Older people and preventive home visits

AGE FORUM

AgeForum is an independent council set up by the Danish Ministry of Social Affairs to monitor and assess the conditions of older people in Denmark on all relevant fronts.

The Council is also to help identify older people's resources and to provide a fuller picture of older people and ageing.

AgeForum regularly issues a number of publications containing information, inspiration and food for debate on older life, initiates research and organises conferences, etc.

The Council involves researchers, administrators, professionals and organisations as well as municipalities and senior citizens' councils in its work.

The Council's members participate in conferences and meetings all over Denmark, debating or providing input on the conditions of older people.

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Preface by the Minister for Social Affairs

The Danish government gives high priority to prevention and health promotion. The preventive home visits therefore constitute a key tool in Danish care for the elderly as research – in Denmark as well as a number of other countries – has shown that prevention can help the elderly in maintaining their physical and mental function. This improves life for the elderly and also postpone their need for external assistance.

Prevention is first and foremost about welfare. The ability to manage on their own is to many elderly equivalent to a greater quality of life – which results in an improved physical well-being as well as a higher degree of resourcefulness and better chances of continueing the lives that they have been living so far.

It is important that society offers everyone opportunities. The right preventive initiatives will enable us to strengthen the elderly's chances of managing on their own. This will enable us to enhance their chances of participating in and contributing to the individual communities. Prevention will thus be a gain to society, one reason being that it can help increase the quality of life of the individual. Another reason is that it helps make resources available, which can be allocated to other areas.

Other countries have shown much interest in how the Danish system for preventive home visits works in practise. I therefore hope that the experience and recommendations of this publication will serve as a source of inspiration and help find useful ways – not only in Denmark but also in other countries.

Eva Kjer Hansen
Minister for Social Affairs

Preface

The idea of setting up national preventive activities in the form of home visits to older people – rooted in legislation and delegated to local authorities – originated in Denmark and arises from a long tradition of Danish social and health policy.

The Danish initiative of preventive home visits and the scientific testing of the method have met widespread interest outside Denmark.

The focus of the preventive home visits has been on functional decline and the corresponding early and coordinated follow-up activities. This has proved an extremely suitable instrument in activities aimed at maintaining older people's autonomy, independence, and functional ability, allowing them to continue caring for themselves. This also makes the scheme an apt initiative in countering the considerable demographic challenge faced by most nations in a world where the number of older people is steeply rising.

In the present publication AgeForum has decided to communicate Denmark's very positive experience from the preventive scheme as a humble contribution to such activities. We hope that politicians, government officials, administrators, etc., in other countries may find inspiration for realising similar initiatives, of course with the needed national and local adaptations.

We selected the UN International Day of the Elderly on 1 October 2006 as the official occasion for this initiative and publication.

The fact that the idea was also established by legislation in Denmark in 1996 and thus has been in practice for ten years was yet another reason to celebrate the Danish experience internationally at this point in time.

Povl Riis,
MD, DMSc, Professor
Chairman of AgeForum
September 2006

Introduction

Preventive home visits – more perspectives

The aspect of prevention has become a major area of focus for all age groups in recent years. The general public has become aware of the serious repercussions of life-long poor habits, and many take action to avoid them.

Individuals are exercising, eating healthy diets and quitting smoking as never before.

The older population is no exception. A multidimensional approach is used for older people, because recent research has proved that they can be trained and retrained to an extent not believed possible just a few years ago.

Globally, the number of older adults is exploding. As such, this is a positive development. Never before have so many older people enjoyed so many years of well-sustained functional ability as today's older people do. Hopefully, future older people will also be able to enjoy the possibilities inherent in such development. Though necessary, medication and technological development are not the sole preconditions. Health promotion and prevention of disability are also key elements of future challenges.

In Denmark, preventive home visits to the +75 age group are a cornerstone of preventive efforts aimed at the older part of the population. Comprehensive Danish and international research certainly prove that preventive home visits have beneficial effects. New Danish research shows that the privileged older people particularly benefit from such activities, a result that underlines the importance of precisely attuning preventive efforts to relevant needs.

Prevention should focus not solely on health, but on an overall picture. Personal physical fitness, e.g. physical condition and muscle power, has significant impacts on how the individual person feels and manages. Therefore, prevention must comprise all aspects of the individual's well-being, i.e. performance, welfare, life content, housing conditions and possibilities of self-determination, etc.

Besides attaining concrete offers of assistance and support, *individual*

older people visited by preventive staff gain confidence in the public sector's ability to assist if the need should arise – and thus it creates a sense of security in their daily lives. If older individuals live alone and even have a modest or no network of family or friends, the visit also gives them the important message that they are not "forgotten". The direct approach to each individual citizen also enables local authorities to establish contact to people with whom they would otherwise not be in touch. But the scheme also carries perspectives for others than the immediate target group.

Older people's *network of family and friends* can use the scheme to develop a valuable, non-official supplement: "popular health and social services". Based on its observations of older family members and friends, the network can, for instance, urge individuals to accept the offer of a visit and ensure that special issues are addressed – perhaps with a view to paving the way for visits to general practitioners (GPs), the local authority administrations, or for other types of assistance. The close personal ties further allow visitors to register any needs for ad hoc visits – e.g. in relation to serious, social events such as the death of a spouse, which completely changes the life of the surviving spouse. This aspect encompasses preventive efforts aimed at older men's high suicide rate.

In the past decade, the life expectancy and health of the older population have improved markedly, a trend that apparently will continue. So in ten years, 75-year-olds are expected to manage even better than 75-year-olds today. These factors will pose major challenges throughout the field of preventive activities, and will, of course, require considerations in legislation as well as in the organisation of preventive home visits.

The development will present major challenges to *professional staff members* throughout the old-age care sector.

And also the staff groups involved in preventive home visits face additional special challenges. The preventive home-visit scheme offers the possibility of showing how preventive and health-promoting activities can be joined to ensure that attention is focused on risk situations and on the individual person's resources.

If successful, these special challenges may open up new fruitful forms of cooperation, from which other service areas may also benefit.

The home-visit scheme gives *politicians as well as centralised and decentralised authorities* a rare insight into senior citizens' lives, thus uniquely enabling them to tailor initiatives and activities to the older population's needs. The very fact that old-age care is rooted in and coheres with other offers is a key element in enabling old-age care to meet quality requirements.

An understanding of older people's need for assistance and support could

also help counter the pressure of individual media-hyped cases by putting such cases in a broader context.

The *scientific perspective* comprises a novel, but essential side of tomorrow's preventive home visits, i.e. their role as sources by which new data on older people can systematically be compiled.

Older people's diseases and need for social support and care are relatively new professional disciplines in training and research. Thus, the greater focus and knowledge on preventive and therapeutic offers, like the rising life expectancy and thus the growing numbers of older people pose both qualitative and quantitative challenges to a welfare society.

Preventive activities centred on the home-visit scheme for older people are pivotal elements. And even though counselling and active efforts targeted at general health, nutrition, fall prevention, emerging symptoms, etc. are already in place, we still have limited knowledge about important aspects of older people's lives in order to target the way resources are used and key action areas selected for home visits.

This is where the home visit contributions become an important innovation.

But we must clearly separate the compilation of new data in this context from the central objective of preventive home visits, so that any questions posed to citizens are only asked once the preventive interview has concluded or at a later agreed time.

We must also, in accordance with the basic scientific ethical rule, in such projects explain to the citizen that the questions asked and the dialogue held serve two different purposes.

Danish old-age researchers have recently concluded and published the results of a research project in the Journal of the American Geriatric Society[1]. The researchers set out to study whether an educational programme for preventive home visitors and GPs in local areas would impact on the participating older people's functional ability levels, transfers to nursing institutions and death rates. The study comprised 34 municipalities, and its results will be summarised later in this publication.

The authors conclude that the applied educational activities have a very positive impact on the results of preventive activities. This presumption is supported by the fact that transfers to nursing homes among participants in the intervention group dropped significantly after five years. In addition, eye-opening and train-

1 Vass M, Avlund K, Lauridsen J, Hendriksen C. Feasible model for prevention of functional decline in older people: municipality-randomized, controlled trial. J Am Geriatr. Soc 2005; 53: 563-8.

ing activities aimed at home visitors and general practitioners (GP's) may possibly have influenced the entire range of social and health staff assisting older people in both control and intervention groups. The study compellingly underpins the basic idea that AgeForum continually advocates: when new, comprehensive initiatives are introduced in the social and health sectors, one should decide how to measure a possible effect scientifically. This procedure would prevent subsequent evaluations of initiatives from being based solely on retrospective reports and the like.

When it comes to major intervention schemes, the study also demonstrates the necessity of constantly working scientifically to pinpoint the target groups that would benefit the most from the intervention. The study also serves to illustrate professional staff's and the older population's high motivation for coupling the home-visit scheme with scientific studies.

Finally, the study gives cause to consider whether large-scale preventive home visits should be offered as an extra service in risk situations such as serious disease, discharge from hospital or loss of spouse. Further, we could consider whether activities should, in such circumstances, be supplemented with activities involving other professionals, e.g. a minister of religion.

The following overall main conclusions of the Danish project on preventive home visits are highlighted here:

- Education on the content of preventive visits makes a difference
- The number and frequency of visits are important factors
- Women benefit more from visits than men
- 80-year-olds benefit more from preventive home visits than 75-year-olds
- The same preventive home visitor and good relations between visitor and visitee are of importance
- Cooperation and collaboration with GPs is important
- The activity is cost neutral

The Act on Preventive Home Visits and its basic intentions will be described briefly.

The publication contains further details of the Danish study, the project comprising 34 municipalities and the project recommendations on home-visit content, set-up and organisation as well as recommendations on staff competences.

Further, the publication includes a section on functional ability, ageing and impairment, based in particular on the observations and deliberations that preventive home visits should generate. The publication also sets out proposals for ethical considera-

tions, which work with older people should continuously prompt as well as any other considerations that should be made when work is performed in older people's private homes.

AgeForum
September 2006

Act on Preventive Home Visits

– intentions, target groups and municipalities' organisation

Excerpt from: Act no. 1117 of 20 December 1995 on preventive home visits to older people, etc.

1. *The local council shall offer preventive home visits to all citizens having reached the age of 75 and living in the municipality.*

   (2) The local council shall organise the visits according to needs. A citizen shall always be entitled to an offer of at least two annual preventive home visits.

   (3) The local council may opt to except citizens from the scheme who are receiving both personal and practical help under S. 71 of the Act on Social Services.

2. *The Minister for Social Affairs may, in cooperation with the Minister for Health, lay down regulations on local obligations under this Act, including coordination with other general local authority preventive and activating measures.*

3. *This Act shall come into force on 1 July 1996.*

   (2) In the period until 1 July 1996, the local council shall only be under an obligation to offer home visits to all citizens aged 80 years or over.

The purpose of the Act

The Act on Preventive Home Visits that came into force on 1 July 1996 is meant to strengthen preventive and health-promoting activities targeted at older people. The scheme springs from experience gained from several prior pilot projects that reported positive results of outreach care activities targeted at older people[2].

The aim of the home-visit scheme is to support older people's self-caring and to aid them in utilising their own resources optimally. Home visits may detect and solve the need for help and support at an early stage which may reduce or preclude needs for more comprehensive help and support from the public sector.

2 Refer to the section "The history of preventive home visits"

Counselling and guidance on activities and support options communicated in time may postpone functional decline and maintain social relations.

Target group [3]

The target group consists of community residing older people over the age of 75. However, the municipality may refrain from visiting older people who receive *both personal and practical help* under the Act on Social Services. Thus, older people who only receive practical help are covered by the scheme.

Municipalities may also decide to except nursing-home residents from the scheme, as nursing-home residents are covered by a special scheme that obliges municipalities to prepare individual action plans for their nursing and care needs.

The municipalities manage the Act and may organise preventive home visits to suit local needs and in cooperation with other – local as well as compulsory – preventive and health-promoting initiatives. In this way, individual municipalities can both develop preventive offers for their citizens with specific needs and also target options at groups that would gain special benefit from particular offers. The act must be revised no later than 2008.

Organising visits

Municipalities must offer at least two annual home visits.

Individual older citizens must receive a concrete home-visit offer. Municipalities decide on their own how to extend the offer – by letter or telephone, for instance. General information on the scheme, e.g. through adverts in newspapers or distribution of brochures, does not meet the Act's requirements for individual visit offers.

Several municipalities have implemented special routines that ensure follow-up on home-visit offers, e.g. by repeating the home-visit offer if the first offer is refused or by repeating the information on the scheme after a certain period of time. Many municipalities also apply special procedures when they make the first offer of home visits. Special procedures are also used for people who have previously refused an offer and for disabled older people.

The municipalities themselves determine the actual content of the scheme. Consequently, the individual municipalities decide whether, for

3 At its commencement, the Act only covered community-residing older people over the age of 80. As of 1 July 1998, the scheme was enhanced to cover community-residing over the age of 75. As of 1 May 2005, the Act allows the individual municipality to deselect home visits with older people who receive both personal and practical help under the Act on Social Services.

instance, home visits should be offered for special risk situations such as the death of a spouse or cohabitant or serious disease – and whether such visits should replace or supplement the municipalities' general offers for home visits.

The home visit

Preventive home visits are an offer that the individual older person may choose to accept or refuse. And the person accepting the offer decides what he or she wants to divulge or discuss. However, the interview is supposed to focus on the visitee's general needs – always on the older person's premises.

Particularly matters such as how the older person copes with daily activities and his or her social contacts, housing conditions, finances, physical performance and health conditions in general are natural subjects for discussion and assessment. The interview gives the visitor a basis for providing information on and referrals to preventive and activating offers while also advising on offers of social service, housing or health service.

If such advice cannot immediately solve existing problems, the local authority is required to launch the necessary initiatives, e.g. provide technical aids that can ease the daily life, personal and practical help or – contingent on the older person's acceptance – arrange visits to the GP.

Professional secrecy and provisions on retrieval and disclosure of information

Individuals receiving home visits are protected against abuse of information on personal matters to the same extent provided in any other type of contact with municipalities.

Provisions on professional secrecy, retrieval and disclosure of personal information and on citizens' right of access to documents related to their own cases, etc., also apply in relation to home visits.

Only personal information bearing on the municipality's handling of an individual's situation will be compiled during the visit. As a main rule, information on private matters such as health conditions, social or misuse problems, etc. may not be disclosed without the person's written consent. The consent must detail to whom and for which purpose the information may be divulged.

With a view to creating trust in relation to the home-visit scheme and the subsequent handling of the often intensely personal information divulged during the visit, citizens should be informed of these provisions during the visits. And in addition to observing them, the staff must also be versed in the secrecy rules.

Other staff requirements

Staff handling preventive home visits

should be updated on social and health aspects in general, and should also be able to assess – at a certain qualified level – the older person's general functional ability, housing conditions, finances and social conditions, etc. Thus, preventive visitors should be acquainted with offers of technical aids that can ease daily life, e.g. communication aids, assistance with home refurbishment (e.g. changed toilet and bathing arrangements or removal of doorsteps), offers of personal and practical assistance and possibilities of personal financial assistance under the Social Pensions Act.

In addition, the preventive staff must be well-informed of the local authority's and voluntary associations' activity and visiting schemes, have general knowledge on ageing and prevention and also be competent communicators.

Involving general practitioners (GPs)

One outcome of the highly positive scientific experience concerning co-operation between GPs and the home care system with respect to the preventive home visits was a new service in the GPs contract of April 1. 2006. GPs are compensated for outreach home visits to frail older people, normally over the age of 75.

From 2006 GPs may offer preventive home visits to frail older people. Frailty is defined as:

- Declining functional ability
- Poor self-rated health
- Mental problems
- Medication problems (more than 3 prescription medicine)
- Falls
- Bereavement
- Newly discharge from hospital

The objective of a GP visit is to gain an understanding of the older person's resources and functional ability, to comprehensively review, assess, and possibly revise the patient's use of medication and, finally, to obtain knowledge on the older person's daily life situation, all of which will enable the GP to act as a competent partner in the interdisciplinary primary health care team. Thus, the visit is *not* a house call in the conventional sense of the word.

To assist this new initiative, a visitor's guide has been prepared, containing suggestions for what GPs should focus particular attention on and weigh during the visit.

A GP preventive home visit must be set up in advance and take place in understanding with the older person and is only paid for once annually per older person.

Despite the short existence of the scheme, it seems already to have gained a solid foothold in the GPs' working routines.

The history of preventive home visits

1937 Home visits after childbirth by health nurses was introduced in Denmark

1950 The Danish Medical Association discussed prevention targeting older people

1960-1970 District nurses 'knock on doors' in a local authority of Copenhagen, and several municipalities launch various comprehensive in-home assessment projects

1980 A major scientific project commences (the Roedovre project), and the Commission on Older People suggests that preventive care be prioritised

1990 Britain introduces 'the 75+ health checks' anchored in general practice

1996 The Danish Act on Preventive Home Visits implemented to cover all +80-year-olds in Denmark and from 1998 all 75+ years

1998 Australia introduces legislation on 'assessment of elderly people'

1999 A research project is launched in 34 Danish municipalities

2002 Systematic scientific analyses of 18 controlled trials define criteria of effective preventive home visits

2004 Britain abolishes the scheme

2005 Amendment of the Danish Act of Preventive Home Visits: Reaffirms that preventive home visits must be offered by the municipalities, but now more targeted to persons without need of personal help

2006 GP contract includes preventive home visits to frail older people

Thus, preventive home visits are not a new idea. As early as the 1950s, the Danish Medical Association debated whether functional decline was preventable with earlier interventions. In the 1960s district nurses were assigned to visit older people and offer help. Later, outreach activities were included in the district nurses' work descriptions. And the 1970s saw a project realised in a municipality where district nurses visited people aged 75 or over in their homes.

The results indicated reduced institutionalisation of women aged +80.

Based on the recommendations of the Commission on Older People, the Roedovre study was subsequently realised and gained major importance in Denmark and other countries.

It showed clear beneficial effects on the use of hospitals and emergency duty services.

Mortality rates also were reduced as a result of regular home visits made by a medical doctor and two nurses.

The use of institutions was markedly lower in the intervention group, but a key result was that the use of home help and aids/home adjustments increased slightly in the group receiving visits.

Up through the 1990s, several Danish municipalities used preventive home visits at their own initiative.

Schemes were designed very differently, performed at vastly differing intervals and had highly different contents. The 1996 Act on Preventive Home Visits gave every municipality latitude in organising and performing the visits as they wanted, which has lead to major variations in the ways the scheme are incorporated in daily work.

The plethora of ambiguous questions about how best to organise and perform the visits created the need among scientists and practitioners alike for a thorough analysis, a need that lead to the launch of the research project in 34 Danish municipalities.

Preventive home visits in other countries

In 1990, Britain introduced the offer of annual '*health assessments*' to citizens aged +75. The offer was in general practice (GP) without any clear guidelines for conducting or organising the work. The scheme got off to a poor start because many British municipalities were unable to offer actual support or help to solve the problems uncovered during the visits.

Further, many British GPs did not find the effort worthwhile, since they already had frequent contacts with the older population.

Instead, many GPs employed nurses to offer the visits, a scheme that produced mixed results. After fourteen years and following a national evaluation, which showed a dubious effect of the activities, the option was removed from the GP contract as of 2004. Prevention in the older people's area remains a priority in British local authorities, but they are now trying other methods.

Australia introduced home visits in 1998, a scheme that also incorporated GPs. Preliminary reports indicate that the Australian scheme also suffers from a lack of specific guidelines detailing how the activities should be organised and performed. The Australian legislation has not been evaluated.

Except for Australia, no other country in the world has legislation matching Denmark's, but the other Scandinavian countries, Germany, the USA and Japan are keenly interested in how the initiative functions in practice. And hopefully, in the next years Denmark will be able to contribute further inspiration.

Impairments, functional limitations and disability

Prevention and health promotion

Since time immemorial, we have known that 'prevention is better than cure'. Through the years, the concept of prevention has aimed to stop diseases from arising. Thus, it is no surprise that prevention has always been closely connected with medical thinking and its frame of reference. Thus, the World Health Organization originally based its definition of health on the absence of illness, but in recent decades the definition has changed radically. The Organization's 1998 Ottawa Charter brought the concept of *health promotion* to the fore, and health is today seen more as the basis for achieving a good life than as the purpose of life. Thus, in addition to the personal desires of avoiding serious diseases or disabilities, health promotion has also come to encompass social, cultural, environmental and other external aspects. For this reason, when using the concept *prevention*, we must clearly define what we want to prevent.

In practice, health promotion and prevention are often difficult to separate.

In short, prevention deals with avoiding or removing threats to general health, while health promotion also strives to improve health and wellbeing by, for instance, giving people the spirit and joy that comes from being able to handle different situations in life.

According to sociologist Aaron Antonovsky an aspect of health is sense of coherence, i.e. comprehensibility, manageability and meaningfulness in life.

Prevention and health promotion are therefore closely linked, and in the text below, prevention is used in a broad sense, thus including health promotion.

Consequently, it is not sufficient to incorporate only health promotion in preventive home visits. If, for instance, preventive activities can avert a risk situation, the risk must, of course, be recognised and the necessary offers extended.

But at the same time, professional activities should design the offers extended on the basis of the citizen's

physical and mental resources. And that procedure is precisely what the Act on Preventive Home Visits clearly advocates.

Traditionally, prevention is divided into *primary, secondary and tertiary* prevention. Primary prevention aims to ward off diseases, *secondary* prevention focuses on tracking and treating diseases in their early stages, and *tertiary* prevention centres on preventing relapses or aggravation of existing diseases. When it comes to older people, it often proves difficult to distinguish clearly between these levels, since, for instance, secondary and tertiary prevention of diseases may actually be primary prevention of disability.

In this context, it is therefore more appropriate to limit the definition of *primary prevention* to activities striving to prevent disability. Similarly, *secondary prevention* in this context would focus on discovering early signs of disability and taking urgent, relevant steps to prevent the disablement process from spiralling or to restore functional ability.

Tertiary prevention aims to avoid further decline in cases where disability is irreversible.

Examples of primary prevention aimed at older people:

- Information on community activity offers
- Advice and guidance on individual physical activity aimed at strengthening muscles, tendons and balancing ability to avoid falls and possibly fractures
- Advice on daily intake of vitamin D and calcium to reduce the risk of weakened bones and malnutrition, and to strengthen muscles
- Guidance on possibilities of improving or refitting the home to prevent falls
- Suggestion of influenza vaccination once annually in the autumn to avoid infections

Examples of secondary prevention of disability aimed at older people:

- Offer and encouragement of exercise to prevent pains related to osteoarthritis in knees and hips
- Early treatment of uncomplicated urinary tract infections to prevent spells of confusion and falls due to dehydration
- Suggestions of, for instance, contact to day centres, pensioners' clubs or volunteers for involuntarily socially isolated people
- Blood pressure measurements and other regular control measures in diabetic individuals to prevent late complications such as reduced vision/blindness, cardiovascular complications and defective renal function

Examples of tertiary prevention of disability aimed at older people:

- Offers of rehabilitation and training of functional limitations after illness
- Information on well-functioning transport schemes and help for disabled people to enjoy interpersonal and other social relations

Objectives and strategies

If we ask older people how they imagine a good, old age to be, we get a wealth of different answers. But almost everybody hopes to have a long life and be able to cope on their own as long as possible without help. And good functional ability is precisely what allows individuals to move freely and manage daily activities without major problems and without being a burden. Thus, functional limitations and disability have serious ramifications for the individual as well as for the society. For the individual, it may entail not only a more cumbersome life, but also a diminished quality of life in such divergent areas as being unable to participate in leisure-time activities and other types of social relations, being unable to do anything for others, and having difficulties in maintaining dental hygiene. Society may also suffer consequences, because disability equals greater needs for social and health services.

The main objective of most preventive activities is therefore to improve or sustain functional ability as long as possible. This applies both to medical treatment, rehabilitation and preventive work performed among community dwelling older people. However, both private and public activities really need to develop more exact strategies aimed specifically at preventing functional limitations and disability. At the same time, there is a razor-thin distinction between sober information about hazards on the one hand and inappropriate intervention into people's private lives on the other. Consequently, careful consideration is needed as to *how* prevention targeted at individuals should be realised from a professional perspective. As we know, living and enjoying life entail risks.

A tangible example is the risk of falls and femoral fractures related to loose carpets in the home, a risk that should be weighed against the joy of looking at a beautiful carpet that has been with you all your life.

Professional handling of such dilemmas requires great tact and diplomacy.

Methods and organisation of preventive activities may differ widely, depending on whether they focus on preventing diseases, on poor quality of life, or on involuntary loneliness. The activities would also differ depending on whether they target groups or individuals.

Organisers of preventive home visits should, e.g., involve the immediate network – typically spouses or adult children.

At the same time, they should be conscious of the content. In addition to health promotion support, the activities should also aim at preserving functional ability, an aspect closely related to well-being, good health, the ability to enjoy interpersonal relations and managing without help. Comprehensive studies seem to indicate that preventive home visits are appropriate because many older people benefit from this type of professional work. This experience thus provides the public sector with an ethical basis for intervening in the life of an older person.

Successful ageing

We age differently and at different stages of our lives, depending on our genetic make-up, our backgrounds, our way of life and our living conditions. Through the years, we also become vulnerable to external factors that may impair functional ability. Our vulnerability is inherent in the changes that occur in all bodily organs – from molecular levels inside the cells via cell level to interrelations between the organ functions.

The biological age-related changes make us more vulnerable to external social and mental factors – thus reducing our resources. Age in itself is not a disease, but older age increases the risk of disease. How we age is not solely a question of bodily changes but an intricate mesh of individual, family-related and social factors.

Biological ageing affects any living creature and is characterised by age-related changes in body cells and organs (wear). But organs may preserve their functions if used the entire lifetime without strain.

In contrast, insufficient use creates 'corrosion' (tear). In other words, we must strike a balance between attrition and corrosion to achieve successful ageing.

Certain processes are perceived as unavoidable age-related changes, such as diminishing renal function, the eye's ability to accomodate its lens for near or distant vision and general reaction time. If we consider a human being from cell level to the entire body, unavoidable ageing is most closely related to cell level, while ageing of complex functions can be counteracted. Muscle function can, for example, be maintained and improved by resistance training.

Diseases and health effects may cause *accelerated ageing*. This means that the overall function does not match the actual age.

At the *mental and social levels*, the ageing process is complex, here being determined by the interplay between an individual and his or her surroundings. Some of the key facts of mental ageing can be summarised as follows:

- Personal development has no time limits
- Major undesired changes entail risks
- Intellectual faculties are maintained by use
- Reduced mental speed can be offset by insight, overview and experience
- Many putative age phenomena are cultural phenomena
- Bodily health and mental function are closely related

It is a key factor to sustain the ability to handle life, not least if a person is affected by adversity and disease. We talk about the ability to *cope*. The ability to handle weak and strong points varies substantially, or, in the Danish saying coined by Piet Hein, it is not just a matter of how we 'feel' physically, but just as much how we 'deal" with it.

Ageing increases the risk of losing a spouse, family members and friends. Largely everybody loses social roles when retiring from the labour market. The risk of isolation and dependency on others increases. And the inevitability of death dawns upon us.

On the other hand, we find time to focus on interests that never had high priority previously. Ageing brings knowledge and experience coupled with possibilities of immersion and joy in small experiences, of enjoying some of the sensuous experiences we perhaps valued less when we were younger. And the advantages of ageing are important to note. They make it easier to accept the loose, wrinkled skin, the reading glasses, the morning stiffness and the somewhat prolonged learning process.

It is not possible to set objective standards for the advantages and disadvantages of becoming old. Many media are inclined to describe the extremes of old age – those who are very healthy and well-functioning and those who are in very poor physical and mental health. But reality has more nuances than that. Presumably, the individual person's ability to handle life, with all the problems and influences that arise, is the key to how we cope in old age. If an old person *experiences* himself or herself as well-functioning in terms of health, feels accepted and is able to decide and act, he or she manages well. Health ties in closely with a person's social and mental state. Thus, there are no easy or simple recipes for a successful ageing.

In recent years, personal *empowerment* has become a key concept. The concept focuses on what is most important and possible for the individual person and not what the 'system' may or may not offer. This development poses clear requirements for precisely worded descriptions defining what is inside and outside the scope of preventive home visits.

Many results indicate that the pre-

ventive home visits particularly reinforce people's ability to cope and their competence of action, a finding that puts requirements on the strategy and the instructional methods used during the visits. Visitors must pay attention to the social and cultural changes experienced by the old people. Many of the older adults of today have experienced two world wars and the Spanish flu, many experienced poverty in the 1930s, the later technological revolution, and the changed attitudes to the older generation. Housing conditions have also changed markedly, as has the economy.

Family structures have changed, too, and in some cases geographical distances have made it difficult to help and care for older family members.

Loneliness is an example of how differently people are affected by and cope with life. Loneliness is a subjective feeling that others can only gauge through close contact with the individual person. Some persons are alone much of the time without feeling lonely, while others feel lonely even though they have contact with many people, in other people's eyes. Gauging loneliness is an excellent example of how essential the ability to identify with others (i.e.empathy) is for professionals working among older people.

'... perhaps my involvement in the project has made me more aware of the need to include professionalism in the visits, something to raise the quality ... But I'm not really able to define precisely what it is.

(Preventive home worker, 2000)

'The good cause' must focus on and help to give the individual old person optimum possibilities for preserving functional ability. In addition to giving the older person an understanding and the possibility of maintaining or improving his or her own health through the preventive home visits, individual preventive activities may help the older person recognise how to handle life's unavoidable changes appropriately. We know that ageing is not an evenly progressing and irreversible process.

Research and development projects have documented that physical performance and functional ability can be improved even at very old ages.

We cannot prevent death, but perhaps postpone it, not merely to add years to life, but also with a view to preserving independence as long as possible. Achieving this requires that older people themselves, their relatives and their therapist and preventive staff all have the necessary knowledge. This is one reason why

preventive home visits may become a major asset, primarily to the older population but also to society, on a par with the public home assessments scheme after childbirth by health nurses introduced in Denmark almost 70 years ago.

Functional limitations and functional ability

In the last decade, the wealthy part of the world has seen a growing faith in the health profession. In the field of geriatrics, medical technology has made enormous progress. Many old individuals have regained good vision after an outpatient cataract operation, and many persons with osteoarthritis have acquired new hip and knee joints, thus achieving a completely new existence without pain.

In our culture we are not inclined to consider that life comes to an end. For many people, death and the preceding disability are so painful to face and is often repressed. However, very few of us are given the luxury of being healthy and agile and dying suddenly at a high age of, for instance, a myocardinal infarction. It is actually *possible* to die of old age, but most people must face a short and some (about 20%) a long period of health problems and disability before they die. Only to some extent can such infirmities be relieved by help from relatives, the local home care service or by a more appropriate home setting.

Ample documentation shows that older adults give high priority to good health, one reason being that it allows them to live the life they want and avoid burdening their surroundings. Thus, one overall objective is to enable most people to cope on their own, preserve proaction and handle their lives as they want.

> *'You must be able to handle lots of things. Knowledge about older people, conventional diseases, when to see a GP,prescription and herbal medicine, and when to pass. You must have a purpose, a wish to attain a result, be able to hold the conversation on course, and to stay focused.*
> *You must know the conditions of the municipality, the voluntary, the private and the public offers, and to be updated on social legislation.*
>
> *(Preventive home visitor 2000)*

All these requirements presuppose that the professional helper has the ability and knowledge to recognise early sign of disability and functional limitations, to target activities at restoring or remediating disability, and also to offer the necessary support in cases of irreversible disability. But it is just as important to recognise and relate to disability – and this applies

to individuals, professionals and other surroundings equally.

The disablement process

Disability is defined as reduced functional ability experienced by an individual compared to previous ability, and may be either the result of disease or irreversible age-related changes that were not compensated for.

Disability has many dimensions and degrees, and each person experiences it differently.

Some individuals experience no longer being able to walk the dog every day as a major problem, while an inveterate card player would experience his or her inability to distinguish between a jack and a king as just as bad.

Fatigue, defined as a person's own feeling of fatigue, has proved to be an early sign of functional decline and may be a key indication of a future need for help. Disability and functional limitations are often reversible in the early stages, but given time become progressively more difficult to treat. Thus, swift efforts are needed to achieve good results. Being bedridden for 24 hours requires several days' rehabilitation, if an older person is to regain his or her former functional level. Thus, relatively banal diseases or social isolation can quickly deteriorate into serious disability and must therefore be addressed immediately.

Small changes in life circumstances may give rise to significant mental impairment. The art of being a professional lies in the ability to determine the factors that contribute to such mental impairment in the individual person, e.g. to be able to distinguish between what is a reaction to irreversible ageing processes and what is attributable to social or health problems.

Social and health professionals perceive disability differently. Slightly simplified, *social professional groups* do not often discuss diseases, while *health staff* focus more on evaluating and relieving diseases than on considering the mental and social domains. Thus, the perception and assessment of disability is tinted by the various professional groups' attitudes and preconditions.

But in relation to preventive home visits, health, social and mental factors all need to be considered simultaneously to determine the efforts to manage the disablement process.

Frailty and disability

However, making a distinction between frailty and disability may help increase our understanding of the *disablement* process.

Frailty is definable as reduced reserves in the bodily system, which increase our vulnerability to derangements, be these extreme surrounding temperatures, worsening chronic

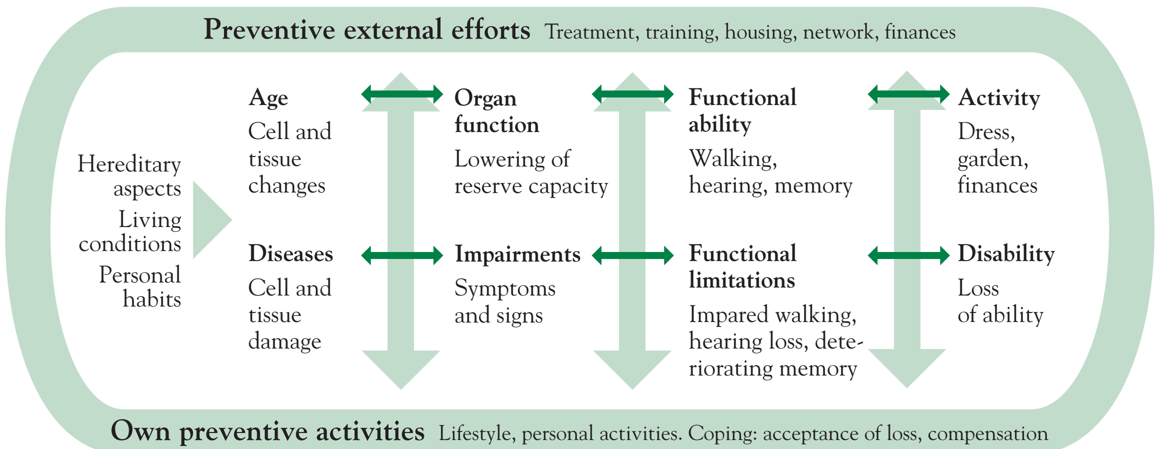
diseases, acute diseases or accidents. Bodily age-related changes are found in many bodily systems: reduced muscle mass, reduced calcium levels in bones, poorer regulation of the immune system, small variations in cardiac rhythm, etc. Frailty is an overall expression of risks inherent in age- and disease-related accumulation of physiological deterioration in several systems. Diagnoses may fail to recognise the early phases of the process, for which reason frailty will only appear when the total loss of reserves reaches a limit that entails serious vulnerability. However, frailty may be discovered early in the process if we use early bodily, health or performance indicators.

To be able to apply a fuller view of disability, we must include the overall concept of disability, this being the area where the individual person feels the disability in his or her daily life.

Functional ability is defined as the ability to carry out conventional, daily activities. The concept includes physical, mental and social aspects. There are many different scales and measurements for evaluating these aspects, but a detailed description is beyond the scope of this publication.

To apply a more dynamic view of functional assessment, we must distinguish between *having difficulty performing* daily activities and not being able to perform them at all, i.e. a complete loss of ability.

Functional limitations and disability can be evaluated either by observing how the person functions, possibly supplemented with a physical performance test or an interview to determine whether a person is experiencing difficulties performing daily routines.



Source: Verbrugge LM, Jette AM. The disablement process. Social Sci Med 1994; 38(1): 1-14. and 'A case for age', Copenhagen: Ministry of Research, 1999.

Activities can be broadly evaluated, e.g. anything from eating to doing hobbies, or special activities may be selected as objects.

It may prove useful to begin with the prevention model on page 24, which includes the disablement process that also builds on four mutually dependent critical age-related changes.

This model defines *disease* as recognised biochemical (i.e. related to cell metabolism) and cell-function abnormalities ascribable to a medical diagnosis (e.g. osteoarthritis of the hand). *Impairment* is defined as measurable, impaired functions of organs and the organ system that lead to specific symptoms and/or laboratory results (e.g. flattening of the articular cartilage caused by osteoarthritis).

Functional limitations are restrictions in an individual's basic physical and mental behavioural patterns necessary to uphold daily life (e.g. finger dexterity, including fine movements such as pinching).

Disability reflects the consequences of physical and/or mental functional limitation and is defined as problems performing activities related to all aspects of life.

Disability must be compared to expectations that depend on the individual's economy, age and social situation (e.g. problems with piano playing or using a computer keyboard).

Disability is most often defined as problems performing *Activities of Daily Living* (ADL), which may be seen as an overall expression of basic abilities necessary for survival, e.g. eating, toileting and practicing personal hygiene.

Instrumental Activities of Daily Living (IADL) are abilities needed to function in the society, e.g. shopping, cleaning, doing the dishes.

Disability arises more frequently as age increases and may lead to failing ability to cope with general daily skills.

Irreversible age-related changes and disease impact differently on functional ability from individual to individual. Thus, evaluations must be performed individually.

Disability is often the first – and in some cases the only – sign of disease. In addition, disability may restrict one's social room of manoeuvre, which entails a risk of further functional decline.

Health-triggered disability susceptible to treatment can and should be restored.

'You can get advice and guidance on local council assistance, meals on wheels and on, health – plus a little personal conversation so that you feel that you're not forgotten in the system.

(Participant in questionnaire)

Evaluating the functional ability is therefore a must in preventive work. Without such evaluations, we cannot enter into a qualified dialogue with citizens, and citizens cannot make appropriate decisions on advice and guidance, which aim at helping the individual to preserve or increase their physical and mental strength and proaction.

Ethics and preventive home visits

'For in truth to be able to help another person, I must understand more than him - but nevertheless first and foremost also understand what he understands. If I do not, then my superior knowledge does not help him at all. If, nevertheless, I assert my superior knowledge, then it is because I am vain or proud, for basically instead of helping him I essentially want to be admired by him. But all true help begins with an act of humility; the helper must first humble himself under the one he wants to help, and therewith understand that to help is not to command but to serve, that to help does not mean to be ambitious but to be patient, that to help means to endure for the time being the imputation that one is in the wrong and does not understand what the other understands.'

Søren Kierkegaard
Danish philosopher and writer 1813-1855

Working with older people in the social and health sectors should regularly give cause for ethical considerations. Dilemmas can arise in many situations, e.g. if a person's need for support differs from the support of-

fered, or if people with dementia refuse to accept help in situations where the need for help is evident. A recognised conflict between married couples where the weaker of the two fails to receive optimum treatment is another ethical dilemma.

Ethical dilemmas often pose questions that are not simple to answer. How, for instance, do we avoid:

- penetrating into the private sphere?
- discriminating, such as reflected in the fact that older people due to their age do not get the offers they are entitled to?
- overprotecting and hemming in the visitee
- suppressing the visitee's autonomy and right of self-determination?
- imbalancing so that any disadvantages overshadow the possible advantages, e.g. causing unnecessary anxiety by discussing fall prevention?
- Discrepancies between identified relevant problems and the public supportive offers?

When local municipalities' offer citizens home visits, it represents an unsolicited intervention into the citizens' lives. This type of intervention holds a proven potential to yield a very positive result, if visits are performed by motivated and competent staff, but visits *could* also be seen as infringement of the individual citizen's integrity and independence. And it is not easy to reject all offers from an authority on which one might later become dependent.

Any preventive interview should therefore rest on the following ethical principles:

Voluntariness

Preventive home visits are offers. *This* should appear clearly from the public authorities' inquiry to the citizen and any information material.

Autonomy

The right of self-determination is fundamental. Where problems are uncovered and changes are deemed possible and beneficial to the citizen, suggestions must be presented – and a refusal respected unless a life-threatening risk is discovered such as a high risk of suicide. An ethical dilemma may also consist of an evident danger of falling inherent in the placing of a carpet. There is a fine balance between providing information on danger elements and risks and displaying patronising superiority and control. In these situations, empathy is a key precondition, and the visitor's keenness to protect and perhaps overprotect the citizens must be toned down. Living and enjoying life are risky, but professional situations also include basic, human responsibility. The citizen has an inviolable right to define

the extent to which he or she will accept a message from a preventive worker. It is important to stress that the visits as well as the sensible advise accompanying the visit are offers. Of course, the citizen is not obliged to follow the preventive worker's suggestions merely because the employee has been invited into his or her home.

The key factor is the citizen's own interest in a high quality of life and functional ability, but these goals should only be reached on the citizen's conditions. Society's overall interest in, for instance, fewer hospital admissions and lowered health costs are in the sense of the visit secondary to the citizen's personal interests in the benefits of the visit.

Irrespective of any major social interests, a mix of any private interests, e.g. studies for the pharmaceutical industry, is completely unacceptable in connection with preventive home visits. The citizen should feel completely certain of the confidentiality needed in meetings with the system and the intentions underlying the visit. Thus, the citizens' confidence in the intentions of the visit may in no way be compromised.

Professional secrecy

As in other types of social and health work, employees are subject to complete professional secrecy, when they carry out home visits, and this fact must be emphasised to everyone visited. Where initiatives are launched, the citizen must have accepted them in advance, including that other authorities be notified, etc.

Preventive interviews will often elicit a wealth of sensitive information, and situations may later arise where such information becomes significant, e.g. for home care service assessments. But professional secrecy was introduced to protect the individual citizen, and if outreach employees overstep this duty in situations not covered by relevant legislation, possibly by making a mere slip of the tongue, the entire body of preventive work among older people risks being discredited.

Norms and attitudes

In conducting preventive home visits, the employee has to disregard his or her own norms and attitudes. Thus, the employee will see that older people design their lives just as individually as other age groups.

Further, an understanding of the possibilities and limitations inherent in the age must be reflected in any suggestions or advice. This means that employees must be able to strike a suitable balance between over-optimism and nihilism.

On the other hand, the employee should not advocate a parent-child relationship. The ”maternal role” with the soft heart should always be measured against the objective of the

visit, i.e. endeavouring to find core elements in the citizen's life strategies that can help him or her achieve control of and mastery over his or her life – while also helping to preserve or improve *functional ability*.

Older people should not be shielded from life. But a realistic understanding of ageing requires up-to-date gerontological[4] and geriatric[5] knowledge.

'The areas where I think I really helped and discovered something are incipient dementia and depressions, because they are so insidious and difficult, and people can keep up the 'façade' appearances during a visit with the GP.'

(Preventive home visitor, 2000)

Communication

Excellent communication is pivotal in relation to ethical problems. The ability to listen and feel how the citizen experiences his or her life – in other words: to 'keep your ear to the ground' – is a must for giving advice without provoking unnecessary anxiety. Focus must be on recording and supporting the individual's resources and not on disease.

Suggestions must not be forced upon the visitee – and health guidance should not give the receiver a bad conscience. It is better to acknowledge the insolubility of a problem than to pretend it does not exist. Home visits always require a keen sense of respect for the citizen's wishes and limits.

Considerations regarding responsibility and obligations

Do citizens, by accepting the visit, always have to follow the advice given? And if they follow the advice, does the municipality in return have an obligation to fulfil all the citizens' wishes emerging during the assessment dialogue? Or should they merely be channelled into the political debate and decision processes on future possibilities?

Such questions point to several possible candidates in which to vest responsibility for the visits, and should in any case give rise to considerations.

'Nothing but praise and gratitude to the Danish health authorities and thanks to the people who are interested in those of us who are more than 80 years old; otherwise we would have been erased from the map a long time ago.'

(Participant in questionnaire)

4 Gerontology: the science of human ageing

5 Geriatrics: the science of older people's diseases

Basically, the muncipality is vested with obligations and responsibility in its capacity as the general authority, but especially because the visits are unsolicited offers extended to the individual citizen.

The responsibility takes the form of, for instance, organising visits in a way that ensures the widest possible respect for the individual citizen and following up the relations arising between the visitor and the citizen.

Additionally, the local authority is obliged to meet certain agreements made with the citizen and to follow up such agreements. Ideally, the responsibility is vested in the individual employee, but the overall responsibility actually rests with the preventive unit for which employee works and ultimately with the local authority.

The role of the preventive worker as the gate to the local authority also commits the local authority to being accessible, always considering, of course, the limitations inherent in ethics of distribution and other priorities.

Often, visitees explain that they feel a sense of 'security in knowing someone in the system'. But can municipalities generally meet expectations when the need for help and support arises? Do they, for instance, have the necessary flexibility and the necessary competences? Are all municipalities able to ensure that, having built up security and confidence, an employee will also be available in a possible emergency? Or are they making direct or indirect promises they cannot keep? Politicians, managers and employees should constantly ask themselves and each other such questions.

Documenting the effect of preventive home visits

International scientific documentation

In addition to the Danish studies, a range of controlled scientific experiments concerning preventive home visits have been made in Great Britain, the Netherlands, Switzerland, the USA and Canada in the last 20 years. To achieve a total overview of these vastly differing projects, analyses have been made in recent years in an attempt to evaluate the overall effect by comparing a range of preventive activities in various national systems with different target groups.

The conclusion is that preventive home visits most likely have beneficial effects measured as an overall assessment that includes social, psychological and health aspects. Visits must be followed up and the effect seems to be greatest for the non-disabled group of community-dwelling older people. The beneficial effects are reflected in the postponement of functional decline and the need for institutions as well as fewer hospital admissions.

However, the studies provide no certain answer to the question of which age group has the largest benefits from the visits. The effect is probably not very pronounced in the disabled part of the population because this group already receives treatment and care.

The precise reason for the positive effect is as yet unknown. The studies provide no easy or simple explanations to why prevention in the form of outreach visits impacts positively on citizens' lives. It is probable that several aspects play a part.

The reasons may lie both in improvements in the systems and the preventive workers' personal resources, but also in the fact that special aspects of the individual older person and his or her life are most evident at home. Meeting citizens in their own environments enables direct influence on older people's abilities to act appropriately in their daily lives and achieve subjective feelings of being in control, which impacts on their ability to preserve *functional ability*.

Early response to failing health and the constant review and possible adjustment of medication in coopera-

tion with GPs may also play a key role.

The 34-municipalities' project in Denmark[6]

The Danish 34-municipality project commenced in 1999. Its objective was to evaluate whether educating local preventive visitors had an effect on visitees' *functional ability*. Another objective was to evaluate the significance of a coordinated interdiciplinary follow-up that included GPs. Thus, intervention primarily focused on educating preventive visitors and GPs.

A total of 50 municipalities in four counties were invited to participate in the scientific study. Of the 50, 34 municipalities accepted the invitation to participate. They were randomised into 17 intervention and 17 control municipalities.

The intervention municipalities received offers of frequent contact to the project management, primarily in the form of offers for education in central issues concerning prevention among older people.

The intervention project was realised in the period 1999-2001 and comprised:

- introductory joint education of all professionals involved in preventive home visits
- gerontological and geriatric education of two key persons from each municipality twice annually
- enhancement of the introductory education, coupled with the possibility of exchanging experience on contents and structuring of preventive home visitation work
- regional training on fall prevention among older people, provided to relevant professionals in the municipalities
- offers of education to GPs, focused on older people's most frequent general health problems and on the contents of the medical tasks arising when preventive home visits led to contact with GPs

Education of local key persons focused on four areas:

- The content of the preventive home visits focused on the individual older person's resources. Attention should focus on early signs of functional decline by assesssment of health, as well as mental and social domains
- The significance of communication as a precondition for both explaining the purpose of preventive

6 Publication of results: Vass M, Avlund K, Hendriksen C, Keiding N. Preventive home visits to older people in Denmark. Ageing Clin Exp Res 2002;14:509-15.

home visits and achieving good contact with the older person

- The importance of support offers in the community, e.g. good possibilites of participating in physical and social activities, good transport schemes, etc.
- Cooperative relations to other professionals in the local area, including GPs, meant to improve the possibilities of following up a preventive home visit

Key home visitors in the intervention municipalities were trained in the options for preventing functional decline in older people. They were urged to focus on early sign of functional decline and be attentive to fatigue by using two simple tests. Additionally, they were urged to stimulate and assist the visitee in being physically active, and to cooperate with the GP. Additional supportive factors consisted of community offers for physical activities, possibilities for networking and cooperation with voluntary associations.

The control municipalities had no contact to the project leaders in the three-year intervention period. The study measured the effect of the intervention by comparing the participants in the intervention and control municipalities – i.e. indirect effect measurement, the intervention being targeted at the employees of the municipalities. More than 4,000 older Danes in the 34 municipalities agreed to participate and allowed data on social and health services to be compiled in the following years. At four points in time, the participants filled in questionnaires on their functional ability and personal conditions, when the study commenced and 1½, 3 and 4½ years later. The data provides an unprecedented opportunity to evaluate both short-term and long-term effects of preventive home visits.

In addition to highlighting the effects of intervention on older people's functional ability, the data from the 4,000 older Danes has yielded knowledge on the best way of inserting preventive home visits into Danish daily life.

What did the results show?

The study measured the intervention effect on functional ability, in questionnaires supplemented with detailed recorded data on the 75-year-old and 80-year-old people in the involved municipalities.

Functional ability and gender

As **table 1** on page 35 shows, older women in the intervention municipalities had better functional ability after the three-year intervention than older women in the control municipalities. Thus, educating the employ-

ees conducting the home visits made a difference to the women's ability to manage their daily activities.

The table also shows that older women who received preventive home visits enjoyed better functional ability than women not receiving visits. Thus, preventive home visits have an effect even when conducted as an aspect of daily practice. None of the results were visible among the men if the group is analysed as a whole.

Age and gender

Table 2, page 35, shows subgroup analyses of the youngest (75-years at project launch in 1998) and the old group (80-years at project launch in 1998). This shows that the older group does have an effect of the educational intervention on their functional ability, irrespective of gender.

Additional analyses of the intervention effect may also prove a corresponding clearly lower risk of institutionalisation. And all effects are apparently visible in the group not needing help at the project launch - i.e. the healthy and agile.

Number of visits and other contact to municipalities

It also appears that the more visits the older person accepts, the greater the likelihood of having better functional ability, even considering the number of people surviving.

Improved functional ability is also seen in connection with regular contact to the outreach offer.

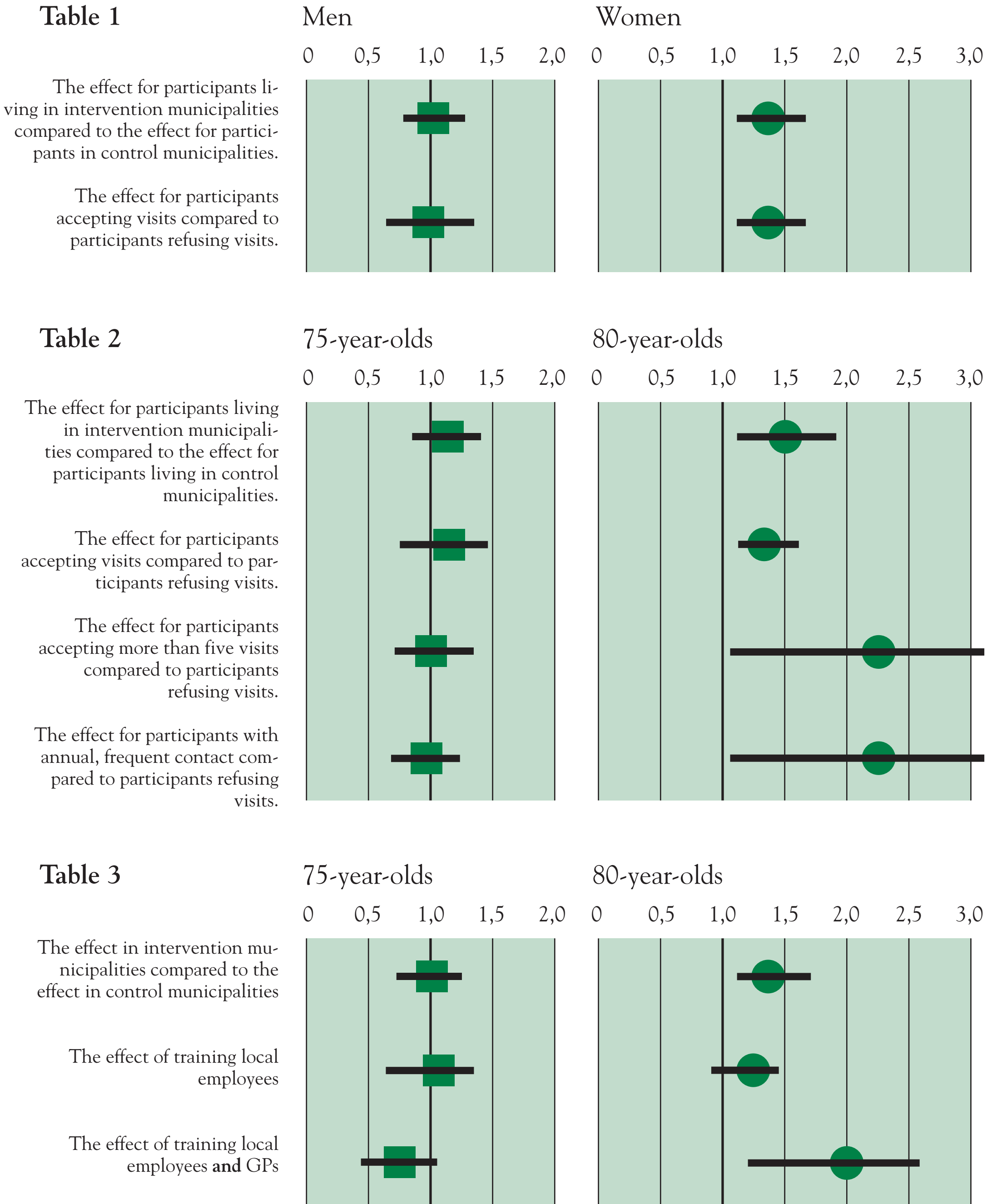
Thus, if older people have subsequently had annual contact by telephone after a home visit, the effect would be greater than if contact to the outreach offer was only sporadic, a clear underlining of the necessity of continuity.

Cooperation and coordination

Finally, it appears that good cooperation between home care service, preventive offers and local GPs is the key to achieving the best results, see **table 3**, page 35. Separate training of preventive workers and GPs had an effect, but if both groups received training, the training urging precisely these groups to coordinate activities, the effect was more than double among the older citizens – i.e. a mutually reinforcing effect. Training focused specifically on the importance of including holistic assessment in the visits and of establishing contact with the citizen's own GP when health problems were suspected. A hypothesis for the intervention was that if incipient functional limitation was to be restored, the problems had to be detected early, and action taken at once. It seems that functional disability might then be prevented.

Effects on functional ability, i.e. managing without help after three years

Statistical uncertainties appear as black bars. When the bar is "free" of the value 1, it indicates that a statistically significant difference is seen in functional ability between the participant groups and that the observed difference cannot be ascribed to coincidence.



Economic evaluation

A cost-effectiveness evaluation of the study showed that staff training is cost neutral.

In other words, the same amount of resources achieves improved functional ability for visitees and enhanced competences for health professionals.

Set up of preventive home visits in municipalities

In the course of the 34-municipalities project, quantitative data were compiled on how the authorities had set up preventive home visits.

The administrative structures of the municipalities differ widely, but the analyses showed a pattern of three general types of governance. The municipalities were grouped according to how they prioritise and realise *management, production and development*. Along these lines governance strategies for: *the rule-based, the frame-based, and the project-based municipality* were identified. Patterns of advantages and disadvantages appear for each type:

The advantage of primarily *rule-based governance strategies* is that the production method ensures uniformity in the service rendered to citizens. The disadvantage is the inability to adjust to citizens' differing needs. This type of organisation may empede the continuous development of corse services that will meet the older population's needs.

Project-based governance strategies are regularly set up in free structures where rapid development and innovation characterise task solution. The disadvantages are the high level of costs that may easily accrue and that the pace of development may be so fast that the core services fail to be embedded into everyday routines. It takes time for the advantages of new initiatives to catch on, especially if focus has already shifted to another idea, even before long-term evaluation concludes. If development goes at a too swift pace, the necessary follow-up on "old activities" with subsequent adjustments risks being evaded.

Frame-based governance strategies lie between the two others. The management sets out the overall objectives and preconditions, but allows the individual preventive workers to flesh out the solutions. Typically, constant adjustment and follow up are embedded in the management strategy.

Thus, the task is not rigidly defined through rules. This way of organising the visits enables standardised solutions to be adjusted to suit the needs of individual citizens. The disadvantage is that uniformity in the services is not ensured, which puts great demand on the individual employee, as it typically leaves a wide scope for the employees' practice of discretion.

Effect of municipality size and organisation

No interrelation can be proven between the setup of preventive home visits as an independent staff function and a superior task solution. On the other hand, results from large municipalities show that merging the preventive visits and the assessment of eligibility for other municipality services is inappropriate.

Nor is there any unambiguous link between the size of the municipality and task solution efficiency. Advantages are seen in both large and small units. Small municipalities master rapid response, when the preventive home visitor identifies a problem.

In large municipalities, employees of various professional groups can continously share knowledge, a fact that serves to ensure professional sustainability. Positive, mutually developing effects of knowledge sharing between socially trained professional groups and health personnel are most often seen in units of a certain size. At the same time, large units offer better opportunities for setting up fixed procedures for supervision.

For large units, delegating the task of preventive visits to sub-districts is only advantageous, if the sub-districts coincide with similar sub-districts for the units entrusted with other services, e.g. meals-on-wheels. Otherwise, both the advantages of proximity for small units and the advantages of knowledge sharing in large units could be lost.

Thus, the setup of home visits appears to be a balance between constant development and the necessity of keeping core services in mind. A minimum of professional thinking and development must be involved, always provided that they do not divert attention from the real core element of the service. According to the analyses, in a Danish context, the best results appear when the individual preventive home visitor is allowed a certain scope for discretion. However, this presupposes skilled employees of broad training.

The content of preventive home visits

The dynamics of home visits

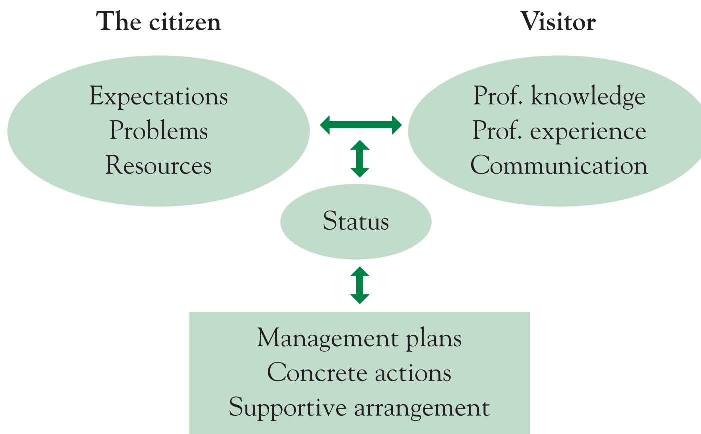
Preventive home visits constitute a *dynamic* process aiming at establishing *relations* that – within the framework of the community and senior citizen policies – allow the older person and the visitor together to preserve or improve the older person's long-term possibilities of leading a good, independent life, i.e. a life without disability and postponement of needs for any help.

The figure below provides an overview of the elements included in this dynamic process.

Of course, the dynamics of preventive visits depend on who the individual visitors and visitees are, how their chemistries suit each other, and the objectives of the visit.

The citizen

The citizens' norms and expectations should always be considered in detail in relation to contacts with the social and health authorities. Initial



clarification of the citizen's *expectations* to the visit would be a good starting point for the structured interview.

The need for concrete actions varies greatly, depending on, for instance, the individual's *resources*, e.g. the extent of the person's health and agility, whether the person lives alone as well as his or her social background.

In the group of healthy and independent individuals, it is hardly a matter of coincidence who has the extra resources needed to uphold active contact with others and who prefers a solitary life, as old age in many ways reflects previous lifestyle.

Thus, suggestions and ideas for assistance should continue and include previous interests and needs.

The right of autonomy and self-determination further entails that the citizen should always be consulted, define his or her problems and decide on the areas where agreements on management plans can be arranged. As for the most frail, self-determination may in principle be their wish, but they may be unable to realise it to the same extent as well-functioning older people. Thus, the task also comes to include an assessment of which unidentified problems and undisclosed needs may advantageously be targeted.

Visitor

The visitor should apply a professional – not patronising or didactic – *communication* based on the individual person's resources. The general attitude should aim at including the older person's norms, neither governing nor counselling in accordance with one's own 'professional' norms and expectations – even if conditions in the visitor's eyes are unfavourable for the visitee. Thus, the employee should never base his or her work on the attitude: 'I know what's best for you' but on the attitude: 'I can offer you something that you might find useful'.

In addition to 'communicating with people', the visitor must, to maintain confidence in the scheme, have clear-cut guidelines on what the system offers. Information on any supportive arrangement must be presented to pave the way for impact assessment – financial impacts included, if any. The preventive home visitor must also hold broad *professional experience* as well as *knowledge on relevant offers* in the social area, while also being so familiar with his or her 'system' that he or she can communicate with and guide the individual older person and the immediate partners in the municipality system.

'We have received various technical aids that we now use daily. We didn't ask about technical aids, because we didn't know that we could borrow them'.

(Participant in questionnaire)

Status

To adjust clarified and concluded agreements and possibly commence assistance, preventive visitors must constantly evaluate whether the scheme is reaching the established objectives.

Preventive home visits

Based on scientific studies and experience from municipalities in Denmark, the content of preventive home visits should encompass:

- Trustful contact
- Structured interview
- Overall assessment
- Any concrete agreements and
- Follow-up

Visits have two dimensions: *specific activities* during and after the visits, and the *atmosphere* in which the visits are conducted. The two dimensions are closely connected, a connection that primarily becomes apparent during the interview. Trust and confidence are necessary if useful information are to be exchanged.

And it is crucial, both in speaking and acting, to show respect for the visitee, to listen and to allow the person time to talk.

At the same time, the professional can ask indepth questions to demonstrate interest in the person and indicate that the person is taken seriously. If the professional fails to show respect for the older person's own evaluation of a problem, the counselling and guidance forming an element of the visit will most likely be received with a certain degree of scepticism.

The initial and following visits should not run along the same lines. At the first visit, the purpose of the visit should be explained.

And subsequently, the visitee's desires should determine the contents of the visit.

Expectations often become clearer during later visits. If trustful contact has been achieved, the older person will automatically provide more and more bits of information on how everyday life works and on aspects that could perhaps not be discussed during the first visit.

Generally, new questions arise that can be debated or that pose requirements to the preventive visitor's other competences.

If the visit succeeds in establishing a friendly atmosphere of mutual trust, confidence and empathy for the visitee's daily life, the foundation has been laid for a real relationship of trust.

The relationship of trust cannot be used to manipulate the visitee in certain directions, thus intervening in his or her right of self-determination, just as the visitor cannot in his or her communication indicate that the visitee will be divested of responsibi-

lity. Thus, a successful result presupposes that the visitor is professionally competent and able to communicate his or her knowledge in a manner appropriate to each individual, i.e. with empathy and qualified tuition skills.

The structured interview

Once the contact has been established, the most important aspect is to structure the interview. For the professional, that involves planning the framework for the visit, including the timeframe, and controlling it during the interview by means of conscious methods that can be individualised from person to person – and from visit to visit.

The main element is to review the daily routines and ask relevant and specific questions on social, mental and health aspects, including reviewing medication administered. As to the individual topics of conversation, the visitor can, of course, offer both general and individual information, guidance and advice. Thus, the aim is to cover all sides of the person's life during the interview.

It is important that the conversation veer towards positive aspects of the interviewee's everyday life. The visitor should therefore not only endeavour to uncover problems or track risks, but also function as a 'talent scout' who can support the visitee's resources. At the same time, the visitor should, however, apply a professional view to risk situations and use appropriate tools to find early signs of functional limitations that can be remedied. Experience shows that it may be critical to discover and respond to fatigue connected with daily activities.

An actual screening, i.e. early diagnosing of some diseases (e.g. dementia and osteoporosis) should not be included.

The interview should not follow a fixed, predetermined template or a fixed questionnaire. Conversely, it appears advantageous to lay down the structure of an interview and control it within a flexible framework that opens up possibilities for individual adjustment. Good literature on the art of professional interviews may prove helpful.

Overall assessment and concrete interviews

Through gentle and empathetic conversation based on professional competence, the visitor records an individual person's functional ability by evaluating the person in his or her daily settings compared to the surrounding network and environment. The citizen's desires and expectations should be included in discussions on specific needs for changes, and actual agreements and management plans may be concluded. Health-promoting and preventive advice and guidance should be touched upon but not

necessarily initiated. The ability to 'keep an ear to the ground' remains a key aspect. The visitor must professionally be able to handle the dilemma between professional knowledge that may benefit the citizen and own attitudes to, for instance, life style – and the citizen's right of self-determination without transferring a sense of guilt to the visitee or making him or her feel ill. See the section *Ethics and preventive home visits* page 26.

During the visits, visitors may advantageously note on a standardised form how life has been since the last visit, what was agreed upon and initiated and when the next visit is scheduled. To foster excellent, interdisciplinary cooperation, a copy of the form – of course with the citizen's consent – can be forwarded to any relevant partners, including the GP.

Follow-up

The primary objectives of follow-up visits are to maintain contact and trust and also to evaluate whether changes according to agreements and management plans have occurred since the last visit.

Discussions from previous visits must also be repeated to confirm desires and expectations previously voiced. Finally, the interview should discuss whether initiated support from or contact to others is functioning satisfactorily. If not, this could be an item for follow up.

What is the best possible way of organising preventive home visits?

In light of the results of the 34-municipalities project, experience from other scientific surveys and knowledge on practical experience from Danish authorities, we can with some certainty pinpoint which key subelements for setting up and realising the preventive home visit should be prioritised.

However, financial considerations must also be incorporated. 'Best possible' should be compared to both effects and costs.

Governance of Danish municipalities' division into authority and supplier units (ordering and executing units) necessitates special considerations and discussions about placing and competence. However, a detailed description of these matters is beyond the scope of this publication.

A short summary of what should in all probability be prioritised would encompass the following:

Organisation and target group

Cooperation

Preventive home visits should be embedded as a coordinated part of the overall public offer in the area of older people, so that cooperation with

both GPs and the secondary health sector is highly prioritised.

Which citizens should be visited?

Basically, preventive home visits and health-promoting activities aim to preserve or postpone functional decline. Preventive home visits with multidimensional geriatric assessment have been shown to postpone functional status decline. Home visits with a preventive purpose are also important for frail older persons but they are most often a component of the continuity of care provided by GPs and primary care.

Unsurprisingly, research can now document that the best-functioning part of the older population are those who benefit the most from preventive initiatives, including preventive home visits.

Aiding in maintaining functional ability while also responding quickly to *early signs* of functional limitations or disability seems to be the right strategy. Thus, the target group for the visits is not the very frail older people.

Age limits

Preventive home visits are targeted at people with a good functional ability in the wide sense of the word. The scheme is targeted at people aged 75 or over, but a fixed age criterion for when visits yield the optimum results is unavailable. Some data indicate that the new generation of older people has fewer functional limitations, and that frequent contact therefore would yield the best results if offered to the 'old' older people. But cultural aspects may mean that preventive home visits should be offered to some groups before they reach the age of 75.

Additionally, group activities targeted at the 'young' old, i.e. the 75-80 age group, might well prove a more efficient offer of preventive initiatives. Flexible interpretation of the age criterion would therefore be preferable, even though both international and Danish research has focused on people aged +75.

Preventive home visits as integrated or independent part of the home care service?

Measured as individual functional ability, better effects will presumably be achieved, if the preventive visitors are well-integrated and professionally rooted in the home care service units, are empowered to perform assessments and have the scope to launch concrete supportive arrangements. Thus, various types of municipality organisations will, as mentioned, offer various procedures for management of the scheme. Municipalities using rigid rule-governed procedures lose flexibility, whereas more innovative and project-governed organisations may

more quickly lose the overview necessary to make daily routines work.

By the same token, preventive home visits should not function as control visits for the purpose of assessing whether other types of municipality assistance given are correct and coordinated. Control visits are supervisory tasks that should presumably not be performed by the same professional, unless circumstances are fairly uncomplicated. However, experience from small units indicates that the same person *can* perform the task. But a preventive worker and a home-care assessor will often present conflicting requests for allocation of, e.g. home care.

We should emphasise that the beneficial effects of preventive home visits will, for instance, presuppose that home care is constantly adjusted as needed.

Preventive home visitors

Competences

International studies as well as the Danish clearly demonstrate the significance of preventive visitors' professional competence and skill. Therefore, training levels should aim to encompass wide professional knowledge of the social and health areas alike.

Motivation

In addition to social and health competences, the workers must also be motivated and committed to working with older people. Personal maturity is another competence needed to understand and perceive when and how to deliver balanced counselling and guidance.

In other words, preventive workers must be able to recognise and master existential problems that will always be an aspect contained in the visits.

Empathy

All preventive professionals in all countries state almost uniformly that establishing a good rapport is a key condition for successful visits. Preliminary analyses in the Danish project support this statement, results primarily being visible in the group where good relations were established between the citizen and the preven-

tive home visitor. This is another way of urging municipalities to ensure that the same professionals render the service and that they master the assignment by receiving relevant supplementary training comprising professional knowledge as well as communication competence. There are many indications that preventive workers' competence and ability to show empathy contribute decisively to enabling citizens to master their lives better.

In this light, preventive home visits constitute a process in which an individualised public service extended in an atmosphere of professional knowledge and sympathy with the individual person will in time translate into helping citizens to help themselves.

Interdisciplinarity

Synergistic beneficial effects due to well coordinated collaboration between GPs and home care have been clearly documented. This underlines the importance of preventive visitors networking with the other primary care professionals, including the GP, and implies that structural possibilities must exist for flexible *interdisciplinary linkage*. This is often accomplished when the preventive home workers are respected colleagues within the primary care team.

Conclusion

In a rich welfare state context, with an implemented national proactive *municipality based* in-home assessment scheme, professional skill and interdisciplinary education should be given priority, and greater attention should be paid to early triggers of functional decline. It seems justified to target the group of 'not considerably disabled', and not to begin at too early an age since the beneficial effects are most obvious for both sexes among the 'old' older people. Other preventive, gendered strategies for 'the younger old' may facilitate health promotion in old age.

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