

novo
nordisk
fonden

Kick-off event on Socioeconomic Impact of Research

Thomas Alslev
Christensen
Head of Operations

Knowledge is the key

It began with the insulin patent in 1922

THE CLINICIAN
H.C. Hagedorn



THE INVESTOR
August Kongsted



THE SCIENTISTS
Marie Krogh and August Krogh



THE ENTREPRENEUR
Thorvald Pedersen



THE ENTREPRENEUR
Harald Pedersen





The Foundation's objectives

Corporate objective

- to provide a stable basis for the commercial and research activities of the Novo Group companies

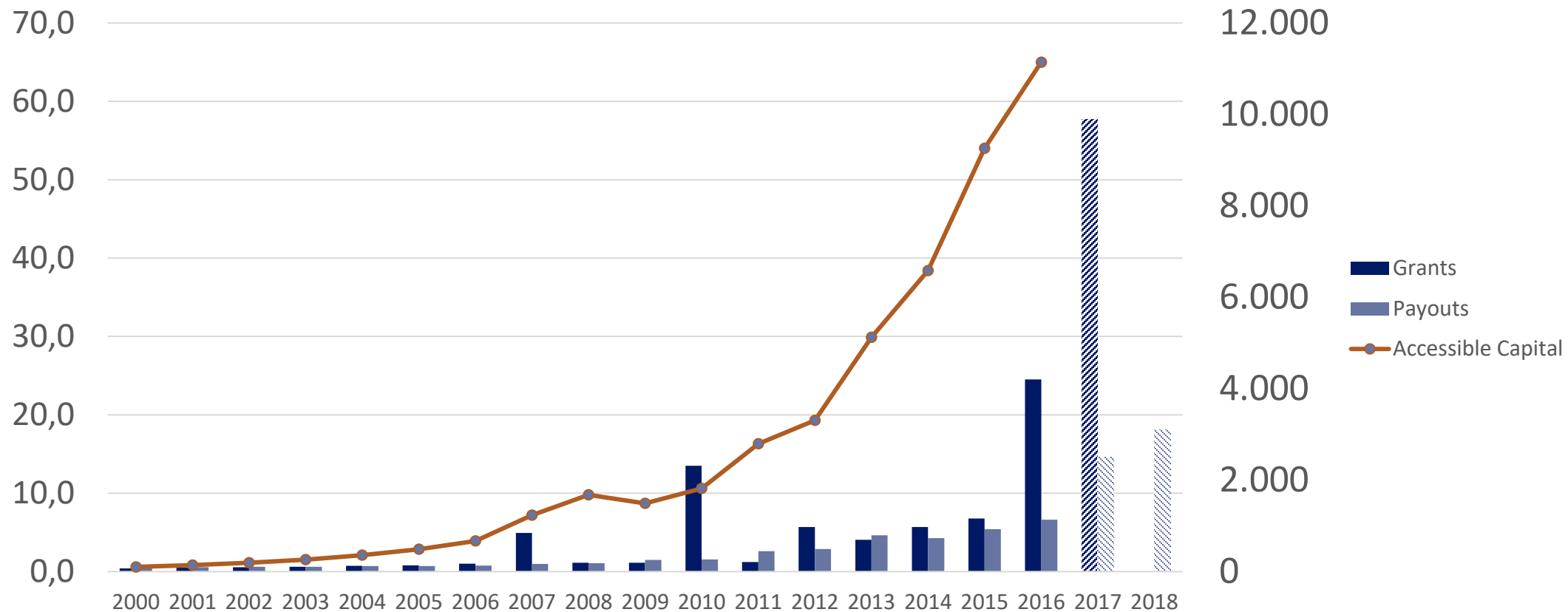
Grant-giving objectives

- to support physiological, endocrinological, metabolic and other medical research,
- to support Danish research hospital activities within diabetes,
- to support other scientific, humanitarian and social purposes

Development in grant-giving, payouts and grant-giving capacity

Accessible Capital
for grant-giving
DKK billion

Grants and
Payouts
DKK million



RESEARCH AND INNOVATION GRANTS

Laureate Research
Grant
Young Investigator
Award
Hallas Møller
Investigator
Excellence Project
Bjerggaard Clinical
Scientist



Ph.d.- og
post.doc.-
fellowships

Research
Leader
Programs



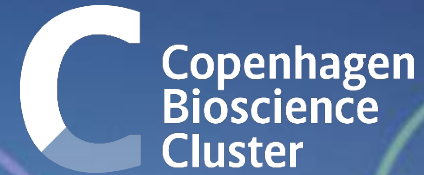
Project Grants

Challenge Programme
Interdisciplinary
Synergy Programme

Prizes

Humanitarian
& Social

Innovation



Metabolic Research

Stemcell Research

Protein Research

Biosustainability

Biobank

- Five large research centres
- DKK 4 billion invested
- Over 800 staff in total
- 300 outstanding scientists and talents recruited abroad

- ⇒ Create high impact in a knowledge based society
- ⇒ Increase the visibility of Danish research and innovation
- ⇒ Stimulate cross-pollination between academia, research hospitals and industry
- ⇒ Attract foreign talent and scientists to Denmark

Research hospitals within diabetes (Steno Diabetes Centres)

Steno Diabetes Centers will raise the level of care for everyone with diabetes in Denmark through:

- Evidence-based treatment through Denmark's five administrative regions
- Nationwide collaboration on research, health promotion and education
- Access to everyone with diabetes in Denmark with opportunities for large cohort studies

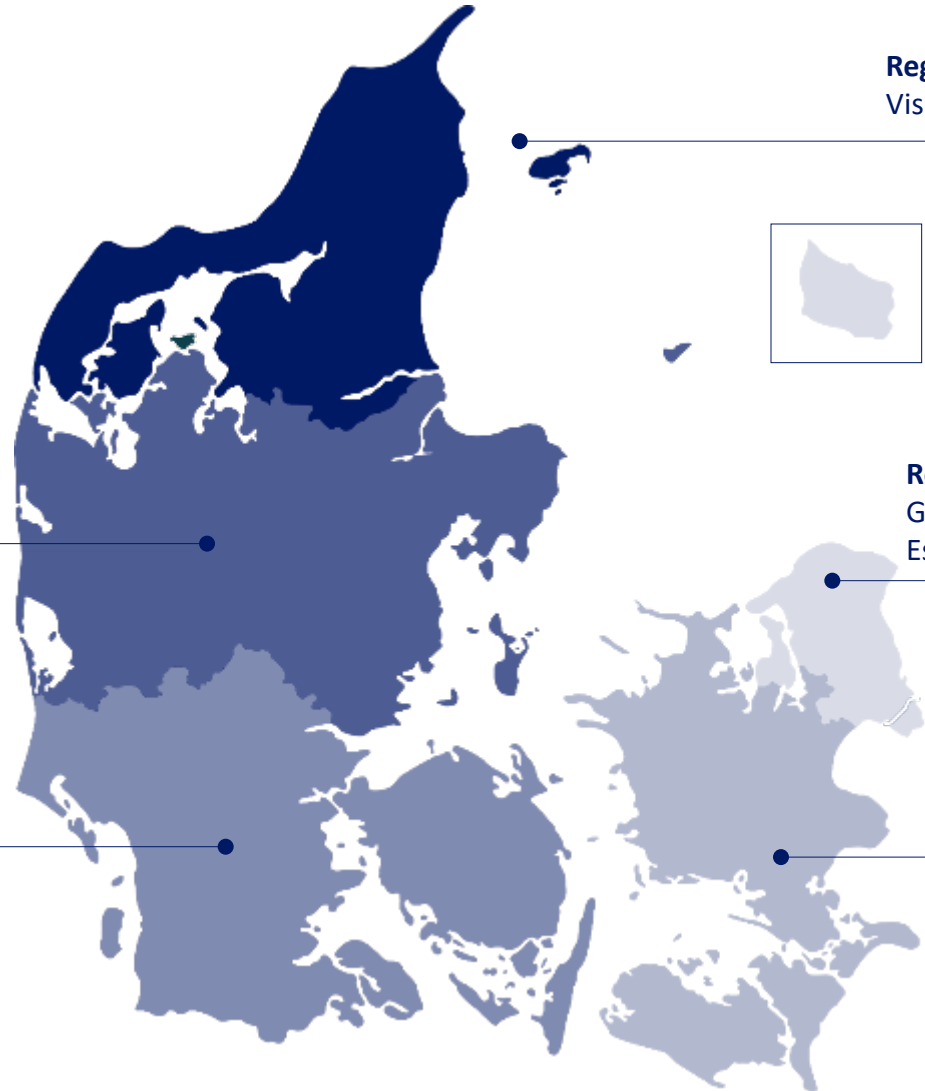
Region Midtjylland
Grant of DKK 1.4 billion awarded
To be established 1 January 2018

Region Syddanmark
Grant of DKK 1.4 billion awarded
To be established 1 January 2018

Region Nordjylland
Vision statement approved

Region Hovedstaden
Grant of DKK 2.945 billion awarded
Established 1 January 2017

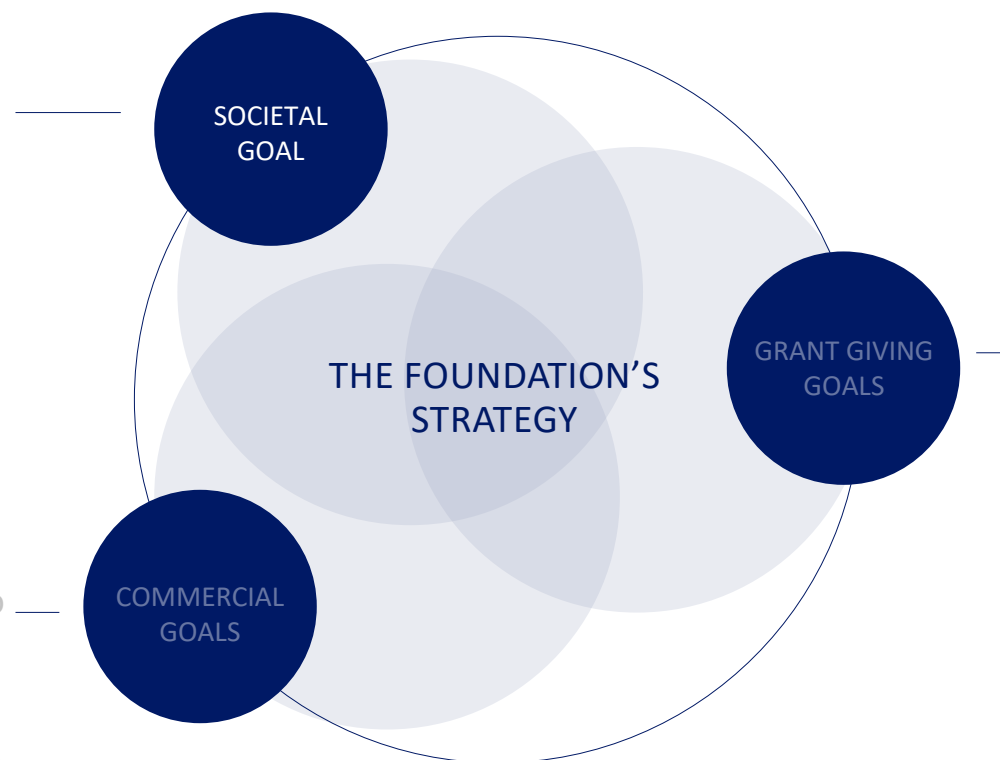
Region Sjælland
Vision statement approved



NNF Strategy

With Denmark as the Foundation's centre of gravity the prime focus is:

- To promote world-class research and innovation in the medical, biotechnological and natural sciences and help to foster a world-class education system.
- To help to develop a knowledge-based society that contributes to long-term economic activity and job creation for improving general health and welfare.
- Be a strong owner of the companies in the Novo Group.
- Generate attractive investment returns for the Foundation on its financial investment portfolio.
- Make investments with the main goal of promoting knowledge and world-class research.



- Strengthen biomedical and biotechnology research in selected fields.
- Fuel cross-disciplinarity.
- Advance individual scientific excellence.
- Spur imagination, inspiration and knowledge about science and technology.
- Build bridges between scientific discoveries and their commercial applications.
- Achieve social and humanitarian impact.

Why do the Novo Nordisk foundation have a research programme on the socioeconomic impact of research?



Why do the Novo Nordisk foundation have a research programme on the socioeconomic impact of research?

- We need much more public research on the socioeconomic impact of research.
- **We take risks** and support the most promising projects to create the basis for breakthroughs.
- **We consult experts** to ensure that the research we support is of high international quality and aims at eliciting new and profound knowledge and innovation.
- **We** understand that producing landmark results that benefit society **takes time**.
- **We** respect the **freedom of research and publication**.
- **We** attach no conditions to our grants and do **not claim rights** to the results.

Why do the Novo Nordisk foundation have a research programme on the socioeconomic impact of research?

2016: Programme on the socioeconomic impact of research.

2017: Programme on the socioeconomic impact of research in health and diseases.

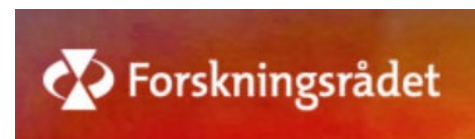
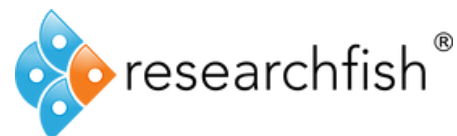
2018: Programme on the socioeconomic impact of research.....?

STANDING ON THE SHOULDERS OF MORE EXPERIENCED



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wellcome trust



Programme (1/2)

Introduction: Why do the Novo Nordisk Foundation have a research programme on the socioeconomic impact of research?

- Thomas Alslev Christensen, Head of Operations and Impact Assessment, Novo Nordisk Fonden

The purpose of the programme and reflections based on project applications received

- Volker Then, Grant committee member and Managing Director of the Centre for Social Investment at Heidelberg University

Panel discussion with engagement from the audience:

- *Synergies between the projects, stakeholders, and what the Foundation can do to promote synergies and collaboration?*
- *What could be the theme in 2018?*



Progress reports from the 2016 research projects:



1. The Socioeconomic Importance of Research-based Education

- Anders Sørensen, Professor, Copenhagen Business School



2. Investigating the microfoundations of socioeconomic impact of university-industry relations

- Marcel Bogers, Associate professor, University of Copenhagen



3. Investments, incentives, and the impact of Danish research (TRIPLE-I)

- H.C. Kongsted, Professor, Copenhagen Business School

Programme (2/2)

*Introduction
to this year's
topic:*

- Jon Sussex, Grant committee member and Chief Economist, RAND Europe



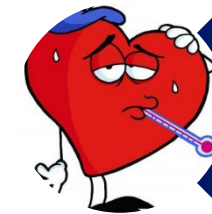
Behavioral Responses to Health innovations and the Consequences for Socioeconomic Outcomes”

- Mette Gørtz, associate professor, Department of Economics, University of Copenhagen



Socioeconomic impact of policy instruments for health research dissemination (INFORMED)”

- Mickael Bech, professor and director, VIVE – The Danish Centre of Applied Social Science



Equity and the socioeconomic impact of disease management programs in Denmark (EQUIP)”

- Karsten Vrangbæk, Professor, Political Science and Public Health Departments, University of Copenhagen

Discussion with Troels Gerhard Bock and Morten Rand Jensen about challenges in the health sector and how these research projects can deliver valueable output

Engagement from the audience

Conclusion and next step, Thomas Alslev Christensen

Behavioural Responses to Health Innovations and the Consequences for Socioeconomic Outcomes

(Mette Gørtz, University of Copenhagen)

Inequality in health has been rising in recent decades. Despite higher health expenditure and awareness of disease prevention, the benefits of new and better healthcare are unequally distributed.

A leading hypothesis is that more affluent and better-educated people more rapidly adopt new health technologies and therefore benefit disproportionately, widening the socioeconomic gap in health. This poses a pressing challenge to society.

The project seeks to answer the following questions:

1. How do health innovations transmit into economic outcomes?
2. How do innovations and behaviour shape the income gradient in mortality?
3. Which mechanisms explain the gradient between education and health?

Socioeconomic Impact of Policy Instruments for Health Research Dissemination

Mickael Bech, Professor, Danish Institute for Local and Regional Government Research

1. The objective of the project is to evaluate the socioeconomic impact of policy instruments that apply, integrate and disseminate research for improving healthcare provision.
2. The project focuses on three key policy instruments: specialty planning, clinical guidelines and capacity-building for research at hospitals.
3. The qualitative research will be carried out at three selected hospitals that will undertake in-depth ethnographic field studies and interviews with different types of employees.
4. The quantitative research will comprise impact studies using registry data.

Equity and the Socioeconomic Impact of Disease Management Programmes in Denmark.

Karsten Vrangbæk, University of Copenhagen

1. How can the impact of complex disease management programmes be evaluated?

The project will analyse the origin and implementation of disease management programmes in Denmark. It will assess the impact on selected groups of patients with the help of health registry and survey data.

2. The equity of the impact on health in the health economics assessment of disease management programmes.

Although health economics is good at evaluating the impact on costs, it is less well developed in assessing whether new forms of treatment are equally effective for different groups of patients.

Panel discussion: What could be relevant and useful outcome from the new projects on the impact of research on health and disease

Discussion with Troels Gerhard Bock and Morten Rand Jensen

What are the main challenges in the Danish health sector?

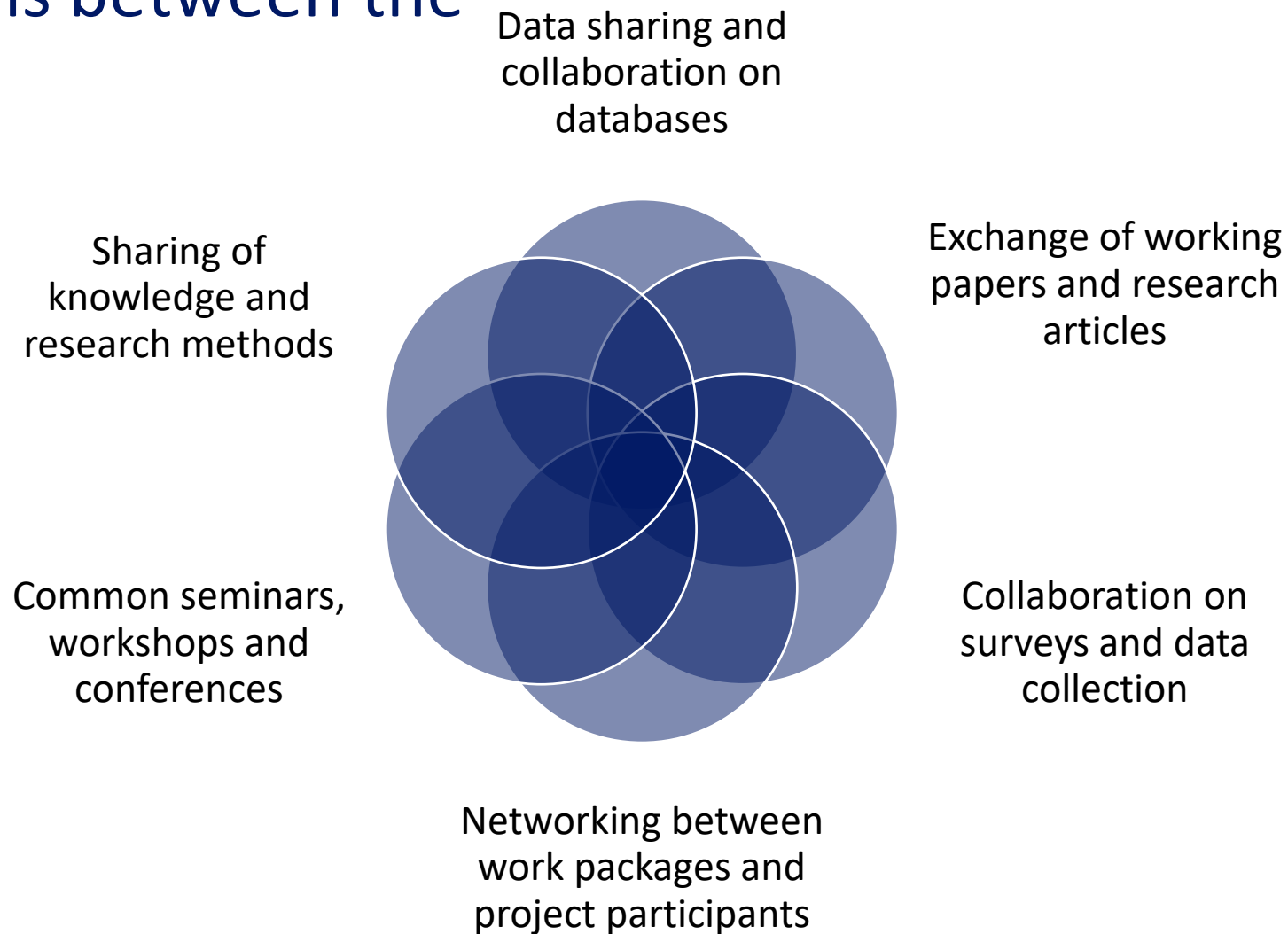
- Inequality in health?
- Rising expenditure in health care?
- Lack of use of new health technologies?
- Ineffective health policy instruments?

How can the three new research projects deliver valueable output and knowledge about the health sector

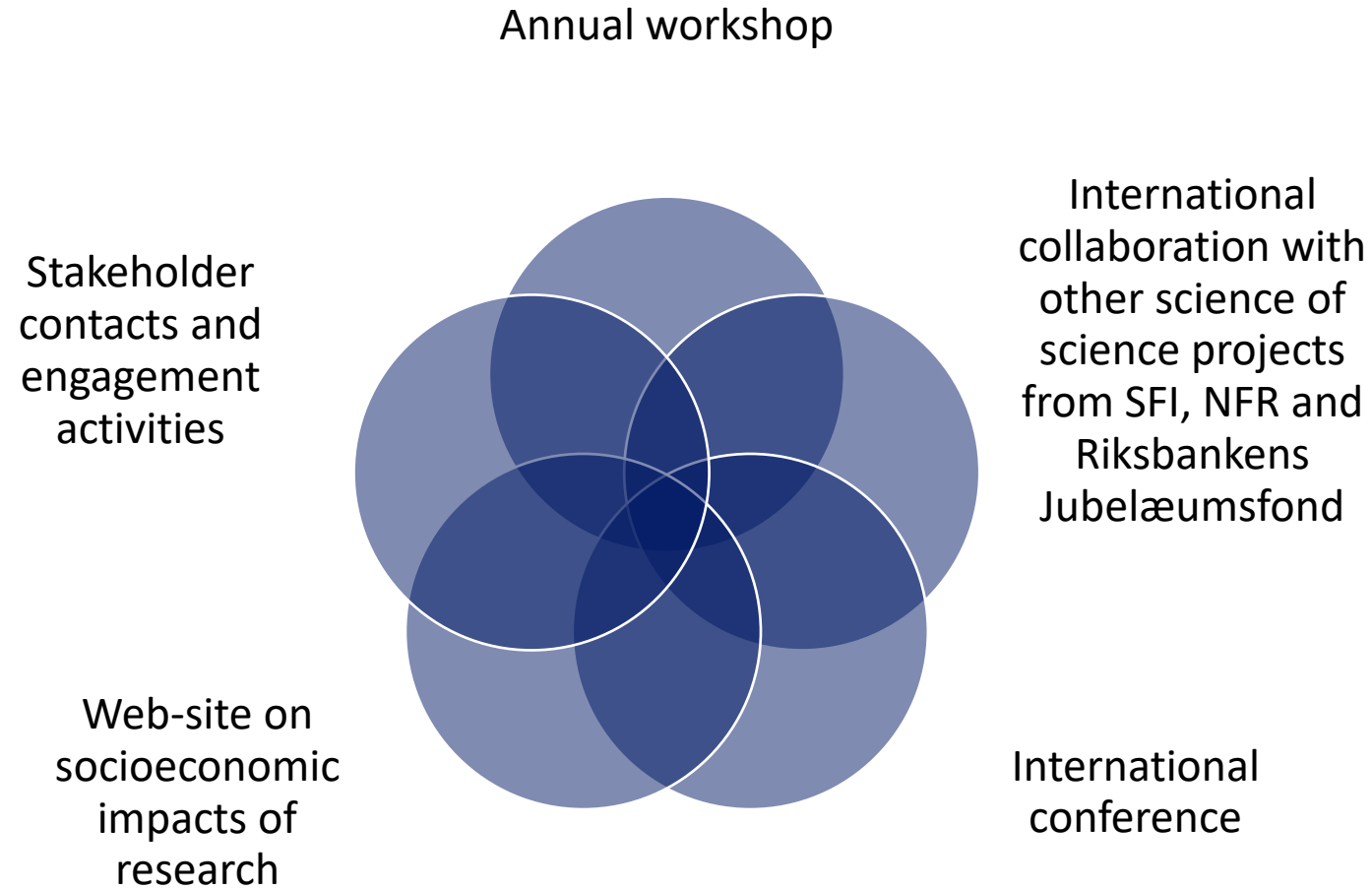
- Is there a connection between education and health?
- Which complex disease management programmes are the most important to evaluate?
- One project focuses on the impact of specialty planning, clinical guidelines and capacity-building for research at hospitals. Should other health policy instruments be analysed?

Closing remarks

Collaborations between the projects



NNF initiatives



Future Steps: calls for ideas

