'Digital health' is about digital technology transforming the healthcare sector. The broad concept spans many areas: from information and communications technology for health, to Big Data and the Internet of Things, to research and innovation. It seeks to find solutions to improve patient and hospital care and to better promote independent living for disabled people and the elderly. Digital health also means new market opportunities for investors and companies. The European Union is funding research initiatives and supports entrepreneurs, including start-ups. Digital health and its various components have been highlighted in several events these past months. June will see this year's eHealth week (8-10 June) and the Digital Health World Congress (22-23 June), where stakeholders will take stock of emerging trends and lay out the way forward. This Topical Digest offers a sample of related publications and graphics produced by the European Parliamentary Research Service.

Focus on digital health events
At-a-glance note by Nicole Scholz
The umbrella term 'digital health' – 'the convergence of the digital and genomic revolutions with health, healthcare, living and society' – encompasses areas such as eHealth and mobile health (mHealth); telehealth and telemedicine; health information technology (IT); wearable devices; and personalised medicine, including genomics. Interested parties use digital health in an effort to reduce inefficiencies in healthcare delivery, improve access, reduce costs, increase quality and make medicine more personalised for patients.

Personalised medicine: The right treatment for the right person at the right time
Briefing by Nicole Scholz, October 2015
'Personalised medicine' refers to a medical approach that uses molecular insights into health and disease to guide decisions with regard to the prediction, prevention, diagnosis and treatment of illnesses. New tools harnessed by personalised medicine include '-omics' technologies, which seek to define and explain the molecular mechanisms of the human body. Integrating advances in molecular technology into clinical practice comes with challenges, namely the translational gap, data protection, regulatory clarity and cost.

Assistive technologies to support people with disabilities
Briefing by Nicole Scholz, June 2015
'Disability' denotes impairments, limitations on activity and restrictions on participation. Some may result in high healthcare needs, while others do not. Assistive technologies to support people with disabilities have also evolved. They now cover sophisticated ICT, software, cyber-physical and stem-cell applications. The briefing provides examples from the five categories of motor, vision, hearing, cognitive and communication disabilities, including non-invasive and invasive brain-computer interfaces, wearable devices, stem-cell applications, neuroprosthetics, humanoid robots and applications (apps).

eHealth – Technology for health
Briefing by Nicole Scholz, March 2015
eHealth – the use of information and communication technology (ICT) in health – can foster patients’ involvement in the care process and facilitate access to healthcare. It has the potential to increase the effectiveness and efficiency of healthcare and should foster growth in the areas of research, health, medicine and ICT. eHealth tools need to be user-centric, user-friendly and universally accessible. Awareness of, and training in, eHealth need to be stepped up. Guaranteeing the security and protection of health-related data and to ensure patients consent to the use of their data is essential.
Further reading

What if others could read your mind?
EPRS Science and Technology podcasts, May 2016

What if others could read your mind?
At-a-glance note by Philip Boucher, Mihalis Kritikos and Lieve Van Woensel, Scientific Foresight Unit (STOA), April 2016

Golden Eye: Who rules tomorrow’s Europe?
At-a-glance note by for the European Youth Event by Shara Monteleone, April 2016

ICT in the developing world
Study by the Scientific Foresight Unit (STOA), December 2015
In-depth analysis (summary of the study) by the Scientific Foresight Unit (STOA), December 2015

The regions in the Digital Single Market – ICT and digital opportunities for regions and cities
Briefing by Vasileios Margaras, October 2015

The silver economy: Opportunities from ageing
Briefing by David Eatock, July 2015

STOA Workshop 'Robots: Enabling the disabled or disabling the abled?'
Participants’ booklet, June 2015

The Internet of Things: Opportunities and challenges
Briefing by Ron Davies, May 2015

Ten technologies which could change our lives: Potential impacts and policy implications
In-depth analysis by Lieve Van Woensel and Geoffrey Archer, Scientific Foresight Unit (STOA), January 2015

Towards Scientific Foresight in the European Parliament
In-depth analysis by Lieve Van Woensel and Darja Vrščaj, January 2015

More in the Graphics Warehouse

[Images of charts and graphs]