Sport, Disability & Metaverse. Viljar Aasan and Tor Erik Heyerdahl Nyquist



# MORE THAN 50 YEARS WITH ADAPTED PHYSICAL ACTIVITY AS A REHABILITATION TOOL IN NORWAY









#### **Beitostølen Healthsport Center**



- Part of the National specialist Health Care System in Physical medicine and Rehabilitation
- Funded by National Health Service
- Admittance requires application from a medical doctor
- Cooperation between institutions, municipalities and local environments.
- 130 professionals, APA specialists, physiotherapists, physicians, occupational therapists - interdisciplinary team



• No cost for users/patients

#### Who use the Healthsport Center?



- 900 users per year
- All kind of disabilities
- 2 years of age and older
- Lifetime approach



#### Vision; Activity and Participation through life for everyone





#### "Focus on the potential"



### **BHC has 3 main functions**

- 1) Rehabilitation practice
- 2) Education and knowledge translation
- 3) Research and innovation







# Healthsports = Adapted Physical Activity (APA)





- Adaptation is the core expertise of the field
- Adaptation of activities, rather than of the participants
- Asstive devices, individualized adaptation and learning
- Assessment of preferences, goals and movement analysis is a prerequisite for adaptation



# **Participation – the ultimate goal**

Model coherence

- goal process;
- What do others with the same gender and age do?
- What is the goal?
- What are the personal resources?
- How can the social and physical environment and the activity be adapted?



#### A rehabilitation period is important because;

- 1. Participation in preferred activities increase motivation
  - to improve skills and activities that the children have tried before
  - improve skills and become more satisfied with their own skills
  - gain courage to try new activities
- 2. Experience enjoyment in activities
- 3. Concentrate on a few activities
- 4. Increasing the feeling of safety for the parents is the most important benefit
- 5. Intensity; 3-5 activitiy sessions a day in three weeks











## **Family course**

- Ordinary rehabilitation period and clinical intervention
- 2nd week includes parents and siblings
- Emphasis: family should be active together
  - The parent role
  - The sibling role
- 8 family courses a year





# «Core components»





- 1. Active together and mutual engagement
- 2. Local competence
- 3. Individual follow up goals
- 4. Common follow-up program
- 5. Facilitators for activities



"For children with disabilities like me, we need to know that no matter what our condition is, there is still a way that we can do what we want to do in our life. To feel like we are doing the stuff that all the other kids do'' - stakeholder, 17y



#### A "free/safe place" for learning together



#### With enough time!







#### The way of thinking for our APA practice?

Friends, fun and family combined with a "free place" for learning may appear as the most important potential for being activie, and also give **APA** a powerful contribution to autonomy and the meaning of life for everyone.





#### BHC is an independent research institution in a network model

- Academic institutions
  - Cooperation with the Norwegian School of Sport Sciences
- Health institutions
- National Competence Centers
- User organizations





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Activity and Participation through life



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# ASSISTIVE DEVICES FOR ACTIVITY (ADA)





# Laws and guidelines in Norway (ADA)

- 26 years old (AKT-26)
  - Under (free):
    - Participate in physical activity
    - Exercise, stimulation and activation to maintain or improve their ability to function and also special equipment related to play and sport activities.
    - Social participation
  - Over (10% max Nkr 5000,- (Euro 450,-))
    - Maintain or improve their ability to function
    - Participate in physical activity

#### Laws and guidelines



- Permanent disability (2 years)
- Can get as many as you needs if you need them...
  - The patients needs decides
    - What's necessary?
    - Wishes and demands...
    - Two homes?
    - +++
  - Not for competitions in para sports...

#### The system



- NAV (The Norwegian Labour and Welfare Administration)
  - 17 offices for assistive devices
  - NAV purcases and owns the devices
  - Agreement between NAV and the dealers (ADA)
    - <u>Hjelpemiddeldatabasen</u>
  - Fully financed by the Norwegian state (ex. AKT26)
  - The main responsibility lies with the therapists in the municipalities (guiding, learning etc)
    - Lack of competence or experience, and time...

#### ADA at Beitostølen HSC



- Thorough investigation of the patient's total situation, where the assistive device is seen in the context of other goals.
- It is often necessary to try out several assistive devices to find a good solution. Special adjustments may also be (or is always) required.
- Just as important as the device itself, is proper teaching and training in using the device.



#### ADA at Beitostølen HSC



- We have the patients in three or four weeks
- Week 1: Investigate needs and demands
- Week 2 (3): Try out different ADA (if needed) and learn how to use them. Get in touch with local therapists.
- Week 3 (4): Apply for the right ADA
- We apply for approximately 100 devices per year

#### Why ADA?



- The ADA is never the main goal!
- ADA is one of several measures/actions to reach the activity the client wants.





#### **Development and innovation**









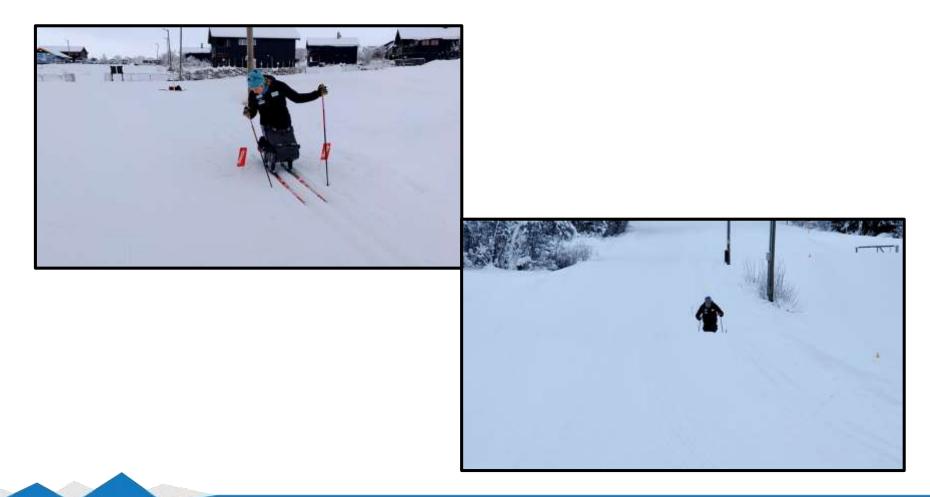
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Optimize for performance – Optimize to master



















#### Knowledge shared = Knowledge<sup>2</sup>



#### Start using when you're able to





#### Developing





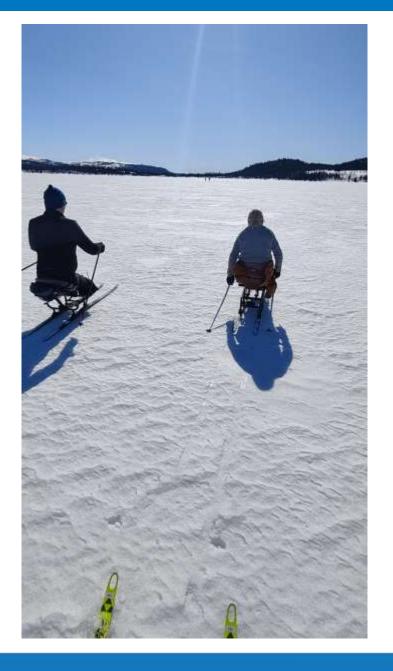








# Participation is the main goal ③





# Thank's for having us 😳



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