Exponential growth has been one of the key characteristics of the COVID-19 pandemic, but such growth has not been limited to the virus itself. Over 10,000 research papers have been published on the pandemic, covering a wide range of topics, with the speed of publication growing in unison with society’s exposure to the virus.

As with so much related to the virus, the speed and volume of publication is unprecedented, as medical research papers typically take years to produce, with scientific journals painstakingly reviewing each submission, and the peer review process itself often taking several months. The public health emergency brought on by the pandemic has transformed this, with governments around the world striving to take a policy approach driven by the best science available.

Science-driven policies

The scientific publishing industry has attempted to respond to this by working overtime to process submissions: what would ordinarily have taken weeks is now performed in days. While the publishing end of the equation has become streamlined, however, it still leaves a dilemma for those tasked with digesting the flood of new research hitting the market.

This is where Spanish enterprise, The Central Control Project, comes in, as their platform digests and syndicates the latest medical research on the virus so that physicians and other stakeholders have access to the best quality research when making their decisions.

The project came into being in the Hospital Clinic of Barcelona, where doctors from a huge variety of disciplines were called upon to support the region’s fight against COVID-19. This presented a need to upskill people whose speciality was not infectious diseases as quickly as possible so they could be effective.

‘We have hundreds of physicians lending their expertise to the fight against COVID-19 who are not infectious disease experts; we needed a quick and efficient way to support them so they could effectively treat the virus,’ said project coordinator Carolina Garcia-Vidal. ‘There was a real risk of health inequalities emerging due to different skill levels among the doctors treating each patient, and we wanted to overcome that.’

The team, which consisted of computer scientists and physicians, developed a digital tool that provides a virtual control centre supervised by an expert in COVID-19. The platform receives basic information pertaining to each patient from their electronic medical records, and then checks that the patient’s treatment is correct and helps the physician to identify those patients most at risk.

Scalable solutions

The ability to provide the best care in such a rapidly changing environment is one that the team believes is common across Europe, and the ability to scale it across territories is one that has received support from EIT Health.

‘We have to work together as humanity to defeat this virus, and we’d love to work with other countries to get the solution rolled out more widely,’ said Carolina. ‘The system is designed to be adaptable to other healthcare system protocols, so we’re confident it can add real value at this most challenging of times.’

Creating such a complex system is hard at the best of times, but the intense nature of the pandemic has made development especially acute. Carolina believes, however, that this determination is at the heart of all examples of entrepreneurialism, and is especially important in such a turbulent time.

She believes that if this grit can be channeled, and Europe works together, then they have a better chance of defeating COVID-19, while also providing a robust foundation for the health entrepreneurs of the future.