



The Swedish approach on physical activity on prescription

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Various methods to promote physical activity (PA) within the health care setting are used internationally, as well as several methods that include written prescriptions of physical activity. However, the various methods include different components. What is unique about the Swedish physical activity on prescription (PAP) method is that the counselling and prescription are individualised based on the patient’s circumstances and that all licensed health care professionals with adequate expertise may prescribe PAP. Furthermore the patients participate in exercise activities outside the direction of healthcare services and a central component in PAP is to integrate physical activity into everyday life (1).

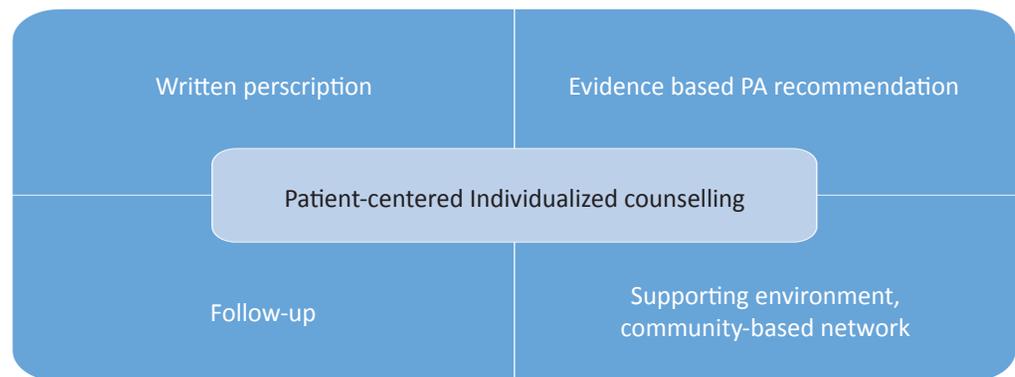
The Swedish PAP method has been shown to be an effective method in primary health care to increase PA for at least 12 months (2-5). Compared to control treatment PAP increases PA on at least moderate intensity with more than

150 minutes/week (6;7). The adherence to PAP is as good as to other long-term treatments (8;9). PAP improves quality of life and cardio-metabolic risk factors (2;5;7). PAP is the recommended method in Sweden to promote PA in patients. The National Board of Health and Welfare’s states in the guidelines for disease prevention methods, that “health care services should offer counselling as well as written prescriptions or pedometers and special follow-ups to individuals with insufficient levels of physical activity” (10;11).

Core components of Swedish PAP

The five core components of the Swedish PAP (in Swedish Fysisk aktivitet på recept, FaR) are illustrated in Figure 1 (1;6;12). The core aspect of PAP is that all work is based on the individual, meaning that the work builds on a patient-centred approach. What controls the *patient-centred counselling* are the patient’s state of health, symptoms, diagnoses, potential

Figure 1 The Swedish physical activity on prescription model is based on five cornerstones.



A patient-centred counselling, using evidence based physical activity in the particular case, results in an individualized written prescription, which should be followed-up. To promote increase and maintenance of physical activity level a community-based network with healthcare and activity organisers is important. Adopted with permission from Kallings 2008 (6).



risk factors, motivation, prior experiences, what the patient finds as fun and possible to do, and what kind of support the patient needs to increase his or her level of physical activity. It is appropriate to conclude the counselling by writing down the prescription on the prescription form. Then it can be viewed as an agreement.

The *individualized written prescription* must state type of PA (aerobic fitness training/strength training/flexibility training), dose (frequency, relative intensity, and duration), prescribed activities, contraindication and a plan for follow-up. Often the written prescription includes current physical activity level, reason for prescription, and what the patients themselves have as one's ambition. Together with the written prescription the patient receive a PA diary. All PA is handled outside the direction of healthcare services and includes every day activities and an activity that the patient does on his or her own or an organised activity.

To ensure that the prescribed PA is *evidence-based*, the scientific knowledge bank "Physical Activity in the Prevention and Treatment of Disease" (FYSS) is used (12).

The *follow up* of the PAP prescription is important in order to adjust the prescription and work more on motivation when necessary. The person prescribing PAP is responsible for ensuring that follow-up is done of both the health outcome and the level of physical activity. The prescriber or other health care personnel can have renewed contact with the patient through, for instance,

return visits or by phone, letter, e-mail or text message.

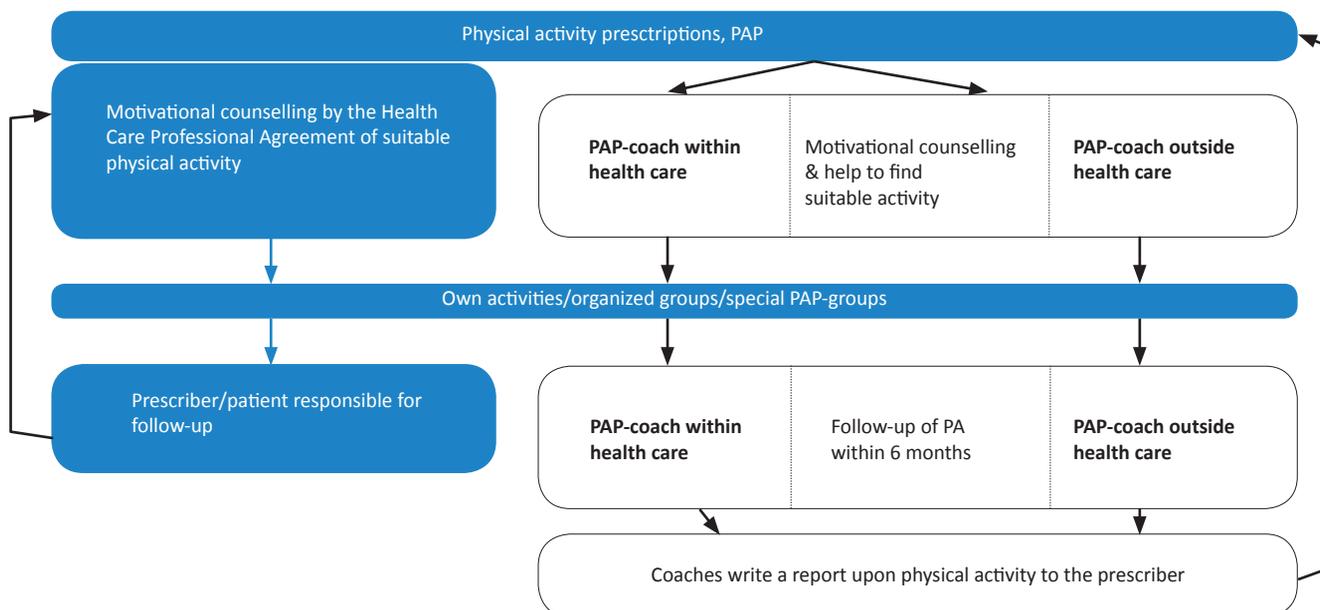
A community-based network is an important part of PAP in order to develop a *supporting environment* to help the individual to both increase and maintain his or her activity level. The healthcare system shall cooperate with various activity organisers in the local community, such as NGOs like sports associations, pensioners' associations and patient associations, or municipal facilities and private businesses.

PAP in clinical practice

Those who may prescribe PAP are licensed healthcare professionals who should have knowledge of the patient's current state of health, how physical activity can be used for prevention and treatment, patient-centred counselling, the PAP method with all five core components as well as local procedures for PAP. Most prescription is made by GP's, physiotherapists and nurses, but also by other specialist doctors, psychologists and dieticians.

According to research, development and clinical experience, clear structures for how PAP should be used are important. Most county councils and regions in Sweden have prepared guidelines, policies, flow charts and organisational diagrams for how one should work with PAP. Based on the basic model for PAP, every county council or region has developed variants adapted to the specific conditions that prevail locally (Figure 2). Many have developed various kinds of guidance or support functions (PAP-coaches) within or outside the health

Figure 2 Organization of The Swedish physical activity on prescription method.



The basic model (blue boxes) and the two main variants of the model, with PAP-coaches within or outside the health care setting.



care setting, that they can offer the patients who need more assistance (1).

In virtually all county councils and regions, health care services collaborate with activity organisers in the PAP work. This is most often regulated by agreement or contract. In many county councils and regions, there are specially trained leaders for the activities. In some places, activity organisers can help monitor the physical activity and give feedback to the prescriber (1).

PAP is most widespread in primary health care. However, PAP is also increasingly prescribed in specialist care, especially in psychiatry. There are, however, some aspects that may require special adjustment of the method compared with that in primary care, such as the care chain. In municipal health care services, there is often a lack of structures for how to work with PAP.

There has been a positive trend in the total number of PAP prescribed in Sweden since 2007, with a yearly increase of 30-67%. An estimate is that just about 50,000 PAP were prescribed in 2010. This could be described as in average about 5 PAP /1000 inhabitants or about 1 PAP /1000 health care visits. However, large variations exists between different county councils and regions with a distribution of 2-15 PAP /1000 inhabitants and 0,5-2 PAP /1000 health care visits (12).

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