

# ADVANCING EIP SERVICES – a data driven approach

Mike Denis<sup>(1)</sup>, Katie. L. James<sup>(2)</sup>, Tony Thomas<sup>(3)</sup>, Prof. Belinda Lennox<sup>(4)</sup>, Sarah Amani<sup>(5)</sup>

1. Oxford Academic Health Science Network, 2. Oxford Academic Health Science Network, 3. Janssen Healthcare Innovation, 4. Clinical Network Lead, Consultant Psychiatrist 5. Clinical Network Manager

## Abstract

Central to the Oxford Academic Health Science Network and the functioning of its programmes is data; it allows an understanding of unwarranted variation so projects can implement interventions and innovations to reduce inequalities in health services, outcomes and experience for the region's population. This project used to its advantage access to real world data collected via electronic medical records to assess variation in outcomes.

## The AHSN Informatics Hybrid Data Analytics Model

In order to deal with the increasing demand for information, a hybrid data analytics service was created to access, verify quality and analyse key data sets. Tailored to meet the diverse data needs of projects across primary and secondary care, this model has the capacity to draw upon internal capabilities, member NHS organisations and commercial partners.

FIGURE 1: The hybrid data analytics service



## The Model in Action

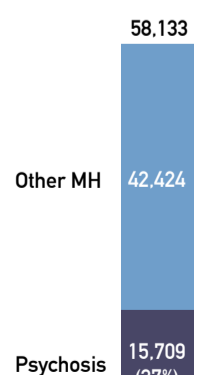
In conjunction with the Early Intervention in Mental Health clinical network (Prof. Belinda Lennox and Sarah Amani), the Oxford AHSN Informatics Team commissioned a piece of work to investigate if access to an Early Intervention (EI) services results in better outcomes for patients with psychosis. Janssen Healthcare Innovation (JHI) were identified as an organisation with access to mental health (MHMDS) and secondary care (HES) data over three years (2010-11 to 2012-13) and with previous experience of data linkage and analytics in this field.

## Problem

- Psychosis is a common, disabling disorder that costs the UK economy an estimated £11.8 billion per year<sup>1</sup> with about 500 new cases every year in the Oxford AHSN area.
- The condition often presents in adolescence or young adulthood, impacting the life trajectory of a young person.
- Many Early Intervention in Psychosis (EIP) services across the country have suffered reductions in funding or have been merged into community health teams.

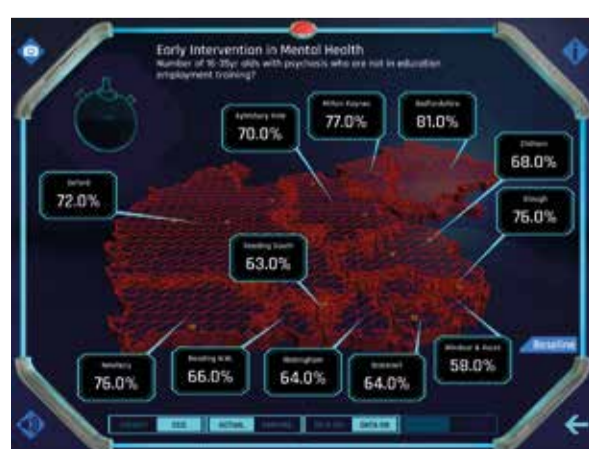
The challenge therefore was to examine whether a person with psychosis treated within an EIP service experienced improved outcomes and whether this care resulted in cost savings.

FIGURE 2: Psychosis patients as a percentage of total mental health patient population in the Oxford AHSN region



SOURCE: MHMDS 2010-2013

FIGURE 3: Percentage of 16-35 year olds with psychosis who are not in education, employment or training (NEETs)



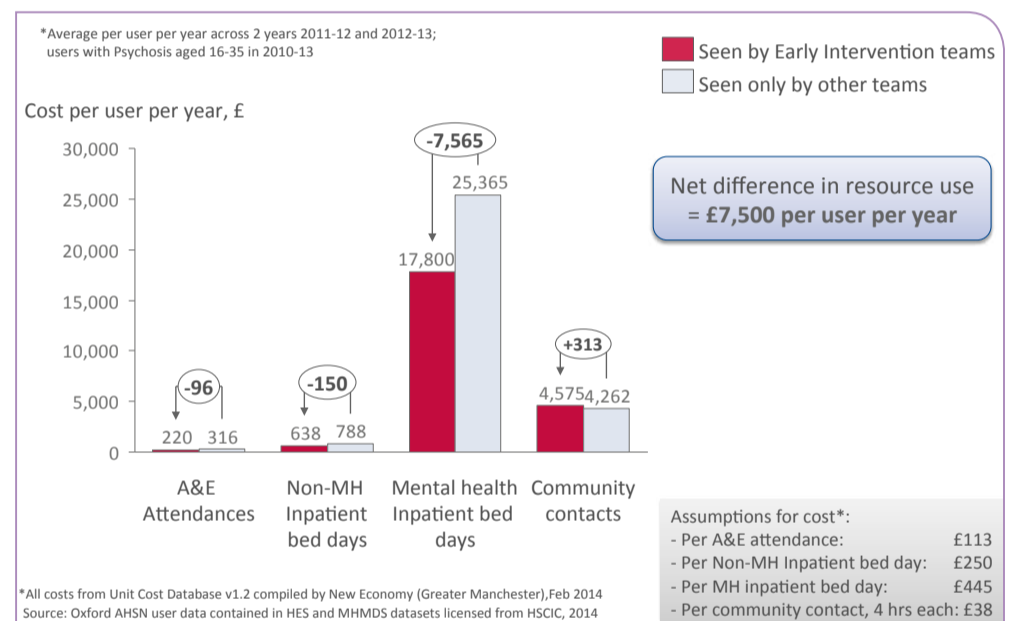
## Resolution

Their task was to co-design with the EI team a set of metrics to source, analyse and present data to meet this challenge. The team identified across the AHSN region all patients with psychosis between the ages of 16-35, split by those who were treated within an EIP service and those with no known interactions with EIP services. The two cohorts were compared for: rates of admission to mental health hospitals, length of stay, A&E attendance, and educational and employment status.

## Results

- Of the 4643 identified with psychosis, 947 interacted with an EIP service. Both had similar numbers of mental health unit admissions, however those under an EIP service had used significantly less bed days and had a lower rate of A&E attendances.
- The estimated potential cost savings from reduced use of health system resources amounted to £7500 per person per year.
- Patients under an EIP service had higher rates of people in employment or education, highlighting the benefits to the young person and wider society.

FIGURE 4: A comparison of health system resources use by patients seen by EI teams or by other teams



## Summary

- The analysis undertaken by JHI clearly highlights the benefits to patients, the healthcare economy and wider society, of young people with psychosis being treated under an EIP service in the Oxford AHSN region by not only improving health and the care of young people but ultimately their life chances.
- As a result of the work undertaken, one provider has secured funding to recruit five EIP care coordinators whose primary focus will be supporting schools and colleges to spot early signs of psychosis. Two other providers are in talks with Clinical Commissioning Groups (CCGs) with regards to expanding their EIP teams.

REFERENCES:  
1. Schizophrenia Commission, 2012

