Democratising Data for Patient Care

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Southern Health NHS Foundation Trust
About Me

Deputy Head of Information

Joined Southern Health in 2013 following a career in Commercial Banking

Tableau Business Intelligence Centre of Excellence

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About Us

• Providing Mental, Physical and Public Health services across Hampshire.

• Serving a population of 1.7 million.

• Diverse geography from inner city Southampton to rural New Forest.

• Information Team & Tableau Centre of Excellence

• 18 Analysts, Data Translators & Data Warehouse Developers

• Promote a learning & development culture throughout.
A Familiar Story?

Traditional to approach data and analytics from a top down level, concentrating on Board Performance Dashboards and national data returns.
Health Care Data

Segmented

“It’s a whole other thing I need to look at”

“Not related to patient care. Bean Counting.”

“My team manager worries about that”

“Those figures cover last quarter. That has all changed now”

“Those lower outcome scores don’t relate to my patients.”

“Performance is 89%. What does that mean for me?”
The New Age of Data

Mission Critical Asset

Answers at the speed of questions

Democratising Data

Improved Graphicacy

Predictive Analysis

OUR VALUES

Patients & people first  Partnership  Respect
Moving Intelligence Closer to the Service User
Not a new idea!
Tableau Business Intelligence

- Provides ability to create simple and engaging dashboards.

- Filter directly to your own data and save those settings for your return.

- Setup report subscriptions to transmit intelligence directly to your inbox.

- Every report to the patient level
**Risk assessments - Current caseload comparison**

**Comparison of teams current caseloads split by compliance status (time since last reviewed and if never reviewed the time since treatment commenced)**

- **Service Line**: AMH - CTT
- **Area**: East, North, Southampton, West
- **Team Name**: Team Names

**Compliance status (Current caseload)**
- Non compliant - Risk assessment prior to treatment commencement
- Non compliant - No risk assessment in place
- Partially compliant - Risk assessment prior to treatment commencement
- Reviewed over 12 months ago
- Reviewed 6-12 months ago
- Reviewed 0-5 months ago

**Created and maintained by the Southern Health Information Department**
**Version control: 1.0, 10/03/2016, Kerri O’Connell**
Focused on the Clinician & Service User

Every Patient Matters

Validation Views

Knowing when data is not correct

Individual Caseload Reporting

Fabulous Fridays

OUR VALUES

Patients & people first

Partnership

Respect
Every Patient Matters

“Performance is 89%
What does that mean for me?”

- Aggregate figures of compliance can hide issues at a local team or patient level.

- Team may have a 99% compliance with completion of Risk Assessments. This is not of comfort to the one patient who has not been assessed and may come to harm.

- Visualise data using a box and whisker plot. This simple method allows teams to isolate outlying patients against a generic compliance figure.
Risk assessments - Current patient profile

Box and Whisker plot for current caseloads - Length of time since last risk assessment review or treatment commenced (if no risk assessment in place)

Click on the ‘+/-’ icon above the hierarchy levels to expand or collapse the hierarchy.

Each dot represents an individual patient for patient's active on a current caseload. The axis shows the length of time in months since the patient last had their risk assessment reviewed or since they commenced treatment (if no risk assessment is in place). The colour of the dot represents their risk assessment compliance.

<table>
<thead>
<tr>
<th>Area</th>
<th>Service Line</th>
<th>Team Name</th>
<th>Team Names</th>
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</thead>
<tbody>
<tr>
<td>East</td>
<td>AMH - CTT</td>
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<td>North</td>
<td>AMH - CTT</td>
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<td>Southampton</td>
<td>AMH - CTT</td>
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<td>West</td>
<td>AMH - CTT</td>
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</table>

Compliance status (Current caseload)
- Reviewed 0-6 months ago
- Reviewed 6-12 months ago
- Reviewed over 12 months ago
- Partially compliant - Risk assessment prior to treatment commence...
- Non compliant - No risk assessment in place
- Non compliant - Risk assessment prior to treatment commencement..

Created and maintained by the Southern Health Information Department
Version control : 1.0, 10/03/2016, Kerri O'Connell
• Making the process as simple as possible.

• Integrating analysis into the clinical process of record keeping.

“It’s a whole other thing I need to look at”
### Risk assessments - Current caseload validation

#### List of current patients with their risk assessment compliance status and days since last updated

**Click and Correct** enables you, should you have access to RiO, to click on a Patient ID within the validation list below, click on the 'Open RiO to view risk assessment' link and be taken straight to the RiO risk assessment screen for the patient. Please note: In order to access the RiO record you must be logged in to RiO prior to clicking on the Patient ID 'Click and Correct' link within Tableau.

Please note: The current caseload validation will include patients who have yet to receive a first attended appointment (Null last treatment date). These patients are excluded from the compliance calculation but are included in the validation view to enable you to plan for these patients to be seen.

| Area     | Service Line   | Team Name   | HCP Name | Months since last updated or months without a valid risk assessment (Current caseload) | Risk Assessment last updated on | Compliance status (Current caseload) | Patient ID | Latest referral start date (Current caseload) | Last treatment date (Current caseload) |}
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<td>AMH - Acute inpatients</td>
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<td>0</td>
<td>09/02/2019</td>
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<td>22242929</td>
<td>28/01/19</td>
<td>21/02/19</td>
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<td>29/12/18</td>
<td>21/02/19</td>
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<td>16/02/2019</td>
<td>Reviewed 0-6 months ago</td>
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<td>1099897</td>
<td>18/01/17</td>
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Fabulous Friday

- Data as a way of celebrating success not criticizing.
- Positive devianance.
- Creates a positive culture regarding the insight available.
# Fabulous Fridays

## Mental Health Risk Assessments

A celebration of teams currently achieving full compliance in terms of recording of Risk Assessments for their current caseload.

<table>
<thead>
<tr>
<th>Adult Mental Health - Number next to each star represents applicable patients</th>
<th>Learning Disabilities - Number next to each star represents applicable patients</th>
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<tr>
<td>Whilst celebrating the success of teams that have achieved full compliance it is hoped these teams will be able to support their colleagues who may be striving to achieve this level of excellence. At present the division has the following number of teams achieving less than 100% compliance:</td>
<td>Whilst celebrating the success of teams currently achieving full compliance it is hoped these teams will be able to support their colleagues who may be striving to achieve this level of excellence. At present the division has the following number of teams achieving less than 100% compliance:</td>
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Individual Reports

- Making the report relevant to the clinical member of staff accessing.
- Highlights areas of risk with that clinicians caseload.

Providing data across multiple reports is not efficient. I want a single view for me and the patients for whom I care.
i – Individual Report

- Caseload NICE standard compliance.
- A repository for data relevant to me within the Trust.
- Training opportunities
- Holiday and shift notifications
Outcomes not Bean Counting

- True focus on utilising data to understand our patients and the efficacy of our services.

- Reported at a team or service area.
Mental Health Outcomes - Completed outcome specific dashboard

A discharged paired score is defined as the first and last of 2 or more scores within a completed episode of care (Inpatient - Admission to Discharge, Community - Referral to Discharge or Referral allocation to Referral allocation discharge). Improvement or deterioration is calculated as a change of 1 or more between first and last scores.

Analysis of completed episodes of care paired scores for the selected time period

Patient counts by change in score (first to last score)

Patient percentage change status colours explained
- Improvement
- Deterioration
- No change

Analysis of completed episodes of care paired scores over the last 24 months

Created and maintained by the Southern Health Information Department
Version control (number, last amended date, author): 2.1, 06/03/2018, Sarah Langton
• Providing our most inquisitive clinical and operational staff with direct access to curated datasets.
Future Plans

• **Further developing i – Individual Reporting** - Introducing additional patient measures.

• **Patient Level Incident Reporting** – Analysing success of therapeutic interventions.

• **NHS Benchmarking Network** – Leveraging the data we receive to identify areas of weaknesses and best practice trusts with whom we can collaborate.

• **Artificial Intelligence** - Identifying those service users who are deteriorating and at risk of going into crisis.

• **Semantic Ontology** – Easier ways to obtain insight.
Thank You

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