



**Customer:** Lincolnshire Partnership NHS Foundation Trust

**Web Site:** [www.lpt.nhs.uk](http://www.lpt.nhs.uk)

**Customer Size:** 2000

**Country or Region:** United Kingdom

**Industry:** Healthcare

**Partner:** 21C

**Partner Web Site:** [www.21C.it](http://www.21C.it)

#### Customer Profile

Lincolnshire Partnership NHS Foundation Trust provides a wide range of mental healthcare services for children, teens, adults, families and senior citizens.

#### Software and Services

- Products
  - Microsoft SQL Server 2005 Enterprise
  - SQL Server 2005 Integration Services
  - SQL Server 2005 Analysis Services
  - SQL Server 2005 Reporting Services
  - Microsoft Office Excel 2007
  - Microsoft Office SharePoint Server 2007
  - Microsoft Office PerformancePoint Server 2007 (now part of Office SharePoint Server 2007)
- Technologies
  - Monitoring
  - Analytics

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## Business Intelligence Helps Mental Health Provider Improve Responsiveness and Quality

“Because our business intelligence solution is based on a self-service model, it actually promotes data ownership and data integrity. Managers can now interact with data on their own and take quick action on problems and errors – all of which help us improve the quality of our services to patients.”

Steve Lidbetter, deputy director of Performance & Information, Lincolnshire Partnership NHS Foundation Trust

Serving over 750,000 residents in the county of Lincolnshire, Lincolnshire Partnership NHS Foundation Trust is deeply committed to delivering patient-centered mental health services and continuously strives to improve the quality and responsiveness of its care. By adopting a Microsoft solution to facilitate Service-Line Management (SLM), Lincolnshire specialists and management experts have gained more insights into organizational performance and they have the ability to make faster and more confident decisions on behalf of their patients.

#### Business Needs

Lincolnshire Partnership Foundation Trust is the National Health Service (NHS) organization responsible for providing mental health services to the residents of Lincolnshire, England's second largest county.

With programs focused on the diagnosis and treatment of mental illness, early intervention, family care, substance abuse and learning disabilities, Lincolnshire's highly-trained psychiatrists, psychologists and clinical workers provide care for individuals across the age spectrum,



including children, teens, adults and seniors.

Given the depth and breadth of its resources and services, combined with the introduction of new accounting standards associated with becoming a foundation trust in 2007, Lincolnshire needed to take critical steps to improve its data flow, transparency and overall performance management.

Like other healthcare organizations, Lincolnshire applies Service-Line Management (SLM) as a framework to manage operations. "Our corporate systems were reliable for collecting and storing data but there was no automated way for retrieving information or performing any sort of service analysis," said Steve Lidbetter, deputy director of Performance and Information for Lincolnshire Partnership NHS Foundation Trust.

## Solution

Lincolnshire teamed up with technology partner 21C to address these challenges and develop a comprehensive web-based business intelligence solution. 21C is a company that provides NHS Business Intelligence Portals based on Microsoft business intelligence software.

With guidance from 21C, Lincolnshire adopted a Microsoft® Business Intelligence (BI) solution based on Microsoft SQL Server® 2005, Microsoft Office SharePoint® Server 2005 and Microsoft PerformancePoint® Server 2007 (now part of Microsoft Office SharePoint Server 2007).

## Benefits

Today Lincolnshire has a fully-functioning data warehouse with the ability to accurately track metrics and other key performance indicators (KPIs) and activity data. Activity data can include the number of referrals clinicians receive at any given time, patients

discharged, wait times and interventions offered, etc.

With increased visibility across the organization as well as within departments, managers are meeting and exceeding tough performance targets. "Our psychiatrists for example have a performance target to provide a diagnosis for 95 percent of completed inpatient sessions," said Lidbetter. "Our data warehouse has transformed this once complicated process into a seamless one by extracting data from two systems automatically, and it produces a heat map to instantly show where any data is missing."

## Comparative Analysis Improves Insight

The data warehouse solution extracts diverse data from multiple sources, including clinical, community, patient administration, and HR systems. Using SQL Server and the front-end reporting and analytics interface, managers now have the ability to evaluate this varied data and produce rich, integrated reports that support the decision-making process.

By cross referencing systems, users can also quickly spot important trends. Managers may identify issues early on that can impact multiple departments, services and patients. If case loads are piling up in the Older Adult division, for example, a manager can use the data warehouse solution to bring in data from the HR system to see if staff sick days are up, meaning clinicians are out of the office. This likely means activity levels in this area will spike back up the following month and possibly require support from other departments.

## Self-Service Model Promotes Data Ownership and Data Integrity

"Because our business intelligence solution is based on a self-service model, it actually promotes data ownership and data integrity. Managers can now interact with data on their own and take quick action on problems

and errors — all of which help us improve the quality of our services to patients," explains Lidbetter.

"As data quality improves, users want even more information because they realize what it can do," adds Lidbetter.

## View Data from Any Angle

Lincolnshire's front-line managers can now create their own queries and peer into the data from nearly any angle. Information can be sliced by division, ward, teams, staff members, patients' attributes, date and time, groups and cost centers. The ability to view data across systems and analyze it has proved hugely valuable. "We can compare demands for service versus the capacity of the organization, see where any bottlenecks are and brainstorm ways to alleviate them," said Lidbetter.

## Dashboards Prompt Better Client Service and Reduce Wait Times

With help from scorecards and dashboards, clinicians can gauge how well they are meeting key requirements pre- and post-care.

"We set up rules around wait times and created a query to identify patients who have waited beyond our target time," said Lidbetter. "Our system presents this information as a traffic light, warning managers that they need to ensure the patient is seen as soon as possible."

Patient follow up times have also improved, according to Lidbetter: "When a person is discharged from our care it triggers a report pulling data from our in-patient system and from our community system. Managers can log into our portal anytime and immediately see who has been contacted, helping them stay on top of this important target."