

# A paradigm shift in perception, learning and action

Boundary-crossing learning and  
educating in health care and welfare  
in the digital age

## Introduction

The demand for health care is changing. We are becoming increasingly older and often suffer from several chronic disorders. This is putting enormous pressure on the quality, accessibility and affordability of health care.

We increasingly want to take control of our own lives. We can make use of all sorts of technological possibilities. The exponential growth in the latter is having an enormous impact. They lead to new possibilities in diagnostics and treatment, support how we function in our own living environment and make it possible to share knowledge faster and more efficiently. Technological possibilities are, however, currently insufficiently used in health care.

Although society is increasingly aware of the importance of health promotion, the main emphasis is still on disease and care. Though health care in the Netherlands is of a high quality, not everyone benefits to the same degree. On average, those who are well-educated live more than six years longer than the less well-educated, and fifteen years longer without physical disabilities (CBS Statline, 2016). Health care costs are still rising, though more slowly than in the past.

Citizens are being asked to take more responsibility for their own health and care, and in caring for one another. Though many people are willing and able to do this, it is not feasible for everyone. Loneliness – and the lack of a social network – is a major societal problem. Almost forty per cent of the adult population suffers from loneliness (GGD Monitor, 2012). Twenty per cent of the elderly and people with a disability have no access to informal care (SCP, 2016). Though loneliness is not a disease, it does influence health and it demands a solution within the social domain, which is still insufficiently involved.

In short, it is imperative that citizens, professionals, educators and policy-makers – jointly – start changing how they see, learn and work.

### A paradigm shift in perception

In 2015, the Committee Innovation Health Care Professions & Education issued its advice: *Moving towards new health care and health care professions: the contours*. This advice formulated three points of departure:

- The demand for care: what will be needed in 2030?
- Functioning: the point of departure is not merely disease, but functioning
- A new concept of health care: the ability to adapt and self-manage

A vision of health that focuses mainly on disease and care offers insufficient leads for substantiating what is needed in the way of care and welfare, nor in the way of training and education. The focus on disorders offers insufficient insight into how individuals and groups function in daily life, and the limitations they face.

The Committee took as its starting point the health care that will be needed in 2030 based on health care prognoses, and on local and regional demographical developments. These were described in our first advice. Among other things, continued ageing is causing a considerable rise in the number of people with several chronic disorders and functional problems. The number of adults met psycho-social problems and psychological disorders is considerable and still growing. Young people also have chronic complaints and disorders and psychosocial problems.

The new vision of health focuses on citizens' functioning and their ability to adapt and self-manage. It is based on individuals' capabilities and how to support these. Not only from the perspective of health care, but also from the perspective of – and in cohesion with – other domains such as welfare, housing, work and sport. The Committee favours shifting the emphasis from disease and care to health and

behaviour. In other words, shifting from a biomedical model to a bio-psychosocial model. This means integrated health care and welfare that will help encourage us to live healthily from an early age, both at home, at school, at work and in our neighbourhood. Cohesive health care and welfare will enable people to function optimally and help to strengthen their ability to adapt and self-manage. Technological developments will play an increasing role in all this.

An important consequence of the new vision of health is that health care and welfare will be offered in 'arrangements' that allow room for pluriformity. Arrangements are implemented by intersectoral and multidisciplinary teams with mixed skills. Only then will we be able to fulfil the increasingly complex demand for care and assistance. The necessary care and support determine what is needed: which professionals have to be deployed, with which skills and at which moment.

Health care was not designed according to this new perspective. Health care is mainly organised compartmentally and professionals are trained in 'silos': health care professions and education are highly fragmented, with more than 2400 different care and care-related professions and functions and more than 1700 different care training courses. Their point of departure is often not functioning, but care and disease. This does not alter the fact that many innovative initiatives are already taking place based on the new vision. The Committee is in favour of bundling these initiatives more and realising greater cohesion, removing obstacles and ensuring that initiatives have a potentiating effect on learning. And when they prove successful, ensuring that they become anchored in daily practice, education and policy.

### A paradigm shift in learning

How can we ensure that, in the future, high-quality care and support is accessible and affordable for everyone? Improving the quality of health care and welfare is a task not only of human dimensions but also macro-economic dimensions. In other words: more in keeping with the needs of citizens, taking into account their diversity and the possibility of functional illiteracy, as well as more effective interventions at lower costs by switching from cure to prevention, i.e., from after-care to pre-care. What will this mean in respect of how we equip the public and professionals? What consequences will this have for the education and training of professionals in health care and welfare? These questions are key issues of the second advice of the Advisory Committee on Health Professionals and Education: *A paradigm shift in perception, learning and action: Boundary-crossing learning and educating in health care and welfare in the digital age.*

In this advice, the Committee discusses the consequences of the altered vision of education in health care and welfare on a continuum from intermediate and higher vocational, and scientific education up to and post-initial, and on-the-job training. The Committee wants to emphasise the enormous and growing role of technology in health care, welfare and education, as well as the importance of permanent learning and knowledge-sharing.

All this has consequences for how we equip (future) professionals. Professionalism is increasingly characterised by cohesion between:

- Expertise
- Ability to collaborate
- Ability to learn

*The eight pillars* of this advice were formulated based on citizens' functioning and their ability to adapt and self-manage in relation to professionals' expertise, ability to collaborate and ability to learn.

- Key issues are citizens' functioning and their ability to adapt and self-manage
- Citizens will develop learning skills and health-related skills from an early age
- Citizens' functioning and their ability to adapt and self-manage form the *leitmotif* of learning pathways
- Daily practice in education and education in daily practice
- Consistent and coherent learning pathways in a continuum
- Permanent learning in teams, organisations and networks
- Living, learning and working with technology
- Connecting research, education, daily practice and policy

*Placing the focus on citizens' functioning and their ability to adapt and self-manage (1)* demands equipping not only professionals from an early age, but also the public. This relates to *developing skills relating to learning and health care (2)*. This will involve an important role for primary and secondary education. Equipping the public is also about supporting our citizens in caring for themselves and for one another. The distinction between informal and formal care will become less static. More hybrid and flexible forms of care, support and assistance will develop. This demands providing care with a greater degree of pluriformity. In daily practice increasing collaboration will take place between informal carers, voluntary carers and collectives such as neighbourhood cooperatives.

**Expertise** forms the basis of professional action that focuses on the promotion – and where necessary the recovery – of health, with the focus on citizens' functioning and their ability to adapt and self-manage. *Functioning and the ability to adapt and self-manage form the perspective in training courses (3) in the field of health care and welfare*, from intermediate/higher vocational and university levels up to and including post-initial and on-going training. The point of departure here is a biopsychosocial model. This will result in greater cohesion between health care and welfare. In order to achieve this, (future) professionals will learn to work together with citizens and their networks and with other professionals in multidisciplinary and interprofessional teams, and to make use of one another's qualities.

**The ability to collaborate** will be developed in practice and during training courses. Future professionals will become acquainted with practical situations in which they learn and work together. This will take place right from the start of their studies by *incorporating daily practice in education and training (4)*. It will also take place by developing consistent and coherent learning pathways in a continuum, based on typical practical situations. Common frameworks in a continuum of MBO, HBO, WO, post-initial education and on-going training will result in education with a broader and stronger core content and differentiation in outflow profiles (tshape). The accent in post-initial education and on-going training will be rapid changes and a life-long need to maintain professional expertise.

**The ability to learn** is essential for professionals. The speed with which knowledge becomes dated is increasing, so *permanent learning together in teams, organisations and networks (6)* will help to improve harmonisation with the changing demand for assistance and health care. This applies specifically to *living, learning and working with technology (7)*, where spectacular developments can be seen. Permanent knowledge-sharing is needed, by *making the connection between research, education, daily practice and policy (8)*, to develop the knowledge and expertise that will encourage and speed up innovations. Applied research will play a central role in all this, thus increasingly making informal knowledge in the workplace more explicit, and validating and connecting it with formal knowledge in education and learning pathways. Personal development and permanent knowledge-sharing can only take place if professionals are motivated to learn. This will be promoted by an environment that encourages and facilitates learning from and with one another in the workplace and in networks. This demands new forms of leadership and supervision in a transparent accountability process that is designed with learning in mind.

Two examples that are coupled with the vision of learning and education have been elaborated upon in this advice: Learning practices for the young and old. These are to inspire educators and developers in health care and welfare to design learning pathways based on the eight primary pillars of the advice.

#### A paradigm shift in action

The Committee's second advice is in line with a transition that has already started. Many initiatives have started that are going in the right direction, as shown by the illustrative practices described in this advice. At the same time, the Committee is aware that systematic and coordinated action is needed as well as national frameworks in order to bundle, broaden and anchor the many innovations and to remove obstacles in current laws and legislation. Signals from the workplace and the educational environment suggest that the obstacles are fundamental and relate to current systems of funding and accountability. Each of the eight primary pillars demands further elaboration and policy development by those responsible for them, or who can play an enabling role in this respect.

Realising this will require long-term investments and efforts from various policy domains. For these fundamental changes to succeed, it is essential to generate leadership, ownership and significance for all parties. This will only be realised with optimum interaction between policy, implementation, education, supervision and funding. To this end, the Committee makes the following recommendations.

### **I. Health Care, Welfare and Education Programme**

The Committee advises central government to take the initiative in developing a long-term programme under the guidance of a suitably prestigious and authoritative programme leader. The task of this programme leader will be to draw up agreements on collaboration with those responsible for policy and the implementation, education, supervision and funding of health care and welfare. An extremely important aspect is to continue and to reinforce local and regional innovations that are already taking place. Joint ownership and better governance and management are crucial in supporting inter-professional learning and the training of professionals in health care and welfare.

The programme will focus on creating conditions for realising the connection between the various forms of training/education (disciplines and levels) and between training/education and the employment market. This will be achieved by realising a continuum of education at the levels of MBO, HBO and WO, including post-graduate studies and a large number of follow-up courses. In order to make the connection between MBO, HBO and WO, the Committee has already taken the initiative in forming two distinctive – though inseparable – joint administrators from MBO-HBO and HBO-WO, who will start making preparations.

Focussing on the learning ability of professionals and permanent learning demands new forms of leadership and supervision. A stimulus to learn from one another, a transparent accountability process that will make use of feedback loops. Improving the quality of care and assistance will be impossible without learning.

### **II. Breeding grounds as development model**

The Committee opted for a working method involving both local/regional and national parties from daily practice, education and policy (see appendix 1 Working Method). The regional approach took the form of four ‘breeding grounds’ (living labs): Friesland, Amsterdam-Amstelveen, Rotterdam and Heerlen. Together with the Health Care Pact, the Committee is encouraging regional cooperation between training/education institutes, care and welfare organisations and local government. The Committee’s advice forms the basis for this regional cooperation. This bottom-up method of working in the breeding grounds is well-suited to regional differences and the desired pluriformity. A great deal of innovation is already going on, with good practices in the breeding grounds setting an example. Innovation is taking place due to the permanent interaction between daily practice, education, research and policy. Experiments are being prepared in the four existing breeding grounds. These are the result of good practices that focus on systematically developing, explaining, validating and sharing knowledge about new forms of health care and welfare.

The approach in the breeding grounds works. An innovative collaborative climate exists between daily practice, education, research and policy, and in some instances also between those responsible for funding and supervision. The Committee advises the Ministry of VWS to reinforce and extend the approach in the breeding grounds by seeking alignment with – and by broadening and anchoring – current initiatives such as the good practices in the breeding grounds and the forerunners of the Health Care Pact. The Committee also advises incorporating the development of knowledge and knowledge-sharing with the administrative process in the regional care pacts.

### **III. Conditions**

The second advice, A paradigm shift in perception, learning and action, emphasises – as did the first advice, Moving towards new care and care professions: the contours – that the necessary changes are considerable and will affect more than the professions and education. The Committee has therefore

taken the liberty of presenting a number of general recommendations, in view of the many signals from the breeding grounds and during consultations.

*Funding and accountability*

A vision of health that focuses on citizens' functioning and their ability to adapt and self-manage requires a different method of funding. Funding should be based on the quality of the process of providing assistance and on the outcomes (from output to outcome). Promoting integral health care and welfare demands innovative forms of funding such as chain agreements, outcome funding, population funding or case management. Clear information is needed in order to shed light on the benefits to society.

*An integral innovation process*

During the many discussions and meetings, the Committee realised that parallel developments are insufficiently harmonised and interconnected. The main focus should be on citizens' environment and their skills.

In the light of the transition from 'caring for' to 'taking care that', citizens will have to become acquainted from an early age with the new vision of health and care and what this means for them.

Clearly, investing in the social and cultural capital of citizens is essential in order to avoid increasing social-economic health discrepancies, a widening gap and declining solidarity. This is why it is important to pay attention to learning skills and health-related skills in primary and secondary education and to tackle functional illiteracy. Some form of support will be necessary for people who are unable to fulfil this vision.

The Committee recommends on the one hand that citizens receive better information and are involved in the changes. On the other hand, the Committee recommends that central government facilitates societal provisions in the field of education, employment, income and people's social and physical environment that will support an optimal change in behaviour.

**Lastly**

The Committee realises that change is the only constant factor. Seen from this perspective, it is not so much a blueprint for future learning and education that the Committee has drawn up, but advice indicating the direction that the required changes should take. Making sure these changes succeed will require an effort on everyone's part and a will to learn.

## Pillar 1. Key issues are citizens' functioning and their ability to adapt and self-manage

### Core message

Whatever is important to citizens' health is what counts in relation to professionals in health care and welfare and to their education. It is no longer about disease or disability, but about how our citizens function in all their diversity and within their social networks. How does a person function in his daily life, in what sort of environment does he live, how does he participate in society and what gives purpose to his life?

The ability to adapt and self-manage is important when facing life's challenges, whether they are physical, emotional or social. Where support is necessary, temporary or otherwise, professionals in health care and welfare will work together in arrangements. A strong relationship between the health care domain and the social domain is important. Health care and welfare professionals will become skilled in jointly helping to promote functioning or its recovery, and in strengthening and supporting the ability to adapt and self-manage.

### What will this mean to citizens, professionals, educators and policy-makers?

#### For us, as citizens, it means:

- ... that we accept as much responsibility as possible for our health
- ... that as far as possible we can appeal to our social network and professionals

#### For us, as professionals in daily practice, it means:

- ... that our perspective is citizens' functioning and their ability to adapt and self-manage
- ... that we deploy our expertise for shared decision-making
- ... that we take into account the diversity of citizens (e.g. age, sociocultural background, gender)
- ... that we contribute to improving the social and physical environment of citizens
- ... that we work together in multidisciplinary teams.

#### For us, as educators, it means:

- ... that we regard citizens' functioning and their ability to adapt and self-manage as a leitmotif in education and learning pathways

#### For us, as policy-makers, it means:

- ... that we aim at high-quality welfare and health care, accessible and affordable for everyone
- ... that we create conditions in legislation for the shift from care to welfare
- ... that we alter the funding structure of health care and welfare
- ... that we contribute to improving the social and physical environment of citizens
- ... that we aim to reduce social-economic differences.

### How does this differ from the existing situation?

- The focus is on health and behaviour instead of on illness and health care
- Health care and welfare are demand-oriented and cohesive instead of supply-oriented and fragmented
- Education is demand-oriented and cohesive instead of supply-oriented and stand-alone.

## Pillar 2. Citizens will develop learning skills and health-related skills from an early age

### Core message

Focusing on citizens' functioning and their ability to adapt and self-manage will encourage people to live a healthy life from an early age. Apart from parents, carers and supporting organisations, primary and secondary education will also play an important role in learning to live healthily. Knowledge and skills in the field of health should be integrated into education. Apart from diet and exercise, it is important to develop psychosocial skills, such as the ability to adapt. Developing learning skills is indispensable to obtaining health-related skills. Investing from an early age in training health skills can help to reduce discrepancies and promote equal opportunities among citizens. Creating a healthy environment is also important.

### What will this mean to citizens, professionals, educators and policy-makers?

#### **For us, as citizens, it means:**

... that we know what living a healthy life means, and this applies to young people too.

#### **For us, as professionals in daily practice, it means:**

... that we are continually involved in promoting (public) health and encouraging healthy behaviour.

#### **For us, as educators, it means:**

... that we pay broad attention to health and obtaining learning skills and health-related skills.

#### **For us, as policy-makers, it means:**

... that we focus on a healthy life-style and (social) participation

... that our policy enables everyone to live a healthy life

... that we attempt to realise low-threshold access to health care and welfare.

### How does this differ from the existing situation?

- Education, sport and culture can contribute more to a healthy life
- Continuous attention to health and a healthy environment, instead of incidental attention to disease.



## Pillar 3. Citizens' functioning and their ability to adapt and self-manage form the leitmotif of learning pathways

### Core message

The perspective of citizens is at the core of education in health care and welfare, from intermediate and higher vocational and scientific education, up to and including post-initial and on-going education. Students learn how they can contribute – based on their specific professional skills – to the functioning of persons in their physical and social environment. The point of departure of all education is a broad, bio-psychosocial approach instead of only a biomedical approach. It is about 'making sure that' instead of 'taking care of'. This requires that professionals all speak the same language. This can be realised by, for instance, using the International Classification of Functioning, Disability and Health (ICF) of the World Health Organisation (WHO) and the pillars of positive health (Huber et al. 2014). The various educational programmes will make use of a common framework around which their final qualifications are designed. In this respect, it is important to offer broad programmes in a cohesive continuum in order to reduce the range of studies and professions. The experience expertise of citizens will also be used where possible.

### What will this mean to citizens, professionals and educators?

#### For us, as citizens, it means:

... that we can offer our experience-based expertise in education.

#### For us, as professionals in daily practice, it means:

... that we focus on 'making sure that' instead of 'taking care of'

... that we contribute to this point of departure in education and in the individual guidance of students.

#### For us, as educators, it means:

... that we make sure that educational programmes are no longer compartmentalised and fragmented

... that where possible we design learning pathways based on a common framework and harmonise them (model, language, planning)

... that we provide students with a broad basis that is supplemented and given further depth in post-initial learning pathways.

#### For us, as policy-makers, it means:

... that we provide room to carry this out and remove any obstacles.

## Pillar 4. Daily practice in education and education in daily practice

### Core message

Focusing on citizens' functioning and their ability to adapt and self-manage has consequences not only on learning pathways but also on the interaction between education and daily practice. Education developers will take characteristic situations in daily practice as their point of departure so that right from the start students work on – and seek answers to – concrete problems and dilemmas. Theory, reflection and learning activities are supportive and enriching. This has a motivating effect, promotes learning from and with one another and professional identity. Furthermore, working, learning and reflecting on matters together with other disciplines is important – in order to be able to collaborate in teams and networks. This interprofessional learning will take place in a real-life setting, in daily practice, during work experience or by means of virtual simulations that simulate reality. In these different settings, students will meet the professionals with whom they work and communicate in daily practice. This will reinforce the ability to learn and daily practice and education to learn from one another. Citizens will increasingly become part of teams and networks. This requires that students learn how to operate professionally in networks. As daily practice is subject to rapid change, teachers and supervisors in daily practice will have to work together to ensure that education programmes remain up to date.

### What will this mean to citizens, students, professionals and educators?

#### For us, as citizens, it means:

... that we are willing to participate in developing and implementing education  
... that we support students by making our experience part of that education.

#### For us, as students, it means:

... that our learning starts in daily practice and is based on the perspective of citizens  
... that we learn, at an early stage of our education, how to work together with citizens  
... that we learn, at an early stage of our education, how to work together with professionals from different disciplines.

#### For us, as professionals in daily practice, it means:

... that we design the workplace as a learning environment for students and for ourselves  
... that we make sure we have the didactic skills needed to guide students  
... that we implement learning in the workplace together with educators  
... that we are prepared to learn from our students.

#### For us, as educators, it means:

... that we take practical situations and experiences as the point of departure in education  
... that we keep our knowledge and expertise up to date by working in daily practice  
... that we work together with professionals from daily practice and the research field in order to promote innovation  
... that we provide room for students to design their own learning path.

#### For policy-makers it means:

... that we offer room for removing obstacles.

## Pillar 5. Consistent and coherent learning pathways in a continuum

### Core message

Consistency is crucial to designing interprofessional learning pathways. Various parts of programmes will have to be properly aligned to one another (internal consistency). The points of departure in designing learning pathways are characteristic practical situations and the roles and skills of future professionals, in a continuum of post-initial education and on-the-job training after intermediate and higher vocational and scientific education. This demands a new approach to design and a joint framework. An example of organising roles and expertise is the CanMEDS. It is important that agreement is constantly reached with those involved in every form of education on the question: When do we have sufficient confidence that these students are skilled and can function independently in general practice (external consistency)?

### What will this mean for educators?

#### **For us, as educators, it means:**

- ... that we educate based on characteristic situations from daily practice
- ... that we design learning pathways together with co-educators and professionals from daily practice
- ... that we involve co-educators, citizens, students and professionals from daily practice in executing and assessing learning processes (formative)
- ... that we reach agreement on assessing learning results (summative).

## Pillar 6. Permanent learning in teams, organisations and networks

### **Core message**

Society changes, as do citizens' demands in relation to assistance and care, as a result of which knowledge becomes dated. This means it is essential that professionals continue to learn throughout their working lives. How and when they do this is determined in part by the phases of their careers and their personal circumstances. This demands flexibility in providing possibilities (time, place, form) for acquiring new knowledge and skills. Traditional education will be replaced by a mix of learning methods and situations that uses technology and online learning (blended learning). Apart from formal and non-formal ways of learning, informal learning in the workplace is becoming increasingly important. Professionals, teams and supervisors increase their ability to learn by continually sharing experience and new insights.

This demands new forms of leadership and governance: an incentive to learn from one another, a transparent accountability process and the use of feedback loops. Learning has to be embedded in all layers of an organisation. This means creating space for the process of learning from one another. Without learning, improving the quality of care and assistance will be impossible. Developing and sharing knowledge is of vital importance to organisations. Professionals will be supported in maintaining their acquired knowledge and expertise, for example, in a digital portfolio.

### **What will this mean for citizens, professionals, educators, internal and external supervisors and the government?**

#### **For us, as citizens, it means:**

- ... that we are open about our experiences and share them with students and with professionals
- ... that we, and those who promote our interests, are structurally involved in designing and implementing education, both initial and post-initial.

#### **For us, as (soon-to-be) professionals in daily practice, it means:**

- ... that we accept our joint responsibility for our own education, both in our workplace and by attending training courses
- ... that we share our knowledge and experience with co-professionals, educators, researchers and citizens (online)
- ... that we continually develop knowledge on the basis of reflection in order to modernise welfare, care and education
- ... that we use the knowledge and experience of citizens to improve and modernise daily practice.

#### **For us, as educators, it means:**

- ... that we offer students space, within certain frameworks, to shape their own learning
- ... that we share our knowledge and experience with co-educators, researchers and professionals in daily practice, and with citizens
- ... that we continually develop knowledge in order to modernise welfare, care and education
- ... that we use citizens' knowledge and experience to improve and modernise training
- ... that we base post-initial learning pathways on the knowledge and skills a person already has (acquired skills)
- ... that we keep our practical experience up to date
- ... that we develop didactics suited to every age.

#### **For us, as managers and employers, it means:**

- ... that we support learning opportunities within the workplace
- ... that we remove hierarchic and organisational barriers to learning
- ... that we continually invest in an inviting work climate and an open learning culture.

**For us, as internal supervisors, it means:**

... that we not only monitor results retrospectively, but also – in the interest of quality and innovation – evaluate the work process

... that we allow room for learning from errors in a transparent process of accountability.

**For us, as external supervisors, it means:**

... that we allow room for learning from errors in a transparent process of accountability.

**For us, as policy-makers, it means:**

... that facilities are created for permanent learning and development.

## Pillar 7. Living, learning and working with technology

### Core message

The ceaseless growth in technological possibilities on care, welfare and education is having an enormous impact. E-health can help citizens take care of their own health, support them in functioning and reinforce their social networks. Domotics and robotics will help people to continue to function independently as long as possible. Personalised care, with help from technology, will become commonplace for treating disorders. The condition being that everyone is able to use the technological possibilities. This may be a problem for some groups, e.g., for the two and a half million Dutch citizens who are functionally illiterate. For this reason, professionals will need extensive digital expertise to be able to support citizens. They will acquire this expertise during initial and post-initial learning pathways, and will keep them up-to-date. They are aware of the risks involved in using new technologies in relation to privacy and the storage of (medical) data.

### What will this mean to citizens, professionals, educators and policy-makers?

#### For us, as citizens, it means:

- ... that we are digitally competent
- ... that we use social media and e-health in caring for our own health.

#### For us, as (soon-to-be) professionals in daily practice, it means:

- ... that we use technology as an integral part of care and assistance
- ... that we learn on a permanent basis to rectify any deficits in our digital knowledge and experience
- ... that we ensure that the technology we use is user-friendly
- ... that we are aware of privacy issues in relation to data files and social media
- ... that we can advise citizens and co-professionals about using technology
- ... that we make active use of our knowledge and experience in maintaining and using technology
- ... that we are conversational partners of those who develop technology.

#### For us, as educators, it means:

- ... that we ensure that our students have or develop the necessary digital skills
- ... that we develop educational programmes for professionals with a knowledge deficit
- ... that we use technology as a matter of course in our training programmes
- ... that we ensure that the technology we use is user-friendly
- ... that we are aware of privacy issues in relation to data files and social media
- ... that we can advise students and co-educators about using technology
- ... that we are conversational partners of those who develop (international) technology.

#### For us, as technology-developers, it means:

- ... that we design our products while interacting with professionals, educators, students and citizens
- ... that we ensure that the technology we develop is user-friendly and safe.

#### For us, as policy-makers, it means:

- ... that we establish appropriate and up-to-date regulatory frameworks for digital traffic and its security.

## Pillar 8. Connecting research, education, daily practice and policy

### Core message

Connecting research, education, general practice and policy will result in the interaction required to develop the knowledge and expertise that will promote and speed up these innovations. Continual interaction between research and daily practice will ensure that new insights are immediately incorporated into education.

For instance, researching questions from daily practice will provide insight into what citizens need to promote and recover their functioning and how to strengthen their ability to adapt and self-manage. Exchanging knowledge can also take place by means of learning networks where knowledge from research, professional knowledge and personal knowledge come together. Double roles will contribute to this: researchers who work in daily practice, students and educators who conduct research and professionals who make policy.

### What will this mean to citizens, researchers, professionals and educators?

#### **For us, as citizens, it means:**

... that we will increasingly participate in research, as individuals and in groups, as co-commissioning party, participant, evaluator.

#### **For us, as researchers, it means:**

... that we participate in daily practice and in education  
... that we acquire skills that enable us to fulfil several roles in daily practice and in education  
... that we ask ourselves, in relation to all research, what it contributes to citizens' functioning and their ability to adapt and self-manage  
... that we develop and implement research, together with citizens, professionals, educators and policy-makers.

#### **For us, as professionals in daily practice, it means:**

... that we participate in research  
... that we acquire expertise that enables us to fulfil several roles in research and in education  
... that we integrate the results of research in daily practice.

#### **For us, as educators, it means:**

... that we participate in research  
... that we integrate the results of research in education  
... that we acquire expertise that enables us to fulfil several roles in research and in daily practice.