to deal with different communications, requests, motives and interests at the same time. Sometimes there is no other option than to speak over the patients’ heads.

Trained on multidisciplinary cooperation

The physician for people with intellectual disabilities will almost always cooperate with several other disciplines. He often is dependent on information and assistance of family and caretakers. He closely cooperates with several paramedical disciplines, psychologists and behavioural specialists and with medical specialists. This cooperation contributes to specialised care for people with intellectual disabilities by institutions and centres of expertise. Interfraternal cooperation together with GP’s is a consequence from increasing decentralisation of institutions. Multidisciplinary management in treatment or in advice requires the ability to attune and cooperate.

Research and curiosity when in doubt

The professionalism of the physician lies in the vitalising power to make progress in unknown terrain. Doctors in practice work in situations featured by uncertainty; each situation consists of an unique constellation of variables that partly remains uncertain while action is needed.

Professionalism does not mean: trying to argue this uncertainty away by gaining knowledge and routine or by fixing the facts by protocols, but the ability to responsibly deal with that uncertainty. One should dare to act on one’s own discretion. From this point of view professionalism means

maintaining an eye for both the known and the certain and the unknown and the uncertain. Medicine for people with intellectual disabilities goes together with a lot of uncertainty. This concerns the deviant or absent presentations of complaints and modifications of medical interventions. Limited know-how in this unknown field tends to uncertainty. Besides a solid medical training it requires a special attitude to manage this strategically. Features of profession are intervision, interfraternal examination, quality guarding, to identify and inventory problems, increase skills, keep up literature, participate in training programmes and scientific research.

Active and convincing from medical competence

Due to the decentralisation of care for people with intellectual disabilities a progressive shift will take place from treatment duties into advising tasks. This requires a system directed attitude, as explained above. The social tendency is aimed at 'normalisation'. This implies that assistance is only sought when the patient does ask for it and preferably for the GP. The hurdle is, however, that the actual request by the patient for help leading to medical assistance is often absent. This is mainly the case when the complaints are subjective (pain, dyspnoea, visual and hearing impairments, dysuria etc). Changes in behaviour as an expression of these complaints are often misjudged. This is why seeking for help often stays behind or the request for help is misinterpreted. Preventive actions like screenings are recommended in medical guidelines for people with intellectual disabilities, especially when it concerns health problems that frequently occur. It is desirable that a physician for people with intellectual disabilities is pro-active and gives advises in the field of secondary prevention and behavioural changes in consent with the psychologist and behavioural expert. This requires the ability to provide the expertise actively and convincingly.

Chapter 3: Characteristics of educational training

3.1 Didactic principles

The educational programme for AVG is a postgraduate training. The education enables trainees to:

- gain expertise by practice
- obtain reflections at their practice
- build up specific know-how
- improve communicative and technical medical skills.

There are 3 didactic principles to facilitate these educational goals.

- concurrency
- continuity
- congruence

Concurrency means that practice runs parallel to theory. Growing knowledge or insight and practical experience of the trainee go hand in hand as much as possible. The educational situation constantly guarantees reflections to their experiences.

Continuity means a consecutive learning process, in which experiences and subject-matter become gradually more complex and responsibility gradually increases. The trainees are supposed to

experience their education as a coherent process that runs together with their increasing new professional expertise.

Congruence means that the supervisors act as models of the AVG's characteristics (exemplary behaviour). Supervisors serve as examples to enable their trainees to learn by identification.

3.2 Didactic Methods

The above didactic principles lead to several didactic methods. Research has repeatedly shown that education by monologue is of limited effect. Instead different didactic approaches have been developed. A leading principle in all these methods is to stimulate the trainee to be actively engaged with his own learning process. The actions by the supervisor are aimed at stimulating the trainee to self-teaching. The curriculum defines the relevant subject-matter and how it can be handed best. The curriculum uses the following methods, as will be further explained in Chapter 4.

- Internships
- Traineeships
- Weekly training days
- Peer group
- Communication training
- Supervision and intervision
- Workshops
- Courses
- Tutorial research project
- Evaluation
- Qualification of progress

Internships and traineeships

Internships enable the trainee to participate actively and self-employed in medical practice in institutions. The internships are divided as follows:

- 1st year: primary health care in an institution
- 3rd year: curative, preventive, consultative tasks in an institution

The traineeships are implemented in the 2nd year, in which the trainee chooses a traineeship from each of 3 blocks.

- 2nd year: 3 x 4 months in a clinic or institution of choice. The activities and assignments are built up according to the didactic principle of continuity: the trainee gains an increasing responsibility in his function as AVG.

Weekly training days

These weekly training days for AVGio's (physicians for people with intellectual disability in training) in peer groups form the backbone of theory education. This training day follows a structural programme in which the above didactic methods are reverted to. In the morning attention is

bestowed on integration of thinking, sensing and acting, in the afternoon on carrying out knowledge. During training days the following work-forms are used:

- Peer group

This is the group of trainees that have simultaneously entered the training programme, but the idea also stands for a didactic work-form of which exchanging experiences between trainees is the core. Each morning the training day sets off with 1½ hours 'peer group'. Under the direction of supervisors this spontaneous exchange of experiences is expanded to a systematic reflection on situations or problems that frequently occur in practice.

- Communication training

This is a didactic method in which essential communicative and psychological skills are presented and trained in a structured and safe way by means of role-playing and video analysing.

- Supervision

During medical practice trainees may encounter topics and problems that cannot be easily discussed during certain training situations. This kind of matters requires a confidential atmosphere that can be provided by supervision. Supervision is a learning method that does justice to the unique individual in the context of his profession. That means that the characteristic learning problems of a trainee are paramount. The essence is to stimulate the trainee to learn in his own way and to come to an appropriate and natural attitude. In the training programmes for GP's a lot of supervision expertise has been built up. During the 1st and 3rd year supervision takes place in couples twice a month during 2 hours on a training day.

- Intervision

An experienced professional once wrote: 'without intervision I will die an untimely professional death'. Also the experienced worker regularly encounters situations that need sharing with a colleague. The method developed for this is called intervision and takes place in intervision groups of 3 till 5 persons. In the 2nd year supervision hours are replaced by intervision hours.

Cursory education

The goal of cursory education is to teach the trainees theoretical knowledge, practical skills and a natural attitude with regard to specific somatic as well as non-somatic topics in medicine for people with intellectual disabilities. To carry out professional knowledge and increase insights two didactic methods are used in particular: workshops and courses.

In cursory education the congruence principle is important, i.e. that the didactic approaches of different trainees' teachers are congruent. Assuming that the trainee is responsible for his own learning process, teachers are supposed to create optimal conditions. The teacher is more of a facilitator than an instructor.

Teachers, who attend to the workshops and courses, have to decide how to carry out the subject-matter to the trainees. They can use a variety of educational methods. As the monologue lectures have repeatedly been proven ineffective, other more activating methods are recommended, as summarized below.

- modular education
- problem-orientated education

- literature study, completed by a periodical question time
- reference conferences
- combination of above educational methods

Many doctor-teachers, who will be participating in the educational programme, have had little or no didactical training at all. Practice tells that one intuitively reverts to a didactical form that is known from his own education. As a more activating didactical approach is preferable, some training is needed. In Chapter 9. Training of teachers this is amplified.

If the curriculum chooses to present certain topics with modular or problem-orientated education, one should realise that these forms of education have to be developed, which is a labour-intensive matter demanding educational expertise. It proves lucrative when once developed programmes can be used over and over again with some minor adjustments.

Various modules have been developed in medical education. Experience has also been gained with problem-orientated education, like the educational programmes about NHG guidelines used in the specialist education for GP's. For the benefit of the AVG education it is recommended that the future staff and teachers first inventory which modules have already been developed and what adjustments are needed to put them into use.

- **Workshops**

As distinct from topics that trainees spontaneously bring in from their practice experiences, workshops are planned in advance. By doing so the topics are link up as much as possible with practice problems: the most frequent themes and problems in the 1st year and the more specific, complex matters during the 3rd year. Classes can be given by the tutor, supervisors, teachers (also guest speakers) and by the trainees themselves. The workshops cover professional topics that can be discussed, with or without self-study, in blocks of half or whole days during training days.

- **Courses**

The main goal is to transmit fundamental knowledge from various scientific sources. As these subjects are too basic, big or new they are entitled to take more than one training day. The teachers are experts in the field. Cursory education takes place in courses of 2 till 5 days' blocks. During the weeks of cursory education, the regular training days are cancelled. The total scope of cursory education is limited per year, since the continuity of the traineeship should not be interrupted too much.

Tutorial research project

Scientific research skills are stimulated during the specialist training by cursory education and by self-employed research. In the 3rd year of the training 45 days are reserved for individual research, either 1 day per week during a whole year or 2,5 months consecutively (with the exception of the training days). This self-directed learning study may take place in the institution during the 2nd or 3rd year.

Evaluation and assessment

The output of the education for the trainee will be evaluated regularly. There is a differentiation between general evaluation and assessment of individual professional qualifications. Evaluation is a

feature of methodical processes, in which the course of the process and the output are reviewed and continuously adjusted on account of the results. The term assessment of professional attainment refers to all the formal ways in which the supervisor evaluates whether or not the trainee is capable to continue and complete the AVG education. Several functionaries are involved as examiners and the assessment is made at previously determined moments, at least 3 times during 3 years in month 9, 21 and 33.

The official assessment is recorded in a so-called assessment of professional attainment procedure that has to be approved by a registration committee of the AVG education. Further explanation is given in Chapter 8.

3.3 Tasks and functions in education

Various tasks can be distinguished within the AVG education. An accomplishment of a certain combination of tasks leads to a function. Each function inheres specific expertise, qualifications, responsibilities and interests. Sometimes one and the same person fills more than one function, for example tutor and trainer. This is not recommended for supervisors, since this function requires a large amount of independence in order to enable the supervision relation to provide sufficient openness and confidence.

Professor

The final professional responsibility for the contents of the complete AVG education is held by the AVG professor, who is charged with 3 core assignments:

- education on behalf of the basic curriculum
- scientific research
- patient care
- postgraduate education for AVG trainees.

To accomplish the AVG education the professor closely cooperates with various people at the university. The professor delegates the organisation and parts of other tasks concerning the education to these functionaries. Named below are the main parties and subsequent functions.

Parties	Functions
Supervisors	<ul style="list-style-type: none"> • Daily supervisors • Tutors: -Medical expert -Behavioural expert • Trainers • Supervisors (in supervision) • Teachers
Researchers	<ul style="list-style-type: none"> • Professor AVG • Assistant researchers
Organisers	<ul style="list-style-type: none"> • Head of Education • Coordinator

Supervisors

The supervisor function is divided in part functions, spread over more actors in different situations. To implement the didactic principles of concurrency, continuity and congruence with the various supervisors optimally, a useful supporting network is necessary, as noted in Chapter 9 Training.

Daily supervisor

The daily supervisor is the AVG who has the authority to teach the AVG trainee in medical practice. In this supervisor function several roles are marked off:

- Trainee's superior:
Watches the trainee's work regarding to medical responsibility, gives instructions and guards the professional borders, represents the interests of the medical discipline and the institution.
- Colleague:
Works together with the trainee on behalf of the continuity of medical care and supports the trainee whenever possible and necessary.
- Work instructor
Puts the institutional aims into practice by instructing the professional AVG rules in finding the answer to: what medical care is most appropriate for this patient?
- Judge of attainments
Evaluates the accomplishments of the trainee during training in perspective of the teaching objectives and final attainment level.

Tutors

Tutors are the contact persons on weekly training days. Each peer group is assisted by 2 persons: one tutor has behavioural expertise, the other is a well-experienced AVG. They form a duo, that is committed to assist with activities in the peer group of AVG trainees during the weekly training days. The tutors are responsible for an optimal interaction between practice and theory. It is all-important to enlighten the elements of the professional profile and to guard the didactical principles in the cursory education. They maintain contact with the institutions that host trainees and their daily supervisors. They are also involved in the postgraduate education of daily supervisors and in educational developments.

Trainers

Communicative and social skills can be practised by special trained people, for instance the same functionaries who fill the function in the GP training. One could also think of a combination with the function of a behavioural tutor.

Supervisors

Supervisors play an important role in learning how to reflect and how to learn from peers. Because of the specific supervision method that is intended and the kind of problems the trainee may encounter in practice that demand a confidential atmosphere, the supervision has to be given by functionaries who are not involved in other educational roles and who own a supervisor registration.

Teachers

Teachers are engaged to carry out the essential professional aspects in education in a systematic manner. Often they are medical experts who have won their spurs in a special field. Teachers are invited to attend to cursory education. They pay attention to the concurrency principle: the build-up of subject-matter during the various training stages: basic and frequent topics during the 1st year, more complex and specialistic matters during the last year.

Organisers

Two different functions are in charge for the organisation of the education.

Head of education

This functionary organises the education by the direction of the AVG professor and is responsible for facilitating business like finances, personnel and accommodations, but also for the relation with the university where the education is posted and the KNMG, government and professional association. The final responsibility is in hands of the AVG professor.

Coordinator

The coordinator is responsible for the daily course of matters and the organisation of education.

Primary roles are:

- manager
The coordinator organises by order of the head of education and the AVG professor all subdivisions of education and the actual contents of the weekly training days in consultation with the tutors.
- contact person
The coordinator visits the traineeship centres and confers with the supervisors about aspects of organisation. The coordinator plays an essential role to guard the principle of continuity by recommending about appropriate phasing and structuring the subject-matter. The coordinator also watches over the congruence: tuning and affiliation to the interaction of practice and theory during the entire education. The coordinator function can be combined with tutor and teacher.

3.4 Curriculum construction

The AVG education is characterised by certain didactic principles and subsequent methods that are offered to the AVG trainee by several functionaries in a phased order. The main items of this curriculum are listed in the following diagram.

Work-form	Specification	1 st year	2 nd year	3 rd year
1. Internship	<ul style="list-style-type: none">• curative AVG• peripheral traineeships• AVG: curative, preventive and consultative	12 months	3x4months	12 months
2. Weekly training days		1day/week 40 days	1day/week 40 days	1day/week 40 days
3. Peer group	<ul style="list-style-type: none">• Exchange of experiences• Reflection• Attitude building	90 min every week	90 min every week	90 min every week

4. Training	<ul style="list-style-type: none"> • Communication skills • Basic communication • complex problems • consultative skills 	20 days/yr		10 days/yr
5. Supervision	<ul style="list-style-type: none"> • reflection at difficult situations • building self-directed learning methods 	12x 2hrs/2pp		12x 2hrs/2pp
6. Intervention			12x2hrs	
7. Workshops	See Ch 5	Afternoons 4hrsx20	Afternoons 4hrsx20	Afternoons 4hrsx20
8. Courses	See Ch 5 1 st year 2 nd year 3 rd year	16 days	13 days	5 days
9. Tutorial research project	Idem			45 days
10. Evaluation	<ul style="list-style-type: none"> • personal attainment evaluations • knowledge/skills examinations • (supervision)evaluation reports • reviews and presentations • research report 	Month 9	Month 21	Month 33

Chapter 4: Education on weekly training days

These weekly training days for AVG trainees in groups at the university form the backbone of theory education. This training day follows a structural programme in which the above didactic methods recur. In the morning attention is bestowed on integration of thinking, sensing and acting, in the afternoon on carrying out knowledge. In the following the work-forms and their important topics and goals are described.

4.1 Peer group

The peer group is a group of AVG trainees who have started the education simultaneously. However, the peer group idea stands also for a didactic method in which exchanging practice experiences between AVG trainees is central. Every training day sets off with 1,5 hours 'peer group': under the direction of tutors this spontaneous exchange of experiences is expanded to systematic reflection on situations that frequently occur in practice. The didactic principles of concurrency and congruence are central in the peer group. Here the characteristics of the professional AVG profile are worked out. Although the topics cannot be planned in advance, the following items can be expected.

Peer group topics

1st year:

- clear communication
- handling an anxious patient
- handling a non-cooperative / resisting patient
- handling discontented or demanding relatives / care workers
- cooperation with GP's
- multidisciplinary cooperation
- institutionalising
- dealing with faults
- somatizing

2nd year:

- unsolicited advising
- handling people with visus and hearing impairments
- elder people
- migrants: intercultural communication
- development psychology
- infection prevention, vaccination and hygiene
- nutrition
- interfaces between family health care and medicine for people with intellectual disabilities
- interfaces with other medical specialisations

3rd year:

- 'bad news' conversations (with people with intellectual disabilities, relatives, care takers)
- course of life (longitudinal) medicine
- disorders, impairments, disabilities
- consequences of multiple handicaps
- mourning reactions
- terminal phase care and care for the dying
- practice atmosphere for patients
- handling conflicts
- burn-out
- sexuality and reproduction, incest

4.2 Communication training

This is a didactic method in which essential communicative and psychosocial skills are presented and trained in a structured way by means of role-playing and video analysing.

- conversation with
 - patients
 - relatives
 - care takers
 - GP's
- 'bad news' conversations
- team interactive training
- consultant skills

4.3 Supervision

Supervision is a learning method that does justice to the uniqueness of the individual in the context of his profession. That means that the characteristic learning problems of a trainee are paramount. The essence is to stimulate the trainee to learn in his own way and to come to a natural attitude. In the training programmes for GP's a lot of supervision expertise has been built up. During the 1st and 3rd year supervision takes place in couples 2 times a month on a training day.

4.4 Intervision

Each experienced worker regularly finds himself in situations that urge for sharing these cases in depth with a colleague. The method developed for this is called intervision and takes place in intervision groups of 3 to 5 persons. In the 2nd year supervision hours are replaced by intervision hours.

Chapter 5: Cursory education: courses and workshops

This chapter sums up the specific topics in medicine for people with intellectual disabilities, both somatic and non-somatic.

The starting-point of the education is that medicine for people with intellectual disabilities forms a separate domain of expertise within medicine as a whole and a specific field of application within the health care system. Partly there is overlap with family and community health care. Because also then specific characteristics are present, the professional AVG education is mainly unique.

The NVAZ guidelines and the –possibly adjusted- NHG (Dutch college of general practitioners) standards form the basic material. Sometimes there is a possibility to participate in existing courses for family doctors, in and outside the university. The low threshold character of AVG care leads to the fact that AVG or family doctor has to deal with a relatively undifferentiated presentation of complaints. However, because of a different spread of disorders in people with intellectual disabilities and different presentations of complaints, the AVG works with other decisive

considerations than the family doctor or clinical specialist. This will be pointed out thoroughly. To carry out the professional knowledge the two following didactic methods are used.

5.1 Workshops

As distinct from topics that trainees bring into the peer group spontaneously, subjects for workshops are planned in advance. The sequence and depth of these themes concur as much as possible with practice problems. That means most frequent themes and problems in the 1st year and the more specific or rare matters during the 3rd year. Furthermore cursory education covers professional topics that can be addressed in blocks of half or whole days. These classes are held on the trainings days in the afternoons. Workshops can be tended by tutors, supervisors, teachers from internships centres of the 2nd year, guest speakers and by the trainees themselves. Special educational modules can be used, edited by NHG, to introduce the developed standards. Besides that special education programmes and modules will be developed for this training.

Cursory topics 1st year	
General medical knowledge and skills	<ul style="list-style-type: none"> • history taking with patient or a third one • emergencies • referral • pharmacotherapy, formulary • intoxications, side effects, interactions • dermatology • fracture diagnostics, wound treatment, ankle taping • pressure sore, crural ulcer • medical record, care plan, care goals, medical policy • laboratory and diagnostic imaging • gynaecological examination (to bring in an IUD, making a cervical smear)
Neurology	<ul style="list-style-type: none"> • neurological examination
Musculoskeletal system	<ul style="list-style-type: none"> • orthopaedic examination • methods in physiotherapy • methods in occupational therapy
Psychological and behavioural disorders	<ul style="list-style-type: none"> • sleeping disorders • developmental psychology
Specific items in internal medicine	<ul style="list-style-type: none"> • urinary tract: • infections, urolithiasis, incontinence, prostate • eating disorders, gastro-oesophageal reflux, constipation, abdominal discomfort • diabetes mellitus • thyroid disorders • specific aspects of asthma, COPD, pulmonary problems in people with multiple complex handicaps (orientation pulmonary function assessment in children included)

Sensory disorders	<ul style="list-style-type: none"> • ENT-diagnostics • introduction ophthalmologic examination, red eye • methods in speech therapy
General understanding of care	<ul style="list-style-type: none"> • care system, national and international, social developments and views, interest groups • institutional policies, budgets

Cursory topics 2nd year	
Neurology	<ul style="list-style-type: none"> • cerebral palsy • cerebral developmental disorders • ataxia • extra pyramidal movement disorders • narcolepsy, problems with consciousness, vertigo, tendency to falls, non-congenital/post traumatic brain damage • neuropsychological examination
Posture and movement disorders	<ul style="list-style-type: none"> • methods of rehabilitation medicine • prevention of secondary disorders • exercise, activation, methods of support, work/live surroundings
Behavioural and psychiatric disorders	<ul style="list-style-type: none"> • specific presentation of symptoms • depression • Attention Deficit Hyperactivity Disorder • pervasive disorders, autism • anxiety disorders, phobias • personality disorders • psychotic disorders • eating disorders • addictions • behavioural disorders • coercive measures • classification systems • psycho pharmaceuticals • behavioural theories and methods
Specific items in internal medicine	<ul style="list-style-type: none"> • the patient with cancer • intensive care
Specific aspects of oral and dental medicine	<ul style="list-style-type: none"> • syndromal aberrations • oral side effects of drugs

	<ul style="list-style-type: none"> • oral problems due to reflux and rumination
Communication	<ul style="list-style-type: none"> • methods in supporting communication
<ul style="list-style-type: none"> • Ageing 	<ul style="list-style-type: none"> • epidemiology of age related impairments • relations with etiologic diagnoses • dementia • delirium • different causes of functional deterioration • drug interactions in multiple prescribing • Parkinson's disease • palliative care • CVA • arthrosis of hip and knee

Cursory topics 3rd year	
Specific somatic and psychiatric co-morbidity in etiological syndromes	<ul style="list-style-type: none"> • Down's syndrome • Fragile X syndrome • Prader-Willi syndrome and Angelman syndrome • one or more syndromes at choice
Scientific education	<ul style="list-style-type: none"> • practical preparation for a research or screening • ethical assay • informed consent • management plan • logistic preparations
General health care	<ul style="list-style-type: none"> • health education • preventive measures against health risks • preventive actions and protocols
Sexuality	<ul style="list-style-type: none"> • frequent questions • contraception • sterilization • examination in supposed sexual abuse
Deepening of ethical and juridical matters	<ul style="list-style-type: none"> • sexuality, reproduction, sterilization, sexual abuse • medical decisions in early life • medical decisions in the end of life • coercive measures • scientific research on an institutional level • privacy guarding • Dutch health legislation • AWBZ (exceptional medical expenses act),

	Ziekenfondswet (compulsory health insurance act), WGBO (medical treatment contracts act), BIG (individual health care professions act), BOPZ (psychiatric hospitals (compulsory admissions) act), Wet op de Lijkbezorging, ARBO (occupational health and safety act).
Practice management	<ul style="list-style-type: none"> • quality guarding and assessment • automation and registration

5.2 Courses

The main goal is to carry out fundamental knowledge from various scientific sources in a systematic way. As these subjects are too basic, big or new they are entitled to take more than one training day. The teachers are experts in the field.

Cursory education takes place in courses of 2 till 5 days' blocks. During the weeks of these courses, the regular training days are cancelled. The total amount of courses is limited per year in order not to interfere too much with the continuity of the traineeship.

Phase	Topics cursory education	Time occupation in days
1 st year	• System theory course	2
	• Basic course decision strategies and epidemiology	3
	• Basic course etiological diagnostics (orientation clinical genetics and laboratory; general diagnostics, syndrome recognition, specific features, laboratory diagnostics, diagnostic imaging, criteria for referral, managementplan)	5
	• Epilepsy in people with developmental disabilities	2
	• National long course (pulmonology)	2
	• National heart course (cardiology)	2
		total 16 days
2 nd year	• diagnostics, referral and assistance in visual impairments (skill training and orientation paediatric ophthalmology in a centre of expertise)	5
	• audiological diagnostics, referral, treatment with hearing devices, assistance for people with hearing impairments (orientation in an audiological centre and centre of expertise)	3
	• consultant skills course	3
	• basic course ethical and juridical aspects	3
	total 13 days	
3 rd year	Eur Epidemiology Summer School	5

Chapter 6 Internships and traineeships

6.1 Phasing

Internships enable the trainee to participate actively in medical practice in institutions for people with intellectual disabilities. The following phasing is presented:

Educational year	Month	Sort of institution
1 st year	12	Institutional internship in a centre for people with intellectual disabilities
2 nd year	3 x 4	Peripheral traineeships
		Block A: Etiology and neurological function
		Block B: Somatic impairments and handicaps
		Block C: Psyche and ageing
3 rd year	12	
		intra (institutional)/ extramural (community based) internship curative, preventive and consultative care in one or a combination of 2 institutions for people with intellectual disabilities

The traineeships, activities and assignments are built up according to the didactic principle of continuity: the trainee gains an increasing responsibility in his function as AVG.

6.2 1st year: Intramural internship

This internship consists of a 12 months' learn-work period being a doctor for people with intellectual disabilities with the following goals:

General objectives Internship 1st year

- learn how to master the AVG assignment as a GP on a basic level
- learn how to cooperate multidisciplinary
- get acquainted with the social systems of people with intellectual disabilities

6.3 2nd year: Peripheral traineeships

Peripheral traineeships at choice

The goal of the peripheral traineeships for the AVG trainee is to get acquainted with several adjacent important fields of care and the necessary multidisciplinary work in particular. The choice for a

special peripheral traineeship will be influenced by practice experiences from the 1st year and the information from the weekly training days. It is not always necessary that the trainee orientates himself in every field that by itself is important for care. Because of the fact that several trainees will be working in traineeships in different settings and report during weekly training days, they can learn a lot from each other.

In choosing peripheral traineeships the didactical phenomenon ‘transfer’ plays a key role. Transfer of knowledge and insight in one specific area implicate that these principles could also be applied in another field. That means that one gets acquainted with certain systematics for example concerning diagnostics and therapeutics, that are relevant in other specialist areas as well. To go into specialised areas is of surplus value, because one can sense the forming value of such deepening. Because of this principle there is no need for the AVG trainees to orientate themselves in all adjacent fields. In their choices they can at first be lead by their own affinities, which are important impulses to go into a field of interest.

The peripheral traineeship gives the best educational output when the trainee has his own responsibilities. Orientating and observing alone is insufficient. To obtain all these responsibilities an peripheral traineeship should take at least 4 months.

Of course the choice of peripheral traineeships must take place in consultation with the academic institution. The development of the AVG trainee during the 1st year has to be taken into account as well. Next to the personal interest of the AVG trainee the academic institution also has to take into consideration both the strong and weak points of the trainee. Besides, practical possibilities, such as availability of peripheral places for trainees, play a role in the final choices.

General objectives peripheral traineeships

- to gain insight in marking off the assignments of AVG and clinical specialist
- to gain several specific skills in the field of diagnostics, management and treatment
- to increase insight in multidisciplinary cooperation with clinical specialists and paramedics
- to increase insight and expertise in the field of secondary and tertiary prevention
- to widen interests by deepening in a few specific domains
- to develop lasting contacts with important clinical colleagues
- to learn to hold advising or informative conversations
- to stimulate a scientific attitude
- to prepare a self-directed learning scientific project or screening in the 3rd year

Three peripheral traineeships of four months each at choice

The trainees choose in consultation with the academic institution one traineeship from the following blocks:

Block	Title	Choice from
A.	Etiology and neurological functions	<ul style="list-style-type: none"> • Department Clinical Genetics with orientation in Molecular Genetics, Paediatrics and Paediatric Neurology • Department (Paediatric) Neurology and Centre for Epileptics with orientation in diagnostic imaging, the work time is divided over both fields
B	Somatic impairments and handicaps	<ul style="list-style-type: none"> • (Paediatric) revalidation centre with orientation in orthopaedics • Centre for people with intellectual and visual handicaps with orientation in paediatric ophthalmology • Centre for people with intellectual and hearing disabilities with orientation in an audiological centre.
C	Psyche and ageing	<ul style="list-style-type: none"> • Nursing (somatic and psychogeriatric) home with orientation in clinical geriatrics • Department of (paediatric) psychiatry and Observation centre or so-called SGLVG-ward in an institution for people with intellectual disabilities with orientation in a so-called consultant's team; the work time is divided over both fields

Specific objectives peripheral traineeships

In the following the main objectives per block and the specific objectives per peripheral traineeship type are mentioned.

General goals block A: Etiology and neurological functions

To gain insight in

- etiology of developmental disabilities
- genetic patrons
- adjuvant functional diagnostics as basis for management plans

To learn to hold advising and informative conversations

A1. Specific goals Clinical Genetics / Paediatric Neurology

- To increase skills in the field of etiological diagnostics
- To gain insight in the principles and possibilities of laboratory investigations

A2. Specific goals department (Paediatric) neurology / Epilepsy / Diagnostic Imaging

- To gain insight in the contribution of paediatric neurology to etiological and functional diagnostics of intellectual impairments
- To increase skills in the field of diagnostics and management of important congenital impairments (cerebral palsy, other neuromotor disorders)
- To increase skills in the field of diagnostics and management of (therapy resistant) epilepsy
- To increase skills in the field of diagnostics and management of chronic progressive and age related neurological disorders
- To increase insight in diagnostics as EEG, CT, MRI, SPECT, PET

General goals block B: Somatic impairments and handicaps

To increase insight in:

- the relation between disorders, impairments and handicaps and the sense of multiple handicaps
- the relation between somatic impairments and handicaps and social, cognitive and emotional functioning

To increase expertise in the field of

- aid devices
- adjustments in the social environment

B1. Specific goals (Paediatric) revalidation centre / department Orthopaedics

To gain insight in

- diagnostics and treatment of orthopaedic disorders
- diagnostics and management of chronic neurological and orthopaedic motor impairments and posture disorders
- physiotherapy, occupational therapy, speech therapy

To increase expertise in the field of

- specific adjustments in the social environment
- secondary prevention of non-congenital brain damage
- secondary somatic disorders, like arthrosis, contractures, pain, decubitus, gastro-oesophageal reflux, chronic pulmonary problems, constipation.

B2. Specific goals Centres for people with intellectual disabilities and visual impairments (department of paediatric Ophthalmology included).

B3. Specific goals Centres for people with intellectual disabilities and auditive impairments (Audiological Centre included).

To increase skills in the field of

- diagnosis and management of visual or auditive impairments.

To increase insight in

- general acquaintance with the visual impaired and the blind, and the deaf.
- principles of training with visual and auditive devices.

To increase expertise in the field of

- low vision and auditive aids
- specific adjustments in the physical and social environment
- specific methods in communication

To increase insight in the know-how of

- the (paediatric)ophthalmologist, orthoptist, TOA, visuologist or (paediatric)ENT specialist, audiologist and akoepedist.

General goals Block C: Psyche and Ageing.

To increase insight in

- correlation between physical, psychological and social functions
- the influence of inborn or non-inborn cognitive impairments on psychological functions
- the specific problems in diagnosis and management in the young and the elderly with intellectual disabilities and behavioural problems.
- risk factors and social stressors for the young and the elderly with intellectual disabilities.

C1. Specific goals Nursing Home (somatic and psychogeriatric) / Department of Geriatrics.

To increase skills in the field of

- diagnosis and management in the terminal stage of progressive neurological impairments and CVA
- diagnosis and management of geriatric disorders
- (differential) diagnosis and management in dementia
- secondary prevention
- aspects of ageing
- decisions towards the end of life, palliative care, care for the dying

C2. Specific goals Department (Paediatric) psychiatry/ Department SGLVG or Observation centre / Consultant teams.

To increase skills in the field of

- diagnosis and management of important psychiatric disorders and behavioural problems, both in general and in people with intellectual disabilities

To gain insight in

- specific diagnostic and therapeutic problems in people with intellectual disabilities
- possibilities of ambulatory care: diagnosis and advice
- risk factors and social stressors for people with intellectual disabilities
- availability of so-called consultant teams

To gain know-how in

- specific psychiatric and behavioural disorders in people with intellectual disabilities

To get to know

- the specialised care of people with intellectual disabilities and severe behavioural disturbances.

To gain consultative skills in the field of behavioural problems.

6.4 3rd year: residential and/or community based internship

During the 3rd year of training 12 months are attended to curative, preventive and consultative care for people with intellectual disabilities, combined with carrying out a screening and a self-directed learning scientific project and writing a final thesis.

Goals of the 3rd year internship

To carry self-reliant care responsibility

To deepen and refine skills

- to carry out the AVG profession
- to perform as a advisor / consultant
- to work in agreement and coordination with general practitioners

To get to know

- different units in the care
- different social views on care and their impacts on medical care

To gain skills to

- to carry out projects of screening or scientific research in people with intellectual disabilities
- to write an essay or scientific article

Chapter 7: Scientific education and international orientation

7.1 Why scientific education?

The university poses that it would be most desirable that the AVG carries out his profession with a scientific attitude. For, medicine for people with intellectual disabilities is shaping in all of the following aspects: decision analysis, methods of diagnosis and treatment, communication and attitude, cooperation and coordination with other disciplines, aspects of quality and ethics.

With a scientific attitude (preoccupation) the AVG can consistently contribute to the development of the AVG profession. Research in this field includes prevalence studies based on accurate diagnosis, prospective clinical trials for development and evaluation of adjusted methods of diagnosis and treatment and research on different care models. If adequate attention is paid to training of basic epidemiological and statistic skills, systematical organisation of screening and research projects, supervision during administration and report, even the most practical intended physician will gain pleasure and satisfaction by those.

7.2 Scientific skills and attitudes

One could not assume that every AVG-to-be, will continue to be involved in his own scientific research. However, all these special attitudes and skills consolidate the professional work-out and the ability to further shape the profession. Required scientific skills and attitudes are presented in the following scheme.

- The ability to critically analyse and question:
- to be able to and to dare to query
- The skills to deal with questions:
- to translate doubts into questions, to transform a non-paying query into a more profitable one, to comprehend the necessity of perspicuous questions
- to purchase the drive to find the answers
- to survey literature
- to consult experts in the field
- to systematically review research data
- to record documents in a systematic way for future use
- to be capable to stay 'updated'
- To find the way:
- to know the literature and documentation systems
- to be able to use computer files and internet
- Discipline and persistence:
- persuasion
- To value scientific publications
- To have the power to take up a position to be evaluated and criticized, to be able to profit by feedback and criticism.

7.3 Cursory education and tutorial research project

During all training years attention is paid to scientific education. During the 2nd year after a brief base course decision analysis and epidemiology attention is frequently directed to reviewing scientific literature. Toward the end of the 2nd year the basic classes of the Epidemiology Summer School are attended, in which on top of the fixed epidemiology class there is a choice of courses like introduction into data analysis, community based scientific research, genetics, introduction into information science. During the 3rd year of education 45 days will be reserved to participate in or carry out tutorial research project, either 1 day a week or 3 months consecutively (with exception of the weekly training days) after workshops about practical aspects of organizing screening or scientific research. This self-directed learning scientific project may take place in the institution in the 3rd year, but also in an institution of choice during the 2nd year.

The scientific education comes under the head of the professor. One has a free choice of topics, but participation in a project as part of the research programme of the AVG professor is also a possibility. In all cases the problem definition and the study design of the self-directed learning scientific project should be approved by the professor, who also has a final call and judgement.

7.4 International orientation

Because the field of medicine for people with intellectual disabilities is limited, international orientation is important to keep updated. Next to that, because of the strong differences in social views on care for the disabled between countries, this stimulates reflection on what is good care and the reasons why. The international aspect will be addressed in the following way during education:

- Participation in EUR Epidemiology Summer School during summer in the 1st year
- Participation in an international congress or round table conference (for example IASSID, MAMH, Special Interest Research group on Health Issues of Ageing) during education (application expenses are included in tuition)
- Invitation of foreign guest lecturer
- Publications about the educational programme in international journals
- Participation in developing a special Summer School: medical aspects of intellectual disability.

Chapter 8: Assessment of professional attainment

8.1 Introduction

It is regularly evaluated whether the AVG trainees profit sufficiently from education. That's why there is a distinction between educative and selective evaluation. Educative evaluation is (according to the handbook of the education for GP's) 'the use of tools with the purpose to give the trainee feedback at his professional acting'. Frequently used tools are for example knowledge test, evaluation form. Selective evaluation is 'the use of tools to assess whether or not the trainee is fit to continue the training'. This selective procedure is according to the formal rules of recognition called 'assessment of professional attainment'. Furthermore the level of quality of the educational programme is examined regularly. This will be worked out later on.

8.2 Principles of assessment of professional attainment

The assessment of professional attainment is based on different principles.

- validity
- congruence
- distinguished process-product methods
- different examiners and moments of assessment

- **Validity**

The applied methods of assessment and tools have to be valid, which means that they are to indicate how the trainee fulfils the characteristics and the professional profile of the AVG.

- **Congruence**

The applied methods and tools are to be in correspondence with the educational didactic principles and work-forms.

- **Distinction between process-product methods.**

Evaluation of process directed education (aimed to initiate and stimulate individual reflection, communication and attitude) requires different methods of assessment than of product directed education, aimed at the final attainment level (medical technical knowledge and skills).

- **Different examiners and moments of assessment.**

As there are several supervisors, there are also different functionaries engaged in the assessment of the individual trainee. During the 3-year course evaluation and examination takes place at previously arranged moments.

8.3 Examinators assessment of professional attainment

The assessment of professional assessment is the red line during education and works through an infrastructure of examiners, moments and methods of assessment.

Examinators

The assessment of professional attainment is the final responsibility of the head and coordinator of the educational department. The qualification of the trainee is based on the assessments by the following functionaries.

- Daily supervisors
- tutors
- trainers
- supervisor during supervision
- teachers

Selective evaluation takes place at least at three moments in the 3-year training

- 1st year in the end of the 9th month
- 2nd year in the end of the 21st month
- 3rd year in the end of the 33rd month

8.4 Scheme of assessment of professional attainment

For every evaluation there has to be consensus about the qualities and tools that are to be used to judge the trainee. The most frequently used instruments for selective evaluation are:

- personal attainment evaluations
- checklist / questionnaire
- knowledge and skills examinations
- essays and reports
- reviews
- tutorial research project

Specific evaluation methods or a combination of methods are obviously depending of the kind of educational objectives and the work-form. In the following scheme these methods are related to educational objectives and examiners.

<u>Objectives</u>	<u>Evaluation methods</u>	<u>Examinators</u>
Practice	• Observations	Daily Supervisors

	<ul style="list-style-type: none"> • Personal attainment evaluations • Check / questionnaires 	Tutors
Profile/characteristics	<ul style="list-style-type: none"> • Personal attainment evaluations • Supervision discussions • Feedback colleagues • Evaluation reports supervision 	Tutors Daily Supervisors Supervisors
Communicative skills	<ul style="list-style-type: none"> • Training reports • Video evaluations • Personal attainment evaluations 	Trainers Daily Supervisors
Medical technical skills	<ul style="list-style-type: none"> • Skills examinations 	Teachers
Knowledge	<ul style="list-style-type: none"> • Reviews and presentations • Knowledge examinations 	Teachers
Scientific education	<ul style="list-style-type: none"> • Tutorial research project • Reviews and presentations 	Professor

8.5 Procedure of assessment of professional attainment

The evaluation outcomes will lead to the call whether or not to continue education. The specific method and forms have to be declared by the university in 'Procedure of assessment of professional attainment'. This has to pass the registration committee of the AVG education. During the development of this procedure the Qualification procedure of the Physicians in Nursing Homes from September 1997 can be used as an example. A similar procedure includes the following matters:

1. definition
2. objective
3. principles of assessment
4. methods
5. protocol with steps and responsibilities
6. fixed times
7. results
8. procedure for notice of objection

Chapter 9: Training of teachers

9.1 Developments in medical education

In modern academic education ideas about transmission of knowledge and skills to specialist trainees differ significantly from the manner in which the supervisors have gathered their professional know-how. Frontal-classical lectural education has made way for small class education, where the teacher is more to structure and guide learning processes rather than transfer knowledge. In Chapter 3 of this note the didactical principles of the AVG specialist training are described. Few among the present teachers will be familiar with these didactical visions from their own former education. It was

customary that the experienced doctor transmitted his knowledge and skills in the lecture room or at the bedside. Many were taught by the gifted clinician who often left an imperishable impression. Even now the teacher plays an irreplaceable role in the specialist training. Neither computers nor educational packets could possibly replace him. However, the assignments of the teachers and trainers are significantly different nowadays.

In the Dutch Medical Journal (NTVG) of April 1996 a list with assignments and abilities was published. Most physicians will not be well-experienced in these tasks. Therefore there is a need for training among the supervisors of the AVG trainees. For ‘Teaching is a profession itself that has to be learned first’. The urge of training is stimulated by the outcomes of the inspections, whereby quality of education was stressed. In 1996 the deans of all medical faculties together with the Dutch Organisation of Medical Education Institute the Foundation Educational and Didactical Development and Training and several didactical and educational trainings have started in aid of medical education.

9.2 Training of Supervisors

In the AVG specialist training different parties are involved in several functions as pointed out earlier in Chapter 3 and in the following scheme

Parties	Functions
Core Staff	<ul style="list-style-type: none"> • Professor • Head of Education • Coordinator of Education
Daily Supervisors	<ul style="list-style-type: none"> • Physicians who train and supervise the trainees
Tutors	<ul style="list-style-type: none"> • AVG and behavioural specialist who supervise the training group
Teachers	<ul style="list-style-type: none"> • Physicians and other experts who provide professional cursory education
Trainers and Supervisors	<ul style="list-style-type: none"> • Professionals with expertise in communicative and reflective skills

In this chapter proposals are made to prepare the above parties for their assignments for the AVG training.

9.3 Preparation Core Staff

The direction of education is in hands of the core staff. This staff forms the management team of specialist training. Considerable time before the start of the training the core staff sets off with the activities by a range of work conferences (alternate whole and half days). It is essential that the core staff is instructed by a special recruited trainer and educational expert.

Objectives of these work conferences of the core staff are:

1. to frame the specialist training
2. to determine criteria for selection of supervisors, teachers and trainees
3. to work-out the application requirements for selection of institutions
4. to make a concept design for course of action
5. to prepare a work conference to establish the concept design for course of action
6. to contact teacher for cursory education

Work conference didactical design for course of action

A crucial issue in preparation is the work conference where the policy is discussed and determined together with the trainees' supervisors. The point is according to the assumed didactic philosophy to decide which educational work-form is to be applied with which educational item. Chiefly these 3 didactical perspectives have to be considered:

a. Modular education

An educational programme can be divided in modules. One module consists of a circumscribed professional content, that is covered within a determined period of time (for example 6-8 weeks) and awarded with a certain amount of credits (for example 1 credit for 4 hours of study). For one module presentation, references, assimilation, examination and suitable teachers are arranged. Important advantage is that trainees can complete a module in their own time, pace and way.

b. Problem-orientated education.

In problem-orientated education practical problems are presented to the trainee group before the related subject-matter is addressed. The trainees' assignment is to analyse the problem by means of their present knowledge. That will raise questions and bring up issues that are not understood. These lay the foundation of the study goals to be formulated. In the next phase of self study the trainees group will gather again to make out whether they have a better comprehension of the problem. The availability of teachers is arranged. Crucial in problem-orientated education is to compile appropriate problems to propound to the trainees.

c. Forms of literature study with examinations, review meetings, question hours.

These concern the classical didactical work-forms to gather knowledge and to examine insight.

The preparation of the Work conference didactic policy requires intensive training of the core staff. She has to familiarize herself under instruction of a trainer and educational expert with different work-forms and materials, for example from the Foundation Educational and Didactic Development and Training and from the University of Maastricht. The selection of teachers plays an important role regarding their affinity and experience with the assumed educational philosophy and didactical work-forms.

Preceding the work conference the selected teachers are instructed about the educational principles of the specialist training. During these discussions it is verified whether the teacher feels comfortable with the proposed didactic principles and what complementary training is needful.

Besides that the core staff lays out time to adjust the ideas about selection of institutions and trainees. This process of preparation results into:

- a list of institutions
- a selection of trainees
- a group of teachers and their fields of expertise

- a group of trainees and supervisors
- a preliminary consultation structure for all supervisors involved
- a programme for the work conference didactic policy

9.4 Work conference didactic policy

Considerable time before the training sets off, a 2-days work conference is held in which the core staff, supervisors and teachers participate. This conference is conducted by the core staff and the trainer and educational expert. The main objective of this conference is to finalize the didactic policy intentions. Here the didactical work-forms are determined. During the conference demonstrations are provided to illustrate the kinds of educational training. Following the conference and prior to the start of the specialist training, this educational training is carried out.

9.5 Training of tutors

The presence of tutors, capable of guiding a small peer group at the weekly training days, is an essential condition for the learning process of the trainees group. A behavioural expert is to be selected on that proficiency. The tutor, a well-experienced AVG, is responsible to watch over the medical, professional aspects of the peer group discussions. He has to acquire the skills to work with a small group. Familiarity with the didactical principles of education and the sense to be a part of an educational system is also of great importance for the tutors. The weekly training days at the university significantly contribute to the learning processes of the trainees, who form a peer group together. In the trainees group the members learn by exchanging experiences from their internships and traineeships and by the way in which the tutors go along with the group's dynamics. The quality of teamwork between the 2 tutors is of great significance for the outcome of the weekly training days. It is important that the tutors prepare themselves for their assignments before the training sets off. This preferably takes place in a series of discussions during whole and half days, instructed by a recruited trainer and educational expert. Working together with an allocation of tasks between the tutors is a hot item. Furthermore developments in group's dynamics (for example phasing of groups' processes) and regular evaluations need much attention during this preparation.

The objective of training of the tutors is:

- to strengthen the skills in the methods of working with small peer groups.

After initial training the tutors participate in 2 weekly supervision to get familiar with the methodical issues and to regularly reflect on their working together during the entire first year of AVG training. Evaluation at the end of the first year will decide whether or not professional support is needful.

9.6 Training of daily supervisors

The daily supervisors are in charge of supervision of the trainee who gains practice experience in their institutions. They assign patients to the trainees with regard to their professional development as an AVG. They hold weekly discussions with their trainees about their practice experiences and problems that they encounter.

During the first year a different approach of the trainee is needed than in the 3rd year. A starting trainee does not feel at home facing the institutional population. He first has to learn the principles of the AVG profession. Because he will start directly with patient care, his supervisor will be of great

help and support. However, also in this initial phase of the specialist training an attitude is wanted whereby the trainee senses that the supervision is directed to self-reliant acting. This process will be completed during the 3rd year. In this method of supervision the quantity of responsibility plays a key role.

The daily supervisors are offered training to fit them in their supervision tasks. This training is given via the method of practice assistance. Central theme is the question what the consequences are of the assumed educational didactical principles for the practice assistance. This training can take place in a series of half or whole days of a several days' conference. The form has to be determined in consultation with the daily supervisors.

Objectives of the training for daily supervisors are to get familiar with:

- the didactical principles of education
- the methodical principles of practice assistance in an institution
- the idea that a training programme is a system in which every part affects the other parts
- the methods of supervision and appropriate techniques.

When the training has started the daily supervisors meet in a monthly intervision group with a tutor to exchange experiences and to guard continuity and congruence of education. This intervision significantly contributes to this congruence of the educational programme because the daily supervisors are trained to exchange their experiences in a systematic way. Furthermore these monthly meetings offer the opportunity to keep posted of the course of things inside the university and the training as a whole.

9.7 Trainers and supervisors

The trainers and supervisors to be recruited ought to have experience in the methods of communicative skills training and / or supervision. They need to get familiar with the purpose and didactical philosophy of the education and their roles there in. The core staff can meet with an educational expert during a series of discussions, in which attention is also paid to their contributions during evaluations and qualifications of progress of the trainees.

9.8 Survey Preparation and Training supervisors

It was pointed out in the previous chapter that for the preparation of supervising the AVG training the necessary activities and training is requested. For as far as it can be estimated these activities and time investments are noted in this scheme.

Phase	Core staff	Tutors	Daily Supervisors	Teachers	Trainer Supervisor
Preparation	Work discussions Design institution	series discussions with didactic expert	Course methods practice assistance		
Coordination	Work conference Didactic policy 2 days	Work conference didactic policy 2 days		Work conference didactic policy 2 days	With core staff & Educational expert
Implementation	Regular consultations	1 st year monthly supervision	Monthly intervision group	individual development & preparation subject-matter	Regular consultation with core staff

Appendix 1: Participants

Steering Committee Curriculum Development NVAZ-Training

- Mrs. Dr. H.M.Evenhuis, MD, PhD, Chairman Hooge Burch, Zwammerdam
- Mrs. I. Van Gelderen, MD Eemeroord, Baarn
- Mr M. Nijenhuis, MD St Anna, Heel
- Mrs W.I.M. Veraart-Schretlen, MD Esdege, Alkmaar
- Mr Drs. Ph.H.van Praag, consultant Amsterdam
- Mrs Drs. M.I.Wiersema, consultant Delphi, Koudekerk

Participants of the one or both Work Conferences:

- The members of the above mentioned Steering Committee
- Mrs J.J.T.M. van Beurden, MD De Lathmer, Wilp
- Mrs M. de Groot, MD Crayenburch, Nootdorp.
- Mrs T. Hermsen-Janssen, MD St.De Dreistroom,Wijchen
- Mr Dr. L.R. Kooij, MD General Secretary, HVRC
- Mr C. van Schie, MD Chairman NVAZ Committee
- Mrs Dr. H.M.J. van Schrojenstein Lantman-de Valk, MD, PhD Pepijn, Echt
- Mrs W. Soeters, MD Westerhonk, Monster
- Mr Dr. R. Starmans, MD, PhD Head of Institute for training of general practitioners, Rotterdam
- Mrs M. Veendrick-Meekes, MD Kempenhaeghe, Heeze.
- Mrs H. Veeren, MD Crayenburch, Sandhaghe.

Translation from Dutch into English (January 2002):

- Mrs. S. A. Huisman, MD, AVG trainee Prinsenstichting, Purmerend

With thanks to:

- Mrs. J. Riley Australia

Appendix 2: Abbreviations and translations:

AVG	Physician for people with intellectual disability
CBO	Central Institute for Guideline Development
EUR	Erasmus University Rotterdam
GP	General practitioner
IASSID	International Association of Intellectual Disability Research
KNMG	Dutch Society of Medicine
MAHM	Mental Aspects of Mental Retardation
NHG	Dutch college of general practitioners
NVAZ	Dutch society of physicians for people with intellectual disability
NVJ	Dutch society of Child Health Care
NVK	Dutch society of paediatricians
NVO	Dutch society of ophthalmologists
NTVG	Dutch Medical Journal
NOW	Dutch Scientific Society
PAOG	Post-academic Education in Medicine
PWS	Prader Willi Syndrome
SGLVG	Special service units for dual diagnosed
SSG	Public Health Institute
VGN	Dutch Association of Care for the handicapped

Appendix 3.

FINAL ATTAINMENT LEVEL AND TEACHING OBJECTIVES OF THE TRAINING COURSES FOR PHYSICIANS SPECIALISING IN THE TREATMENT OF PEOPLE WITH INTELLECTUAL DISABILITY (AVG)

1. Medical Expertise and Skills

- 1.1 The physician specialising in the treatment of people with intellectual disability (AVG; *Arts voor Verstandelijk Gehandicapten*) has the necessary expertise and skills in general practice medicine and the diagnostic and therapeutic tools of general practice medicine.
- 1.2 The AVG has the necessary expertise and skills with regard to the complaints and disorders that are commonly found in people with intellectual disability.
- 1.3 The AVG is able to take the medical history of people with mild to moderate intellectual disability and to take a hetero-anamnesis from the carers of people with severe intellectual disability.
- 1.4 The AVG is able to interpret the often atypical presentation of complaints by people with intellectual disability.
- 1.5 The AVG is able to conduct a thorough physical examination of people with intellectual disability, even if they are not very co-operative.
- 1.6 The AVG is able to balance the value of certain diagnostic and therapeutic actions against the burden these actions impose on people with intellectual disability.
- 1.7 The AVG is able to offer intensive medical care to children and adults in nursing care, as well as postoperative care and terminal phase care.
- 1.8 The AVG is familiar with the protocols for prevention, diagnostic work-up and treatment developed particularly by the *Nederlandse Vereniging van Artsen in de Zwakzinnigenzorg* (NVAZ; Dutch society of physicians specialising in the care of persons with intellectual disability) and the *Nederlands Huisartsen Genootschap* (NHG; Dutch college of general practitioners).

2. Knowledge of the etiology of intellectual disability, etiological diagnostics, specific lifetime comorbidity and their therapeutic implications

- 2.1 Knowledge of etiology, etiological diagnostics and specific comorbidity
 - 2.1.1 The AVG is familiar with the etiology of intellectual disability.
 - 2.1.2 The AVG is familiar with available screening methods and protocols for etiological diagnostics.
 - 2.1.3 The AVG is able to recognise, on the basis of history taking and physical examination, the specific somatic disorders, dysfunctions, dysmorphologies and behavioural characteristics that are important for the etiological diagnosis.
 - 2.1.4 The AVG is sufficiently knowledgeable in other relevant specialist areas, particularly pediatrics, (developmental) neurology, clinical genetics, ophthalmology, otorhinolaryngology / audiology and dentistry, to be able to consult the appropriate specialists or refer patients to such specialists.
 - 2.1.5 The AVG is sufficiently aware of the methods of psychological and neuropsychological examination to ensure that patients are referred to the appropriate specialists.
 - 2.1.6 The AVG is aware of the current state of knowledge about the characteristic stages of life in people with various types of intellectual disability, and is able to provide information and

education on complications and comorbidity and, where possible, the expected development, on the basis of the etiological diagnosis.

2.2. Knowledge of treatment strategies in relation to the etiological diagnosis.

2.2.1 The AVG is able to function in a multidisciplinary team and contribute to the treatment or management plan.

2.2.2 The AVG is sufficiently aware of paramedical examination and treatment methods (especially physiotherapy, speech therapy and occupational therapy) to be able to refer patients to the appropriate specialist for reduction and / or stabilisation of the consequences of physical, communicative and sensorimotor handicaps.

3. Knowledge of the epidemiology, diagnostics, treatment and possible prevention of

3.1 Disorders in the field of (developmental) neurology

3.1.1 The AVG has the necessary expertise in developmental neurology.

3.1.2 The AVG is able to conduct an explorative neurological examination. He is sufficiently aware of specialised diagnostic methods to be able to refer patients to the appropriate specialist

3.1.3 The AVG is familiar with neurological signs that can be expected to manifest themselves during the course of life of patients with specific syndromes.

3.1.4. The AVG is familiar with manifestations of epilepsy among people with intellectual disability and is able to treat and manage epilepsy, if necessary together with the epileptologist / neurologist. He has the necessary expertise on antiepileptic medicines, including their common and less common side effects, and is sufficiently aware of specialist diagnostic methods to be able to refer patients to the appropriate specialist.

3.2. Disorders of the musculoskeletal system

3.2.1. The AVG is familiar with the musculoskeletal disorders, whether neurological or orthopaedic, which may occur in people with intellectual disability.

3.2.2 The AVG is able to conduct an explorative orthopaedic and neurological examination of the musculoskeletal system.

3.2.3. The AVG is familiar with methods of prevention and treatment of secondary consequences of musculoskeletal disorders which may arise in the course of life.

3.2.4. The AVG is able to co-ordinate the activities of paramedical experts and medical specialists involved in the management of musculoskeletal disorders.

3.3 Psychological and behavioural disorders

3.3.1 The AVG is aware of the specific signs and presentation of various types of psychological and behavioural disorders that may manifest themselves among people with intellectual disability.

3.3.2 The AVG is familiar with the various classification systems for psychological and behavioural disorders and the possibilities and limitations of their application in people with intellectual disability, and is able to apply these classifications.

3.3.3 The AVG has the necessary expertise and skills with respect to psychiatric diagnostics and treatment among people with intellectual disability, if necessary in consultation with a psychiatrist. The AVG is aware of the effects and side effects of psychopharmaceuticals and their specific applications. He is also sufficiently familiar with the theories and methods of behavioural science regarding diagnostics and treatment.

3.3.4 The AVG is able to work in a multidisciplinary team for the diagnostic work-up and treatment of psychological and behavioural disorders.

3.3.5 The AVG is able to recognise somatisation among people with intellectual disability (and among their carers) and is able to deal with this adequately.

3.4 Internal diseases

3.4.1 The AVG is aware of the prevalence, manifestations and course of internal diseases among people with intellectual disability, in relation to the causes and severity of the patients' intellectual disability and environmental factors.

- 3.4.2 The AVG is able to diagnose internal disorders, even if their presentation is atypical.
- 3.5 Sensory disorders and disorders of sensory integration
 - 3.5.1 The AVG is aware of the nature and prevalence of sensory disorders and disorders of sensory integration among the population of people with intellectual disability, and of the specific risk groups.
 - 3.5.2 The AVG is able to apply screening methods for sensory disorders and disorders of sensory integration that are specially adapted to people with intellectual disability.
 - 3.5.3 The AVG is familiar with the treatment of sensory disorders and disorders of sensory integration among people with intellectual disability, and is able to instruct and counsel people with intellectual disability and their carers in this respect.
- 3.6 Knowledge of specific medical aspects of ageing
 - 3.6.1 The AVG is aware of the incidence and prevalence of the most common diseases among ageing people with intellectual disability, partly in relation to the etiological diagnosis. In particular, he is familiar with the specific ageing process among persons with Down's syndrome.
 - 3.6.2 The AVG has the necessary expertise and skills for the diagnostic work-up and treatment of diseases and psychological and behavioural disorders common among elderly people with intellectual disability. He is able to take account of multiple pathologies and is aware of possible interactions between medicines.

4 Knowledge of the care of people with intellectual disability

- 4.1 The AVG is familiar with the history of and developments in the care of people with intellectual disability. He is also aware of major new developments outside the Netherlands which may influence care in the Netherlands.
- 4.2 The AVG is aware of current scientific and societal views on the care of people with intellectual disability in the Netherlands.
- 4.3 The AVG is familiar with current care requirements of people with intellectual disability and the expected nationwide developments in this respect.
- 4.4 The AVG is aware of the existence and objectives of the various patients' societies and scientific societies involved in the care of people with intellectual disability and / or societies which include such people among their target groups.
- 4.5 The AVG is familiar with the various types of care (day care, 24-hour care, home care) available locally. He is also aware of the expected developments with respect to the types of care being offered.

5 Communicative skills and personal functional characteristics

- 5.1 The AVG has the necessary skills to communicate with people with intellectual disability, their parents, relatives and other carers.
- 5.3 The AVG is able to co-operate with representatives of other disciplines and to function in collaborative teams.
- 5.4 The AVG is able to assess, evaluate and if necessary adjust the way he collaborates with others (for instance in organisations) and the way he deals with conflicts.
- 5.5 The AVG is familiar with the conversational techniques which are relevant to his professional activities; he is able to use these in advisory / educational, problem-solving and 'bad news' conversations with people with intellectual disability and their relatives, or in conversations with staff members or external contacts.
- 5.6 The AVG is able to help build up expertise in others and has the necessary teaching, peer consultation, supervision and consultative skills.
- 5.7 The AVG is aware of his own standards and values in relation to his professional activities.

6 Scientific training

- 6.1 The AVG has acquired a scientific mind-set.
- 6.2 The AVG is familiar with the findings of scientific research in his area of expertise.
- 6.3 The AVG is able to study the findings of relevant scientific research critically and to evaluate their consequences for his own professional activities.
- 6.4 The AVG has acquired the necessary skills to design, implement and evaluate scientific research.

7 Knowledge of general health care practice

- 7.1 The AVG actively engages in health education and promotion.
- 7.2 The AVG is prepared to engage in active screening and diagnostic methods for health risks, and is able to organise such activities in the context of various facilities for people with intellectual disability.
- 7.3 The AVG is familiar with measures to prevent health risks, in relation to the severity of the intellectual disability and the type of facilities (such as 24-hour care or day care) involved.
- 7.4 The AVG is familiar with aspects of general health care such as infection prevention, hygiene and food and general safety.
- 7.5 The AVG is able to use or design protocols for, for instance, hepatitis B prevention, influenza vaccination and other infectious diseases.
- 7.6 The AVG is familiar with those aspects of social security legislation that are relevant to the care of people with intellectual disability, including the *Ziekenfondswet* (compulsory health insurance act) and the *AWBZ* (exceptional medical expenses act).

8 Ethics and health law

- 8.1 The AVG is familiar with those aspects of medical ethics that are relevant to:
 - 8.1.1 justifying and clarifying his own ethical points of view;
 - 8.1.2 ethical aspects of scientific research among people with intellectual disability;
 - 8.1.3 the implementation of medical ethics at facility level.
- 8.2 The AVG is able to handle “vicarious” decisions and is aware of his own responsibilities and legal position in this respect.
- 8.3 The AVG is able to deal with ethical dilemmas in the medical care of patients with intellectual disability.
- 8.4 The AVG is able to balance the value of diagnostic and therapeutic actions against the burden they impose on the patient.
- 8.5 The AVG is familiar with the main aspects and sources of health law; he is able to recognize problems in the area of health law; he can incorporate the principles of Dutch health law (including *BOPZ* (psychiatric hospitals (compulsory admissions) act), *WGBO* (medical treatment contracts act), *BIG* (individual health care professions act) and *ARBO* (occupational health and safety act) in his professional activities.
- 8.6 The AVG is familiar with prevailing legislation concerning people who are unable to give informed consent, especially as regards scientific research.

Note: for ‘he, his, him, etc.’ in the above text, please read “he/she, his/her, him/her, etc.”

