

Novel approach to Procuring Innovation in Stroke Rehabilitation

Hopkins E¹, Hun S², Walkden J³, Grigolo S⁴, DeLuca A⁵, Donnin L⁶. Health and Social Care Board, Belfast, Northern Ireland, Public Health Agency, Belfast, Northern Ireland, Business Services Organisation, Belfast, Northern Ireland, Azienda Sanitaria Locale TO3, Piedmont, Italy, Università degli Studi D'Annunzio, Chieti, Italy, Ancona University Hospital, Marche, Italy

[@MagicPcp](https://twitter.com/MagicPcp) <http://magic-pcp.eu>

Problem

- Stroke services in Northern Ireland and Italy do not have enough staff or finances to deliver the required amounts of therapy to stroke patients at home. Both have large rural populations which are difficult to access. Patients are not maximising their potential function at six months post stroke.

Proposed Solution

- EU through Horizon 2020 called for public sector procurers to use technology development to enhance self-management in long term conditions.
- Partners were sought from EU countries to put together a joint project bid.
- Public Procurers from 3



3.62m EUROS

Italian regions and 3 healthcare organisations from Northern Ireland came together to form the Buyers Group of a Pre-Commercial Procurement (PCP)

- MAGIC Team secured 3.62m Euros from H2020; a co-funded project with an overall budget of 5.18M Euros.



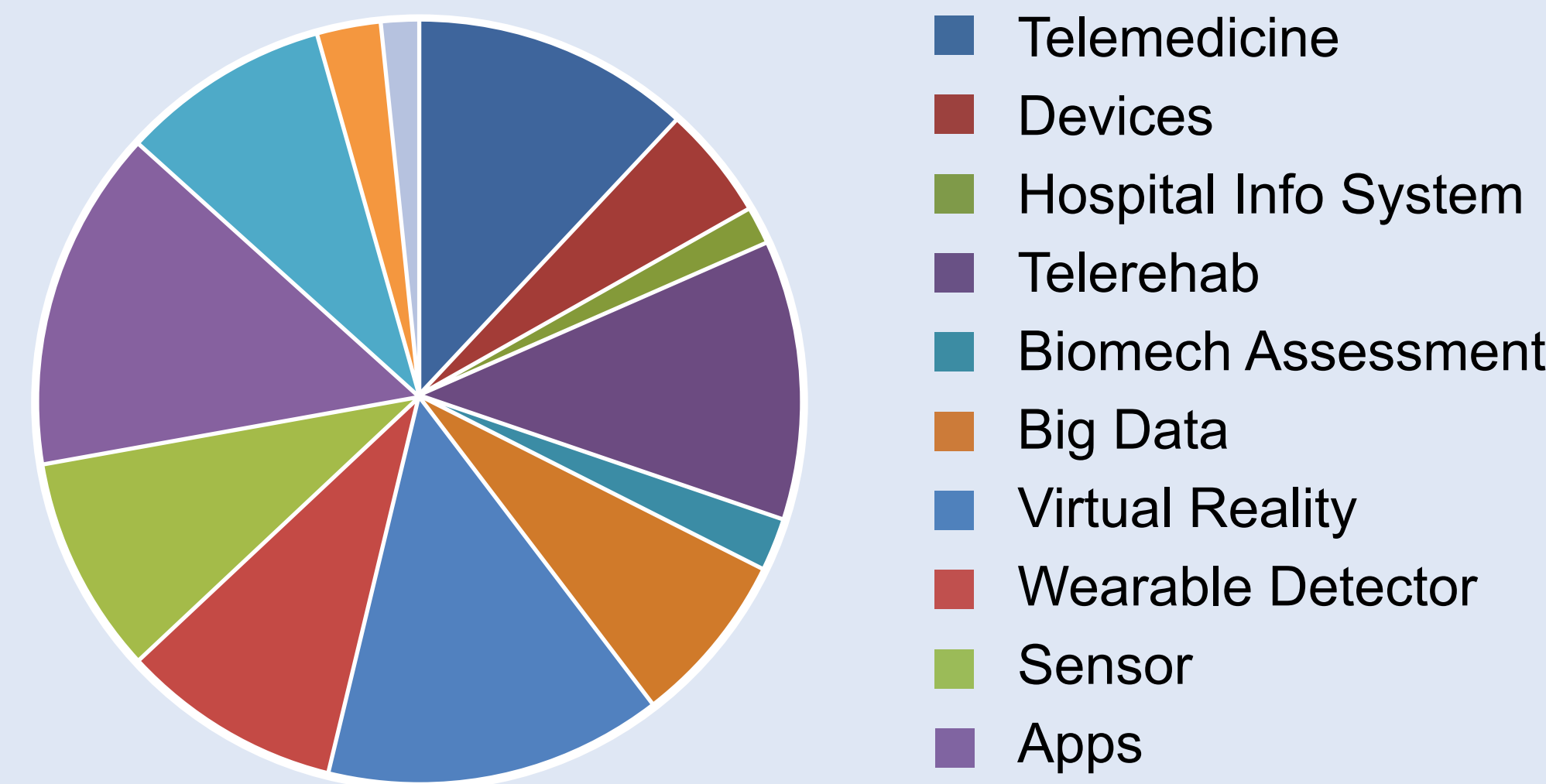
Process

- Public participation workshops took place across Northern Ireland and Italy to identify the key service requirements and priorities for stroke survivors and clinicians.



What we learnt... Industry said

Solution Suggestions



- 2016 - Tender opened to technology sector to apply for funding to co-create detailed proposals for solutions with Italian and Northern Ireland Partners.
- 2016/17 - 8 companies co-created novel solutions with services based on wearables, virtual reality, mirror therapy, transcranial stimulation, bioengineering devices and gaming.
- 2017/18 - 4 companies co-designed prototypes: two based on wearable accelerometers & machine learning and two based on virtual reality.
- 2018/20 - 3 companies succeeded in bids to run field trials, each with 150 participants, in Northern Ireland and Italy and commenced ethical approval.

Benefits

- Clinicians and patients closely involved in the design of novel technology and research design.
- Solutions developed that will really work in our public sector health systems.

Hope for Future

- Prove** that novel rehabilitative technologies can be deployed at scale in public sector health systems
- Reduce** socio economic burden of stroke using technology.
- Empower** patients, improve intensity of therapy and achieve better recovery at six months post stroke.
- Deploy** high volume innovation by buying technologies designed to address specific needs.

PCP Stages

