

CASE STUDY

# MEDICA<sup>®</sup> Pro selected for Siemens ADVIA<sup>®</sup> analyzers

at City General Hospital, UK

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# MEDICA<sup>®</sup> Pro selected for Siemens ADVIA<sup>®</sup> analyzers

As part of the redevelopment of the City General Hospital complex in Stoke on Trent, the University Hospital of North Staffordshire NHS Trust went to tender for a water purification system to supply the ADVIA analyzers in its biochemistry laboratory. After assessing the situation and presenting solutions to Siemens Healthcare Diagnostics and the Trust, ELGA was selected to provide a duplex MEDICA<sup>®</sup> Pro system, supported by a managed service agreement.



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# Background

The University Hospital of North Staffordshire (UHNS) NHS Trust recently undertook a major redevelopment of its hospitals, opening a brand new, 768 bed, multi-million pound hospital and consolidating services from the North Staffordshire Royal Infirmary, the City General and Central Out-patients onto the City General campus.

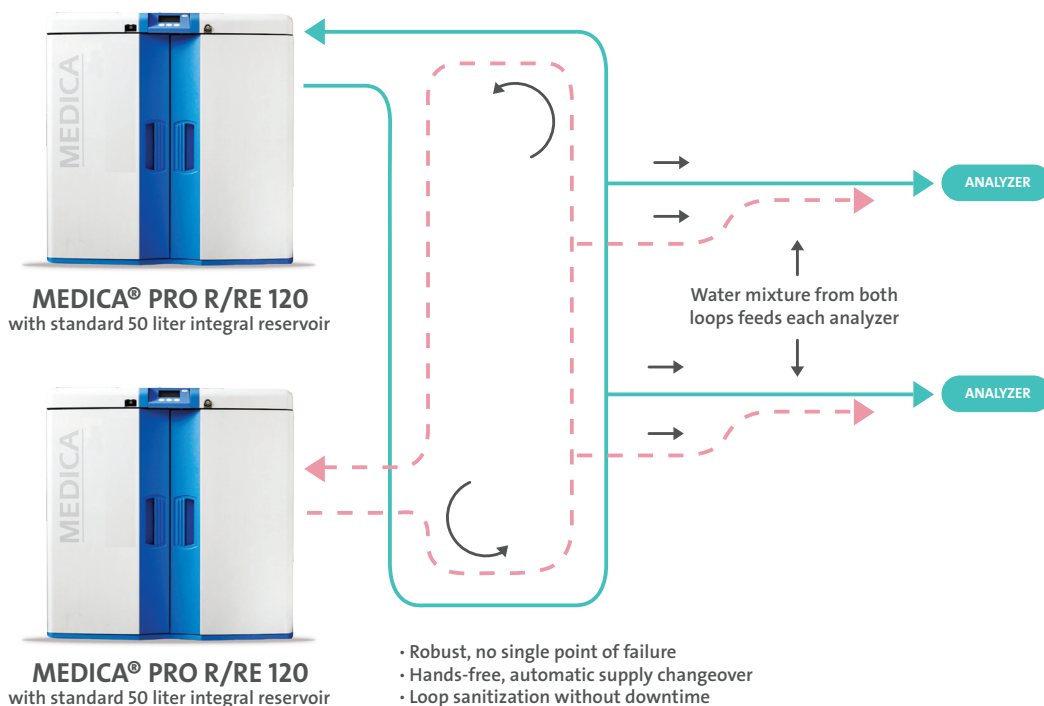
As part of the development, the Trust awarded a tender to provide a centralized water system which, initially, was intended to provide purified water to the pathology laboratory, as well as to the clinical analyzers in the biochemistry laboratory.

Siemens Healthcare Diagnostics was awarded the tender to provide five ADVIA 2120i analyzers, four ADVIA 2400 analyzers and two ADVIA Centaur® XP systems, connected by the new Aptio™ Automation system, the first Aptio installation in England.

Both the ADVIA 2400 and ADVIA Centaur XP analyzers require a supply of highly purified water, and there was concern that the centralized water system may

not be able to provide water of sufficiently high purity, or to meet the laboratory's need for 100% uptime. Either the quality of water from the centralized system needed to be improved, or an independent, high quality water supply was required for the analyzers. ELGA has a longstanding relationship with Siemens, and had already developed a duplex water purification system – an essential requirement if analyzer downtime is to be avoided – that specifically supports automated equipment from Siemens. In addition, the laboratory already used a standalone ELGA MEDICA® Pro water purifier to supply general laboratory water, so staff were familiar with ELGA equipment. This, coupled with ELGA's excellent relationship with the Trust, made the Company an obvious choice to perform an evaluation of the site.

### Twin MEDICA® Pro systems and twin distribution loops





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# Facing the challenge and providing solutions

**In December 2011, ELGA was invited to visit the site with Siemens to assess the situation, and discovered that the proposed centralized water system relied on a single distribution loop.**

As a consequence, whenever sanitization or maintenance of the system was necessary, the flow of water to the laboratory analyzers would be interrupted, potentially for several hours. The laboratory handles between 4,000 and 5,000 patient samples a day, and lengthy periods of downtime would have a massive impact on the delivery of results. Clearly, the biochemistry laboratory's analyzers required an independent water purification system.

Possible solutions to the problem were presented to Siemens and the Trust by ELGA and an alternative supplier, and ELGA was chosen to provide two MEDICA® Pro-RE 120 units – a duplex installation – as well as a manual dispenser for a general laboratory water supply, under a managed service agreement with the Trust. Installation of the MEDICA® units was straightforward; ELGA had already developed a duplex system which was simply connected to the power pole system specified by Siemens, enabling highly purified water to be consistently delivered to the laboratory analyzers. Since each individual MEDICA® unit has the capacity to support the analyzers independently, the laboratory has in-built 100% redundancy, ensuring a constant supply of high quality water, even during system maintenance procedures.



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# Conclusion

**City General is a new hospital offering state-of-the-art facilities, including a busy biochemistry laboratory handling between 4,000 to 5,000 patient samples daily. Building on its established relationships with the UHNS NHS Trust and Siemens Healthcare Diagnostics, ELGA successfully completed the installation of a duplex MEDICA® Pro-RE 120 system, ensuring consistent delivery of high quality purified water to maintain accurate results from the laboratory's ADVIA analyzers.**

As Dave George, National Projects Manager for Siemens Healthcare Diagnostics, commented:

'Our long-standing relationship with ELGA has been fostered by the Company being willing to collaborate and to develop the duplex system, as well as having the right equipment and attitude.'





# Dedicated to Discovery

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