

Case Study

Company Name

Sandstone Dental Practice

Industry

Dental Care

Technology

Additive Manufacturing, Internet of Things, Cloud Computing and Systems Integration

Background

Sandstone Dental Practice was established in 2017 as a destination for bespoke private dental services enabling patients to access high-quality oral healthcare.

The COVID-19 pandemic is continuing to have major financial and oral health care provision impact on UK dental practices with the latest guidance from the Department of Health restricting services to a fraction of pre-COVID capacity.

Sandstone Dental Practice took the proactive decision to set up a "Digital Centre of Excellence" to create a safe and productive working environment to benefit both patients and staff by promoting "Contactless Visits" to minimise the risk of COVID-19 infection.

Challenge

Following an introduction to the LCR4 START team at Liverpool John Moores University (LJMU) a consultative support process centring around a combination of digital diagnostics and readiness level assessment resulted in developing a digital strategy focussing on key Digital Workflow: Intra Oral Scanning and Design Software Technology, Additive Manufacturing, Internet of Things, Cloud Computing and Systems Integration technologies to help set up the Digital Centre of Excellence and delivery of a Contactless Visit experience to Sandstone Dental Practice staff and patients in the local community.

Solution

Sandstone Dental Practice took advantage of the support provided by LCR4 START via access to an LJMU Coronavirus COVID19 Grant Scheme, which helped to identify the risks associated with Aerosol Generating Procedures and deployment of digital technologies to create a safe working and productive environment at the practice.

Impact

The roll out of the digital strategy has enabled Sandstone Dental Practice to successfully apply for and win a digital manufacturing grant through Made Smarter UK to part-fund new Digital Workflow packages including Intra Oral Scanning and supporting software technologies, the benefits of which have improved business capacity by 25 %, reducing impression time and recurring cost by 15 minutes and £ 20 / impression respectively.

The support provided by the LCR4 START programme has helped to increase the awareness and understanding of Industry 4.0, including Additive Manufacturing, Internet of Things, Cloud Computing and Systems Integration to develop a Digital Strategy and set up a "Digital Centre of Excellence."

This strategy has already started to deliver results by improving the patient experience and minimising chair time. Sandstone is now keen to further develop the Digital Centre of Excellence via the inclusion of Additive Manufacturing and Subtractive Milling technology which will enable in-house manufacturing of high- quality dental restorations, further improving the quality of service and patient experience in the Heswall community.

The support of the LCR4 START programme has helped to improve productivity, sales growth and creation of jobs.



I would recommend anyone in the Health Care and Dental sector to take advantage of the support that LCR4.0 START has to offer. Now more than ever, Dental Practices are developing in-house capability to manufacture dental restorations and need to be at the top of their game in terms of deployment of digital workflow technologies to improve restoration quality and the patient experience levels during these challenging times.

- Prof Fadi Jarad, Director