

# Children are Able to Better Manage their Diabetes at University College Hospital in London

## Capgemini Consulting puts vital medical information in the hands of young patients to improve the quality of their lives

### The Situation

Children and young people with Type 1 diabetes make four injections of insulin each day. To ensure a normal healthy life, it is vital that they understand what dosage to take to regulate their blood glucose levels. However, in 85% of cases, this is not accurately controlled. In order to improve their lives and meet the key objectives of the U.K. Government's "Every Child Matters" initiative, the Department for Paediatric Endocrinology at University College Hospital (UCH) in London wanted to give children better access to information about their condition. Greater control of the disorder will also help to avoid the need for expensive renal dialysis and transplants.

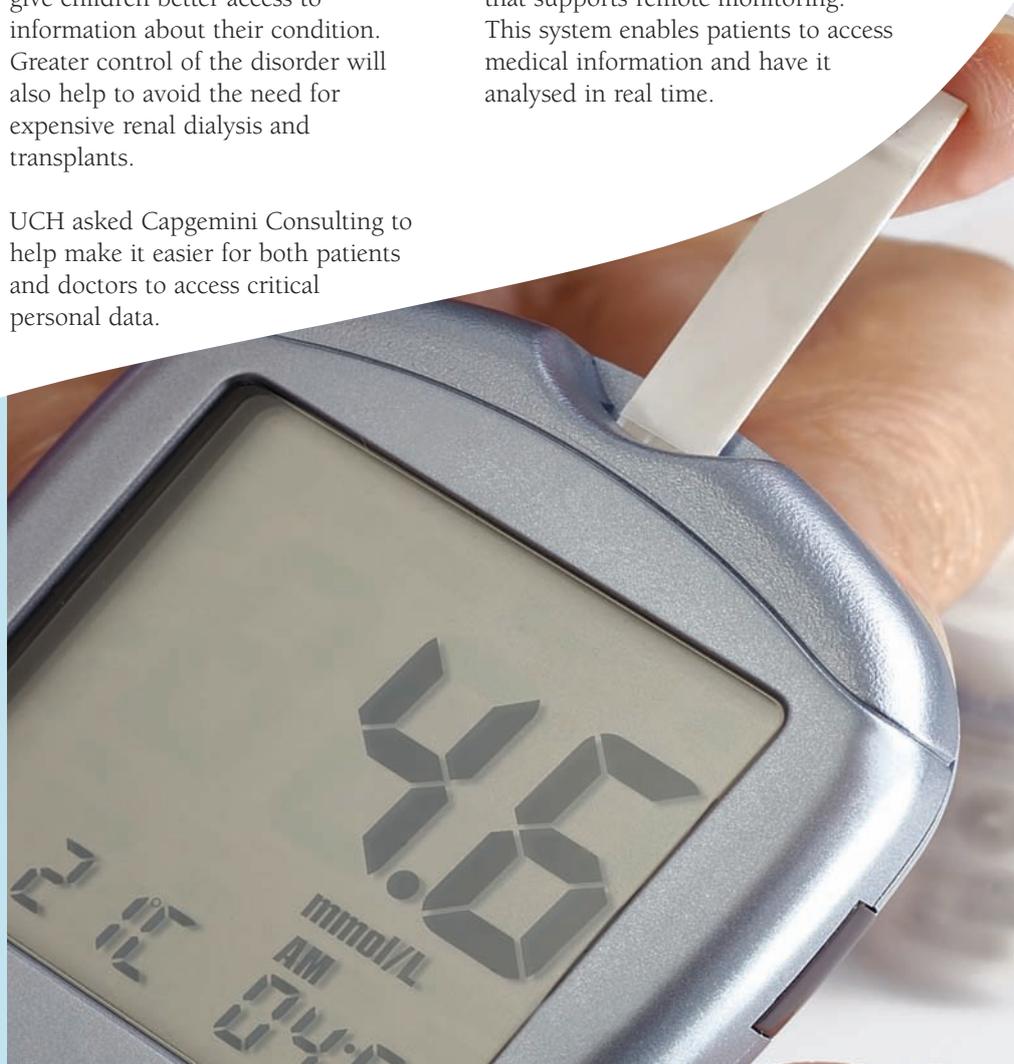
UCH asked Capgemini Consulting to help make it easier for both patients and doctors to access critical personal data.

### The Solution

UCH decided to bring together all the key people and organisations involved in the diabetic care of young people. Using Capgemini Consulting's collaborative Accelerated Solutions Environment (ASE), children, parents, doctors, social workers and teachers met with Capgemini Consulting healthcare experts and representatives from technology companies to agree on a common vision and a way forward. Capgemini Consulting then worked with a California-based company to build a secure system that supports remote monitoring. This system enables patients to access medical information and have it analysed in real time.

“We've learned an awful lot by watching and thinking about how business methodology can be applied in the management of patients.”

Professor Peter Hindmarsh,  
Paediatric Endocrinology,  
University College Hospital



### The Result

A trial of the new system involved around 60 people. Feedback from this showed that children felt empowered to control and manage their diabetes and thus reduce the risk of complications. The solution also provided healthcare practitioners at the UCH with accurate and up-to-date information for analysis.

Professor Hindmarsh of Paediatric Endocrinology at UCH commented: "We now use this information to make decisions jointly with affected families. We can go back and check what our intervention has done over a period of a few days or a week. Previously, it would have taken three months for a traditional clinic appointment. If all we did in this project was to stop one person having renal dialysis and transplantation then we would be saving somewhere in the region of £250,000 a year for that individual alone."

### How UCH and Capgemini Consulting Worked Together

To treat Type 1 diabetes, doctors traditionally relied upon data from different medical centres that was recorded on blood sugar meters or written down on various pieces of paper. "It is easy in this situation not to have the information you need to make any formal decision," said Professor Hindmarsh.

In 2006, Professor Hindmarsh had a vision to give children and young people access to their own blood sugar metrics to enable them to control their condition better. "We know that this information is likely to improve long-term control of diabetes," he said. "Capturing information is important for this; it doesn't just empower young diabetics; it helps us make decisions as well."

After talking to consultants from Capgemini Consulting's Healthcare team, Capgemini Consulting deployed its ASE to bring all the stakeholders

together to turn Professor Hindmarsh's vision into reality.

The ASE was the first real opportunity to gather together a disparate group of people and find consensus on a way forward. It became a unique opportunity to unleash the full creativity of the clinic's staff, their leadership, key suppliers, children, parents and experts. It was important

that the children and young people were motivated, and incentivized to use the technology on a regular basis. The technology was designed with visual features and training was given to the users. After the meeting, Professor Hindmarsh commented: "What we got back was a sense of ownership of their condition on the part of our young patients."



### About Capgemini

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working - the Collaborative Business Experience™ - and through a global delivery model called Rightshore®, which aims to offer the right resources in the right location at competitive cost. Present in more than 30 countries, Capgemini reported 2008 global revenues of EUR 8.7 billion and employs 90,000 people worldwide.

Capgemini Consulting is the strategy and transformation consulting division of the Capgemini Group, with a team of over 4,000 consultants worldwide. Leveraging its deep sector and business expertise, Capgemini Consulting advises and supports organizations in transforming their business, from strategy through to execution. Working side by side with its clients, Capgemini Consulting crafts innovative strategies and transformation roadmaps to deliver sustainable performance improvement.

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In collaboration with University College London Hospitals NHS Foundation Trust, situated in the West End of London, is one of the largest NHS trusts in the United Kingdom and provides first class acute and specialist services.

The new state-of-the-art University College Hospital, which opened in 2005, is the focal point of the trust alongside five cutting-edge specialist hospitals.

University College London Hospitals   
NHS Foundation Trust

The Trust is committed to research and development and forms part of UCL Partners, which in March 2009, was officially designated as one of the UK's first academic health science centres by the Department of Health.

For more information, please visit: [www.uclh.nhs.uk](http://www.uclh.nhs.uk)