# [Care robots could revolutionise UK care system and provide staff extra support](#)

- UK today moves a step closer to developing health care robots which could improve the provision of health support and care around the world
- Within the next 20 years, autonomous systems like self-driving cars and surgical robots will become a normal part of our lives, transforming the way we live, work and travel
- Part of the government's aim to solve the [Grand Challenges](#) facing our society, including giving people five years of longer, healthier life

The UK moves one step closer to developing robots capable of providing support for Britons and making caring responsibilities easier, thanks to £34 million government investment announced today (Saturday 26 October).

With one in seven people in the UK now expected to be over 75 years old by 2040, so-called "care robots" could help provide the UK's dedicated adult social care sector with more assistance for those who need it most.

The government today launched the UK's biggest research programme entirely dedicated to making autonomous systems safe and trustworthy for public use with investment that could help develop robots to one day fulfil tasks such as helping an elderly person up after a fall and raising the alarm, delivering food to an older person at mealtimes, and even ensuring they take crucial medication at the correct time.

Autonomous systems are currently built across industries to solve challenges, but in order to be used by people they need to be designed to be safe, keep data secure and have a clear set of rules in order for them make effective decisions.

This cutting-edge programme will undertake research into their design, for example ensuring robots are better protected against cyber-attacks and that they demonstrate principles like respect, fairness and equality enabling them to eventually be used in environments like care homes and hospitals. It will provide developers, policy makers and regulators with access to world leading experts, as well as the to the latest information and guidelines around this technology. In the healthcare sector, resulting applications, such as care robots, could work in tandem with professionals to assist and complement their work, and help relieve pressures.

Science Minister Chris Skidmore said:

> A staggering one in seven people in the UK are now expected to be over 75 years old by 2040. As our society ages, most of us will have to care for a loved one, whether it's a grandparent or a parent or a partner.

It's vital that we meet the needs of this ageing society, and through cutting edge research like this we will ensure that as technology advances, the UK leads the way in designing and adopting it, growing our status as a global science superpower.

This announcement follows previous government investment in a Bristol based project which has already developed a prototype of a robot called [CHIRON](#) – designed to support older adults with mobility and other ageing-related impairments. The robot could eventually assist with anything from bringing a tray of food or drink to a patient, to helping those with mobility issues to their feet from their chair. The latest phase of the project in the [Bristol Robotics Laboratory](#) is conducting research to ensure that these robots are trustworthy and safe for use.

Praminda Caleb-Solly, Professor of Assistive Robotics, Bristol Robotics Laboratory said:

Assistive robots can provide essential support for those who need help carrying out everyday tasks – so they can maintain their independence for as long as possible. But making sure we can trust these robots by reducing the risks associated with this technology is essential.

Unlocking their full potential means they could assist with anything from physiotherapy, to assistance for older people with mobility issues, improving people's quality of life significantly.

The impact of the government-backed autonomous systems programme could also be substantial for the transport sector – where lack of public trust is also a key challenge. Self-driving cars alone are expected to create an outstanding 320,000 UK jobs, and deliver £51 billion in economic benefits. By developing safer systems, self-driving vehicles could be widespread on our roads in just a couple of decades, revolutionising journeys, improving road safety, reducing congestion and making transport more accessible for people with mobility issues.

Funded through the government's [Strategic Priority Fund](#) and delivered by [UK Research and Innovation](#) (UKRI), the £34 million investment will help tear down public trust barriers by ensuring autonomous technologies like robots and self-driving vehicles are shown to be ethical, viable and safe.

The programme will look at developing reliable autonomous systems across all sectors – from automated personal shoppers, to robots that select the best mortgages, by bringing together researchers and experts, as well as involve the general public so that their needs are understood. Ethical and legal considerations will be incorporated when developing autonomous systems, so that new advances will be more resilient to cyber-attacks and be as safe as possible for consumers.

ENDS

## Notes to editors

**About the Strategic Priorities Fund:**

The Strategic Priorities Fund (SPF) supports high quality multidisciplinary research and development priorities and is delivered through UK Research and Innovation. This is from the second wave of SPF funding of £496.8 million.

**About the programme:**

Trustworthy Autonomous Systems (EPSRC)

- Funding: £33.9 million over 5 years
- Location(s): The intention is to build a national capability through calls which are open to HEIs, Institutes, PSREs and/or businesses across the UK.

**Examples of existing care robots:**

- [PARO](#) is an advanced interactive robot developed by AIST, a leading Japanese industrial automation pioneer. It allows the documented benefits of animal therapy to be administered to patients in environments such as hospitals and extended care facilities where live animals present treatment or logistical difficulties and has been found to reduce patient stress and improve their relaxation
- [Pepper](#) is the world's first humanoid robot able to recognise faces and basic human emotions and has been adopted by over 2,000 companies around the world. In the Healthcare sector, Pepper can improve awareness of prevention care and reduce anxiety on treatment and disease Last year, the government also launched the [Centre for Data Ethics and Innovation](#) aiming to give the public a voice in how data-driven technology is governed and promoting the trust that's crucial for the UK to make the most of AI and data-driven technology

This opportunity for unrivalled innovation will ensure that the UK becomes a world-leader in the development of trustworthy autonomous systems and encourage international companies to operate in the UK.

The announcement follows the government reaffirming its commitment to invest at least 2.4% of GDP in R&D by 2027. The programme supports the UK government's Ageing Society Grand Challenge and Future of Mobility Grand Challenge, and complements the recently launched Robotics Growth Partnership, aiming to realise our ambition to place the UK at the cutting edge of the global smart robotics revolution.