

HVILKE KONTEKSTUELLE BARRIERER OG FACILITATORER PÅVIRKER TRÆNINGSBASERET BEHANDLING TIL PATIENTER MED SUBACROMIELT SMERTESYNDROM?



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OPTIMERING AF RAMMER FOR TRÆNINGSBASERET BEHANDLING TIL PERSONER MED SUBACROMIELT SMERTESYNDROM

DELEXI

OPTIMIZED FRAMEWORK FOR DELIVERY OF
EXERCISE-INTERVENTIONS IN PRIMARY AND
SECONDARY CARE FOR SUBACROMIAL PAIN
SYNDROME – A MIXED METHODS STUDY

Projektgruppe:

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Medforfattere:

Nanna Raunsø, Anna-Birgitte Møller Stamp, Kristian Damgaard Lyng,
Claes Johan Peter Weise Schiermer Mørkeberg



Projektet er støttet af Danske Fysioterapeuter og Fysioterapiraksisfonden

Klinisk relevans

Arbejdsliv



- En stor del af de personer der diagnosticeres med SAPS er erhvervs- eller sportsaktive i risiko for langvarig sygemelding eller påvirket arbejdsevne eller deltagelse i sport.
- *Rammerne* for behandlingen kan medvirke til den lave gennemførelsesgrad af anbefalet træning og deraf ringe behandlingsresultater.
- *Rammer* defineres her som økonomi, kommunikationsveje, strukturelle indretninger f.eks. henvisningsprocedurer og adgange til information.

Data collection - 3 themes derived from literature



1) Delivery of recommended services

which services are currently delivered or confirmed received by patients regarding length of pathways, type of interventions, whether the involved persons are aware of latest clinical recommendations and possible conflicts or barriers in the delivery of recommended interventions.



2) Adherence to clinical recommendations

the nature of barriers and facilitators for patients and HCPs to adhere to the recommendations in means of either for patients to be consistent with the services and treatment proposed, or for HCPs to adhere to the latest guidelines of recommended interventions in their clinical activities.



3) Frames of the clinical pathways

the structural or organizational (*contextual*) barriers surrounding the clinical pathways and persons engaged in the pathways in means of resources needed (time, economy, equipment), ways to communicate, formal regulations surrounding pathways and possible social structures present in this field.

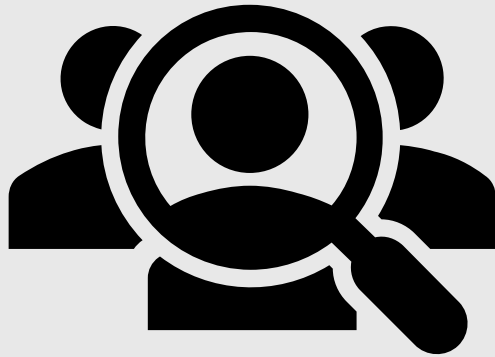
Hvad ville vi gerne opnå?

En optimering af rammerne for levering og efterlevelse af træningsbaseret behandling

Formålet med projektet var derfor at:

- 1) undersøge og kortlægge kontekstuelle barrierer og facilitatorer relateret til levering og modtagelse af kendte, evidensbaserede behandlingsydelser (Studie 1) og
- 2) på denne baggrund benytte co-design til at udvikle optimerede rammer for behandlingen af SAPS i både privat-, kommunalt- og regionalt regi (Studie 2).

Målgruppe

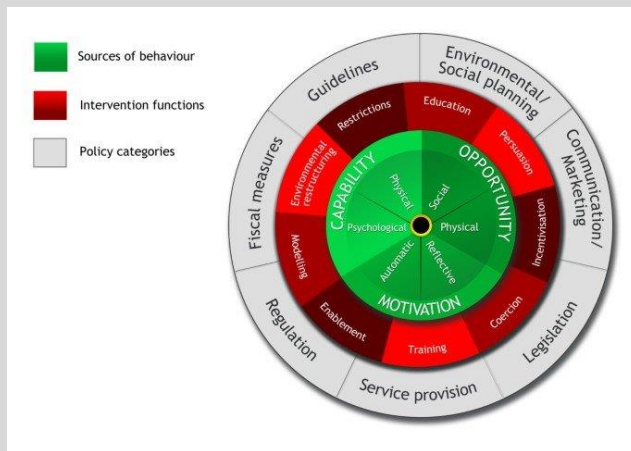


Projektet retter sig mod parter, der er involveret i den ikke-kirurgiske behandling af patienter diagnosticeret med SAPS.

Determinanter relateret til levering og efterlevelse af behandlingen undersøges derfor ud fra tre perspektiver:

- patienter i træningsbaseret behandling, som modtager trænings interventioner hos privatpraktiserende fysioterapeut eller kommunal genoptræningsenhed
- sundhedsprofessionelle som leverer disse ydelser i forløbene og
- privatpraktiserende og speciallæger, der henviser til disse forløb.

Design i en adfærdsteoretisk ramme



Michie, S. et al. 2014.

The Behavior Change Wheel

– A guide to designing Interventions.

Exploration of barriers

Study 1

Stage 1: Understand the behaviour

1. Define the problem in behavioural terms
2. Select target behaviour
3. Specify the target behaviour
4. Identify what needs to change

Which actions are needed?

Study 2

Stage 2: Identify intervention options

- Identify:
5. Intervention functions
 6. Policy categories

Stage 3: Identify content and implementation options

- Identify:
7. Behaviour change techniques
 8. Mode of delivery

Studie 1 og 2

Projektperiode fra 2020 til 2024,
2 studier gennemført,
et publiceret og det andet på vej til indsendelse.

Research Article

Unravelling interacting barriers and facilitators to adherence and delivery of exercise-based care in the treatment of Subacromial Pain Syndrome – an exploratory qualitative study

Lise Kronborg Poulsen , Jeanette Wassar Kirk, Nanna Raunsø, Anna-Birgitte Møller Stamp, Kristian Damgaard Lyng & Mikkel Bek Clausen

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DelExi –

Development of an optimized framework for Delivery of Exercise-based care for persons with subacromial pain syndrome - A pragmatic qualitative study

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Study I Design and participants

Semi-structured individual- and group-interviews

21 hours of interview data

Physiotherapists

(n=25)

- 4 focus group interviews
- Private- (n=8) and municipal practice (n=17)
- 11 municipals
- 3 physical attendance meetings
- 1 virtual meeting.

Patients/citizens

(n=10)

- 10 individual interviews
- 6 municipals
- Telephone- or online-interview.

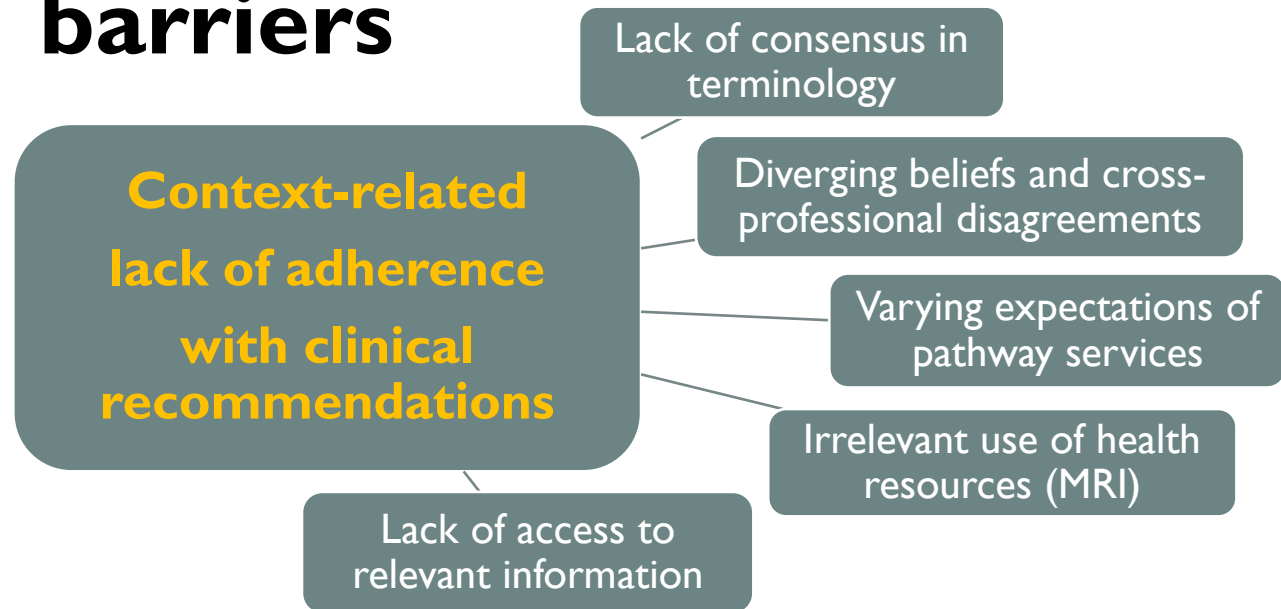
Doctors

(n=12)

- 12 individual interviews
- General- (n=6) and specialist practice (n=6)
- 9 municipals
- Telephone- or online-interview.

The study included participants from 22 out of 98 municipalities, both rural and urban, in all 5 national regions in Denmark.

30 context-related barriers



DISABILITY AND REHABILITATION
<https://doi.org/10.1080/09638288.2024.2388867>



OPEN ACCESS Check for updates

RESEARCH ARTICLE

Unravelling interacting barriers and facilitators to adherence and delivery of exercise-based care in the treatment of Subacromial Pain Syndrome – an exploratory qualitative study

Lise Kronborg Poulsen^{a*}, Jeanette Wassar Kirk^{b,c*}, Nanna Raunsø^a, Anna-Birgitte Møller Stamp^a, Kristian Damgaard Lyng^{d,e} and Mikkel Bek Clausen^a



UNIVERSITY
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COPENHAGEN

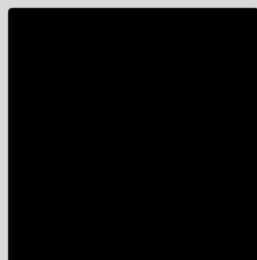
Hvad ved vi fra Studie I?



Lack of access to relevant information

Do we in Denmark have a national health platform with exercise videos for patients with SAPS?

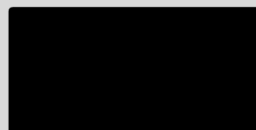
40.5%



A. No

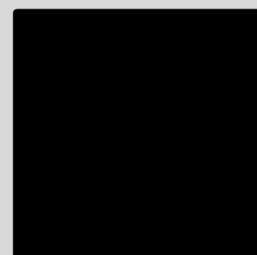
Open

20.0%



B. Yes

39.5%



C. I don't know

205 Votes

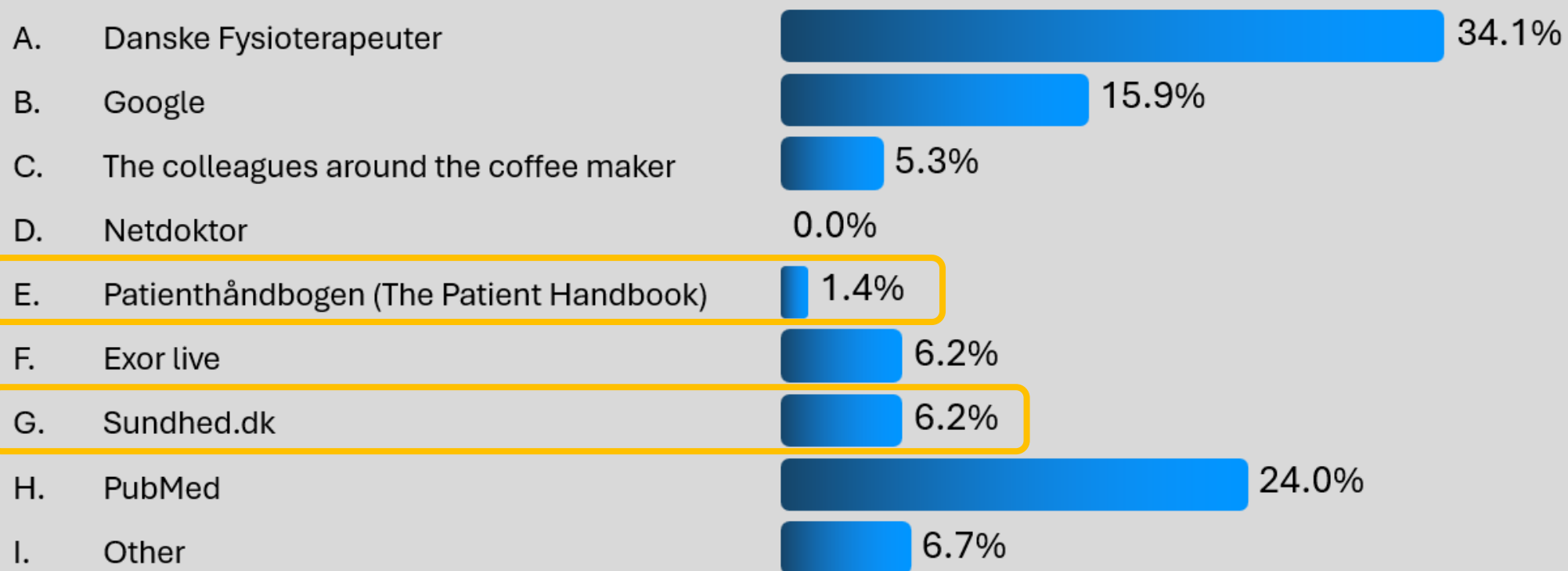
DATAINDSAMLING
TIL SKULDER
SYMPOSIUM PÅ
KØBENHAVNS
PROFESSIONS
HØJSKOLE
SEPTEMBER 2024

DELTAGERE VAR 205
KLINIKERE,
FORSKERE,
UNDERVISERE OG
FYS STUDERENDE

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XP

Which platform would be my first choice to find latest recommended exercises for patients with SAPS?



N = 208

Tag gerne et billede og besøg links i pausen

Skuldersmerter:

<https://www.sundhed.dk/borger/patienthaandbogen/knogler-muskler-og-led/symptomer/skuldersmerter/>

Skulder- senebetændelse:

<https://www.sundhed.dk/borger/patienthaandbogen/knogler-muskler-og-led/sygdomme/skulder-og-overarm/skulder-senebetaendelse/>

Skulderøvelser - introduktions film:

<https://www.sundhed.dk/borger/patienthaandbogen/knogler-muskler-og-led/oefvelsesfilm/skulderoefvelser/skulderoefvelser-introduktionsfilm/>



Contextual barriers in the frames of the clinical pathways

"Indeed, there is a challenge in that patients have to seek private healthcare, which requires them to pay out of pocket. Those who are at a higher risk of developing chronic pain may not have as many resources, time, or financial means. As a result, they may experience prolonged pain..//." (Physiotherapist, 1)

○ **Capability**

- *"Shoulders can be complex, and I believe that addressing shoulder issues adequately may require more than just a 15-minute consultation." (GP, 35)*

○ **Opportunity**

- *"The classic thing is that many... no, that's not true... but there are some who expect to receive an MRI scan of the shoulder. I think it's actually the primary issue. That, and then if they haven't been doing anything (exercise) yet, that they then expect you to offer an initial injection. These may well be expectations that do not match." (GP, 33)*

○ **Motivation**

- *"If it (PT exercise) doesn't fit into your work schedule and you face constant criticism or reprimand from your boss whenever you ask for time off, it's understandable that you might quickly lose motivation. When faced with such obstacles, it can feel like your efforts don't matter anymore. Having a boss who is unsupportive or creates a negative work environment can significantly impact your desire to even try." (Patient, 5)*

“How does the optimal pathway for this group of patients look?”

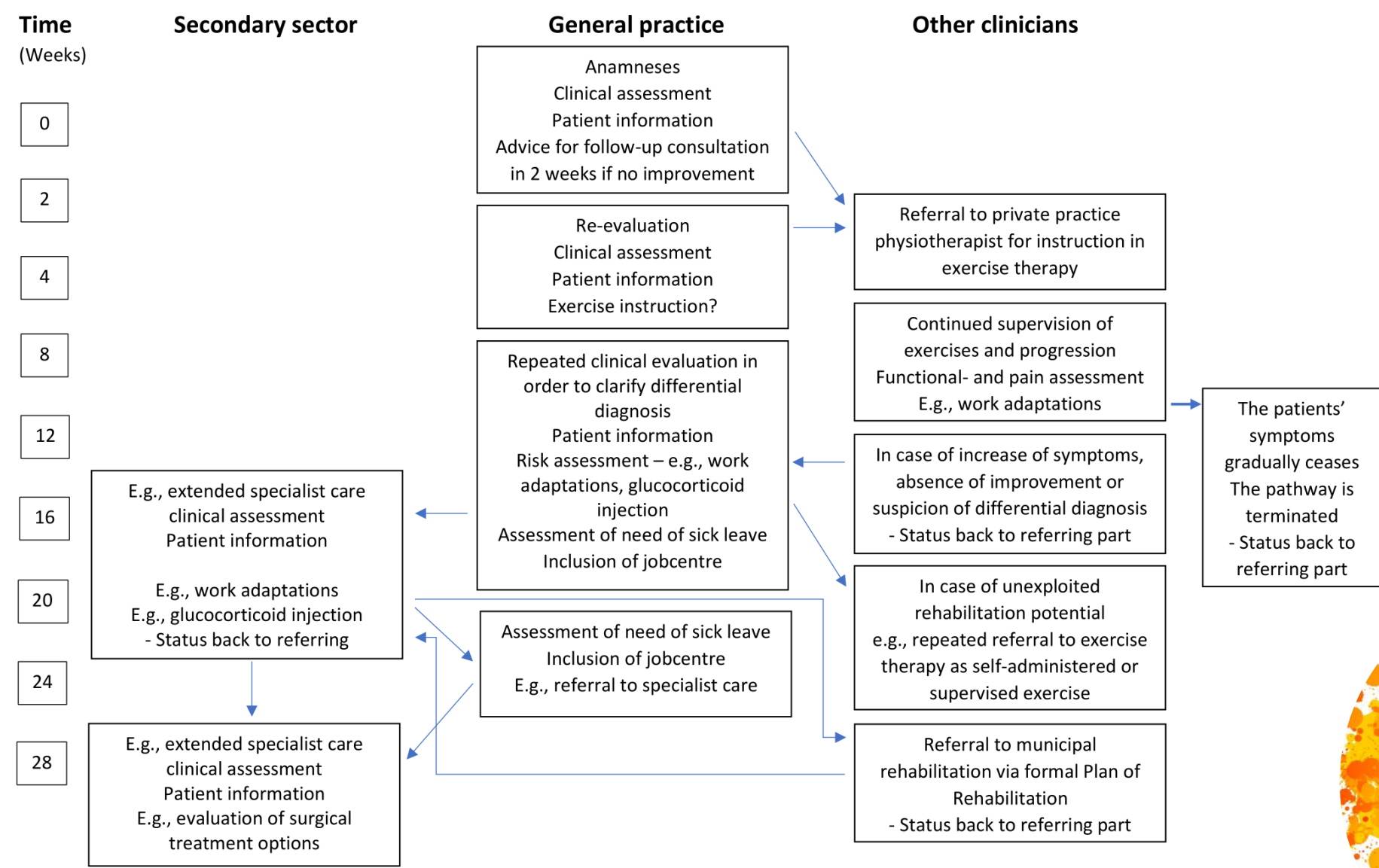
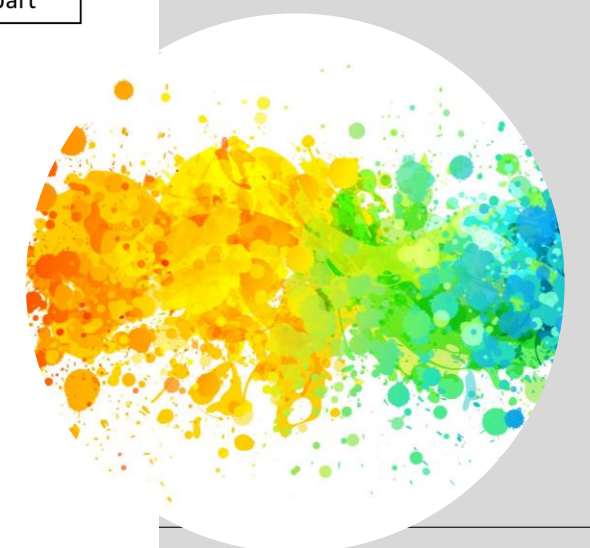


Figure 1. Flowchart for proposed optimal pathway for patients presenting symptoms of Subacromial Pain Syndrome





Hvad skal vi gøre **mindre** af og **mere** af?



Main challenges to delivery of and adherence to recommended care:

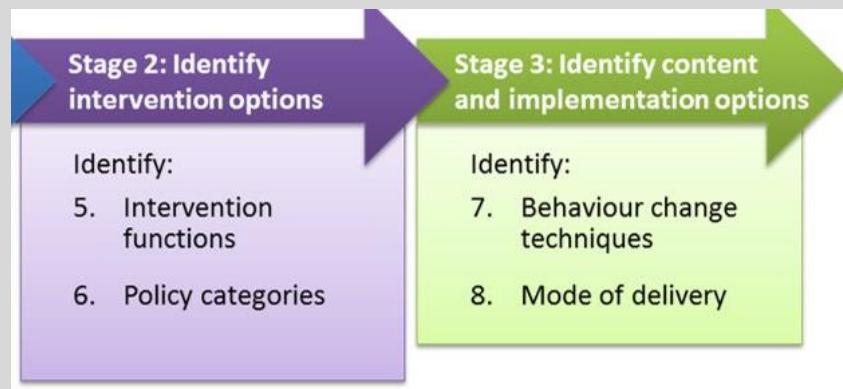
- Inconsistencies in terminology and care
- Diverging beliefs and cross-professional disagreements
- Varying expectations of pathway services



Facilitators for adherence to recommendations:

- Easy access to key information, examination and treatment suggestions
- A person-centered approach
- Alignment in patient information between HCPs

Study 2 Design and Participants

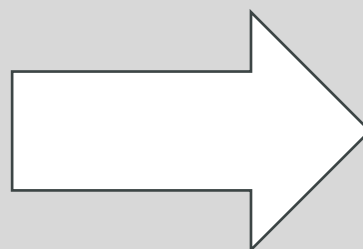


Workshop 1

– 4hour physical meeting at
University College Copenhagen

Prioritizing challenges, finding solutions,
reflection on implementation

Observatory field study



Workshop 2

– 2 hour online Teams meeting
Qualifying suggested interventions

Supplementary questions regarding
available information

Critical evaluation using the APEASE
evaluation method (Michie et al, 2014 & 2016)



Participants – Who, why and how?



Involvement of clinicians acting in the examined clinical pathways

To promote relevance and specificity of results



Previous participants volunteering from Study I – interviews with patients, Physiotherapists, Orthopedic specialists and Medical doctors (GP's)

To promote continuity and transfer of knowledge

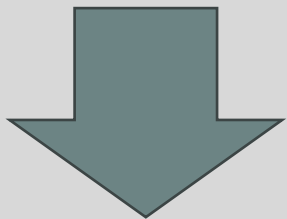


Compensation for time invested on participation



Facilitators from the research group

Workshop I



Workshop 2



pdf - Adobe Acrobat Reader (32-bit)

Vindue Hjælp

Delexi BWC resulta... x

3 / 4 69.8%

Grube 3. Target behavior 3 - Changing patient expectations about treatment courses to align with recommendations (5-7 handlinger) - Katrine

Instruktion: Gren boks udfyldes først i APEASE rubrik med gruppens bud på en handling, der kan medføre den beskrevne adfærdssændring. Hvem skal gøre hvad, hvor og hvornår, for at ændringen opnås? Grå boks bearbejdes gennem arbejds spørgsmål. APEASE vurdering gennemgås for alle handlinger. Start med vurdering af Effectiveness.

COM-B	Subcomponent	Specified behaviour What needs to change?	Intervention Function Handling
Capability	Psychological	Bygt professionel omgængelse af status og formidling Forsker ved træning frem for operation etc. af sprøjtebehandling, der er ikke endeligt endeløst behandlet. Hvilke af de mest relevante informationer ligger i (for)gængelige kilder af de studier, som vi baserer udførelsen på.	Educational, Environmental restructuring & Enablement: 1) Formidling af video præsentation i form af præsentation for studenter, at "Det gør godt, når du går ud på her" og med sundhedsprofessionelle, der fortæller hvordan det kan forenes at gå tilbage til arbejde, informationen skal komme op som Google søgning etc. 2) og andre tilgængelige kilder som F.eks. Sundhed.dk eller i samarbejde med...
	Motivation	Automatic	Skejsen for gyldigheden af anbefalinger som barrierer for levering og efterlevelse af kliniske anbefalinger fra sundhedsprofessionelle.
Opportunity	Physical	Palmeri Google og opvarer rigtig meget information, og skal være bedre til de mest relevante informationer.	Environmental restructuring & Enablement: 2) Teamfaglig arbejdsgruppe skal udføre revidering og opdatering af revidering og indikationer for (og mod) kirurgisk behandling.
	Social	I mødet med patienten, skal vi som praktiserende læger ændre adfærd til at understøtte kliniske anbefalinger og fremtidsvisningen positivt.	Environmental restructuring, Restriction & Enablement: 4) Sundhedsprofessionelle skal formidle til patienterne gennem de relevante medier (videoer eller anden medier) ikke med "blot materialer".
		Indikationen (for og imod) er klar og medfører, at der fortløbet overføres til samarbejde og samarbejde af tilsvarende engagement til speciallægen.	77 Små 12 kombineret af handlinger Environmental restructuring & Enablement: 3) Vi skal gennemføre denne gruppe på kirurgisk behandling. Teamfaglig revidering og opdatering af revidering og indikationer for (og mod) kirurgisk behandling.



Workshop I outcome



The four prioritized target behaviors were:

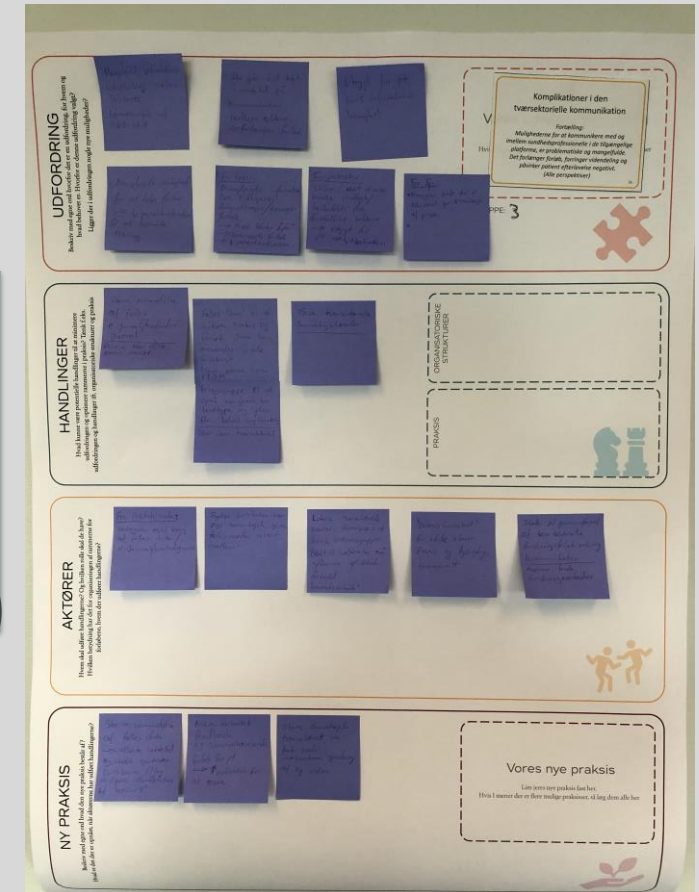
1) Improved patient motivation for exercise

2) Changing patient

3) Changing patient expectations about courses to

Upubliceret data.
Bliver tilgængelig ved publicering.

cross-sectoral communication



Dataflow studie 1 til studie 2

Workshop 1 content:
30 barriers from Study 1 prioritized by expert panel

Outcome Workshop 1:
4 primary target behaviors (covering 22 barriers)
25 specified behaviors paired with 24 actions

Workshop 2 content:

- Qualification of Specified behaviors
- Supplementary questions on available information material
- Critical APEASE evaluation of suggested interventions

Hvad ved vi fra Studie 2?



Workshop 2 content:

- Qualification of Specified behaviors
- Supplementary questions on available information material
- Critical APEASE evaluation of suggested interventions

Outcome Workshop 2:

8 specified behaviors paired with actions to change behavior

Specified behavior outcome

- 1) Reach cross-professional consensus on terminology and assessment
- 2) Cross-professional terminology
- 3) Update of public health professional
- 4) Cross-professional information
- 5) Cross-professional knowledge sharing
- 6) Enhanced opportunities for knowledge sharing
- 7) Continuous knowledge sharing
- 8) Increased opportunities for knowledge sharing in various ways

Upubliceret data.
Bliver tilgængelig ved publicering.

Result example

- Which behaviors to change how, by whom and why?



Specified behavior	Intervention function and Behaviour Change Technique (BCT)	Actions – (behavior described in BCT terms)	Rationale
<p>4) Cross-professional application of available information</p>	<p>EDUCATION - increasing knowledge or understanding</p>	<p>1) <i>Health professionals increasingly apply available knowledge with clinical recommendations</i> increase patient knowledge and opportunity and recommendations</p>	<p>of uniform structural patient information creates doubt among</p>
	<p>PERSUASION – using communication to induce positive (or negative) feelings or stimulate action</p>	<p>2) <i>Health professionals central and accessible with available guidelines and exercise videos</i> to imitate by fellow health professionals increase health professional recommended interventions</p>	<p>compliance of information will efficiency of pathways and decrease the individual and economic costs.</p>
	<p>MODELING – Providing an example for people to aspire to or imitate</p>		

Upliceret data.
Bliver tilgængelig ved publicering.

Hvad kan vi med denne viden?

Arbejdsliv



Bidrage til professionsudvikling med resultaterne som:

- Informerer klinisk praksis om de primære udfordringer i rammerne for kliniske forløb
- Beskriver det optimale, tværsektorielle forløb
- Vejleder klinisk praksis til målrettet og specifik adfærdsændring til at minimere udfordringerne
- Beskriver konkrete handlinger til optimering for klinikerne, organisationen og på politisk niveau
- Beskriver metoder til optimering af kompleks praksis som er fuldt overførbare til andre specialer

Acknowledgements

KØBENHAVNS
PROFESSIONS
HØJSKOLE

XP



This work was supported by grants from **Danske Fysioterapeuter** and **Fysioterapipraksisfonden**.

Study 1, for extended collaboration in identification and recruitment of PTs for the studies:

- **Jan Arnholtz Overgaard**, BSc. (PT), MSc. (PT), PhD candidate, Department of Rehabilitation, Lolland Municipality, Musculoskeletal Function and Physiotherapy (FOF), University of Southern Denmark (SDU), Research & Implementation unit PROgrez - NSR hospitals, Region Zealand.
- **Christine Bodilsen**, PhD, MH Sc, Pt, Head of the Rehabilitation unit, Roskilde Municipality, Denmark, and **Jonas Samsø Larsen**, PT, and **Thomas Linding Jakobsen**, PhD, Research and Development Therapist, Centre of Rehabilitation, City of Copenhagen.
- Prof. **Kristian Thorborg**, Centre for Injury Prevention and Protection of Athlete Health, Department of Clinical Medicine, University of Copenhagen, Copenhagen, Denmark, **Birgitte Hougs Kjaer**, Postdoc, Copenhagen University Hospital Bispebjerg and Frederiksberg, Department of Physical and Occupational Therapy, Institute of Sports Medicine Copenhagen (ISMC), Copenhagen, Denmark and **Jens Christian Pöerneki**, Senior consultant, Department of Orthopaedic surgery, Sygehus Lillebælt, Vejle, Denmark.

Special thanks go to all **participating PTs** for invaluable help with identification and recruitment of all participants for study 1a and to the **participants in all interviews** making their time, experiences, and expertise available for this research.

For invaluable contribution to interview transcription:

- **Tina Svane Hansen**, **Sebastian Huniche Larsen**, **Asta Fink-Jensen** and **Nanna Flenskov**, students in Physiotherapy or Occupational therapy bachelor's degree program at University College Copenhagen.

Study 2:

A special acknowledgement goes to the **12 expert panel participants** in this study and their organizations for lending their time and expertise to the panel and the research group.

Workshop I outcome



The four prioritized target behaviors were:

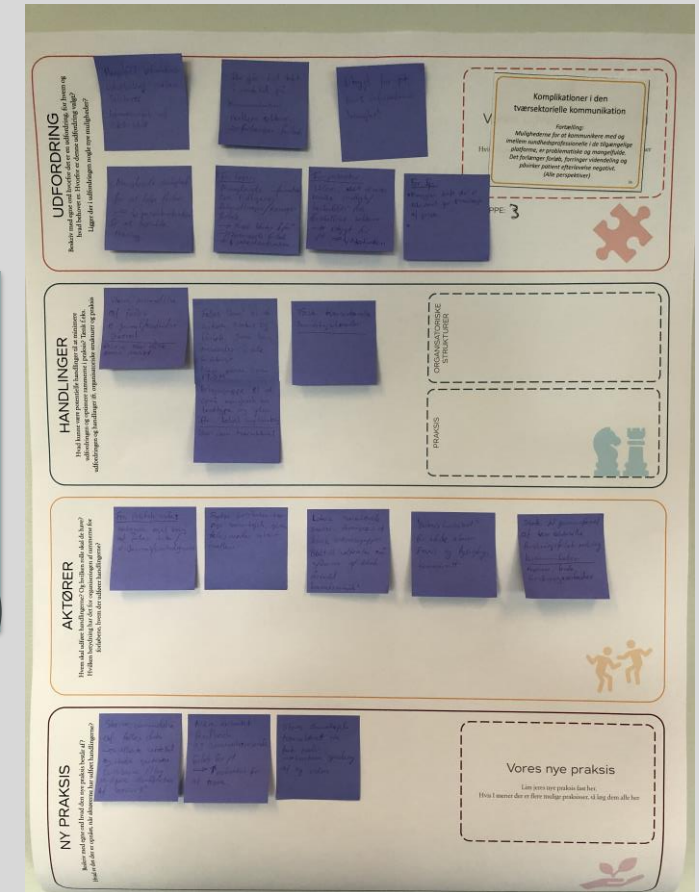
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cross-sectoral communication



Ongoing PhD

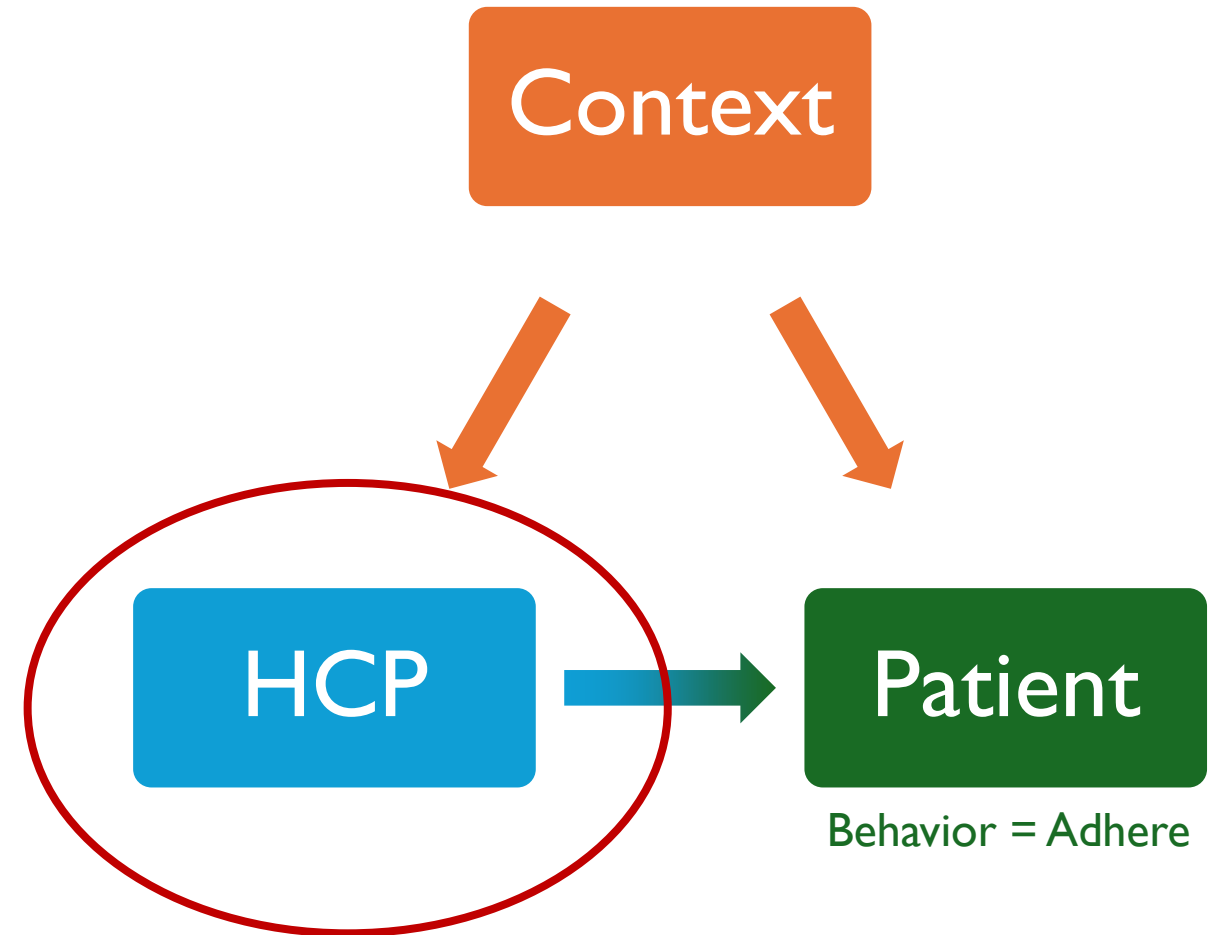
Optimizing exercise adherence and outcomes for patients with shoulder pain syndrome by merging behavior change and rehabilitation science



PhD-fellow Katrine Thingholm Erhardsen

Supervisors: Mikkel Bek Clausen, Alison Keogh, Colin Greaves, Michael Skovdal Rathleff

Funded by Fysioterapipraksisfonden



SPØRGSMÅL

