



Aalborg Universitet

AALBORG UNIVERSITY  
DENMARK

**Development and initial evaluation of a complex intervention to ensure early detection of type 2 diabetes**

*among women with a previous pregnancy complicated by gestational diabetes*

Hyldgaard Nielsen, Jane

*Publication date:*  
2018

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*

Hyldgaard Nielsen, J. (2018). *Development and initial evaluation of a complex intervention to ensure early detection of type 2 diabetes: among women with a previous pregnancy complicated by gestational diabetes*. Poster presented at Forskning og de kommunale forebyggelses- og sundhedsopgaver, Aalborg, Denmark.

**General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

**Take down policy**

If you believe that this document breaches copyright please contact us at [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk) providing details, and we will remove access to the work immediately and investigate your claim.

# Development and initial evaluation of a complex intervention to ensure early detection of type 2 diabetes

– among women with a previous pregnancy complicated by gestational diabetes

Jane Hylgaard Nielsen – RM , MScPH , Ph.D-student – jhy@ucn.dk

The Ph.D project is funded by; University College North of Jutland, Aalborg University Hospital and Aalborg University

## INTRODUCTION:

**Women with pregnancy complicated by gestational diabetes (GDM) are recommended follow-up screening every 1-3 years after birth do to the potentials in early detection of diabetes and health promotion for women and families.**

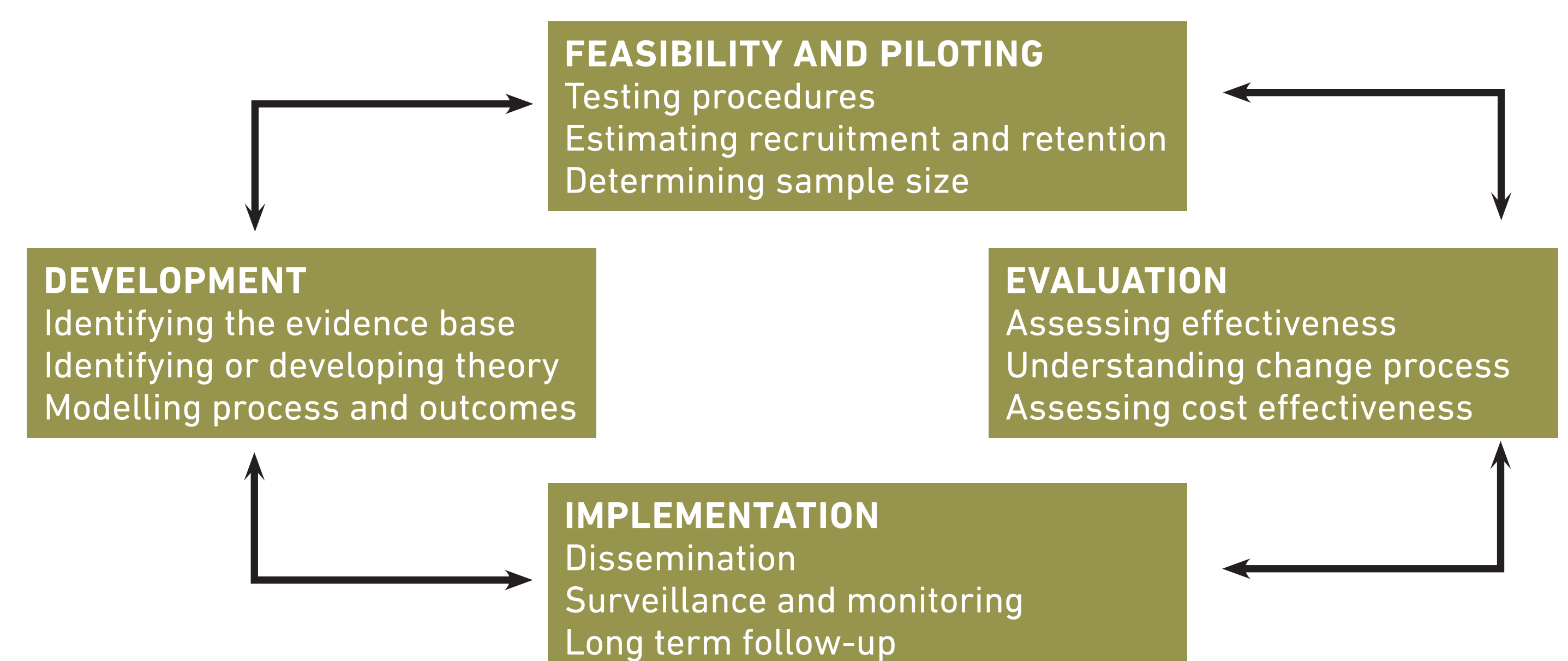
- Women with a history of GDM have a 7-fold higher risk of developing diabetes, primarily type 2 diabetes, compared to women with normoglycemic pregnancies.
- 40 % of women with a history of GDM are found to develop type 2 diabetes within a 10-year period after birth.
- The children are also of high risk of developing type 2 diabetes later in life.
- Early detection of diabetes can prevent or delay the onset of late complications often caused by type 2 diabetes and strengthen health promotions initiatives.
- A register-based study from 2014, showed that only approximately 18% of women in the Region of North Jutland participated in the recommended follow-up screening 4-6 years after birth.

The unutilized potentials in early detection, prevention and health promotion of young women and their families, emphasizes the importance of development of an intervention with the purpose of increasing participation in the recommended follow-up screening. This is the overall objective of this PhD project.

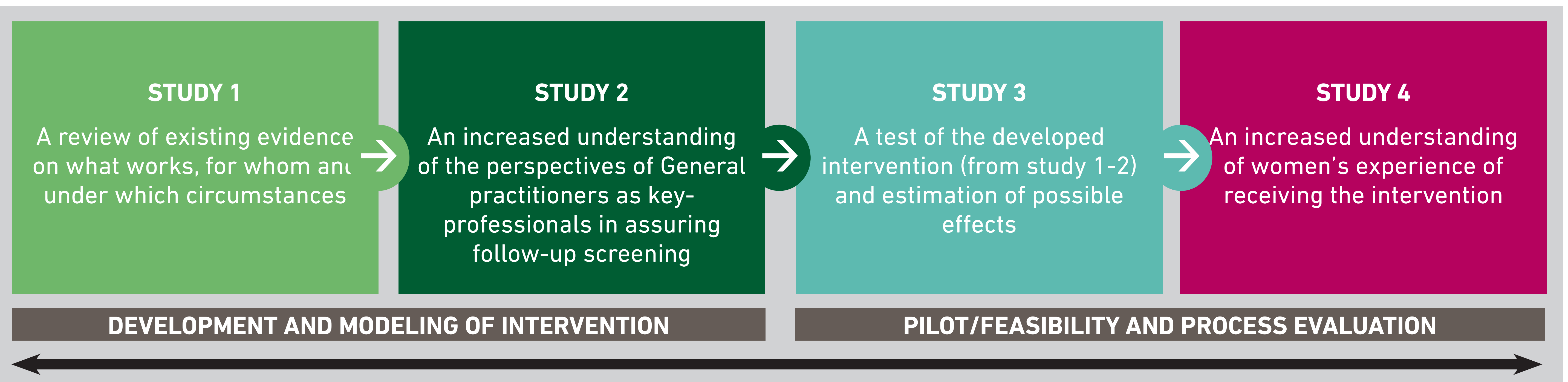
## METHODS AND DESIGN:

An intervention study based on the English Medical Research Council's (MRC) framework for development and evaluation of complex interventions in public health.

This PhD project focus on the development (study 1-2) and pilot/feasibility (study 3-4), drawing on both qualitative and quantitative methods. Final, evaluation and implementation are beyond this PhD project.



Medical research Council. The development - evaluation - implementation process new guidance



## IMPLICATION FOR PRACTICE:

This constitute the first steps of developing a theoretically sound, contextualized and well-adapted intervention that has the potential to be effective in a Danish setting. This could improve cross-sectional care for this specific group of women in high risk and create more healthier living years beneficial for both the women, families and communities in general.

## RESEARCH/PRACTICE COLLABORATION:

Collaboration with Aalborg University Hospital provides professional expertise and cooperation of the care and treatment.

Collaboration with the public administration, Region of North Jutland provides knowledge on hospital systems and are supportive of the execution of the intervention.

Affiliations of the project has been granted at DECIPH'er, Cardiff University which ensures expert methodological advice on complex intervention.