*Feasibility test of an APP care model in an emergency setting in a Danish University Hospital* 

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# What's the problem

- Thousands of patients with minor injuries at EDs
- Long waiting time for ED care
- Suboptimal management in present care models





# Why is it important?

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Better use of resources



Transformation of the health care system high priority



Supported by research

### Feasibility study at AUH

Study aim: To develop and feasibility test the role as "behandler fysioterapeut" (APP) in the ED at Aarhus University Hospital



### Level of training for our study

- Two physiotherapists with +10 years of experience in the ED
- Trained by following ED physicians and receiving feedback during training period



### Project preparation





Designing content and framework of role as APP / behandler fysioterapeut

Handling IT-issues, legal issues on authorisation and patient safety, coordination of work hours





Skills training for APPs

Planning of study design and methodology

## Patients included

- Adult patients
- Minor injuries of the foot and ancle
- Triaged "blue" at the ED
- Consent to participate





Patients included at ED October – December 2024



Baseline questionnaire (day 1)



1st follow-up questionnaire (day 7)

Phone interviews with patients (day 14 - 21)



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2nd follow-up questionnaire (day 30)



3rd follow-up questionnaire (day 90)



Phone interviews with patients (day 90 - ongoing)



Focus groups with staff (Pending)



# Study population (N = 39)

| Age, mean (SD)   | 37.9 (16.9) |  |  |
|--|-------------|--|--|
| Sex at birth, female, n (%)                              | 21 (54.0)   |  |  |
| Occupation, n (%)  |             |  |  |
| Student  | 10 (25.6)   |  |  |
| Employed   | 11 (28.2)   |  |  |
| Other*   | 8 (20.5)    |  |  |
| Missing  | 10 (25.6)   |  |  |
| Body Mass Index, mean (SD)                               | 23.2 (3.5)  |  |  |
| Missing  | 10 (25.6)   |  |  |
| Diagnosis, n (%)   |             |  |  |
| Achilles tendon rupture                                  | 1 (2.3)     |  |  |
| Minor fractures of metatarsals                           | 5 (11.7)    |  |  |
| Distortion of ankle and foot                             | 26 (60.6)   |  |  |
| Fracture in ankle and foot                               | 11 (25.6)   |  |  |
| * Other: retirees, disability pensioners, and unemployed |             |  |  |

#### Patients' satisfaction with being managed by the APP

I felt there was proper time to talk with me as a patient, that it wasn't just, so to speak, an examination of your foot. I thought that worked really well. And she gave me good instructions on what was wrong with my foot, and what I could expect, both from the process and what I could and couldn't do, and so on. So that was really good.

I think one of the best parts of the experience was that there was <u>one</u> person who took care of me. That you weren't just sent around the department, and it wasn't just these narrow professional specialties where one person looks at the X-ray, one person looks at... you know.... I think that's also one of the strengths of it.

# Patients' perception of the idea of task-shifting from physicians to physics

I think it's pretty clever to delegate the tasks, so yes, I can only see that as a positive thing. Why not just have the physiotherapists, and they might even know more about what needs to be done. At least for these types of injuries. I actually trust that more than if it's a physician who has all sorts of other things going on as well. So, I actually thought that was really nice

And I have to admit, I've gained respect for them [physios], for their skills, for their professionalism, because they know so many things. And I can definitely see, that the more you can free up the physician and take care of what you're good at, and let others do what they're good at...because there's really no reason to have a physician putting on a bandage, he's way too expensive for that!

### Treatment satisfaction (N = 29)





### Study results – patient reported outcomes

|   | 7 days<br>mean (SD) | 30 days<br>mean (SD) | Mean difference<br>(95% CI) |
|---|---------------------|----------------------|-----------------------------|
| Brief pain inventory<br>(0 – 7 /best - worst)       | 4.0 ± 2.2           | 2.6 ± 2.8            | -1.4 (-0.4 to -2.4)         |
| PROMIS – physical function<br>(0-40 / worst – best) | 23.5 ±10.9          | 31.5 ±8.7            | 7.2 (3.7 to 10.7)           |
| EQ-5D VAS (QoL)<br>(0 – 100 / worst – best)         | 59.7 ± 21.5         | 75.3 ± 19,5          | 28.2 (6.1 to 17.1)          |

# Lessons learned – APP role

- Trust your competencies
- Identity of "being in charge" grows over time
- Managing complex situations with no clear diagnosis





# Lessons learned – study design

- Young adults = low response rates
- Local implementation plans required
- Interprofessional collaboration crucial

### Next steps

• Last results of feasibility study are pending:

National APP education in preparation

• Full scale trial in preparation – more hospitals are welcome ③

### Thanks for listening

