

# Hjerterehabilitering

## En livslang aktivitet med barrierer undervejs

*Hjerteforeningens Sundhedskonference 2023*

*Lars Hermann Tang*

*Lektor og fysioterapeut, Ph.d.*

*Forsknings- og implementeringsenheden PROgrez & SDU*



# Træning virker!

## hvis man gør det!



**Cochrane  
Library**

Cochrane Database of Systematic Reviews

**Exercise-based cardiac rehabilitation for coronary heart disease (Review)**

Anderson L, Thompson DR, Oldridge N, Zwisler AD, Rees K, Martin N, Taylor RS



**Cochrane  
Library**

Cochrane Database of Systematic Reviews

**Exercise-based cardiac rehabilitation for adults with heart failure (Review)**

Long L, Mordi IR, Bridges C, Sagar VA, Davies EJ, Coats AJS, Dalal H, Rees K, Singh SJ, Taylor RS

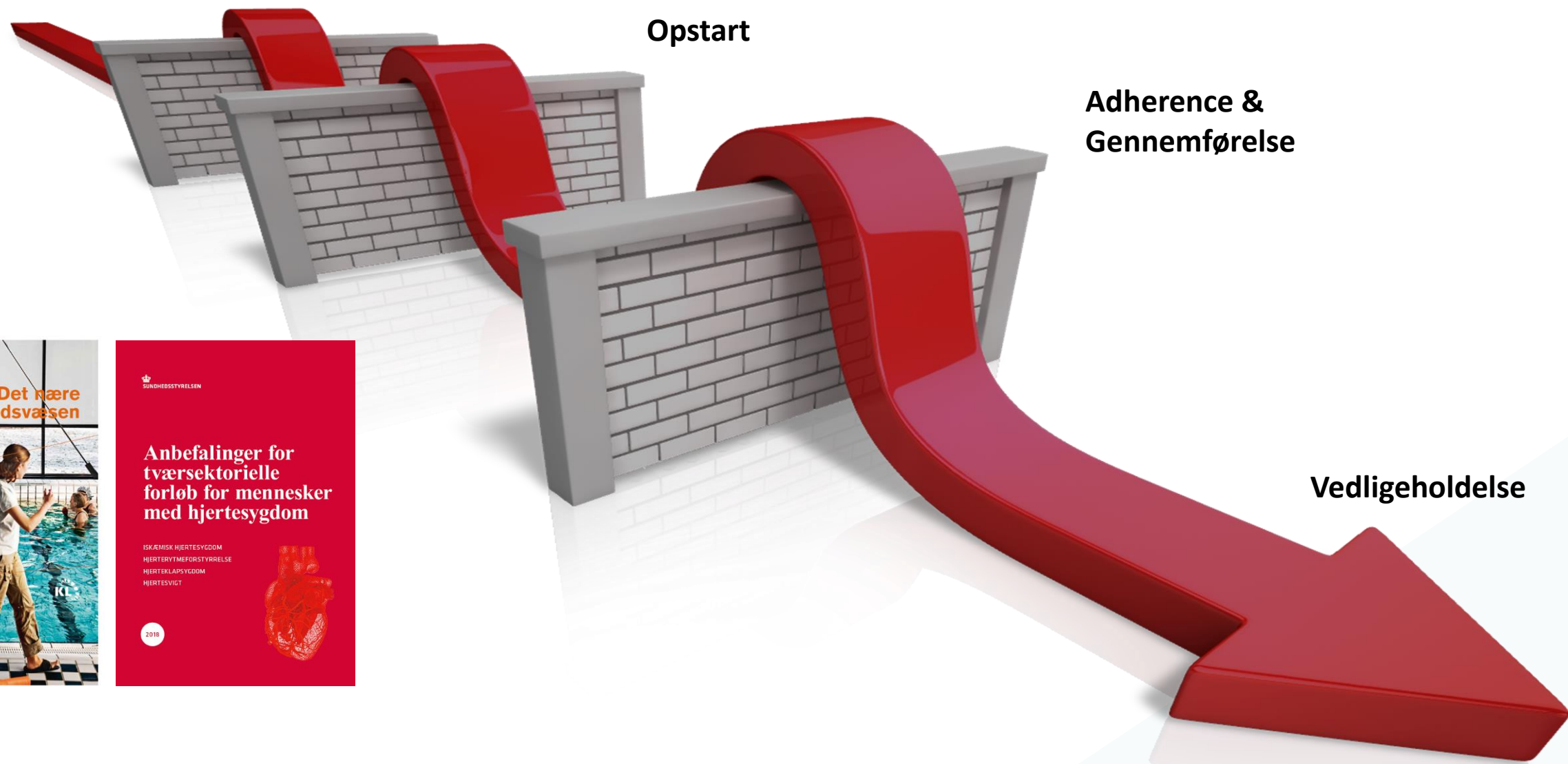
**Diagnose**

**Henvisning**

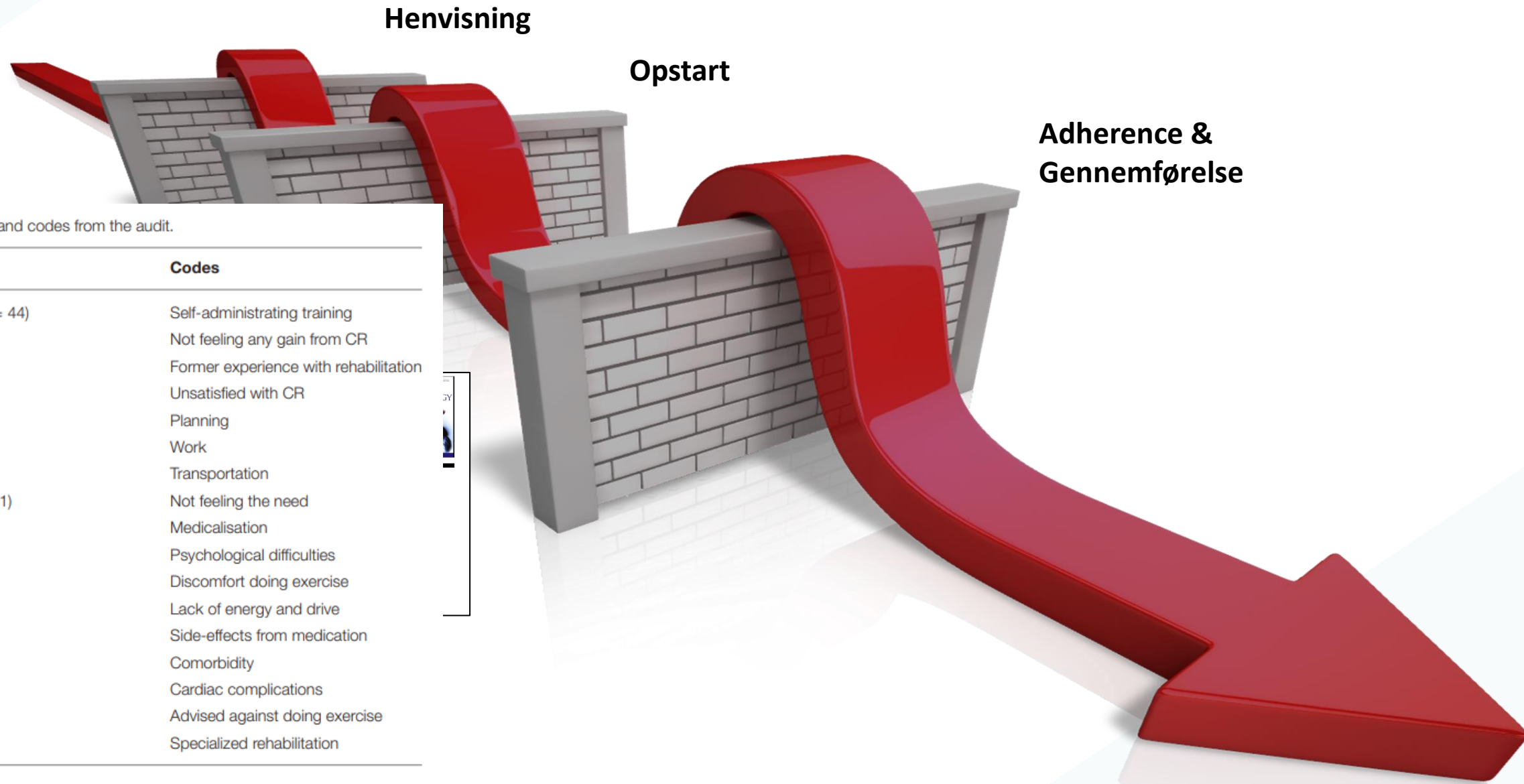
**Opstart**

**Adherence &  
Gennemførelse**

**Vedligeholdelse**



70% af alle patienter skal 6 mdr. efter et hjerteevent have deltaget i rehabilitering (RKKP indikator)



**TABLE 1** | Themes and codes from the audit.

Theme	Codes
CR programme (N = 44)	Self-administrating training Not feeling any gain from CR Former experience with rehabilitation
Logistical (N = 20)	Unsatisfied with CR Planning Work Transportation
Intrapersonal (N = 41)	Not feeling the need Medicalisation Psychological difficulties Discomfort doing exercise Lack of energy and drive
Clinical (N = 28)	Side-effects from medication Comorbidity Cardiac complications Advised against doing exercise Specialized rehabilitation

# Opmærksom på sektorovergangen!

6 ugers træning på hospitalet



6 ugers træning i kommunen



 ESC  
European Society  
of Cardiology

European Journal of Cardiovascular Nursing  
<https://doi.org/10.1093/ejcn/zvab119>

ORIGINAL ARTICLE

## Dropout during a 12-week transitional exercise-based cardiac rehabilitation programme: a mixed-methods prospective cohort study

Charlotte Greve Sommer<sup>1\*</sup>, Lars Bo Jørgensen<sup>1,2,3</sup>, Birgitte Blume<sup>1</sup>, Tom Møller<sup>4</sup>, Søren Thorgaard Skou<sup>2,3</sup>, Alexander Harrison<sup>5</sup>, and Lars Hermann Tang<sup>6,7</sup>

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Received 17 December 2020; revised 31 May 2021; accepted 11 November 2021

Open access

Original research

**BMJ Open** Reasons for dropout in the transition from hospital to municipality during exercise-based cardiac rehabilitation in a Danish cross-sectorial setting: a qualitative study

Anders Ravnholt Schüsler Damlund<sup>1</sup>, Lars Bo Jørgensen,<sup>1,2</sup> Birgitte Blume,<sup>1</sup> Søren T Skou,<sup>3,4</sup> Lars H Tang,<sup>5,6</sup> Tom Møller<sup>7</sup>



52<sup>95</sup>

59<sup>00</sup>  
64

59<sup>00</sup>  
64

65<sup>00</sup>  
75

65<sup>00</sup>  
75

Merrild  
ØKOLOGISK BÆREDYGTIG HELE BØNNER  
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Merrild  
ØKOLOGISK BÆREDYGTIG HELE BØNNER  
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500 g e

Merrild  
HELE BØNNER  
MELLEMRISTET  
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BLACK COFFEE ROASTERS  
WHOLE BEANS SUPREME  
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BLACK COFFEE ROASTERS  
WHOLE BEANS SUPREME  
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BLACK COFFEE ROASTERS  
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57<sup>95</sup>

58<sup>95</sup>

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Merrild  
SIGNATURE BLEND NO 56  
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SIGNATURE BLEND NO 56  
BALANCED ROAST  
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Merrild  
SIGNATURE BLEND NO 64  
ESPRESSO  
HELE BØNNER  
400g e

Merrild  
SIGNATURE BLEND NO 64  
ESPRESSO  
HELE BØNNER  
400g e

CARTE NOIRE  
BIO GRAINS  
DELICAT & AROMATIQUE  
PUR ARABICA BIOLOGIQUE  
400g e

CARTE NOIRE  
BIO GRAINS  
DELICAT & AROMATIQUE  
PUR ARABICA BIOLOGIQUE  
400g e

LAVAZZA  
TIERRA  
BIO ORGANIC  
400g e

LAVAZZA  
TIERRA  
BIO ORGANIC  
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CLASSICO  
COFFEE BEANS  
500 g e

LAVAZZA  
espresso ITALIANO  
CLASSICO  
COFFEE BEANS  
500 g e

LAVAZZA  
QUALITÀ ORO  
PERFECT COFFEE  
500g e

LAVAZZA  
QUALITÀ ORO  
PERFECT COFFEE  
500g e

58<sup>95</sup>

58<sup>95</sup>

71<sup>95</sup>

79<sup>95</sup>

79<sup>95</sup>

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STARBUCKS  
ESPRESSO ROAST  
400g e

365  
ØKOLOGISK  
KAFFE  
MELLEMRISTET  
400g e

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KAFFE  
MELLEMRISTET  
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ANLAMARK  
ØKOLOGISK ESPRESSO  
MELLEMRISTET  
HELE BØNNER  
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42<sup>00</sup>

34<sup>95</sup>

41<sup>95</sup>

41<sup>95</sup>

45<sup>95</sup>

55<sup>95</sup>

52<sup>95</sup>

55<sup>00</sup>  
65

48<sup>95</sup>

48<sup>95</sup>

25<sup>00</sup>  
43

43<sup>95</sup>

44<sup>95</sup>

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48<sup>95</sup>

48<sup>95</sup>

50<sup>95</sup>

48<sup>95</sup>

Are patient characteristics and modes of delivery associated with completion of cardiac rehabilitation? A national registry analysis

Lars Hermann Tang<sup>a,b,c,1,\*</sup>, Alexander Harrison<sup>a,b,c,1</sup>, Søren T. Skou<sup>a,d,1</sup>, Rod S. Taylor<sup>e,1</sup>, Hayes Dalal<sup>f,g,1</sup>, Patrick Doherty<sup>c,1</sup>

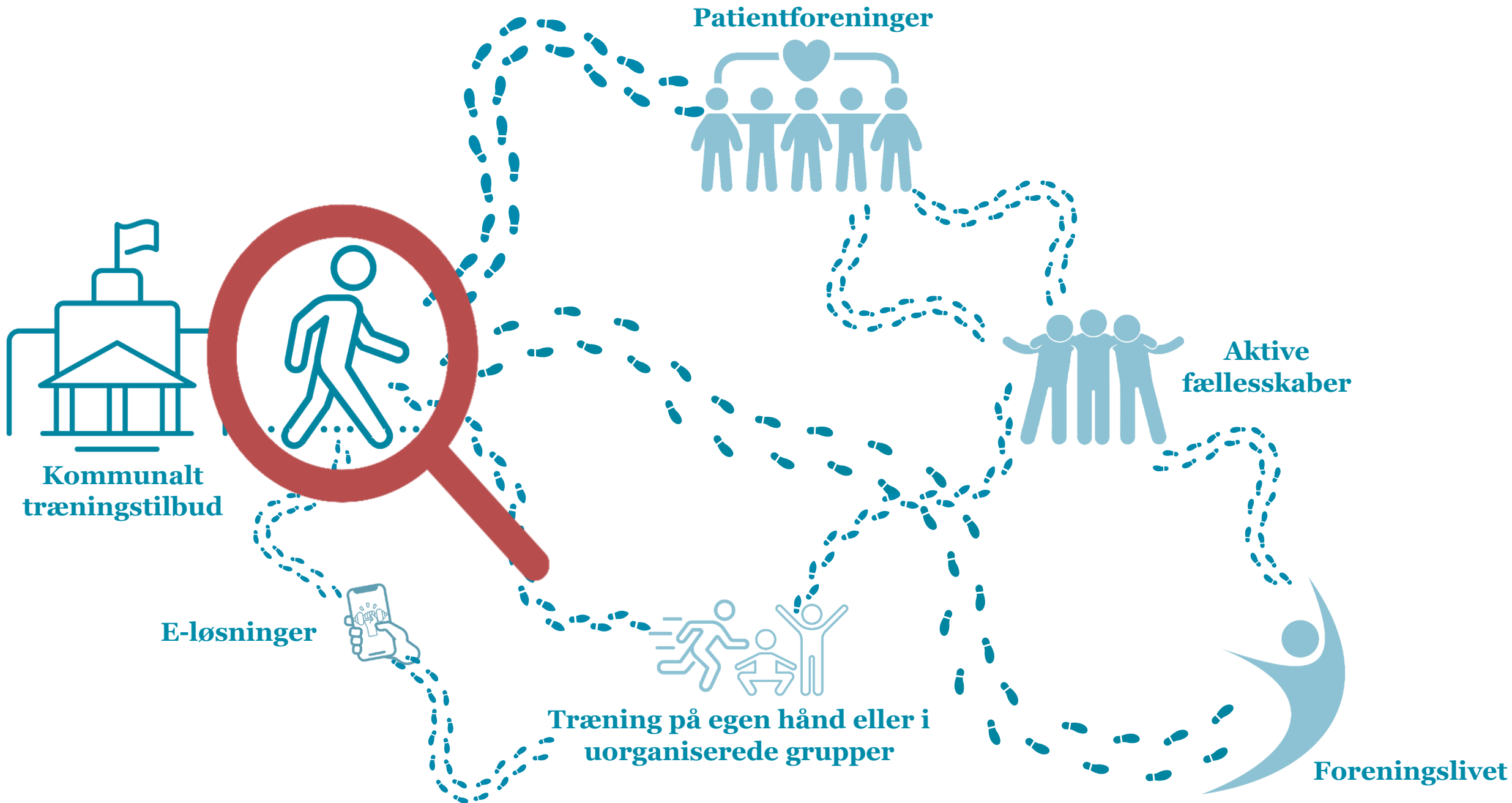
Et hjemmebaseret rehabiliteringsforløb viste 34% mindre sandsynlighed for at gennemføre rehabiliteringsforløbet.

Gennemførelse

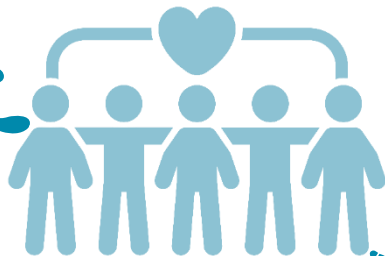


Vedligeholdelse

Sparsom evidens om i hvilket omfang borgere med hjertesygdom vedligeholder længerevarende adfærdsændringer



**Patientforeninger**



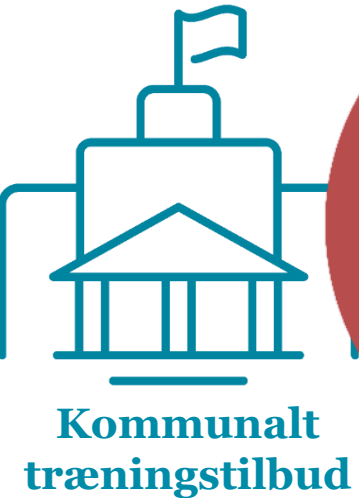
**Aktive fællesskaber**



**Træning på egen hånd eller i uorganiserede grupper**



**Foreningslivet**



**Kommuntalt træningstilbud**



**E-løsninger**





## Systematic Review of Interventions Designed to Maintain or Increase Physical Activity Post-Cardiac Rehabilitation Phase II

Helen Graham, Kathy Prue-Owens, Jess Kirby and Mythreyi Ramesh

Rehabilitation Process and Outcome  
Volume 9: 1–14  
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DOI: 10.1177/1179572720941833  
SAGE

### Scientific Review

## The Effectiveness of Interventions to Maintain Exercise and Physical Activity in Post-Cardiac Rehabilitation Populations

A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

Novella Martinello, MSc; Stephanie Saunders, MA; Robert Reid, PhD, MBA

## The effectiveness of digital health interventions for maintenance of physical activity following cardiac rehabilitation: a systematic review and meta-analysis

Alexander Luijk, Trine Grønbeek Hamborg, Sofie Rath Mortensen, Graziella Zangger, Jonas Ahler Eriksen, Jan Christensen, Søren Thorgaard Skou, Lars Hermann Tang  
(endnu ikke publiceret)

Interventioner tilbudt efter endt hjerterehabilitering kan muligvis opretholde længerevarende adfærdsændringer og reducere risikoen for kardiovaskulære komplikationer

- Eksisterende studier er dog af lav kvalitet og med stor variation i interventioner og populationer.





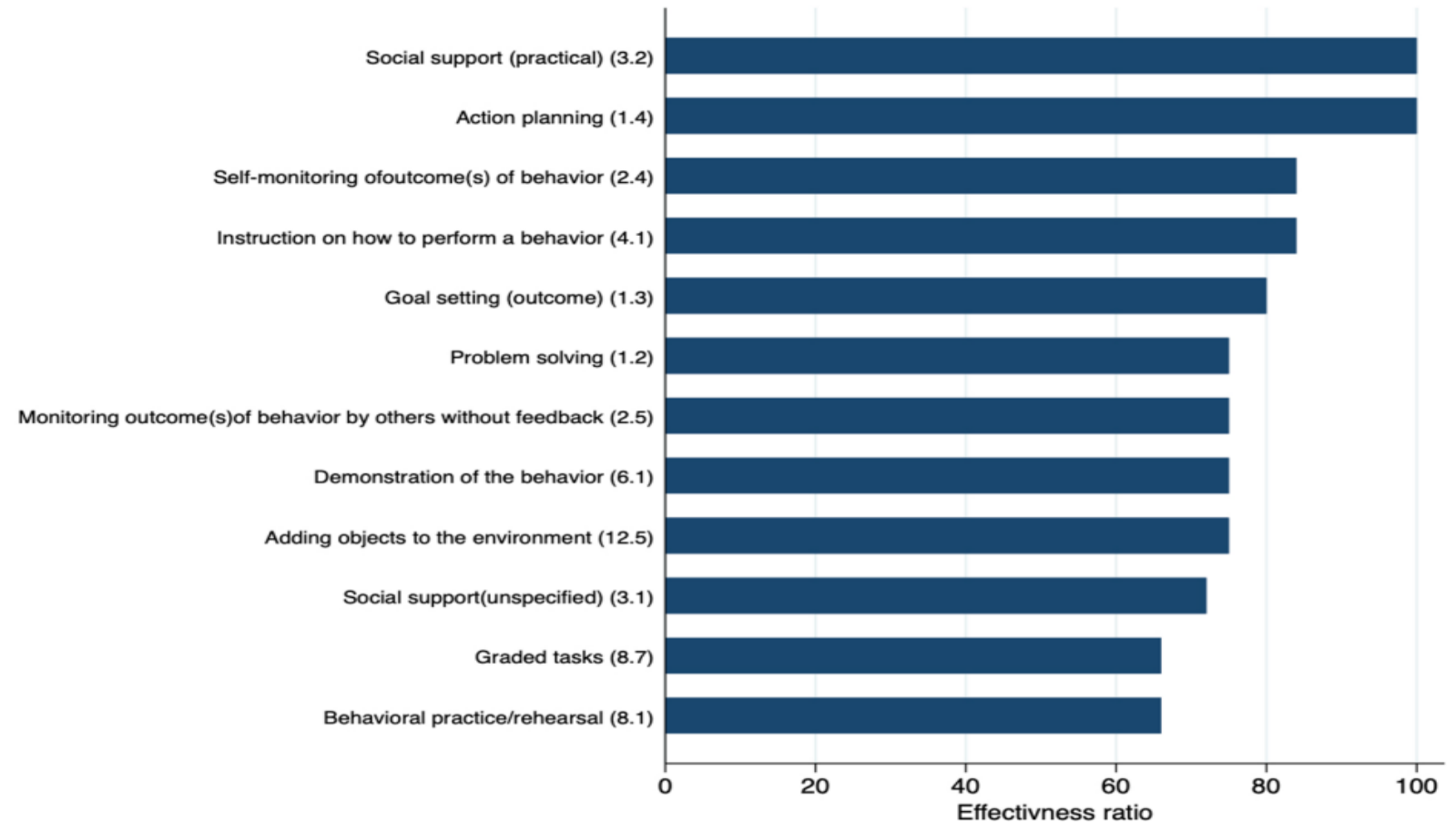
## Effect of In-Person Delivered Behavioural Interventions in People with Multimorbidity: Systematic Review and Meta-analysis

Alessio Bricca<sup>1,2</sup> · Madalina Jäger<sup>1,2</sup> · Marie Johnston<sup>3</sup> · Graziella Zangger<sup>1,2</sup> · Lasse K. Harris<sup>1,2</sup> · Julie Midtgaard<sup>4,5</sup> · Søren T. Skou<sup>1,2</sup>

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International konsensus om systematisk at anvende modeller for adfærdændringer i sundhedsindsatser og beskrive konkrete evidensbaserede adfærdsteknikker, som anvendes i indsatsen (Michie et al 2023, Riley et al 2011)

### Physical activity








# BMJ Open Maintenance of physical activity after cardiac rehabilitation (FAIR): study protocol for a feasibility trial



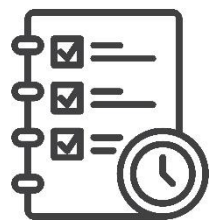
Rune Martens Andersen <sup>1,2</sup>, Søren Thorgaard Skou <sup>1,3</sup>,  
Mikkel Bek Clausen <sup>4</sup>, Madalina Jäger,<sup>3</sup> Graziella Zangger <sup>1,3</sup>,  
Anders Grøntved <sup>5</sup>, Jan Christian Brønd <sup>5</sup>, Anne Merete Boas Soja <sup>6</sup>,  
Lars H Tang <sup>1,2</sup>

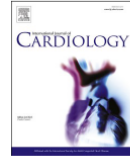
## RESEARCH ARTICLE

### It is like someone holding your hand when you need it – lived experiences of patients with cardiovascular disease participating in a digital health intervention focusing on the maintenance of physical activity after cardiac rehabilitation

Trine Grønbek Hamborg<sup>a</sup> , Lars Hermann Tang<sup>a,b</sup> , Rune Martens Andersen<sup>a,b</sup> , Søren T. Skou<sup>a,c</sup>  and Charlotte Simonj<sup>a,b</sup> 

<sup>a</sup>The Research Unit PROgrez, Department of Physiotherapy and Occupational Therapy, Næstved-Slagelse-Ringsted Hospitals, Region Zealand, Denmark; <sup>b</sup>Department of Regional Health Research, University of Southern Denmark, Denmark; <sup>c</sup>Research Unit for Musculoskeletal Function and Physiotherapy, Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Denmark





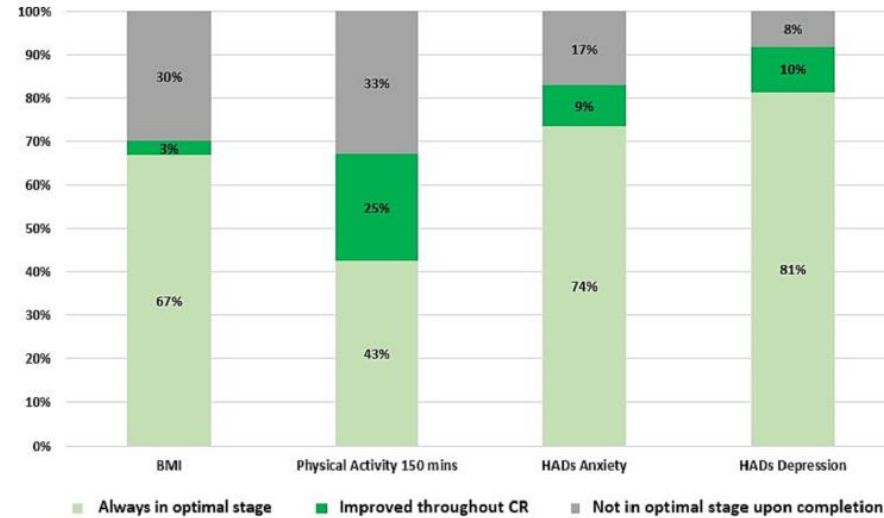
Optimal outcomes from cardiac rehabilitation are associated with longer-term follow-up and risk factor status at 12 months: An observational registry-based study<sup>☆</sup>

Lars Hermann Tang<sup>a,b,c,\*</sup>, Patrick Doherty<sup>c</sup>, Søren T. Skou<sup>a,d</sup>, Alexander Harrison<sup>a,b,c</sup>

# Stratificeret brobygningssindsatser?

L.H. Tang et al.

International Journal of Cardiology 386 (2023) 134–140



Proportion of patients in each optimal stages for the four risk factors 12 weeks post core cardiac rehabilitation (CR).

Lidt poppet oversat:

Får vi folk til at lykkes under et rehabiliteringsforløb, så øger vi deres sandsynlighed for længerevarende adfærdsændringer



# Hvad skal vi i fremtiden

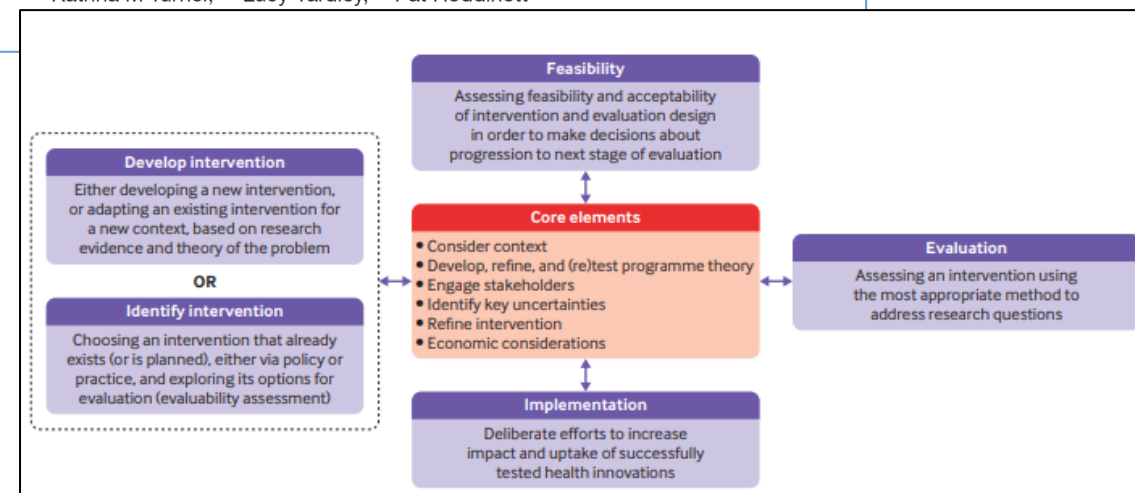
- Fokuserer på at rehabilitering starter allerede ved diagnostetidspunktet og er en livslang proces med udfordringer undervejs.
- Øge fokus på forebyggelse.
- Følge evidensbaserede retningslinjer, indrapportere til kliniske kvalitetsdatabaser og tage patienterne med på råd.
- Stå sammen om forebyggelse, behandling og rehabilitering.
- Udføre forskning af høj kvalitet med udgangspunkt i klinisk praksis og anbefalede modeller for komplekse interventioner.



Open access Communication

## BMJ Open Guidance on how to develop complex interventions to improve health and healthcare

Alicia O'Cathain,<sup>1</sup> Liz Croot,<sup>1</sup> Edward Duncan,<sup>2</sup> Nikki Rousseau,<sup>2</sup> Katie Sworn,<sup>1</sup> Katrina M Turner,<sup>3</sup> Lucy Yardley,<sup>3,4</sup> Pat Hoddinott<sup>2</sup>



# Tak for jeres tid



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