



EUNAAPA – Work Package 5

**Expert Survey on Physical Activity Programmes and Physical Activity  
Promotion Strategies for Older People**

**National Report Norway**

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# 1. INTRODUCTION

## 1.1 *The main objective of EUNAAPA*

Norway participates in the “European Network for Action on Ageing and Physical Activity” (EUNAAPA). The main objective of the network is to improve the health, wellbeing and independence of older people throughout Europe through physical activity. The strategic objectives are:

- To establish a self-sustaining network for the promotion of evidence-based physical activity.
- To foster an intersectoral approach to the promotion of physical activity.
- To identify evidence-based, cost effective and acceptable ways to promote physical activity.
- To facilitate the contribution of European scientists to the development and implementation of evidence-based physical activity promotion policies in Europe.

Project duration is 2006-2008 and currently, 24 Institutions from 19 European countries participate in EUNAAPA. The EUNAAPA Project consists of the following 7 work packages

The objectives of **Work Package 1**, coordination of the project, are to

- maintain communication between partners and between project and European Commission/Public Health Executive Agency (PHEA)
- handle financial affairs of the project
- oversee implementation of EUNAAPA’s work plan
- search for new partners, especially from new EU member states (“Additional Cooperating Countries”)

The objectives of **Work Package 2**, dissemination of the results, are to

- disseminate project results among scientists, policy makers, providers and professionals in the fields of ageing, PA and health, and older people
- exchange with existing networks and organizations in the field

The objectives of **Work Package 3**, evaluation of the project, are to

- evaluate the quality of the EUNAAPA’s work, deliverables and milestones
- develop a mechanism for the EUNAAPA to evaluate itself after the end of the funding period

The objectives of **Work Package 4**, assessment of physical activity and physical functioning in older people, are to

- collect information on instruments for assessing physical activity and physical functioning in older people
- evaluate the existing instruments
- exchange with other networks and organisations on assessment instruments

The objectives of **Work Package 5**, identifying existing programmes for physical activity and physical activity promotion for older people, are to

- collect information on existing programmes for physical activity and physical activity promotion for older people

- evaluate these programmes and developing best practice guidelines

The objectives of **Work Package 6**, implementation and dissemination of programmes for physical activity and physical activity promotion, are to

- exchange with policy makers and professionals in the field of physical activity and ageing
- exchange with older people and their representatives
- consult policy makers/professionals on physical activity promotion, implementation and dissemination

The objectives of **Work Package 7**, securing the existence of EUNAAPA, are to

- identify funding sources for the EUNAAPA to secure its development and sustained existence
- establish mechanisms for securing the existence of the EUNAAPA
- demonstrate the impact of the EUNAAPA on public agencies, policy makers and professionals

## ***1.2 The objectives of this report***

The content of this report relates to Work Package 5, identifying existing programmes for physical activity and physical activity promotion for older people and examine in which degree they follow international guidelines. The informant gets the following definitions:

- 1. Physical activity (PA)** – Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure (e.g. running, walking, swimming, lifting or carrying a heavy weight).
- 2. PA programme** – A schedule of selected physical activities in which individuals can choose to engage (e.g. an overall programme of activities and PA opportunities for older people OR the components of such a programme, such as a programme of old time dancing classes, supervised resistance training, supervised, seated exercise classes, hill walking groups or aqua classes etc).
- 3. PA promotion strategy** – An intervention, device or plan which it is intended will increase the PA of a community (e.g. improved street lighting or an educational TV advertising campaign).
- 4. A successful PA programme** – A PA programme is ‘successful’ if a PA expert in that country considers it to be successful. This judgment may be based on some or all of a wide range of possible effects of the programme. These might include, for example, demonstrable improvements in physical fitness or quality of life, growing membership, client loyalty, etc. To be eligible for consideration a successful PA Programme must have been running for at least 6 months and if ceased, this must have occurred no longer than 2 years ago.
- 5. A successful PA promotion strategy** – A PA promotion strategy is ‘successful’ if a PA expert in that country considers it to be successful. This judgment may be based on some or all of a wide range of possible effects of the strategy. These might include, for example, demonstrable improvements in swimming pool use, in self-reported physical

activity, increasing bicycle sales etc. To be eligible for consideration a successful PA promotion strategy must have been running for at least 6 months and if ceased, this must have occurred no longer than 2 years ago.

## **2. Physical activity promotion strategies and programmes**

The contents of this report relates to the three questionnaires:

- I PHYSICAL ACTIVITY EXPERT FORM
- II PHYSICAL ACTIVITY PROMOTION STRATEGY
- III PHYSICAL ACTIVITY PROGRAMME

### ***2.1 Results from the Physical Activity expert form***

A total of six experts were involved. Their job titles were: adviser, head of department of occupational therapists and physiotherapists, PhD-student, physiotherapist, project manager, teacher in physiotherapy, and assistant professor in physiotherapy.

They were representing organisations as Bergen municipality, The Directorate for Health and Social Affairs/Department of Physical Activity, Norwegian Institute of Public Health, Norwegian Olympic and Paralympics Committee and Confederation of Sport. Oslo Sport Association, 60+, Norwegian School of Physical Education, Tromsø University College, Unit for Physiotherapy Services, Trondheim Municipality. Some of their web addresses were <http://www.hitos.no/>, [www.60+.Oslo.no/](http://www.60+.Oslo.no/) [www.osloidrettskrets.no](http://www.osloidrettskrets.no), [www.bergen.kommune.no](http://www.bergen.kommune.no), [www.fhi.no](http://www.fhi.no), [www.shdir.no](http://www.shdir.no), [www.swusnasau.no](http://www.swusnasau.no) and [www.trondheim.kommune.no](http://www.trondheim.kommune.no).

Five were health professionals and two were ‘exercise sport scientists’. Regarding the field, everyone reported to be an expert on physical activity programmes and two of these were also experts on physical activity (promotion) campaigns. Three persons were at national level and five were at city/town level. Regarding client group, six were related to community-dwelling older adults, one at institution-dwelling older adults and one at governmental level.

Concerning professional expertise, four were categorised as health care, five as health promotion, one as sport/recreation/physical activity/supervision/guidance”, four as health-related exercises and one on education. Only one answered that a basic level qualification was required to supervise/guide physical activity /exercise and referred to Norwegian School of Sport Science. Two answered no, two answered sometimes, two ‘don’t know’, and two answered not applicable regarding the question if the basic level requirement is implemented properly in their country.

In Norway six answered no and one did not know if it is required higher level qualification to supervise/guide physical activity/exercise for older people. No name of the higher level qualification level for supervising/guiding older people was given. Four answered no and two answered not applicable concerning the question about whether this higher level requirement

is implemented properly in Norway. Regarding the experts meaning about the necessity of implementing properly higher level of qualification, two answered no and did not know, and four did not found the question applicable. The question number 18 about external validation of higher level qualification is not applicable, and the same is the case with the rest of the questions (question 19-27).

## **2.2 Results from the physical activity promotion strategy survey**

Nine persons answered the questionnaire about physical activity promotion strategy. The names of the nine physical activity promotion strategies were:

1. Adapted Physical Activity
2. Exercise to prevent functional decline and falls in community-dwelling older persons
3. Friskis& Sveltis/Senior
4. The action plan on physical activity, 2005-2009 - working together for physical activity
5. Oslo Idrettskrets 60+
6. Physical activity and elderly people
7. Strength and Balance Activity Group
8. Wednesday exercise
9. [www.ingrid-kristiansen.com](http://www.ingrid-kristiansen.com)

The job titles of the informants of these nine strategies were adviser, assistant professor in physiotherapy, head of department of occupational and physiotherapists, head of the physiotherapy section in the primary health care in the municipality, physiotherapist, project manager, special physiotherapist, teacher in exercise.

Regarding education, seven were health professionals, two were educated in exercise and sport science, and one had other types of education (medical engineer).

There is no law in Norway for regulation of promotion of physical activity. Seven persons answered that the recommendation for physical activity “the Norwegian National Action Plan on Physical Activity” is [http://www.shdir.no/vp/multimedia/archive/00004/IS-0162\\_E\\_Kort\\_4546a.pdf](http://www.shdir.no/vp/multimedia/archive/00004/IS-0162_E_Kort_4546a.pdf) and a healthy diet for good health, which is a strategy plan for 2005–2009, including proposed courses of action, under the auspices of the Norwegian Directorate for Health and Social Affairs, see the web side [http://www.shdir.no/vp/multimedia/archive/00007/IS-1259\\_Engelsk\\_7033a.pdf](http://www.shdir.no/vp/multimedia/archive/00007/IS-1259_Engelsk_7033a.pdf)

Five said that the organisations which had developed the promotion strategy were from the governmental sector. Regarding non governmental level and organisation developing promotion strategy, five were recorded: one commercial, five welfare/community organisations, three research organisations and tow person used the answer category ‘other’ described as ‘exercise centres’ and idealistic organisation’. Six said that the sector which the organisation had delivered the promotion strategy, is the governmental sector (i.e one used the category on national level, two regional, and three local level related to the governmental). Regarding non governmental level and organisation delivered promotion strategy, four were recorded: one commercial, four welfare/community organisations, one research organisation, and one person used the answer category ‘other’ described as ‘idealistic organisation’.

Most frequently the settings promotion strategy were centre based or outdoors (see Table 1).

Table 1. Setting promoting strategies (n= 9)

Setting	Number of “yes”
Centre based	4
Home based	1
Outdoor	4
Group exercise	3
Independent exercise	2
Other	2*

*\*Voluntary small groups with a variety of activity*

Social institution was recorded of 44 % or the informants as the place where the promotion strategy is connected to (Table 2). Only 11% report connection of the promotion strategies to workplace.

Table 2. Setting taking part in the actual promoting strategies (n=9)

Setting	Number of “Yes”
Social institution	4
Primary Health care	3
Workplace	1
Other	2*

*\*Individual*

Regarding the theoretical model used, five used Health Belief Model, one Protection Motivation Theory, one Theory of Reasoned Action, and to Theory of Planned Behaviour, two information, and three answered Attitude, Social Influence, Self-Efficacy model and one referred to physiological principle for exercise. Concerning the length of the run of strategy, three persons reported 1-5 years, one person 6-10 years and three persons more than ten years. Seven answered that the promotion strategy run continually. Community dwelling older adults was the most frequently reported target group for the promotion strategy (Table 3).

Table 3. Target group of participant the promotion strategy (n=9)

	Number of “Yes”
General population (including older adults)	2
All older adults	2
Community dwelling older adults	4
Older adults with chronic conditions	1
Ethnic minority older adults	1
Other	3

Table 4. Level of function mobility included in the promotion strategy (n=9)

	Number of “Yes”
Frequently walks vigoursly or runs	4
General population walks outdoors with no walking aids and no assistance or supervision by another person	4
Walks outdoors with no walking aids (e.g. stick, cane or walking frame), no assistance or supervision by another person	6
Walks outdoors only with assistance or supervision by another person	1
Never walks outdoors	1

In order to reach the population, most of the professionals were physiotherapists, or other allied health care professionals (Table 5).

Table 5. Intermediaries used to reach intended population (n=9)

	Number of “Yes”
Medical practitioners	5
Nurses	4
Physiotherapists	7
Occupational therapist (OT)	3
Physiotherapy/OT Assistant	3
Other allied health care professionals	6
Exercise/dance instructors	3
Sports coaches	2
Community/social workers	4
Volunteers	4

In order to encourage to change the behaviour (eg. more physical active), ‘fear reduction’, ‘improved safety’, and ‘improved motivation’ was the most common (Table 6).

Table 6. Encouraging behaviour change in relation to physical activity (n=9)

	Number of “Yes”
Improved knowledge	4
Improved access	2
Improved safety	5
Improved time management skills	1
Improved motivation	5
Fear reduction	6
Improved skill	5
Reduction in misconceptions about aging	4

Three informants reported that the promotion strategy was designed to surmount barriers to physical activity (see Table 7).

Table 7. Barriers (n=9)

	Number of “Yes”
Perceived poor health	2
Symptoms associated with chronic conditions	2
Fear of injury	3
Acute exacerbation of chronic conditions	2
Lack of skill	3
Lack of time	2
Lack of energy/motivation	3
Environmental barriers(e.g. weather, extreme temperatures, uneven ground)	2
Misconception about ageing	3

The most frequently used information approaches was group-based health education focused on information provision and mass media campaigns. Concerning the most frequently used behavioural and social approaches, the most common was individually-adapted behaviour change. Regarding environmental and policy approach, only one were recorded in the category ‘enhanced access to physical activity’, and one in ‘outreach activities’ (see Table 8).

Table 8. Approaches the physical activity promotion strategy used (n=9)

	Number of “Yes”
Information approaches	
Community wide campaigns	1
Group-based health education focused on information provision	5
Mass media campaigns	5
Others*	1
Behavioural and social approaches	
Individually-adapted behaviour change	3
Education with TV/video/DVD	1
Family-based social support	1
Health professionals social support	2
Non-family social support	2
Environmental and policy approach	
Enhanced access to physical activity	1
Outreach activities	1

*\*From people to people*

The most effective approaches in the activity promotion strategy were mass media campaign, Individually-adapted behaviour change, education with TV/video/DVD, and social support (see Table 9).

Table 9. Approaches which are found effective in the physical activity promotion strategy (n=9)

	Number of “Yes”
Information approaches	
Community wide campaigns	1
Group-based health education focused on information provision	1
Mass media campaigns	3
Others*	2
Behavioural and social approaches	
Individually-adapted behaviour change	3
Education with TV/video/DVD	3
Family-based social support	1
Health professionals social support	3
Non-family social support	3
Other**	
Environmental and policy approach	
Enhanced access to physical activity	2
Outreach activities	1
Transportation policy	1
Infrastructure changes to promote non-motorised transit e.g. cycle paths	1

\* *Word of mouth and housing cooperative (for one particular project)*

Regarding type of message used, six answered ‘general message (e.g. exercise is good for you), four ‘general advice (e.g. if you exercise, you...), one used ‘general warning (e.g. if you don’t exercise...), three ‘specific advice’ (e.g. if you exercise 5 times a week for 30 minutes a day at moderate intensity, then...), two ‘specific warning’ (e.g if you don’t exercise enough, your risk of getting coronary heart disease increase...), and two had other messages (e.g it is fun to exercise and it is never too late to start exercising).

Table 10. Message conveyed to the target population (n=9)

	Number of “Yes”
Media (TV, radio, papers, films)	3
Post	4
Internet/e-mail	3
Intermediates, health care professionals	4
Events e.g. year of the Older Persons, Falls Awareness Day	3
Other	3*

\* *Articles in the newspapers, direct information to the participants.*

Table 10 demonstrates that different ways to convey the message to the target population were used. Moreover, printed material posted was the most frequent tool in order to maintain behaviour change (Table 11).

Table 11. Tools used to maintain behaviour change (n=9)

	Number of “Yes”
Printed material posted	4
Positive reinforcement/ feedback rewards	3
Financial incentives	3
Social support	2
Buddy groups	3
Opportunities to socialise	2
Promotion days	3
Other	1*

\* *Health at green prescription*

Regarding the total cost on national/regional governmental level only one person answered 250000€. Three persons answered the health budget was used to fund the strategy, one answered social care budget, and one leisure/sport budget, and one referred to the government, and that the participants pay themselves in addition to that they ‘had once received 6000 Euro from the leisure/sport budget’. Regarding the total cost on city/local governmental level, only four persons answered the health budget was used to fund the strategy, one answered social care budget, two leisure/sport budget, and two referred to the city/local budget and one lottery.

### **2.3 Results from the Physical Activity Programme**

Eleven experts answered the questionnaire. Of these, three were men. Their job titles were adviser in sport and health, assistant professor in physiotherapy, head of department of occupational and physiotherapy, outdoor and physical activity consultant, project manager, teacher in exercise, and physiotherapist. 93.8 % was physiotherapists. Totally 37.5 % answered that they had education in exercise sport science. Most geographical areas of Norway were represented.

Totally 10 programs were registered and the name of these were: “Senior Training NIMI”, “60+”, “Exercise for Seniors”, “Exercise to prevent functional decline and falls in community dwelling older persons”, “Group training for osteoporosis”, “In harmony”, “Group for Patients with Neurological Disorders”, “Rise from your rest chair”, “Senior training”, “Strength and balance Activity Groups”.

Most of the programmes were limited to city level and had duration from one to five years (Table 12).

Table 12. Duration of the programme related to regions

Duration of the existence of the programme	Programme Classification			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Less than 1 year	0	0	0	0
1 to five years	0	1	4	2
6-10 years	0	0	1	1
>10 years	1	0	0	0

Most of the programmes were community based senior fitness programmes limited to a city/town (Table 13).

Table 13. Feature of programme related to regions (n=10)

Programme classification	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
The overall programme include				
Master			1	
Community based senior fitness programme		1	4	2
Community chair based programme			1	1
Home based exercise programmes			1	
Exercise referral/ General Practitioner	1		1	1
Falls prevention Programmes	1	1	2	2
Cardiac rehabilitation	1			
Pulmonary rehabilitation				
Arthritis programmes				
Others				2*

*\* One program was promotion of function and prevention of fall and another program was related to neurological disorders.*

Most of the programs were limited to a city/town and were group activities, indoor and land based (see Table 14).

Table 14. Kind of programme related to regions (n=10)

Programme classification	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Group activity	1	1	5	3
Individual activity			1	
Indoor	1	1	5	3
Outdoor	1		1	
Water based			1	
Land-based	1	1	5	2

Concerning facilities used, a variety was used. For more detailed information, see table 15.

Table 15. Facilities used related to regions (n=10)

Facilities	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Sport/ physical recreation facility	1	1	2	2
Community centre	1	1	2	
Day resources centre			2	1
Participant's private dwelling			1	
Sheltered housing, assisted living facility, care home or nursing home			2	
Others*			2	1

\* Hospital, outdoor activity and the gym facilities at the college.

The age range of the participants of the different programmes was from 45 to 100 years.

Most of the programmes were limited to a city/town, and were activities such as 'walks outdoors with walking aids but no assistance or supervision by another person' (see Table 16).

Table 16. Level of functional mobility related to regions

Level of functional mobility	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Frequently walks vigorously or runs	1	1	1	2
Walks outdoors with no walking aids and no assistance or supervision by another person	1	1	2	1
Walks outdoors with walking aids but no assistance or supervision by another person	1	1	4	1
Walks outdoors only with assistance or supervision by another person		1	1	
Never walk outdoors			1	1

In addition to be limited to a city/town, most of the participants were women (Table 17).

Table 17. Proportions of participating women related to regions (n=10)

Proportion of participating women	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
0%				
25%				
50%			1	2
75%	1	1	3	
100%			1	1

The most common ratio of instructor to participant was 1:2-10 and 1:11-25 (Table 18).

Table 18. Ratio of instructor to participant related to regions (n=10)

The typical ration	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
1: 1				
1: 2-10			2	2
1: 11-25			2	1
1: 26-50	1		1	
1: 51+				
Don't know				

The number of times per week was mostly once a week and the proportion of ‘current participants attending’ were mostly 75%. The most important overall aims from the sponsoring was ‘health promotion’ and ‘disease prevention’, whereas the second important aim was ‘improved physical function’ and ‘improved self-esteem’.

The components of physical fitness varied, but the most common was strength and coordination-balance (see Table 19).

Table 19. Component(s) of physical fitness of the PA Programme aim to improve related to regions (n=10)

Component(s) of physical fitness	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Endurance	1		3	2
Strength	1	1	5	2
Coordination and balance	1	1	5	3
Flexibility and mobility	1	1	3	3
Other*	1		2	1

\*Cognitive skill, ergonomic, psychological well being, sport specific, e.g. volley ball, bandy

The modalities of physical activities varied from aquatics, group with focus on ball games, running and walking, recreational movements (e.g. dance), and adapted physical activity (e.g. fall prevention). Moreover, the aspects of fitness varied. For detailed information, see Table 20.

Table 20. The relationship between aspects of fitness in the programme related to regions (n=10)

Aspect of fitness	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Strength	1		5	2
Explosive power	1			
Maximal oxygen uptake	1			1
Balance	1	1	5	3
Joint range of motion	1		1	3
Body composition				1
Bone density	1		1	2
Other	1*		1**	1***

\*coordination/relaxation, \*\* physical and social wellbeing, \*\*\* cognitive training

Adapted exercise, with participants included in the mainstream older person’s group(s) was the most common (see Table 21).

Table 21. How to cater for the exercise need of older people with medical conditions related to regions (n=10)

How to cater for the exercise need	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
This is not possible	0	0	2	0	2
Adapted exercise , with participant in disease-related groups	0	0	0	1	1
Adapted exercise, with participants in frailty-related or disability-related groups	0	0	0	0	0
Adapted exercise, with participants included in the mainstream older person's group(s)	1	0	3	2	6
Don't know	0	0	0	0	0

The levels of qualification required for instructors are shown in Table 22.

Table 22. Level of qualification required for instructors delivering the programme related to regions (n=10)

Minimum level of qualification	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
A higher level qualification	1	0	3	3	7
A basic qualification	1	0	1	0	2
Other	0	1*	2**	0	3
Don't know	0	1	0	0	1

*\*We are still working with this strategy, \*\* Physiotherapy students learning about aging, our organisation have a special education for instructors to the senior group.*

Most of the instructors do not have to be a member of a professional register (see Table 23).

Table 23. If the instructor for the programme has to be a member of a professional register related to regions (n=10)

Member of a professional register	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
No	1	0	3	2
Yes	0	0	2	1
Don't know	0	1	0	0

Almost all of the instructors in all regions had the entry level qualifications, and some of them were ongoing in-service training for the instructors (see Table 24).

Table 24. If the programme provide ongoing in-service training for the instructions related to regions. (n=10)

Ongoing in-service training for the instructions	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	0	2	2	4
Yes	1	0	3	1	5
Don't know	0	1	0	0	1

Regarding question 52 examples of topics recently covered in in-service training for this programme's instructors were age related changes in the body, how to adjust to progression in fitness, strength training and training theories, how to give precise instruction, movement flexibility and awareness, balance and fall prevention, to give instruction to other people, training and balance testing, balance exercise: how and why, how to observe changes in participants' health e.g. changes in cognitive functioning, medical training therapy, walking or running related to obstacles.

The degree to which unpaid volunteers contribute to the program is presented in Table 25, and the way the contribute can be seen in Table 26.

Table 25. If unpaid volunteers contribute to the programmes related to regions (n=10)

Unpaid volunteers contribute	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	1	3	2	6
Yes	1	0	2	1	4
Don't know					

Table 26. The way unpaid volunteers contribute to the programmes related to regions (n=10)

The way unpaid volunteers contribute	Region			
	National	Regional	Limited to a city/town	Limited to a local neighbourhood
Not at all	1	0	0	1
Instruction	1	0	1	1
Instructor's assistant	0	0	1	0
'Buddying' a participant	0	0	1	1
Peer mentoring participants	0	0	0	0
Administration	0	0	1	1
Transport	0	0	1	0
Refreshments	0	0	1	0
Others	0	0	1	0
Don't know	0	0	2	1

Most of the programs had specific protocols to be followed in emergency (see Table 27), and most of the staff was trained (see Table 28). Most of the staff is trained annually.

Table 27. Specific protocols to be followed in emergency situations related to regions (n=10)

Specific protocols	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	0	2	0	2
Yes	1	1	3	3	8
Don't know	0	0	0	0	0

Table 28. The relationship between if the staff trained in emergency protocols related to regions (n=10)

Staff trained	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
Yes	1	1	2	3	7
No	0	0	0	0	0
Don't know	0	0	1	0	1

Half of the programs have specific protocols to be followed, and almost half of the staff is trained in emergency situations (Table 29 and 30 respectively).

Table 29. If the programme has specific protocols and/or procedures to be followed in respect of equipment use, storage or maintenance related to regions. (n=10)

Specific protocols and /or procedures	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	1	2	2	5
Yes	1	0	3	1	5

Table 30. If the staff is trained in equipment, storage and maintenance protocols related to regions. (n=10)

If the staff are trained	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	1	0	1	0	2
Yes	0	0	2	1	3

The total cost of the programmes is difficult to state, but about half of them are under ten Euro, and half of them 'don't know' (see Table 31).

Table 31. The total cost of the programme related to regions. (n=10)

Total cost of the programme	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
Up to €2					
More than €2, up to €5	0	0	2	0	2
More than €5, up to €10	1	0	0	2	3
More than €10					
Don't know	0	1	3	1	5

Concerning transport to the programs, most of them do not provide it (Table 32).

Table 32. The relationship between if transport is provided related to regions (n=10)

Transport is provide	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
Yes to everyone					
Yes , selectively( some participants, some sessions)	0	0	2	1	3
No	1	1	3	2	7

Refreshment is offered to most of the participants (see Table 33).

Table 33. If refreshment is offered related to regions. (n=10)

Refreshment	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	0	2	1	3
Yes	1	0	2	0	3
At some sessions	0	1	1	0	2
Don't know	0	0	0	0	0

For detailed information concerning advertising the programme, see Table 34

Table 34. Methods have been used to publicise, market or promote this programme related to regions (n=10)

Methods	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
Advertising in local newspapers	1	0	3	2	6
Advertising in national/ regional newspapers	1	1	2	0	4
Advertising in elder-oriented magazines	1	0	1	0	2
Advertising through elder-oriented organisations	0	0	3	0	3
Features in local newspapers	1	0	1	0	2
Features in national/regional newspapers	1	0	2	0	3
Features in elder-oriented magazines	0	0	1	0	1
Features on local radio	0	0	2	0	2
Features on national/regional radio	0	0	1	0	1
Features on local TV	0	0	1	0	1
Features on national/regional TV					
Neighbourhood leafleting	1	0	4	1	5
Sports hall leafleting	0	0	2	0	2
Health premises leafleting	0	0	3	0	3
Leafleting in	1	0	4	0	5

community centres for older people					
Talks to local groups	1	1	4	1	7
Word of mouth	1	1	5	3	10
Website	1	0	2	1	4
Open days	1	0	2	0	3
Bring a friend	1	0	3	1	5
Discounts	1	0	0	0	1
Multiple session bookings	0	0	1	0	1
Other( please specify) Recommended by doctors	0	0	2	2	4

Data indicate that most of the programmes are not seen as useful to capitalise on national or regional campaigns related to aspects of ageing and health in order to improve recruitment of new participants (see Table 35). Some of the programmes are seen as useful in order to build partnership with health care professionals (see Table 36).

Table 35. If the programme is useful to capitalise on national or regional campaigns related to aspects of ageing and health in order to improve recruitment of new participants and/or motivation of existing participants related to regions (n=10)

If useful to capitalise	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	1	0	2	1	4
Have not tried	0	1	2	1	4

Table 36. If the programme is useful to build partnership with healthcare professionals or organisations related to regions (n=10)

If useful to build partnership	Region				Total
	National	Regional	Limited to a city/town	Limited to a local neighbourhood	
No	0	0	2	1	3
Yes	1	0	1	1	3
Have not tried	0	1	1	1	3
Don't know	0	0	1	0	1

### **3. Discussion: Concordance in Norway with international guidelines**

Fiona Scott, (Geriatric Medicine Unit, College of Medicine and Veterinary Medicine, University of Edinburgh) a member of EUNAAPA, WP5 has done a systematic research of physical activity guidelines and has given us summaries of 57 articles of which 10 concern habitual physical activity and physical activity promotion. From these 10 summaries we have chosen the 3 most updated guidelines[1-3]. In addition we have chosen one article on exercise referral systems[4]. With these four articles we wanted to see in which degree the included Norwegian physical activity promotion strategies and programmes are in agreement with updated international guidelines.

#### ***3.1 Concordance of programmes with guidelines***

The 10 programmes registered in this report are only a small amount of all the programmes existing in Norway for physical activity in older adults. We do not know how representative the sample of 10 is, but they certainly give an idea of several aspects of Norwegian programmes.

The content of the included programmes is mostly in agreement with guidelines. They focus on endurance, strength, coordination and balance, and flexibility and mobility (Table 19). Coordination and balance have the highest percentage (100% of the programmes), while endurance has the lowest (60%). However, the recommendation that older adults ought to do moderate-intensity aerobic (endurance) physical activity for a minimum of 30 minutes five days a week[3] is often possible to follow without participating in a programme – as long as environment and nature areas are easily accessible .

The schedule of the programmes was mostly only once a week. This is too seldom according to guidelines[3], but the participants can participate in other programmes as well. Nevertheless, twice a week would for many programmes be appropriate[3].

The proportion of current participants attending was mostly 75%, thus the adherence was not very high. The barriers of participating and being adherent to programmes for physical activity are a great problem among older adults and should be taken seriously. Decision makers, planners and professionals/ highly skilled persons on all levels within public, private and voluntary sector ought to take this into account. For example, 7 of the programmes provide no transport, while 3 programmes provide it selectively (Table 32). Maybe an offer of transport could improve adherence.

There is another way to increase adherence. Growing evidence shows that providing choices concerning exercise program characteristics (group based versus individual activity programs and choice of exercise location) contribute to higher adherence[1]. Table 13-15 show that the programmes vary with respect to classification and facilities which is good according to guidelines[1].

Adequate qualification of the programme instructor is important as well as the safety of the participants[1, 4]. The instructors of 7 of the 10 programmes have a higher level qualification (Table 22) and the other 3 are working to improve the qualifications. Eight of 10 have specific

protocols to be followed in emergency situations. This shows that qualification of instructor and the safety of participations are taken seriously in the 10 included programmes. However, our experts say that there is no general requirement of higher level qualification to supervise/guide physical activity/exercise for older people. This is not in accordance with international guidelines[1, 4].

### **3.2 Concordance of promotion strategies with guidelines**

Seven of the 9 experts answered that the recommendation for physical activity in Norway are described in “the Norwegian National Action Plan on Physical Activity”[5]. The Action Plan on Physical Activity is a national mobilisation and strategy in order to promote improved public health through increased physical activity. It is signed in 2005 by 8 ministers.

One of the many targets is to achieve that more adults and older people choose to be moderately physically active for at least 30 minutes per day. This is in accordance with the guidelines from American College and Sports Medicine and the American Heart Association[3].

Older people and others with a reduced physical capacity are particularly dependent on environmental and nature areas that are easily accessible. In accordance with a WHO report[2] promoting physical activity requires the involvement and cooperation of all levels of government with clear roles and commitments for each level. The primary target groups for the Norwegian action plan[5] include decision makers, planners and professionals/ highly skilled persons on all levels within public, private and voluntary sectors. Obviously there are persons like these who are going to contribute to the realisation of the intentions and the measures within the plan. However, old people can also contribute. They know what is important to them. One of Oslo’s seniors said constantly that Oslo has too few benches in parks and other places where old people prefer to walk. Before he died he said that instead of giving flowers to his funeral he wanted people to club together for a bench. A beautiful bench is now placed on a pavement in Oslo[6].

The Norwegian plan[5] states that options of varied activities adjusted to the needs and physical functioning of the individual are seen to be the fundamental requirements that the municipality is obliged to follow up. Regarding older people and functionally disabled people it is in some cases relevant to develop specially adapted training programmes. Some voluntary organisations also offer various types of activities for older people. The municipalities may continue this work through institutions such as centres for older people, voluntary centres and other relevant organisations[5]. Specially adapted physical activity may postpone and reduce the need for assistance from the nursing- and care service. These intentions of the Norwegian plan are good and in accordance with the WHO report[2], but the plan lacks a requirement of clear roles and commitments for each level.

In accordance with the Norwegian plan[5] the Public Health White Paper in Norway contains a proposition concerning the introduction of a special rate for Regular General Practitioners introduced in Norway in 2003 in order to encourage the GPs to give advice regarding lifestyle as part of the treatment of patients with a high liability for cardio-vascular diseases. The rate

is applicable in cases where “green prescription” is prescribed as an alternative to medical treatment when treating patients with diagnosis high blood pressure and diabetes 2. The “green prescription” includes an assessment of diet and/or physical activity, and an individual plan for change with systematic follow up from GP. The patient has to pay for the prescribed exercise. It is also written in the Public Health White Paper that programmes for follow-up must be developed, programmes in which the social- and health care service collaborates with other agents and voluntary organisations regarding among other things measures of activity for “green prescriptions patients”. By evaluating the “green prescription programme” a basis will be created for the further development of this system. It will include procuring medical guidelines for doctors and actualising a regular follow-up of patients[5].

Many general practitioners are sceptical to the “green prescription programme” as it is now[7]. Green prescriptions has low legitimacy among Norwegian GPs. Advice on lifestyle to patients with moderate hypertension or risk of type 2 diabetes is already an integral and natural component of GP work and calls for no extra fee or bureaucratic procedures[7]. Another problem is the target group. Why are not patients who already are on drugs, but may be able to reduce or eliminate these if they change their lifestyle, included in the “green prescription programme”? [7]. So the “green prescription programme” includes only a small patient group which is not good enough according to guidelines[4].

It is a great challenge to improve and expand the “green prescription programme” to include also other patient groups. A new systematic review[8] shows that exercise-referral schemes have a small effect on increasing physical activity in sedentary people. The key challenge, if future exercise-referral is to be commissioned for larger groups of patients, is to increase uptake and improve adherence by addressing the barriers. A Danish project shows that it is possible to make a successful physical activity referral system:  
[http://www2.kk.dk/folkesundhed/cfg.nsf/Files/Fysisk%20aktivitet%20som%20behandling%20\(Rapport\).pdf/\\$file/Fysisk%20aktivitet%20som%20behandling%20\(Rapport\).pdf](http://www2.kk.dk/folkesundhed/cfg.nsf/Files/Fysisk%20aktivitet%20som%20behandling%20(Rapport).pdf/$file/Fysisk%20aktivitet%20som%20behandling%20(Rapport).pdf)

#### 4. Conclusions & recommendations

Norwegian physical activity promotion strategies and programmes follow a lot of the international guidelines; but there are still large possibilities for improvements. The work on these improvements is an ongoing process in Norway and ought to be strengthened in the following areas:

1. **Content of programmes:** should constantly follow updated international guidelines
2. **Content of strategies:** should include requirements of clear roles and commitments for each level
3. **Qualifications of physical activity instructors:** should include constantly improvements of qualifications
4. **Safety of participants:** should include constant focus on updated protocols to be followed in emergency situations

5. **Barriers to physical activity:** Promotion strategies and programmes for physical activity in older adults should be designed so that barriers to physical activity is surmounted
6. **Green prescriptions:** should include more groups of patients, increase uptake and improve adherence by addressing the barriers, have a greater focus on follow up, etc
7. **Safe and pleasant environment:** should include shovelling of snow from footpaths, spreading of sand on icy footpaths, lightening of footpaths, putting many benches with short distances in parks and other places where old people like to walk, etc.

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