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News Article

NATIONAL STRATEGY FOR HEALTH RESEARCH AND INNOVATION

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1 Malta Council for Science and Technology (MCST)

In 2011, the Malta Council for Science and Technology (MCST) commissioned the Development of a dedicated strategy for health research and innovation in line with its mandate from Government to identify areas of national priority and design and to also implement strategic approaches to enhance economic competitiveness and quality of life.

The Strategy was drawn up by a steering group which also included people from outside the health sector, to ensure that it also keeps note of the economic side of things.

2 Mission and Vision

The Health Research and Innovation Strategy for Malta aims to develop an enabling health research and innovation ecosystem as a springboard for securing sustainable health care. This can be done through the identification of areas and opportunities for undertaking health research in processes, diagnoses, treatments and delivery of health care services.

The objective is to improve the effectiveness and efficiency in these areas, attracting investment and achieving long-term sustainability.

3 Enhancing the efficiency and effectiveness of health care

Health research and innovation generate a range of direct and indirect benefits leading to the enhancement of the efficiency and effectiveness of healthcare.

Health research and innovation enhances the quality of health services through the development of new and innovative healthcare systems. Research leads to the implementation of evidence-based measures and policies, which are aimed at enhancing the quality of life of society in general. Improvement in health system is however a partial although direct impact of health research.

Environmental, social and economic developments are considered as indirect impacts which contribute to advancements in the welfare system. Health Research should cover a wide spectrum of academic fields in order to be effective. Fields include social sciences, engineering, agriculture and food technology among others.

4 Economic growth through health research

Health research in Malta promotes economic growth in the long-term, particularly because it tackles demographic challenges. Despite the smallness and inherent disadvantages faced by the Maltese economy, the development of health research in Malta is deemed to be economically viable especially when considering the challenges brought about by demographic development.

Smallness may actually be advantageous for local researchers, if they specialize on specific niches which are

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not easily accessible in larger countries. Furthermore, health research is expected to enhance the potential of the Maltese economy, diversifying local economic activity. Research improved productivity within the economy while reducing healthcare costs and increasing healthcare effectiveness.

Policy-makers in Malta should seek to encourage the uptake of promising markets, particularly those related to innovation, which open up new opportunities for the local economy. The aim of the Strategy is to ensure that health research activity and innovation in health care is promoted and furthered in Malta. In addition, the Strategy promoted measures that help in bridging the gap between research and policy implementation.

The implementation of this Strategy involves a number of economic benefits, which are identified and monitored through various indicators. Such benefits include prevention through increased awareness of diseases, enhanced efficiency within the healthcare system, and increased profits for the manufacturing sector.

In addition, capacity building and knowledge benefits are improved through research results and the more research capacity available (it increases as more institutions involve themselves in research projects). Health benefits include the improvement of the healthcare system as well as the well-being of the citizens.

Health research is a financially worthwhile investment as it will attract more local and international firms to the industry. Indicators are also useful to identify whether the resources involved are being used optimally.

5 Promoting Long-Term Sustainability

The Strategy identifies the most prominent areas and opportunities for health research and innovation, and the investments required to develop a vibrant health research and innovation ecosystem. This will provide the springboard for improvements within the local healthcare system, taking into account the structures that are already in place including the relevant infrastructure, policies and initiatives.

Long-term sustainability in the health sector is an important target for this Strategy and the main recommendation is the setting up of a National Research and Innovation Centre. Sustainability is expected to be attained through a range of capacity-building measures implemented in the short, medium and long-term.

Research will focus on enhancing the efficiency and effectiveness of processes, diagnosis, treatments and the delivery of healthcare services. This way, the maximum social and economic benefits from the strategy can be attained.

6 Funding Opportunities

Future economic growth depends on reforms in various economic sectors including health. Research is an essential component for change. Given the limited availability of local funding, the Health Research and Innovation Strategy recommends a strong internationalization drive, based mainly on proactive participation in the relevant EU funding programmes and related international activities. This would enable local organizations and individuals to increase and achieve their potential.

The success of the health research and innovation strategy depends primarily on the amount of funds allocated by the government and the private sector, together with the availability of additional funding provided at an EU Level. This funding (at EU Level) includes the FP7 programme (to be followed by Horizon 2020), the European Social Fund (ESF), European Regional Development Fund (ERDF) and related programmes including the Interreg and the MED Programmes.

Hence, research funds have to be secured and allocated accountably. Funds are also needed to generate the required skills for any potential future growth of health research industry in Malta. It is therefore important to build, strengthen and sustain human and physical capacity to conduct, absorb and utilize health research.

7 Four main goals of the Strategy

The Strategy sets out four goals which, if implemented within the specified timeframe, will result in an innovative, efficient and effective health research strategy in Malta.

These goals are:

- i. Developing a vibrant and sustainable health research and innovation ecosystem
- ii. Building the necessary capacity and competence for high quality research to improve well-being
- iii. Supporting evidence-based policy-making in human health and ensuring outreach and take-up
- iv. Leveraging internationalisation opportunities for economic growth and innovation in the health sector

8 Ten Key Recommendations to achieve these goals:

For Goal 1 - Towards a vibrant and sustainable health research and innovation ecosystem

(i) **Set up a National Governance Framework for Health Research and Innovation:** to oversee the development of an enabling ecosystem for health research and innovation.

(ii) **Increase Funding for Health Research and Innovation:** to drive capacity-building of the sector which supports an appropriate balance of specialization

and interdisciplinarity and covers transnational research in a variety of disciplines in meeting societal challenges.
(iii) **Ensure enhanced access to health research facilities:** and also enable researchers to network between each other as well as join international research networks)

(iv) **Enhance use of public procurement to stimulate Research and Innovation:**

- a. Encourage proactive use of EU public procurement directives as a means for stimulating public and private sector investments in health research and innovation.
- b. Enhance the role of the Public Service (both as a purchaser and regulator) as early user of health innovative products by developing capacities for implementing public procurement for research and innovation.
- c. Support the Public Service to act as a catalyst in private procurement, through the establishment of credit guarantees for innovative health services, training in innovative procurement techniques and intellectual property protection, and the purchase for private use of innovative services and products.

For Goal 2: Building the necessary capacity and competence for high quality research to improve well-being

(v) **Attract high quality researchers:**

- a. Provide a set of attractive conditions to increase the number and profile of local researchers engaged in medical and health research and to attract high quality researchers from overseas, particularly, in areas of national priority.
- b. Develop an enabling environment conducive to research, through the establishment of an excellent health research management system

(vi) **Support Capacity-building and forward planning**

- a. Map current research capacity and competence by area in order to project current research strengths, locally and abroad, and as a means to define better future needs for capacity-building.
- b. Facilitate forward planning by tertiary institutions at post-graduate, doctoral and post-doctoral level to build critical mass and develop defined and structured research units.
- c. Encourage postgraduate and doctoral level studies and research in health through well-designed programmes and incentives.

(vii) **Build critical mass and enhancing potential of researchers:**

- a. Set up incentives to encourage clustering of researchers from various fields including ICT, medical and engineering.
- b. Encourage the setup of Knowledge Transfer Partnerships (KTP) between academic institutions and industrial partners (both local and foreign) to encourage

rewarding collaborations with innovative businesses as well as gain ideas for further research and development of projects.

For Goal 3: Supporting evidence-based policy making in human health: outreach and take-up

(viii) **Ensure dissemination and take-up of results:**

- a. Increase the publication and dissemination of research findings in peer-reviewed and non-peer-reviewed journals
- b. Build the competence for communication and exploitation of research results to develop new tools and research applications to improve the health of the population.
- c. Utilise results as an educational tool to change the habits, behaviour and opinion of the general public on health issues.

(ix) **Enable access to research results and new knowledge:**

- a. Enable access to research results and the transfer of knowledge needs to be improved to ensure that research evidence is transformed into practice
- b. Integrate and validate data obtained from routine clinical examinations and investigations.
- c. Set up an online portal to disseminate information and research evidence.
- d. Introduce compulsory training in entrepreneurship.

For Goal 4: Leveraging internationalisation opportunities for economic growth and innovation in the health sector

(x) **Invest in competitiveness and job creation:**

- a. Study and design a competitive package of policy measurements and incentives to target local and foreign investment in particular niche areas.
- b. Review the full range of internationalisation opportunities instrumental in addressing the Strategy's objectives.
- c. Ensure a strong national drive to coordinate health, biotech and life science initiatives which exploit Malta's competitive advantage.
- d. Increase private sector awareness of the value-added gained from investments in research and innovation to enhance competitiveness.
- e. Introduce compulsory training in entrepreneurship and related hands-on experience.

9 The Importance of Good Governance

In order to ensure the set-up and implementation of the Strategy, good governance and stewardship are necessary. These are important not only to establish a vision

for national health research, but also to identify the appropriate health research priorities and research partnerships with the relevant international organisations, especially those established in the EU. Good governance is ensured if ethical standards for health research are established and monitored.

10 Concluding Remarks

The National Strategy for Health Research and Innovation will only succeed if there is enhanced communication among all the main stakeholders. There is an urgent need for a more proactive and dynamic

approach in health research and innovation.

Many clinicians and researchers feel the need to own research-it has to be a bottom up approach. The enabling research and innovation ecosystem needs to be put in place as the basis for implementing the Strategy. This ecosystem will facilitate the transformation of research outcomes in innovative products and services on the local as well as international market.

Malta needs to identify its Unique Selling Propositions-Malta is ideal as a centre for pilot projects in health care, such as bio banking, testing new drugs, servicing clinical trials and health tourism.