Cleveland Clinic, Ohio

Background
In the United States, as in other health systems, rising healthcare costs have been attributed to the failure to connect competition with value. Absence of information on quality and cost means that providers and consumers are unable to assess the value of healthcare. The organisation of healthcare provision, based on medical specialties and not patient needs, means that care is organised and priced for individual services and not cycles of care. The Cleveland Clinic in Ohio is one of the leading providers in the United States and has been cited as a pioneer of a new model of care.

Established in 1921 by four ex-military physicians, Cleveland is now the second largest physician group practice in the world. As well as its main 150 acre tertiary campus, Cleveland also runs 16 family health centres, 9 community hospitals, as well as hospitals in Florida, Nevada, Canada and Abu Dhabi. The not-for-profit provider also operates a research institute, a large medical education programme and a commercial arm that sells innovative healthcare products and technologies. Although the majority of Cleveland’s 3.4 million patients come from Ohio and the surrounding regions, the Clinic has also become a leading destination for medical tourism, with patients coming from over 80 different countries.

Method
Since its foundation, patient-centred, multispecialty care has been central to the Cleveland Clinic. With tertiary, secondary and community provision, the Clinic provides a continuum of care to patients, bringing together doctors from different specialties to provide care “as a unit”. In 2006 the Clinic reorganised its traditional medical departments into 27 Institutes organised by disease or organ groups, organising delivery around patient needs in “solution shops”, not clinical competencies. For instance, the Heart and Vascular Institute includes the departments of Cardiovascular Medicine, Thoracic and Cardiovascular Surgery, and Vascular Surgery. These Institutes remove the artificial barriers between disciplines and promote meaningful integration between services, with patients able to receive all of their care at one location. The leadership of each Institute develops a set of shared outcomes measurements, has autonomy to pursue different approaches to improve care and is held accountable for performance. The initiative, was part of a wider programme called “Patients First” to deliver a cultural transformation in the Clinic’s approach to care.

As a physician-led health system, the financial incentives of the hospital and the physician are aligned. This minimises waste and duplication, as well as providing seamless integrated care. The different parts of the system share billing, finance, legal and other support services, while procurement is centralised and back office processes are standardised. The Clinic has also been able to ensure that care is delivered in the most cost-effective location. All maternity and elective orthopaedics have been moved out of the tertiary centre, while emergency care has been consolidated from four centres to two.

Information and technology
Cleveland has invested significantly in information technology and been praised by President Obama as “one of the best health information technology systems in the country.” According to the President of Cleveland Clinic, Dr Delos Cosgrove: “Honest, transparent self-evaluation is the only way we’re going to get better. We’ve learned that every time we look at our outcomes, we identify problems; then we go fix those problems. That is the essence of the quality movement. At the end of the day, quality brings down cost.”

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The Clinic has published clinical outcomes since 1998. The first report covered thoracic and cardiovascular surgery, and subsequent reports were published for heart failure, digestive diseases and aortic surgery. In 2004 the Clinic set out to publish annual reports on outcomes for every major disease area. Today each Institute has established benchmarks and quality improvement programs. The annual outcome reports show volumes, results, and innovations relevant to patients and referring physicians.

As well as generating high quality data on clinical outcomes, Cleveland is also leading the way in developing a transparent and value-based pricing strategy. In 2006 the Clinic set out an approach to pricing based on five key attributes of value – the relationship to costs for services, the payment arrangement with the insurer, quality, the market price, and consistency. Essential to developing transparent pricing has been using information to track costs, as well as standardising accounting and pricing processes.

Cleveland’s electronic medical record system, “MyPractice”, has been used across their health system for many years and covers 6.1 million patients. The health record is integrated with a decision support system. Tests are posted onto the record automatically and clinical orders are entered through the system and clinicians are alerted to possible drug interactions and less expensive alternatives. The system allows doctors to track patients’ progress, and reduces duplication, error and ensures referrals are more efficient. Tracking patients has also helped the hospital reduce waiting times by as much as 20 per cent. The move to a paperless hospital has also reduced printing by 75 per cent. Patients can access their own records online through Cleveland’s “MyChart” system, which generates reminders and recommendations. Patients can also manage prescriptions and appointments through the Cleveland Clinic website. This has become the most visited hospital website in America.

Technology has also been effectively used to identify cost variation and areas for productivity improvement. Since 2006 Cleveland has used a clinical dashboard to show real time snapshots of key performance indicators such as bed utilisation and readmissions. Data on quality, cost, productivity and patient experience are presented in a single location. Managers are also able to view real-time and trend labour productivity, through assessing work force costs and activity. Measuring nurse productivity enabled managers to review performance snapshots of key performance indicators such as bed utilisation and readmissions. Since 2006 Cleveland has used a clinical dashboard to show real time snapshots of key performance indicators such as bed utilisation and readmissions. Data on quality, cost, productivity and patient experience are presented in a single location. Managers are also able to view real-time and trend labour productivity, through assessing work force costs and activity. Measuring nurse productivity enabled managers to review performance recommendations.

Staff

Unlike other hospitals where doctors’ income is linked to activity, Cleveland’s 2,000 physicians are salaried employees with no financial incentives or bonus schemes. There is no tenure for staff and each doctor is on a one year contract. Salaries and renewal of contracts are based on an annual performance review. The Clinic has also innovated with greater use of “mid-level” providers and non-registered technicians. As well as providing the highest

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12 Porter, M and E. Teisberg (2006), Redefining Health Care: Creating Value-Based Competition on Results.
13 Ibid.
16 Ibid.
20 Cleveland Clinic (2011), “Bending the Cost Curve”.
21 Ibid.
quality care, staff are expected to provide excellent customer service, with all employees required to attend the “Cleveland Clinic Experience”; a training course on the patient experience. Cleveland has also introduced Patient Navigators to coordinate health services for patients. Their primary training is in customer service and they provide one-to-one support to patients as they move through the health system.

Clinical leadership and accountability are at the heart of initiatives to improve quality. The Nursing Institute is responsible for improving the quality of nursing and has led a coordinated effort to standardising nursing practice and promote patient-centred care. Nurses are tasked with maintaining a healing environment, while the Institute makes regular assessments of nurse competency and has a real focus on continued professional development.

Coordinated care

The Clinic has recently started to develop a community based coordinated care model. The new Curon Community Health Centre was developed with community leaders specifically to provide out of hospital care to an urban community. The Centre will be a one-stop shop “medical home”, where patients are both cared for, but also educated on how to manage and prevent illness. Cleveland has also been a leading user of telecare. In 2008 the Clinic announced the first physician-driven pilot to electronically manage patients with multiple chronic conditions. An information exchange between Cleveland’s medical record system and data from telehealth devices in the patient’s home will provide patients and their doctors with the data needed to manage chronic illness. Two years after the start of the pilot, the number of physician appointments had been reduced, and the patient experience of self-care had been improved.

Outcomes

Through its innovative structure and highly effective use of information technology, the Cleveland Clinic is one of the most celebrated health providers in the United States. The hospital was ranked fourth in the country by the U.S. News and World Report, with its cardiac care named the best in the United States for the 17th year running and 16 specialties ranked in the top ten. Surveys of recently discharged patients found that 82 per cent would definitely recommend the hospital to family or friends, compared to the national average of 69 per cent.

The Dartmouth Atlas of Health Care, a leading study of health costs in the US, has claimed the Clinic to be a future model for delivering high quality, low cost care. The Dartmouth study has found that overall costs are half that of other providers across the country. The average number of days spent in hospital by a Medicare patient in the last two years of life was 23.9 and the average daily spend on a patient was $1,307. In comparison, the bed rate for patients at the University of California Los Angeles Medical Center was 31.3 and daily spend was $1,871. Of the five highest ranked providers by U.S. News, Cleveland was the most efficient, with the expenses incurred over the last two years of life nearly 50 per cent lower than the most expensive, according to the Dartmouth study’s analysis.

30 Ibid.
31 Ibid.
32 Herman Miller Healthcare (2010), “Research Summary: Coordinating Care in An Age of Chronic Illness”.
33 Cleveland Clinic (2008), “Cleveland Clinic and Microsoft Collaborative Pilot: Microsoft HealthVault”.
34 Cleveland Clinic (2010), “Cleveland Clinic/Microsoft Pilot Promising; Home Health Services May Benefit Chronic Disease Management”.
36 Ibid.