

## **Definitions of the ten roadmaps as described in the Innovation Contract Top Sector LSH 2012**

The roadmaps are designed to address priorities in health outcomes (age-related, chronic, acute, infectious, orphan and neglected diseases) and along the healthcare chain (from prevention through diagnosis to cure and care). The roadmaps represent the areas in which public and private parties are committed to co-innovate and ask the government to co-invest. Companies, research institutes, practitioners, patient organizations, health foundations, health insurers, regulators, and many others have contributed and endorsed these roadmaps. Seven roadmaps (1 through 7) are product-oriented. They are supported by two that deliver health technology assessment (8) and enabling technologies & infrastructure (9). The latter also links to other Top Sectors with a strong life sciences component, such as Agro-food, Horticulture and Chemistry. A final roadmap (10) is centred around diseases that cause a high burden mainly in the developing world, but for which the developed world can make strides in solving.

1. **Molecular diagnostics:** Development of candidate biomarkers into validated molecular diagnostics for clinical use
2. **Imaging & image-guided therapies:** Development of imaging applications for more accurate and less invasive diagnosis and treatment
3. **Homecare & self-management:** Development, assessment and implementation of technologies, infrastructure and services that promote clients' abilities to live independently and manage their own care, adequately supported by healthcare professionals
4. **Regenerative medicine:** Development of curative therapies for diseases caused by tissue damage and ensuing organ dysfunction, through repair or renewed growth of the original tissue or replacement by a synthetic or natural substitute
5. **Pharmacotherapy:** Discovery, development and stratified use of new, safe and (cost-)effective medicines in order to cure or prevent progression along the healthcare chain
6. **One health:** Development of solutions like vaccines, optimized antimicrobial use and early warning systems that improve health status of humans and animals by coupling the know-how and infrastructure available in the human and veterinary/agricultural domains
7. **Specialized nutrition, health & disease:** Researching specialized nutrition for nutritional intervention as part of integrated health solutions in terms of prevention, cure and care of chronic, acute and rare diseases
8. **Health technology assessment & quality of life:** Development of methods and knowledge for health technology assessments in which the impact of health innovations on quality of life, cost-containment and productivity is assessed
9. **Enabling technologies & infrastructure:** Development and offering of expertise and infrastructure in cutting-edge molecular life science technologies (e.g. next generation sequencing, proteomics and bioinformatics), in biobanks and in ultramodern research facilities, all readily accessible to industry and academia, and with existing, strong links to other Top Sectors (Agro-food, Horticulture, Chemistry, Biobased Economy and High Tech Systems and Materials)
10. **Global health, emerging diseases in emerging markets:** Development and delivery of solutions to diseases associated with poverty, which affect more than 2 billion people in the developing world