

## H021 Workshop report

# Policy and Recommendations – 6 November 2018

### Introduction

As part of the H021-project "Dagens forsknings- og innovasjonssystem", the Norwegian Research Council hosted a workshop on the 6<sup>th</sup> of November 2018. The workshop was organized by Steven Wooding, Cambridge University and Torben Vad, DAMVAD Analytics. In addition to this, Alexandra Pollitt from Kings College and Catriona Manville from Rand Europe contributed with international insights and inspiration to the discussions.



The aim of the workshop was to test, nuance and discuss the results of the initial analysis. Hence, it should contribute to the analysis by providing insight on how to interpret and use the results of the analysis.

Prior to the workshop the participants were sent five themes indicating major challenges in the Norwegian health research and innovation system. Under each theme of challenges up to eight proposed solutions were highlighted:

# 1 Better public health impact

## Identified challenges

- Inadequate knowledge of causes and consequences of differences in health and health service utilization
- Large variations in local knowledge and implementation of treatment guidelines
- Initiatives at the local level are merely pilots and lacks good documentation
- Public health initiatives are not sufficiently evaluated
- Low level of public procurement of innovative solutions
- New practices, technologies or service models are poorly adopted and diffused
- Leading research environments are not sufficiently engaged in applied research

## Solutions proposed:

- 1) Let regional health authorities take over the responsibility for implementing new guidelines and insuring the commissioning of the same.
- 2) Give "Kommunenes strategiske forskningsorgan" (KSF) a permanent assignment to promote enhanced knowledge creation and sharing in regard the implementation of guidelines among the municipalities.
- 3) Establish mechanisms to make sure that pilots are evaluated in a transparent way and formulate criteria for what a successful and high-quality local project looks like.
- 4) Establish Innovation and Technology Tariffs and Innovation and Technology Payment schemes to reduce financial and procurement barriers related to the uptake of innovations (Inspiration UK)
- 5) Create strong interdisciplinary research units, "Clinical Academic Groups" (CAGs). consists of clinicians and researchers from each region, educators from the region, university lecturers and university researchers with the aim to link basic research and clinical research and to work for research results to be implemented in clinics and improve the treatment of patients (Inspiration Copenhagen Health Science Partners)
- 6) Establish national networks of academic, industry, health service, third sector and local authority stakeholders and organisations, which aim to spread innovations across the healthcare system as well as generate economic growth (Inspiration UK).
- 7) Establish a Collaborations for Leadership in Applied Health Research and Care (inspiration UK) between service providers, managers, research institutions and local organisations (e.g. councils, charities) etc. Make sure to address challenges due to different values, priorities and ways of working.
- 8) Use KPI's (tellekanter) measuring and rewarding health researchers for collaboration with industry, commercialization, contribution to innovation, provide solutions to real health problems and contributing to socioeconomic impact.

## 2 Using the R&I system to stimulate and grow the health business sector

### Identified challenges

- Norway lacks private health businesses and have a low private investment level in research and innovation.
- Support measures do not support private health business development in the invention and adoption stages.
- There is not enough public-private cooperation in the Norwegian system.
- There are only few career paths in health research beyond PhD and outside academia.

### Solutions proposed

- 1) Broaden the scope of TTO's and use KPI's (telleanter) measuring and rewarding TTO's for their contribution to innovation and business development in the health sector.
- 2) Make large cross-sectoral mission calls focusing on grand challenges requiring large consortia and make it a requirement to include innovative SME's.
- 3) Establish a large-scale cluster with the combined aim to recruit highly skilled researchers and attract talent to Norway, to stimulate cross-pollination between academia, hospitals and industry and to increase the visibility of research and innovation in Norway. (See Copenhagen Bioscience Cluster for inspiration)
- 4) Establishment of a permanent life science park with a big cluster, involving industry, academia and educational partners under the same roof.
- 5) Establish a Small Business Research Initiative (Inspiration UK) with the aim to strengthen research competences, educate and hire PhDs, find innovative solutions for healthcare problems and increase the economic growth of innovative health companies.
- 6) Broaden the scope of Innovation Loans and OFU contracts and establish a special fund with the specific aim to build a Norwegian health business sector.
- 7) Give tax incentives for investors investing in health research and innovation projects.
- 8) Launch regional initiatives for Procurement Development & Strategic Partnerships with a focus on the three strategic pillars: business development of corporate procurement, a future pipeline with new innovation projects, and a dedicated consultancy service towards the regional hospitals (Inspiration the Capital Region of Denmark).

### 3 Strengthen collaboration across organisational silos

#### Identified challenge

- The Norwegian sector principle hampers cross-sectoral cooperation

#### Solutions proposed:

- 1) Develop large national and inter-sectoral health research and innovation announcements.
- 2) Introduce mission-oriented projects, in which parties from different sectors are required to solve the biggest health challenges.
- 3) Coordinate research infrastructures at the highest strategic and operational level, i.e. establish a formal cooperation forum with high level participation from the ministries, regional health authorities and research institutions.
- 4) Establish a joint research administrator support system.
- 5) Promote mutual governance representation between research institutions and regional health authorities and between university hospitals and the faculty of Health / faculty of Medicine
- 6) Make a larger proportion of funding for health research subject to open national competition.

## 4 Efficiency and speed of research translation and innovation

### Identified challenge

- Health innovation processes are too slow

### Solutions proposed:

- 1) Launch a program supporting open innovation which promotes experiments with new open innovation measures. It could be price challenges, partnerships accelerator fellowships, new innovative procurement initiatives, as well as programmes supporting online marketplaces, innovator support, innovation scouting, etc.
- 2) Reduce variation in the availability and quality of treatments and provide evidence-based guidance and recommendations on the clinical and cost-effectiveness of treatments, technologies, medicines, diagnostic tools, health activities (Inspiration UK)
- 3) Establish production-oriented environments for the development and testing of digital innovations with synthetic data at the hospitals with the aim to increase hospitals readiness and speed regarding digital innovation.
- 4) Have continuous tests of new solutions on limited populations. The tests should provide better skills before market introductions. The tests could be done in testbeds or as part of the innovation arena in clusters, in hospitals or in municipalities.
- 5) Establish fast-track appraisals (Inspiration UK) for products that 'offer exceptional value for money' and ensuring that they are made available to patients already 30 days after approval.
- 6) Speed up the uptake of high-impact and evidence-based innovations through an Innovation Accelerator (Inspiration UK)
- 7) Bring organisations and actors across the health system together to work jointly on an Accelerated Access Pathway with the aim to speed up the route to market for selected, strategically important, transformative innovations (Inspiration UK)

## 5 Effectively integrating public, patient and practitioner priorities

### Identified challenges

- Patients and the public are invited in but without the capacity to contribute
- Users experience difficulties getting access to health data.
- Low prioritization of health technology assessments and clinical trials
- Municipalities lack the capacity and competencies to be involved

### Solutions proposed

- 1) Launch an overall government plan offering concrete support measures to ensure that Norwegian patients and users can be involved systematically and with the capacity to contribute and make a difference. The plan should allow for wide-spread experimentation with different kinds of user involvement, i.e. real-time monitoring, crowdsourcing, peer-research, online feedback, establishing communities and making participatory priority setting.
- 2) Formulate a National Strategy for Patient-Oriented Research (Inspiration Canada) with national governance structure accompanied by lateral support hubs across regions. An appropriate funding model, with national contributions to core activities being matched by regional funding. Stakeholder engagement across a broad group of stakeholders in various sectors, as a key part of the initiative's design. Focus activities on a) providing access to data and training; b) providing evidence to research questions; c) strengthen clinical trials; d) networking between researchers, experts and patients; e) providing small grants to build capacity and streamline current start-up process for clinical trials and f) providing tools for patient engagement.
- 3) Establish Priority Setting Partnerships (PSPs) (Inspiration UK). Include multi-stakeholder collaborations to highlight health research areas important to patients, carers and clinicians, which could be explored by research. E.g. identify the top ten uncertainties related to the effects of treatments in different areas. The prioritisation should help raise health research funders' awareness of issues that are important to patients, carers and clinicians.
- 4) Support and expand projects like "praksisnært", which makes it possible to recruit patients among GP's for research.
- 5) Avoid high paywall or regulatory walls when establishing a technical environment that it is open for anyone and supports open innovation in health.
- 6) Establish a platform where citizens can store their own health data and companies and organisations can develop and supply health-related services for citizens (Inspiration Sweden).
- 7) Reward the hospitals for how many patients they have involved in clinical trials and technology assessments.
- 8) Make Kommunenes Strategiske Forskningsorgan (KSF) a permanent Council with a budget for research and innovation and a hearing part, funded jointly by RCN, HOD and KMD. Make municipalities fund 1-3 pct. of the money transfers from the government into accompanying research fund. This will in the future increase the municipalities research budgets.

In preparation for the workshop the participants were asked to indicate their first and second priority for an overall theme they would prefer to work on. Half of the participants voted. They prioritized as follows:

Theme	1st priority	2nd priority
1. Better public health impact	5	2
2. Using the R&I system to stimulate and grow the health business sector	2	0
3. Strengthen collaboration across organisational silos	4	2
4. Efficiency and speed of research translation and innovation	1	2
5. Effectively integrating public, patient and practitioner priorities	0	6

The participants worked with the proposed solutions in two rounds during the workshop. In the first round they were asked to work on their first priority and in the second round they were able to shuffle to another table. In the first round the participants were spread quite evenly across the 5 themes. During round number two, no participants chose to work with theme 3. Thus, 9 posters were produced in total - 2 on each theme except for theme number 3 where 1 poster was completed.



**The biggest tensions of the discussions**

During the two rounds of discussions of themes and related solutions there was a lively debate and a lot of constructive work. This is reflected on the posters that the groups made, including the additional post-it-notes that were added by other participants commenting on the challenges and ameliorations of the suggested solutions. To round up the workshop the participants were asked about the biggest tensions of the discussions.

The subject that took up most of the attention was the sectoral principle resulting in silos. A united health care system was mentioned as a solution to this issue, even though this doesn't seem realistic as of now. It is something that is continuously debated, however the sectoral principal is very strong. There is a lack of collaboration between the ministries. They are responsible of financing within their own sectors, which does not enhance the collaboration. The participants seem to share the opinion that the ministries only see their own sector and that there is a very narrow definition of responsibility. This is not the case in other sectors. As an example of this a participant mentioned that if you were to ask the Ministry of education if they are responsible for research on primary schools, they will most certainly say yes.



A suggestion was to launch a program on open innovation. This should cut across sectors, silos, levels and systems. The intention should be to link the arenas in some way and actually put some money in to this effort 'from above'. According to one participant it does not help to just corporate and compensate from below, with small money. The government should contribute to this and reflect upon what issues need to be solved.

Another subject that was discussed in this part of the workshop was essentially what task that needs to be done. Is it to create more jobs? More efficient health care systems? Improve patient health and welfare? One participant noted, that the workshop discusses large themes and that they (the participants from different sectors) collide with each other as there are a lot of different interests. Another participant expressed that the central questions is to describe what the job of the public sector is. Is it to treat patients? Is it to build a community in terms of research and businesses in order to provide solutions? There has been a tendency that the users are slowly making their way into the production of solutions, but the private sector is not really a part of the system as of today. That also needs to change in the future.



**Selected policy option**  
4.2 & 4.7

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?  
Who: Governmental structures & involve the different stakeholders  
How: Establish standards & implementation incentives (sanctions)  
→ monetary, improved patient care & better working environment

**What would success look like?** How might it be evaluated? When should it be evaluated?  
More effective, efficient, and better treatment.

**Known unknowns?** What else do we need to know make this work?  
\* knowledge about future technology  
\* Drivers for behaviour and uptake for new tech.

**Problems and solutions** Space to put post-it notes of challenges and ameliorations

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?  
4.4 continuous tests  
4.6 speed up the uptake.

Potential of idea (ie without feasibility)      Feasibility of idea

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?  
Belgium not used to standardisation going forward  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance

**What would success look like?** How might it be evaluated? When should it be evaluated?  
Patient manager taking over  
Goal: better health of (adult) = take responsibility  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance

**Known unknowns?** What else do we need to know make this work?  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance

**Problems and solutions** Space to put post-it notes of challenges and ameliorations

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?  
Banks, industry, public governance  
Banks, industry, public governance  
Banks, industry, public governance

Potential of idea (ie without feasibility)      Feasibility of idea

**Selected policy option**  
Introduce mission oriented projects in which parties from diff sectors are required to solve problems

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?  
Who: Prim & sec healthcare, universities, pts. organiz, tech providers, governmental bodies  
How: Network based process involving stakeholders above  
Examples: Mental health UK, Greater Copenhagen health co partners, Samaritans organization, KSF in cl. municipalities  
Cost: Stakeholder contribution - funding bodies' 100 mill NOK  
Time frame: 2-10 yrs depending on project size + complexity of mission

**What would success look like?** How might it be evaluated? When should it be evaluated?  
Goals can be measured - important  
How: TBD - whole range of successes/measurements, + partner  
When: several evaluation points during process/evaluation

**Known unknowns?** What else do we need to know make this work?  
Evidence based approach to define mission.  
GROUP: JARSE SUBBUM  
Elin Eriksson  
Who Longland  
Samlene Gurrup  
Vibe, Jansen

**Problems and solutions** Space to put post-it notes of challenges and ameliorations

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?  
3.1 Operational funding/calls  
5.2 National effort for pt-oriented research  
5.3 Priority settings  
4.4 Cont. test for new solutions  
4.7 Bring organs ++ together  
1.5 Create strong int-disc research units

Potential of idea (ie without feasibility)      Feasibility of idea

**Selected policy option**  
Create strong interdisciplinary research units (1.5)

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?  
Who: Academia (research education) pts, primary health care  
KSF + FH + OH sector → initiate  
How: National network of units  
What int examples: National example: The Trans Study  
Cost: 10 mill NOK annually - 4 regional units 2.5 each  
Time frame: 10 yrs (5-8)  
→ sustainable in terms of cost/personnel

**What would success look like?** How might it be evaluated? When should it be evaluated?  
Robust • Reducing inequalities in health care  
• Implementation of results that make a difference

**Known unknowns?** What else do we need to know make this work?  
National or regional?  
regional  
Umbrella structure?  
Joint leadership?

**Problems and solutions** Space to put post-it notes of challenges and ameliorations

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?  
Units that:  
• Implement evidence  
• focus public health  
• produce evidence  
evaluate!

Potential of idea (ie without feasibility)      Feasibility of idea

KSF (8) (5.8)

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?

ARB. GRUPPE KSF (HØR) / 4 REGIONER (REGIONAL/LOKAL FORÅRBEJEDNING) / FINANSIERING?

**What would success look like?** How might it be evaluated? When should it be evaluated?

MER KUNNSKAPSBASERT PRAKSIS I PRIMERHELSE (BØRE)

**Known unknowns?** What else do we need to know make this work?

**Problems and solutions** Space to put post-it notes of challenges and solutions

FORSKAL PÅ FORÅRBEJEDNING VS. UDBYGGELSE / LOKAL VS. REGIONAL VS. NASJONAL / DEPARTEMENTER SILBER (FINANSIERING) / HØ-RETT PRIMER KID-MER HELSE / ST. FORÅRBEJEDNING (FOR ÅRSVÅR) / U. (ÅRSVÅR) / U. (ÅRSVÅR)

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?

PEP(3) (5.3) PRAKSISNETT

Potential of idea (ie without feasibility) | Feasibility of idea

Mona Skott, Espen, Tone, Heidi Tøstet

**Selected policy option**

open innovation program

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?

Narrow down # measures / KEEP focus on: = OPEN (primary, secondary, private, user) / = focus on removing barriers close to delivery/implementation/purchase

Will work well in some areas in others / - elderly / elderly care / vulnerable groups (immigrant) / Cultural change in the public stakeholder (hospital/municipality)

**What would success look like?** How might it be evaluated? When should it be evaluated?

Address problems that cross fag/sector 'silos' / More radical innovations get implemented

**Known unknowns?** What else do we need to know make this work?

Who will take the lead / Will the public stakeholder take the lead?

**Problems and solutions** Space to put post-it notes of challenges and solutions

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?

Innovation Accelerator / open data / Cluster programs / Learn from other sectors like ...

Potential of idea (ie without feasibility) | Feasibility of idea

Decision: The scope of the ...

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?

... / ... / ...

**What would success look like?** How might it be evaluated? When should it be evaluated?

... / ... / ...

**Known unknowns?** What else do we need to know make this work?

**Problems and solutions** Space to put post-it notes of challenges and solutions

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?

Potential of idea (ie without feasibility) | Feasibility of idea

6+7 Adressere Kapital behov

**How would it work?** Who would do it? How would they do it? What international examples are there? How much would it cost? How long would it take?

... / ... / ...

**What would success look like?** How might it be evaluated? When should it be evaluated?

... / ... / ...

**Known unknowns?** What else do we need to know make this work?

... / ... / ...

**Problems and solutions** Space to put post-it notes of challenges and solutions

**What other initiatives/ideas are synergistic with this one?** Are any suggested initiatives/ideas antagonistic?

... / ... / ...

Potential of idea (ie without feasibility) | Feasibility of idea

**PSP (5,3)**

**How would it work?** How would it work? How would they do it? What international examples are there? How much would it cost? How long would it take?

Flere samlinger og mindre ud i alle spær (samtidig) forbrug  
 Bottom-up process - forudsætnings / design thinking  
 Udforske på tværs af felter - alle helhedsplaner, bare i samarbejde med  
 Indtætte bidragningerne! Men arbejde med - samarbejde  
 Kombination af kerneaktiviteter og forbrugstjenester  
 Udforske midler til at gøre PSP - PSP-program i 10-15 år  
 Støtte KSF 7 i udførelse af 10 PSP  
 Programmet skal ikke involvere mere end  
 1000 personer, selv efterfølgende

**What would success look like?** How might it be evaluated? What should be the outcomes?

Mer relevant forbrug  
 Behageligt forbrug  
 Lettelse i implementering

Arbejde på tværs af - finansiering/finansiering  
 Mulighed for forbrug  
 Arbejde + produktivitet i var i samarbejde

At gøre  
 forbrug  
 hurtigere /  
 mere effektivt

**Known unknowns?** What else do we need to know about this idea?

Habilisere gode forbrug  
 H-OD  
 Metoder i forbrugstjenester

**Problems and solutions** Where to get stuck? A list of challenges and stakeholders.

5,3 KSF

**Potential of idea (ie without feasibility)**      **Feasibility of idea**