

Driving cross-sectoral innovation in health and life sciences

An Innovation Agenda
for the
Baltic Sea Region Health Economy



Part-financed by the Baltic Sea Region Programme 2007–2013
Business acceleration support and training
bridging innovative SMEs and health care organisations
to strengthen BSR health economy
[Acronym BSHR HealthPort]

Part of the Flagship Project 7.4
of the European Strategy for the Baltic Sea Region



Part-financed by the European Union
(European Regional Development Fund)



Our Vision

Strengthening
 cross-sectoral, collaborative, open innovation
 in health and life sciences
 to promote
 sustainable, cost-efficient, citizen-centric health systems,
 strengthen regional economies and
 thus improve the health, wellbeing and prosperity
 in the Baltic Sea Region (BSR)

Objective of the Innovation Agenda

- Promote and increase the development and implementation of innovative products, technologies and services for health and life sciences
- Accelerate market access for innovative products, technologies or services
- Set up a framework for a sustainable innovation ecosystem in the BSR
- Through innovation promote more efficient BSR health care systems
- Promote collaborative BSR efforts to combat challenges to health and well-being
- Spur macro-regional development and the creation of new jobs and businesses

Key messages

An ecosystems approach to innovation will

- help the regional economies to contribute to more effective and qualitative health care and tackle the major challenges of health care and well-being in an ageing society
- contribute to a BSR-wide common home market for the health economy and related sectors
- help overcome fragmentation of solutions and serve as a catalyst for implementing common regulation and public procurement rules
- contribute to fostering a common identity in a transnational context
- help overcome innovation traps such as lack of early stage access to capital or hurdles within the systems of procurement and regulation
- help provide a creative and safe environment for cross-pollination of ideas and innovativeness

These objectives will be achieved by

- promoting a cross-sectoral BSR wide innovation ecosystem for the health economy
- providing services and tools for SMEs including
 - education in entrepreneurial skills,
 - early ideas evaluation and support,
 - early access to capital,
 - early support in regulation and approval,
 - risk management and networking
- bundling and aligning regional, national and macro-regional activities in innovation and implementation of innovative products, technologies or services

Foreword

The ScanBalt strategy for 2012-2015 is entitled "Smart Growth and Specialization on Top of Europe towards EU 2020". The Innovation Agenda "Driving cross-sectoral innovation in health and life sciences" is a step forward to implement this strategy.

There is a clear line connecting the various projects since the beginning of ScanBalt BioRegion and the innovation agenda released by BSHR HealthPort.

First the basic tools and structures of ScanBalt BioRegion (supported by Nordic Innovation Center) were established. Hereafter followed the collection and structuring of the necessary knowledge about the region and its competencies (supported by EU FP 6).

The insight gained served to propose basic decentralized mutual benefit models for collaboration and macro-regional added value chains (supported by EU FP 7 and Interreg IIIB). The establishment of regional triple helix clusters was promoted where lacking and the Baltic Sea Region promoted as a globally competitive health and bio economy under the brand name ScanBalt BioRegion.

An important moment arose when the EU Baltic Sea Region strategy was established and ScanBalt Health Region became a flagship within priority area innovation (PA Innovation).

ScanBalt Health Region was launched following discussions in a previous project, Bridge-BSR (FP 7), and builds on experiences gained since the beginning of ScanBalt BioRegion in 2001. It is based on the basic ScanBalt principles of decentralization and bottom-up while referring to a common vision and having a common communication structure. The bottom-up approach is supported by an advisory mechanism.

Now ScanBalt BioRegion targets specifically the issue of innovation with the innovation agenda. Our hope is to promote an eco-system for innovation leading to concrete innovation platforms. In fact the implementation of the agenda is already initiated and we hope to see the first collaborative trans-national innovation platforms in the coming years.

ScanBalt BioRegion thereby takes another step forward supporting regional economic development.

We hope that you enjoy reading the innovation agenda and that it may lead to considerations on how to be part of this exciting adventure!

October 2013

Dr. Wolfgang Blank
ScanBalt fmba President
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Peter Frank
ScanBalt fmba General Secretary
Coordinator of BSHR HealthPort



The HealthPort advisory board and partner representatives met for the last time at 12th ScanBalt Forum 2013 16 – 18 Oct in Gdansk

Executive Summary

EU health care sector spending ranges from 5 to 11% of GDP across different regions. This is a significant level of economic activity. But it faces mounting pressures due to demographic and epidemiological trends. There is also a tremendous cost increase in drug & technology development. And, these trends are happening in a period of ongoing financial instability. At the same time a paradigm shift is occurring that reflects a mood of change in health care towards more integrated and pluralistic models of care in place of the current hospital-centric model. In meeting these challenges, health care is not simply a cost. It is an investment that acts as a driver of the economy, employment and creation of new businesses. However health care is split into sectors which function separately: health care providers, enterprises, and research institutions, regulatory and financing institutions. As models of care evolve and needs change, the EU project BSHR HealthPort aims at bridging existing cross-sectoral gaps by involving key regional actors in the value chain of health care innovations. Specifically BSHR HealthPort addresses the following key bottlenecks:

- (1) Insufficient commercial exploitation of ideas from health care researchers and practitioners
- (2) Procurement practices limiting access of innovative SMEs to the health care market
- (3) Insufficient innovation competencies and cultural differences between the target groups.

Definition of Health Economy

“Provision and commercialization of goods and services, in order to support the maintenance and restoration of health.”

Towards Openness and Collaboration

Past and current innovation strategies in health and life sciences, biotechnology and the health economy are focused on closed innovation, i.e. it is based on knowledge and ideas from inside a company or a consortium of partners. In the pre-internet era knowledge was mainly available either through (paper-based) publications or through people. The internet, and especially the mobile internet, enables access to knowledge anywhere at any time (where

The Innovation Agenda for Health Economy in the Baltic Sea Region is part of BSHR HealthPort and summarizes the findings and best practice examples developed in the project.

The BSR shares with the rest of the EU challenges like rising health care costs and ageing populations. In particular the major non-communicable diseases (diabetes, cardiovascular diseases, cancer, chronic respiratory diseases and mental disorders) account for an estimated 86% of the deaths and 77% of the disease burden in Europe. Consequently, it is only logical to coordinate responses to common challenges, but also to (i) pool the resources and expertise, and (ii) exchange ideas and knowledge on effective and less effective solutions. This can help bridge gaps and speed up innovation processes, to avoid duplication of efforts with limited resources, and, finally, to allow for well-informed policy and decision-making.

internet access is available) and in this way knowledge is not bound to a specific geographical region any more. It also provides the tools for global collaboration. It is therefore evident that idea generation and problem solving is much faster in a community than in a closed team of a limited number of persons but also requires new management models, an enhanced focus on quality and standardization and a free market for the flow of ideas and knowledge. Collaboration is therefore an imperative to accelerate the development of innovative solutions for 21st century health care challenges.

Innovation Ecosystem for Health Economy

Innovation in health care is essential to address the challenges of an ageing society, epidemic threats, rising health care costs and growing health divide between healthy and unhealthy citizens. But health care is complex and models of care are changing. Support for innovation to develop new products and services has to be addressed in a holistic way. A focus on value creation and societal usefulness is essential for the long-term stability of health care systems. A focus on unmet health needs and user-driven innovation is a key success factor for a new thriving innovation system. The BSR innovation ecosystem provides a promising model implementing innovation support activities in a macro-regional context with a complex network of entities and relationships. Such an ecosystem in ideal form ensures that individuals are given optimal conditions to apply their skills and competencies while contributing to the interconnectedness and interdependency of all stakeholders. The Innovation Agenda for health economy in the Baltic Sea Region promotes an Open Innovation Ecosystem and defines actions towards their practical implementation. The main objective is to support the creation of sustainable, cost-effective, citizen-centric healthcare systems promoting new jobs and businesses.

Policy recommendations

Innovation promoting the BSR health economy includes a regional/national, a macro-regional, and a global dimension.

On a regional/national level EU policy should:

- strengthen instruments which aim at the formation of new and existing regional research and innovation-driven (triple/quadruple helix) clusters
- support user- and employee-driven innovation and the creation of regional innovation systems for health care innovations
- support a cultural transformation towards a positive climate for innovation including creativity, openness, transparency and trust, a positive attitude towards failure, honour for risk-taking, cross-pollination of ideas and novel mechanisms to cope with IP rights

On a macro-regional level EU policy should:

- strengthen trans-national and cross-sectoral approaches for launching projects and initiatives aimed at removing disparities, gaps and barriers in the EU and fostering cooperation for innovation within the health economy in order to overcome the major societal challenges and bring innovative products to the market

- support macro-regional development based on regional innovation systems in order to implement the ‘Innovation Union’ of the EU 2020 Strategy
- support the infrastructure that connects the different regional innovation systems and mechanisms for innovation dissemination and exchange among the regions
- support the establishment of an effective Baltic Sea Region cross-border financial support infrastructure for research, development, innovation and education in collaboration with public and private funds and investors

Definition of Innovation

“Innovation is ideas put into practice which then create value.

Value can be heightened quality, improved economy or increased safety.”

(Ideas Clinic Aalborg)

Implementation recommendations

In the scope of the HealthPort project a model for a sustainable innovation ecosystem has been developed: the ScanBalt International Business Innovation Support (IBIS). IBIS is a multidimensional approach and builds on ideas and models developed in Bridge-BSR and HealthPort. IBIS is an instrument for macro-regional development and is part of the EUS-BSR flagship project ScanBalt Health Region (SBHR). It implements the EU innovation strategies and may be considered as an implementation guideline providing a blueprint for concrete realization.

(1) Scouting & Early Evaluation

Early evaluation of ideas is important to filter out promising ideas and to identify any knock-out criteria in an early stage. Local mentoring is needed to support young entrepreneurs and provide them with advice and access to knowledge that is needed for the different phases of transforming an idea into a marketable product or service.

Recommendations:

- Set up a platform/meeting point for young entrepreneurs and experts for early evaluation and mentoring
- Promote Innovation competitions to generate and filter innovative ideas
- Set up user driven idea management platforms to generate early feedback from potential users

(2) Business Support & Financing

Young SMEs lack resources and skills to manage the early phase of company development and subsequent growth gaps, especially when it comes to international collaboration. Specific competence is available in the regions that could be used on a transnational level.

Recommendations:

- Improve existing and develop new forms of transnational financing e.g. crowdfunding or special transnationally available funds for health and life sciences
- Promote successful models for SME support and development that could be used in the entire BSR
- Develop a transnational, cross-sectoral mentoring system for SMEs in health and life sciences

(3) Implementation & Marketing

Efforts to implement products and services in the market are mostly underestimated. Thoroughly prepared market access however is crucial for the success and growth of companies in health and life sciences. It will be essential to offer specific instruments to prepare SMEs for international market access.

Recommendations:

- Provide a platform with modular shared services for SMEs that comprise marketing and dissemination of final products or services. Organise platforms for cooperation between SMEs offering complementary services
- Provide case specific support for transnational market implementation with a focus on BSR macro-region
- Support "strategic communication" with all relevant actors for products and services from SMEs

(4) Education & Qualification

The "business environment" in the health care sector is constantly changing. Continuous education is a prerequisite for successful product development. Teaching entrepreneurship skills, knowledge about clinical trials (and translational research) regulation and certification is essential for startups and clinical personnel interested in developing new solutions.

Recommendations:

- Develop a platform of practical SME tailored courses on specific topics for working individuals (post-education) up to hands on local coaching for SME consortia
- Value working conditions and creativity – Create room for innovation and change the climate to allow creativity

(5) Regulation & Procurement

Regulation and approval will become increasingly pivotal in the future of pharma, bio- and medtech development. The public sector has two roles: it acts as a regulator on one side and as a procurer on the other side. PPP initiatives implementing the interest of regional economy support will become an important tool to overcome this bottleneck.

Recommendations:

- Support initiatives to coordinate clinical trials in the BSR and offer SME support measures
- Support the installation of early HTA assessment expertise as a parallel process to product development
- Support for certification procedures and other formal requirements with respect to international markets

Annex

Regional Hearings

Six regional hearings were conducted during the project period. The objective of the regional hearings was to integrate the BSHR HealthPort Innovation Agenda and innovation tools into regional, national and macro-regional strategies as a step towards a sustainable innovation framework, a key deliverable of BSHR HealthPort.

| | |
|---------------------------|--------------------|
| Vilnius, Lithuania | 10th February 2012 |
| Rostock, Germany | 26th October 2012 |
| Aalborg, Denmark | 31st October 2012 |
| Tampere, Finland | 22nd November 2012 |
| Vilnius, Lithuania | 24th August 2013 |
| Gdansk, Poland | 18th October 2013 |

Network Hearing

A network hearing (co-organized by ScanBalt HealthPort, Network of German Health Regions (NDGR) and HealthClusterNET) was organized and relevant stakeholders were invited to exchange experience and discuss the draft HealthPort Innovation Agenda.

| | |
|--------------------------|---------------------|
| Brussels, Belgium | 26th September 2013 |
|--------------------------|---------------------|

HealthPort Press Study Tour

The Draft Innovation Agenda was first published at a press study tour with invited journalists from 10 different countries. The tour focused on commercialisation of ideas from clinics and hospitals, gave an insight into the Danish health and life science sectors as a practical example and discussed the future of health and bio economy.

| | |
|----------------------------|---------------|
| Copenhagen, Denmark | 28th Mai 2013 |
|----------------------------|---------------|

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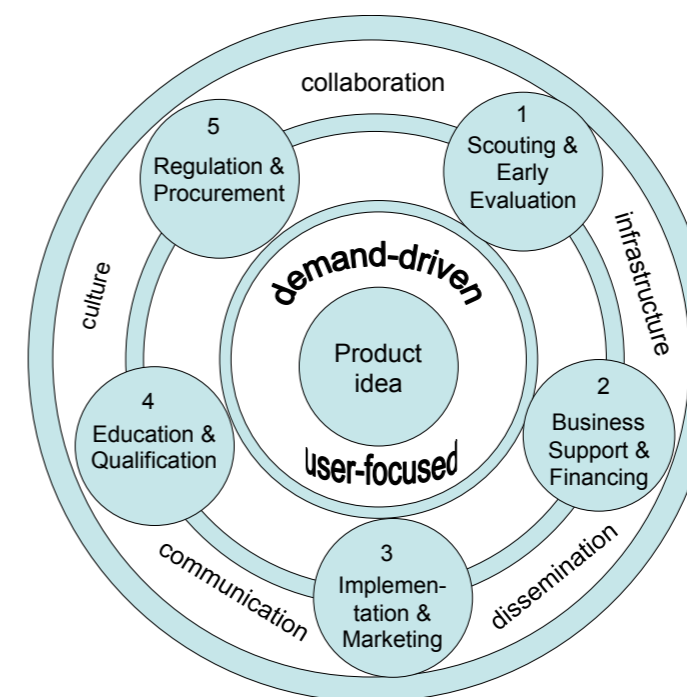
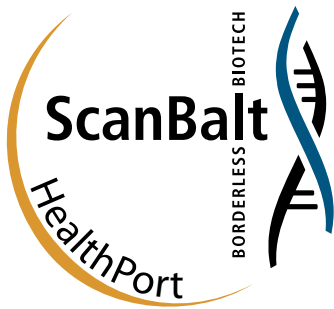


Figure 1: Innovation Ecosystem for Health Economy in the Baltic Sea Region

The figure illustrates the model of the proposed Innovation Ecosystem for Health Economy in the Baltic Sea Region. The model contains 5 action fields and at its core is a demand-driven, user-focused product idea. Further the model highlights that innovation can not be planned but fostered by providing an infrastructure for innovation management supporting collaboration, communication and dissemination of innovations and finally promoting a culture of openness and creativity.



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to promote
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