

MetaForum
“Innovation in the Health System”
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Memorandum on Dimensions of Innovation in the Health System

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Background and approach adopted

Only by means of innovation will it be possible to overcome major present and future challenges to the healthcare system such as the emergence of new disease entities, new diagnostic and therapeutic approaches, and problems of financing.

Obstacles to the efficient introduction of new drugs, treatment methods, and healthcare provision structures include unresolved conflicts of interest between different treatment and policy areas (e.g. expenditure limits vs. employment opportunities and economic potential in healthcare). A “thought blockade” is excessive focusing of the discussion on short-term cost and benefit considerations while ignoring other dimensions that are important for a balanced assessment of innovations in healthcare.

The various social groups that are of importance for the healthcare system sometimes have conflicting interests. The ability of developers, regulatory authorities, insurers, citizens and politicians, hospitals, physicians, and patients to come to decisions despite these differences depends on an understanding of innovations in healthcare that covers all important aspects and is shared by all parties involved.

With its MetaForum “Innovation in the Health System”, a series of events scheduled to be held over three years, the Fraunhofer Institute for Systems and Innovation Research hopes to help all parties involved to come to a common understanding of innovation in healthcare and how to assess it. For this purpose innovations are understood to include novel technologies, products, processes, and services, as well as novel structures (“systems innovations”).

The aim of the 2007 MetaForum was to establish dimensions for assessing innovations in healthcare. In the course of a two-day conference involving about sixty participants, a variety of aspects of this topic were discussed. The thematic areas of the MetaForum were systems aspects of innovations in healthcare, social aspects of innovations, and innovations from the point of view of patients (and of clients of health insurance companies and of citizens, respectively). Each thematic block was introduced by means of a plenary talk, which was followed by thematically focused discussions in smaller groups.

Some of the questions dealt with had already been considered by other discussion groups and the like. Until now, however, there had been no “meta”-forum that provided all those involved in the innovation process with an opportunity to state their specific needs and demands without immediately having to weigh these up and defend them against other

interests. The MetaForum thus provided participants with a unique opportunity to reach agreement on relevant matters before having to make decisions on contentious questions of current healthcare or economic policy. On this basis technical decisions can also find broader acceptance.

After the event the results of the first MetaForum on dimensions of innovation in healthcare were summarized in the form of the present memorandum by Fraunhofer ISI with the assistance of the chairperson, the speakers, and the leaders of the working groups.

Results: Dimensions of innovation in healthcare

Innovation in healthcare consists of more than just the development and introduction of new products, processes, and structures. Rather, a fundamental change in perspective is required if radically new possibilities for improving healthcare are to be identified and put into practice. This applies to many areas, however above all it implies the need for a change of paradigm from a disease-oriented to a health-preserving approach; a reorientation of the healthcare system towards citizens, health-insured individuals, and patients as active participants in their own healthcare; a holistic approach to people's individual requirements; and an all-embracing concept of health as an essential foundation and opportunity in people's lives.

All the protagonists involved in healthcare innovation (especially patients, payer organizations including health insurance funds, healthcare service providers, public research institutions, private companies, and health policymakers) have their own points of view. These must be taken into account if obstacles to the innovation process are to be avoided. This calls for very careful and precise analysis, as the various groups of actors and their respective requirements, contributions, and economic models are presently in a state of major flux.

When assessing innovations, consideration should be given to whether they make a contribution to

- **Patient-relevant treatment outcomes.** This dimension is relevant to all actor groups. In addition to the efficacy of new products and experience obtained with them in studies and routine clinical use, other important considerations include avoidance of burdens of disease, achievement or restoration of the ability to work, and improvement in quality of life. Also to be taken into account are improvement in treatability, humanity of treatment, and reduction of the burden of treatment.
- **Safety of products, processes, and services,** including contribution to optimization of the risk-benefit relationship, also compared to non-treatment, and safety-promoting structures.
- **Economic efficiency** of healthcare provision, in particular the relationship between cost (expenditure, expense) and benefit (effectiveness, meeting of demand). Innovations should also make a contribution to structures that promote efficiency. In the field of healthcare policy this also implies helping to coordinate healthcare policy objectives with those of other policy areas (nutrition, education, research, environment, economy).
- **Assurance and optimization of healthcare provision,** including quality of products, processes, and services, distributive justice, usability in clinical practice, meeting of demand, improved cooperation in healthcare, adaptation of the innovation to healthcare provision practice and to the life situation, illness concepts, objectives, and possibilities of patients, and contribution to the making of evidence-based decisions.

- **Health promotion.** Important aspects of this dimension include promotion of health knowledge and awareness, responsibilities of and possibilities for cooperative action by citizens and patients, illness prevention and consequent avoidance of expenditure, and new market opportunities for benefit-providing organizations, healthcare service providers, research, and industry.
- **Optimal implementation of the treatment plan.** This includes products, processes, and services that are optimized in terms of compliance and health management, structures that promote improved communication between the various protagonists and with patients, and competence of utilization (empowerment) of all involved parties.
- **Availability and quality of information** required for the creation and use of innovations, including the transfer of knowledge between research and practice, transparency in terms of costs and benefits to patients, and competence of utilization (empowerment) of payer organizations, healthcare service providers, and patients.
- **Maintenance of ethical standards,** including distributive justice and observance of ethical norms in research.
- **Competitive advantages** for researchers and developers, manufacturers, payer organizations, healthcare service providers, or the location as a whole, including usefulness for further research, choices for users, and modification of the innovation system itself (e.g. innovation-promoting organizational forms and innovation incentives for payer organizations and healthcare service providers).
- **Financial returns** for all groups of protagonists (other than patients), access to financing opportunities for researchers and developers, and economic growth and employment.
- **Costs and expenditure.** In the face of limited healthcare budgets, consideration must be given not only to the economic efficiency of an innovation, but also to the impact of the innovation on absolute costs and expenditure, healthcare insurance premiums, and patient co-payments.

Finally, innovation processes themselves need to be adapted (“innovation of innovation”). This calls for structures that motivate the protagonists and enable them to develop and exploit new concepts. This includes goal-oriented coordination of a number of policy areas (health, nutrition, environment, economics, research, education).

We wish to thank the participants of the MetaForum for their generous contributions to the discussions, the chairperson Prof. Kurt H. Biedenkopf, the speakers at the plenary sessions (Permanent Secretary Prof. Frieder Meyer-Krahmer, Prof. Ilona Kickbusch, Prof. Klaus-Dirk Henke, and Dr. Bernhard Bührlen), the leaders of the working groups (Dr. Dorothee Gänshirt, Prof. Jürgen M. Pelikan, and Prof. Friedrich Wilhelm Schwartz), Dr. Albrecht Kloepper for his work as moderator, and MSD SHARP & DOHME GmbH for providing unlimited financial support.

A detailed report of the entire event is to be published early in 2008.

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