

Impact Framework and Impact Management at Novo Nordisk Foundation

This policy brief introduces Novo Nordisk Foundation and the scope and nature of its RDI funding.

Novo Nordisk Foundation net worth is 697 million Euros and in 2021 it provided 13% of RDI funding in Denmark.

ELVIS - Evolving innovation space, RDI policies and impact evaluation

Jari Kuusisto, Thomas Aslev Christensen, Helka Kalliomäki, Leena Kunttu, Johanna Kalliokoski.

University of Vaasa



The Novo Nordisk Foundation is an independent Danish foundation with corporate interests. It is focusing on medical treatment and research and it has two objectives:

1. to provide a stable basis for the commercial and research activities of the companies in the Novo Group (Novo Nordisk A/S and Novozymes A/S)
2. to support scientific, humanitarian and social causes.

In 2021, the foundation had a net worth of 697 million EUR placing it among the top three wealthiest charitable foundations in the world. Novo Nordisk Foundation owns Novo Holdings A/S, a holding company that is the majority shareholder of Novo Nordisk, a Danish pharmaceutical corporation. From 2010 to 2015, the foundation distributed more than EUR 1.24 billion for research, innovation, treatment, education and humanitarian and social purposes. In 2020, the foundation awarded grants worth EUR 0.74 billion (5.54 billion DKK) and paid out EUR 0.62 billion (4.6 billion DKK). During 2021 it provided 13 % of the RDI funding in Denmark. The Foundation typically distributes more than EUR 285,2 million each year to research within the fields of Life sciences and Bioscience. While the main focus lies within biomedicine and biotechnology research, the Foundation also awards grants for research in general practice and family medicine, nursing and art history. In 2021, around 6000 people in science were fully or partly funded by the Foundation's grants. 51% were men and 49% were women.

In this policy brief, we introduce Novo Nordisk Foundation Impact Framework and Impact Management concepts. They include systematic development of impact frameworks, including theory-of-change, logic impact model, KPIs and data points for reporting and monitoring for all new initiatives. It also implies new processes for co-creation between the Foundation and applicants in the formulation of an impact framework and an agreement on how to implement this once the initiatives run. Conclusions and proposals for action are presented in the end of this policy brief.

This analysis is partial contribution from the project: *ELVIS - Evolving innovation space, RDI policies and impact evaluation*. The objective of the project is to explore new ways to evaluate the impact of innovation policies and to develop comprehensive approaches and indicators for this purpose. The need for novel evaluation concepts is obvious due to the fact that the major evolution of policies has not been complemented by novel evaluation approaches. ELVIS produces knowledge, concepts and methods that can be used in the development of Finnish STI policy and in the evaluation of its effectiveness and impact. Some methods of the project include international comparative research and rigorous case studies. The project takes place during the years 2020-2022 and it is funded by Business Finland.

Further information:

Jari Kuusisto, Rector, University of Vaasa, tel. +358 29 449 8291, jari.kuusisto (at) uwasa.fi
Leena Kunttu, Project Manager, tel. +358 29 449 8562 leena.kunttu (at) uwasa.fi

In 2021 Novo Nordisk Foundation introduced an Impact Framework and Impact Management that are co-created with each funded project partner.

Elements of the co-created impact Framework include: a logic model, KPI's, Data collection procedure and Annual Wheel

Introduction

Since the Spring 2021, there has been introduction of the Novo Nordisk Foundation impact frameworks for new initiatives and application processes. This implies systematic development of impact frameworks, including theory-of-change, logic impact model, KPIs and data points for reporting and monitoring for all new initiatives. It also implies new processes for co-creation between the Foundation and applicants in the formulation of an impact framework and an agreement on how to implement this once the initiatives run (Novo Nordisk Foundation, 2022).

The ambition is to increase the likelihood of success for research activities and thereby optimize the societal impact of research funding through more awareness among researchers and research institutional about the importance of good project leadership and impact management.

The purpose of impact frameworks and impact management is also to support the Foundation and the researchers and their institutions in establishing the necessary and realistic impact framework conditions for a new initiative and once the initiative is funded to ensure a close monitoring, evaluation and if necessary, management of how the initiative progresses towards achieving its long-term objectives.

From the point of view of the Novo Nordisk Foundation, impact frameworks should help increasing the societal impact of the Foundation's grant portfolio and lead to more solutions and breakthrough research for the benefit of society and research.

Materials and methods

The analysis is based on a review of Novo Nordisk Foundation documents, Website of the Foundation and Memorandum provided by Dr. Thomas Aslev Christensen, Vice President, Impact. One of the key documents compiling much of the key information is: Novo Nordisk Annual Impact Report 2021. This type of case analysis is based on qualitative method aimed at distilling relevant key themes from the empirical materials. Relevance of the findings is based on their novelty and possibility to reflect them on the national context in Finland. Proposed actions in the Finnish context are presented in the end of this document.

Key elements of the Novo Nordisk Impact frameworks and impact management

The elements in Impact Frameworks and Management are:

- A Logic Model,
- KPIs, success factors, and selection of a few impact markers,
- A Data Collection Model with specified data sources and data contributor responsibilities, and
- An Annual Wheel for larger initiatives

The purpose with Impact Management and how this is implemented in the organisation has been communicated to the entire NNF organisation. NNF staff has been offered training sessions in Impact Frameworks and Impact Management. Impact department will always participate in development of new initiatives as co-driver of development of impact frameworks and in the implementation of impact management.

The logic model template at Novo Nordisk Foundation follows the well-established flow model. The contents of the model are co-created with the grant receiver in the

The aim of Innovation and Growth Research funded by Business Finland is to find solutions to the global challenges of the Finnish economy and society.

beginning of the project. This is expected to improve project management and project impacts.

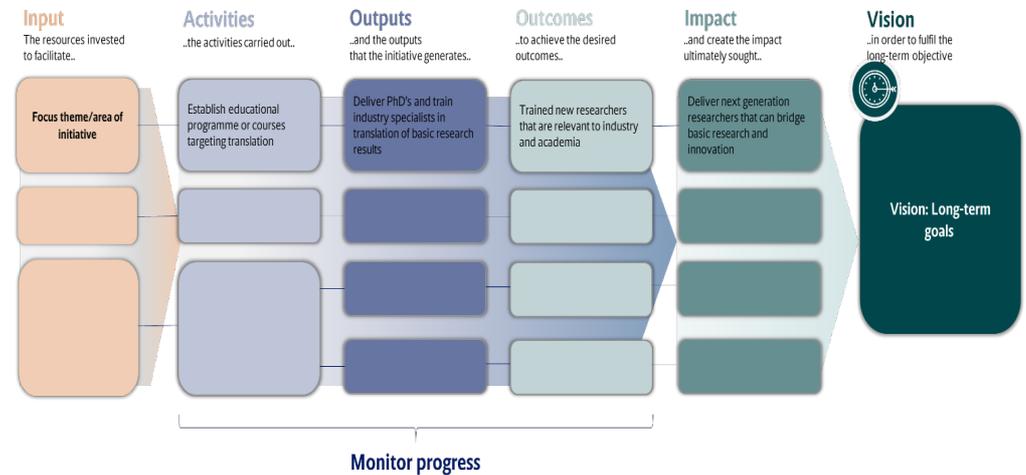


Figure 1: Logical impact model introduced by Novo Nordisk Foundation.

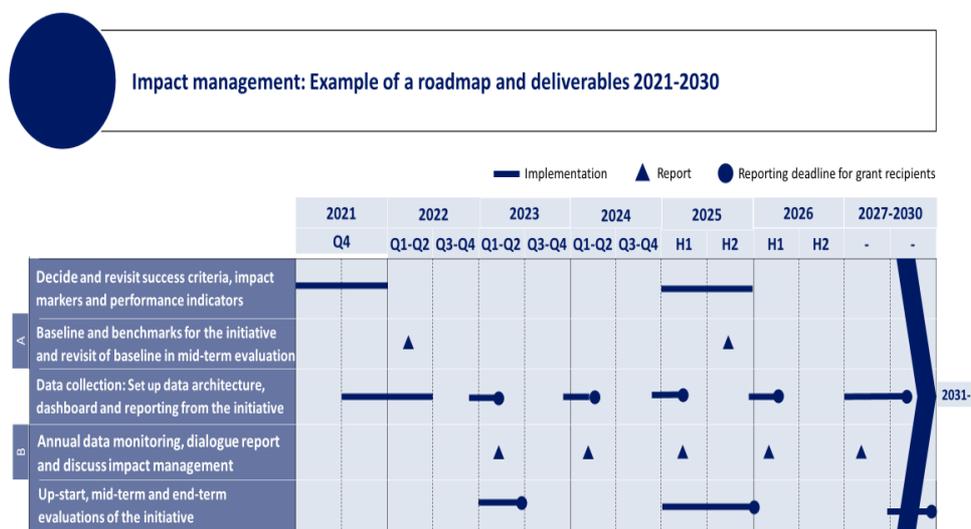
As part of the impact management process also project KPIs are co-created with the grant receiver. The Figure 2, below provides an example of identifying KPIS/ Data points for success factors.

	Input	Activities	Outputs	Outcomes	Impact
Success factors	Funding	Establish educational programme or courses targeting translation	Deliver PhD's and train industry specialists in translation of basic research results	New researchers that are relevant to industry and academia	Deliver next generation researchers that can bridge basic research and innovation
KPIs/data points		# courses organized and/or taught # staff and budget	# graduated PhD's from new programme # publications # pubs in collaboration with industry	# employed in industry # employed in academia % research citation impact	
Success factors					
KPIs/data points					

Figure 2: Policy inputs, activities, outputs, outcomes and impacts.

The third example, Figure 3, describes the structure of an annual wheel and impact deliverables. It presents a rather typical project timetable and deliverable diagramme. Again, it is significant that grant receiver and funding agency are co-creating this item.

Figure



Novo Nordisk Impact management covers all the processes and deliveries needed to collect data, monitor progress, facilitate evidence-informed management, and evaluate the achievement of milestones

Figure 3: Project roadmap and deliverables 2021-2030

Impact Management covers all the processes and deliveries needed to collect data, monitor progress, facilitate evidence-informed management, and evaluate the achievement of milestones and success throughout all stages and beyond the grant life cycle. The core elements of impact management are to:

1. Develop an **impact framework** that identifies the logic model, and the theory-of-change of the initiative, builds and formulate clear success factors and impact markers, as well as key performance indicators (KPIs) based on long-term objective.
2. Implement the **data collection model** at grant start based on the KPIs and success factors.
3. Efficiently collect data from grant holder and external databases and prepare data for **monitoring** purposes, and for future evaluations, based on an annual wheel. When grants are in operation they report on a regular basis.

Monitoring, impact management and impact products

When grants are in operation they report on a regular basis. Grants are then systematically monitored based on the data. Many data points are harvested from the reporting systems Foundgood and Researchfish, while for large and more complex

grants, supplementary reporting methods may entail the use of other types of monitoring products such as surveys, dashboards or scorecards.

Implementation of the impact framework is effectuated by inclusion in the grant agreement.

The implementation of the impact framework is effectuated by inclusion in the grant agreement. Thus, being a part of the agreement, the framework constitutes necessary terms and conditions to which the grant receiver must comply. NNF Impact has the entire responsibility for collecting data from grant recipients. NNF Impact secures that information and data is collected, cleaned, structured, and stored effectively on the foundation's data platform.

Novo Nordisk Foundation impact evaluation framework constitutes necessary terms and conditions to which the grant receiver must comply.

Lessons from the Novo Nordisk impact evaluation framework for the Finnish policy makers

Private foundations in Denmark are independent from the political system, which enables them to be open to risk and work on a long-term basis in their grant provision. They are also generally considered less bureaucratic (e.g. around grant applications or with process reports for funded activities) than public funding bodies. Many foundations also fund research that challenges the status quo, which on normal grounds might struggle to achieve public funding, such as multidisciplinary projects or research in emergent fields. Finally, private foundations tend to be very flexible organizations, quick to adapt to changes in the research landscape (DEA, 2012).

Private foundations in Denmark complement public RDI funding by allocating funding also for the projects that public RDI funding is not covering.

Discussion around public RDI funding in Finland is lively and political parties have agreed with the other stakeholders to raise the share of funding to 4 % of the GDP by 2030. This is an ambitious goal and achieving it requires also major contributions from the private sector. In this scenario private funds could play an important role.

Lack of discussion on which private sector partners are expected to contribute towards the funding goal, is noticeable. Novo Nordisk Fund share of the private RDI funding in Denmark is 13 % (2021). In this light, it would be useful to discuss how private sector supply of RDI funding can be increased in Finland? For instance, should we create more favourable conditions for channelling private sector funds through foundations? Should we explore framework conditions in Finland and perhaps make them more favourable for private foundations?

Novo Nordisk Fund has developed impact evaluation as co-creation process so that each project will develop its own KPI's.

Novo Nordisk Fund is a major contributor to RDI funding in Denmark and it is well aware of the major impact it has on the national scale. In order to balance short term fluctuations in government budget funding, the foundation is offering long term RDI funding. It has become very clear in Finland, that major swings up and down in the RDI funding ought to be avoided. The question is, what type of policy measures are needed so that we can avoid rapid changes in the volume of funding. Rapid growth of funding creates bottle necks in the supply of skilled personnel whereas rapid cuts in funding level force skilled RDI personnel to look other work opportunities.

Novo Nordisk Foundation has developed a novel co-creation-based approach to impact measuring and management. In this approach grant receiver takes part into the formulation of an impact framework and an agreement on how to implement this once the initiatives run. The ambition is to increase the likelihood of success for research activities and thereby optimize the societal impact of research funding through more awareness among researchers and research institutions about the importance of good project leadership and impact management.

It is also expected that the novel impact framework should help increasing the societal impact of the Foundation's grant portfolio and lead to more solutions and breakthrough research for the benefit of society and research. In other words, one size fits all thinking has been abandoned in impact measuring and impact management. While one will lose some cross project comparability it seems that benefits are expected to come from better project management. Such novel approach to impact and impact management mean that private foundations may be agents of change in the RDI system as they introduce new approaches to their field.

Proposals for action

Evolving innovation policies clearly call for new type of impact evaluation indicators, processes and practices. Ever broadening scope and complexity of innovation policies sets new requirements for the evaluation criteria and the entire evaluation process. Following proposals for actions are inspired by the analysis of Novo Nordisk Foundation and its evaluation process.

Proposed action 1: An analysis of private foundations role and impacts on the Danish RDI funding system as well as wider society. Discussion on private foundations role and potential in Finland. Novo Nordisk Foundation is a good example of a very powerful private foundations that are typical of Denmark. Overall foundations and their many activities play a critical role for universities, and for individual researchers and research projects, but equally because they collectively provide a substantial economic boost to public research in Denmark – which is crucial to ensuring Denmark's global competitiveness in the scramble for top-tier international research talent, and the ability to make ground-breaking impacts in our key areas of expertise. D

Proposed action 2: Funding bodies should explore possibilities to co-create the evaluation criteria with the grant recipients and possibly include other relevant stake holders in the process. Many of the current innovation policies have impacts across the society. Hence, it is important to engage wide range of societal interest groups into discussion. Mission driven policies and policies aiming at ecosystem development are examples of areas where co-creation of the evaluation process and indicators would be most useful. While large mission driven policy initiatives may benefit from individually tailored impact indicators and evaluation process. It can be more effective to use broadly specified common framework and some tailored indicators for more limited policy initiatives.

Proposed action 3. Re-design the evaluation process so that it will adopt more Impact Management type of approach. In such approach achieving the impacts will be actively managed throughout the funded project life cycle by the funding body and the grant recipient. Funding body and the grant holder also co-create impact framework, data collection, KPI's and agree impact monitoring on a yearly basis. Grant recipient will commit to these activities at signing the project funding contract. Nevertheless, it is also important to retain the autonomy of the research when it comes to research results of the project and naturally the funding agency should never influence the research results.

Contact information:

Jari Kuusisto, jari.kuusisto@uwasa.fi, +35850447123098

References:

Novo Nordisk Foundation Annual Impact Report 2021 – Societal impact of the Novo Nordisk Foundation (to be published), Copenhagen, Denmark.

DEA (2012) Private foundations – a unique player in Danish research funding.
<https://www.datocms-assets.com/22590/1587548527-privatefoundations.pdf>

Thomas Aslev Chistensen (2022), Memo on Impact frameworks and impact management. Private memo provided by the author in connect with telephone discussion.

