

NOTeB

Nordic Test Beds



Project goals

- To support developers and companies by evaluating and running cases in realistic Nordic cross border health care test bed environment
- To improve the implementation of new innovative and user friendly products/services generated by the health care professionals and industry
- To create systematic cooperation between Nordic test beds operating in healthcare sector through productized procedures and innovative collaboration methods

Project participants

- Innovation Skåne
- Innovation Akademiska, Uppsala University Hospital (Akademiska sjukhuset)
- Aalborg University Hospital, North Denmark Region
- Oslo University Hospital
- OYS TestLab, Oulu University Hospital
- Centre for Health and Technology, University of Oulu (coordinator) + BusinessOulu

Project work packages

- WP2: Network cooperation
- WP3: Case coordination
- WP4: Intellectual Property Rights Guide
- WP5: Benefits for the stakeholders
- WP6: Clinical testing procedures
- WP7: Health value, efficiency gains and best practices

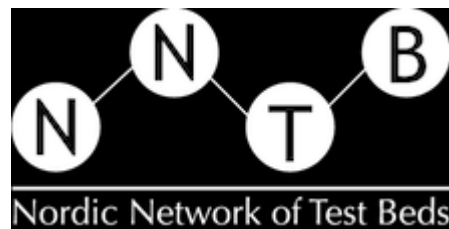
Project funding

The project has received funding from Nordic Innovation, a Nordic institution working to promote cross-border trade and innovation, with board members selected by the five Nordic governments (Denmark, Finland, Iceland, Norway and Sweden).



Cooperation

Nordic Test Beds (NoTeB) and Nordic Network of Test Beds (NNTB) are Nordic Innovation funded sister projects in the pursuit for higher visibility and access to services provided by health field testbeds in the Nordics. Together the two projects aim to secure a coordinated and varied offer of testbed services all across the Nordic countries.



Cases evaluated and/or tested in the project

- SplintEEZ -cast replacement
- CompactaSteril -mobile solution for surgery intervention
- Sengeløfteren -bedlift
- Druglog solution improving the patient safety of intravenous drugs prepared at the hospital ward
- HangOn Box designed to hold a patient 's personal belongings
- HELGE (Hemolysis Level Gauge Equipment) for identification of hemolysed blood samples at the point of care,
- Monidor: Monidrop device for accurate and safe intravenous therapy
- Triple A system; alcohol consumption monitoring before and after surgery

Cases evaluated and/or tested in the project

- Adesante: Clinical Operation Simulator (COS™); virtual reality solution for surgery planning (Turku, Finland)
- MediTuner AB: AsthmaTuner digital self-management solution for asthmatics (Stockholm, Sweden)
- Medow AB: IV bracelet for intravenous tubes attachment (Lund, Sweden)
- Nucu Oy: Nucu “kangaroo method” nest for babies with wooden plate and soft nest part (Oulu, Finland)
- Q-linea AB: ASTar Instrument System for automated antibiotic susceptibility testing (Uppsala, Sweden)
- Runitec A/S: Trauma carpet designed for hypothermic and trauma patients (Aalborg, Danmark), and
- WeVision: Laboratory Cost Modelling & Analytics tool (Oulu, Finland)

Benefits of test beds activities

Several benefits have been identified for the main stakeholders (by interviews);

- Small and middle sized companies
- Hospital personnel
- Innovation network and project partners

The benefits are described in the report
"Evaluated benefits of cooperation between Nordic test beds within health care".



Benefits for companies

Several benefits have been stressed by the interviewed companies;

- The unique value of a realistic product environment
- Testing executed by real teams of end users
- Testing in different countries added value
- Insights in communication
- Insights into how to design a test
- Facilitating the contacts with hospitals
- New application of the product
etc.

*“Small companies have no idea
how to address a hospital.
I mean – who do I call?”*

Benefits for hospital personnel

Several benefits have also been highlighted by the participating hospital personnel;

- See future products and services
- An opportunity to impact the development
- Possibility to discuss procedures and ways of working
- Pride of working at the hospital striving to be in the forefront of healthcare

Definition of testing

(in a clinical testbed context)

- Idea validation through workshop
- Product refinement through meeting/workshop
- Usability
- Healthcare economic analysis
- Clinical trials
- Pilots
- Etc.

Testing is not:

- Official seal of quality
- Sales

Test journey

1. Dialogue

- Establish common understanding of what is the product, stage of product, how to test, what and how to feedback etc.

2. Contract

- Should contain non-disclosure, IP-rights and remuneration etc

3. Test planning and implementation

- Follow test protocol, perform risk analysis if needed

4. Test report

- Write up test results

Guidelines for testing

Types of testing:

- Forms, interviews, meetings, workshops, immersions, technical tests, clinical trials, pilots, etc

Participants:

- Multi-disciplinary teams consisting of clinical staff (nurses, doctors, physiotherapists), support staff (IT, economy, cleaning, procurement), etc

Ethical considerations

- Avoid involving patients until necessary, avoid bias, check rules

Procurement

- Think of possible future procurements – avoid procurement risks. Transparency, equal treatment, non-discrimination, proportionality, mutual recognition is needed

Test set-up:

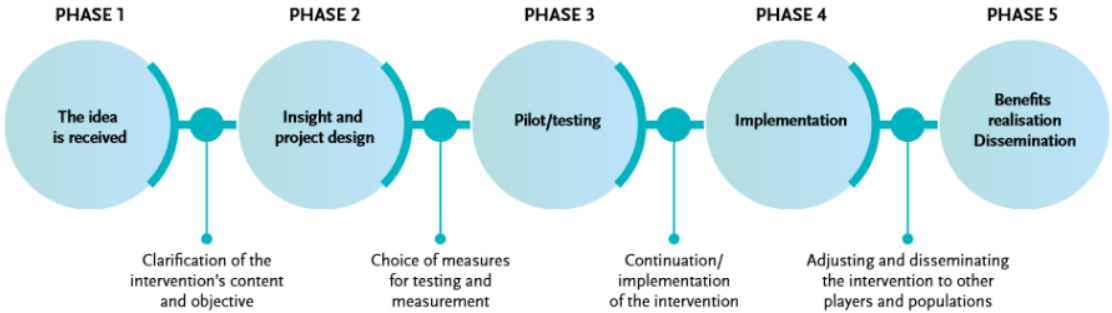
- Use a pre-defined test protocol, perform risk analysis

Why to measure effects of innovations?

- Is it worthwhile starting an innovation development process?
- To check if you are on the right track.
- To help the colleges to understand the purpose of the innovation, and
- thereby reduce resistance against change.
- To create an innovative culture and a learning organization.
- To improve the communication with people involved.
- To help the management making decisions.

How to assess value and benefits of innovation?

THE INNOVATION PROCESS

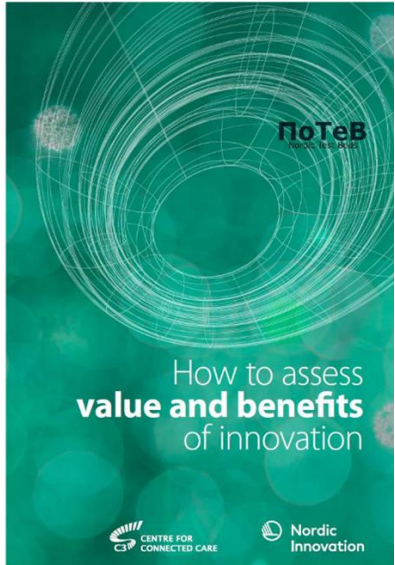


The measurement process must be an integrated part of the innovation process.

More information in the user guide *"How to assess value and benefits of innovation"*.

THE MEASUREMENT PROCESS

Expected benefits	Designing the measurement method	Evaluation and reporting	Subsequent measurements	Dissemination
<ul style="list-style-type: none"> • What is the overall goal of the project? • Who will be affected by the intervention (stakeholders)? • What are the expected benefits, and for whom? • What similar projects/interventions are out there? 	<ul style="list-style-type: none"> • How to measure • What to measure • Analyses • Protection of privacy • Reporting • Plan for the measurement process 	<ul style="list-style-type: none"> • Collecting data • Analyses • Reporting • Preparing for implementation 	<ul style="list-style-type: none"> • Data collection • Analyses • Reporting • Adjusting the intervention • Plan for dissemination and sharing 	<ul style="list-style-type: none"> • Publication and marketing of the benefits of the intervention • Assumed benefits for new areas of use
Decision regarding measuring of the benefits of the intervention	Plan for measuring the intervention	Final report with recommendations	Subsequent measurement and adjustment of the intervention	Sharing of experience and dissemination of the intervention



Contact & more information

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