Data systems in action

How we understand caseloads in General Adult Psychiatry at the Royal Cornhill Hospital (RCH) in Aberdeen (NHS Grampian)

Information below provided by Dr Sean Cassidy, General Adult Psychiatrist, and Clinical Lead for Adult Mental Health (AMH) City Outpatients at RCH, Aberdeen.

Introduction

A city wide service redesign prompted interest and provided opportunity to create new ways of collecting, analysing, and visualising data. The intention was to create systems which would provide up to date and accurate information about caseloads, demands, and outputs, and assist with decision making around service design and staffing.

A monthly meeting comprised of admin support, medical, nursing, and health intelligence colleagues began building a dashboard which provides automated monthly updates based on information from our clinical software, TrakCare.

Twice yearly meetings were agreed (with management support) in which a CMHT would stop clinical work for one day and make a review of all patients on the caseload to ensure information was accurate. The information was kept securely on a "RAG document", which contained information on all team patients such as the patient CHI, responsible clinician, GP practice, and their diagnoses. Team secretaries would update the information frequently (based on clinical letters), using the document as a means of organising their own work.

Following months of ensuring all inputs into the dashboard were accurate, and manually comparing the dashboard with RAG documents and other information, the team could reliably present information from the dashboard to operational and strategic groups. It has since been used to identify where additional medical/nursing staff are required, organise job plans, safely cover service gaps, and support GP practices.

When the dashboard/RAG analyses suggest a change in an established pattern, an additional system named BOXI is used to dive into specifics (this also pulls from Trakcare) and make more detailed comparisons between teams, clinicians, and patient groups.

RAG documents

The name came from the original purpose of the document, which was to provide a red/amber/green risk rating for patients as the Covid pandemic emerged. While the function changed, the name stayed. As mentioned above, the documents are kept up to date by admin staff and reviewed twice yearly by clinical teams. Information can be compared/analysed as per the attached video.

The Dashboard

The display allows us to make comparisons between the CMHTs, GP practices, and professions. We are able to monitor the performance of individual CMHTs/disciplines, for example looking at how many of our patients are seen within our 8 week target, or how many referrals a GP practice might make in a week/month/quarter/year. Examples shown below:

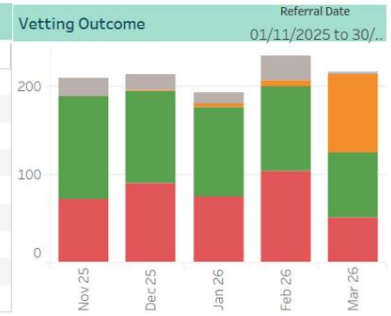
Key measures, comparing practice population/patients/appointments by CMHT (caseload # inaccurate, "patients" used instead):

Key Measures

Area: AMH City | Group: CMHT | Central/North/South: All | Team: Multiple vals

Summary (March 2026)

	Grand Total	Centr. A	Centr. B	North	South
Practice Population	252,959	49,704	72,248	71,780	59,227
Referrals	217	60	61	47	49
Discharged from Service	52	15	22	8	7
Caseload	5,373	1,387	1,954	882	1,150
Patients	3,102	790	1,026	564	722
Appointments Offered	1,868	450	636	275	507
First Appts Offered	116	28	39	13	36
Follow-up Appointments	1,470	343	516	229	382
IP Delayed Discharges					



Time between initial referral received and first appointment, by CMHT, all staff groups:

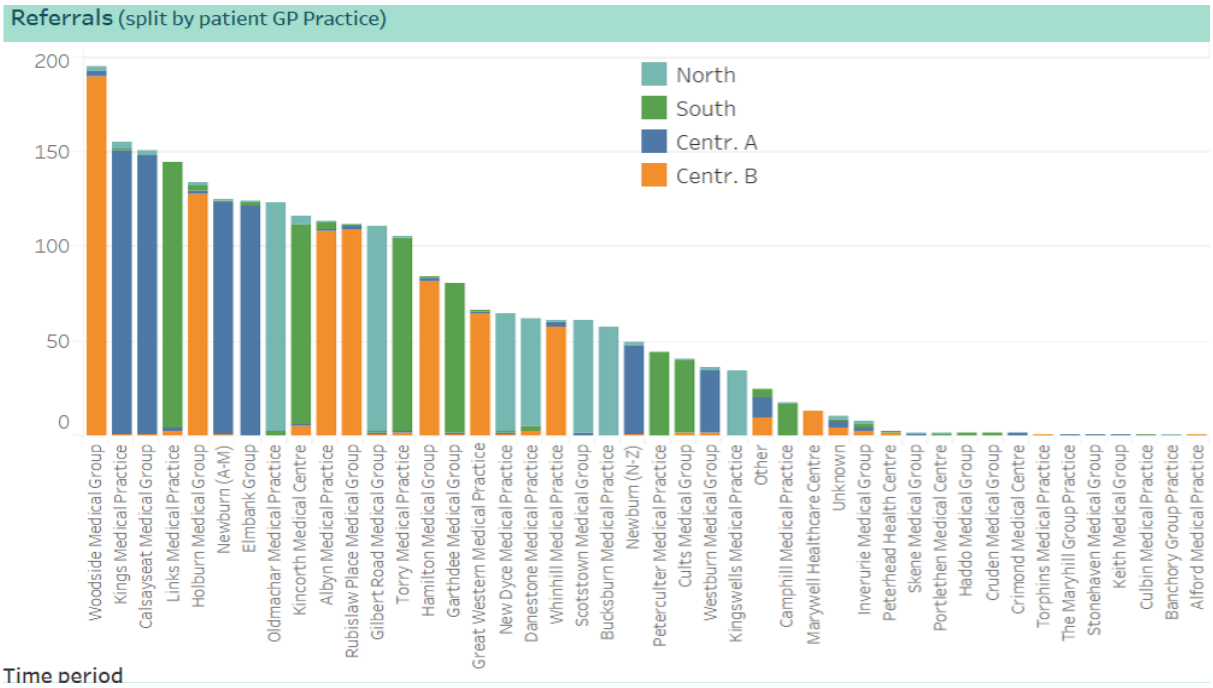
Waiting Times & IP Activity

AMH City | CMHT | All | Multiple vals

Referral->1st Appt Offered | Face-to-Face: Mar 26, 100% | Urgency: All | Staff Group: All | Virtual/Face-to-Face: All

Weeks wait..	Team Area	Grand To..	Apr 25	May 25	Jun 25	Jul 25	Aug 25	Sept 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26
Grand Total		1,258	108	112	104	82	84	113	111	120	108	89	111	116
Within 1 week	Centr. A	41		2	4	3	7	4	2	7	4	2	2	4
	Centr. B	46	2	9	4	4	4	4	6	3	1	2	3	4
	North	19		3	3		3	4		2	1	1	1	1
	South	29	2	3	2	3	2	3	3	3		2	2	4
1-8 weeks	Centr. A	181	14	16	16	13	13	12	19	27	18	10	10	13
	Centr. B	133	20	13	12	8	13	11	11	6	12	2	11	14
	North	122	18	13	13	5	9	7	7	15	13	7	7	8
	South	217	14	19	18	10	11	29	20	22	22	18	17	17
>8 weeks	Centr. A	104	4	1	6	11	6	9	14	13	3	10	16	11
	Centr. B	197	19	14	11	17	3	15	14	8	27	21	27	21
	North	76	11	5	4	2	7	8	6	6	4	8	11	4
	South	93	4	14	11	6	6	7	9	8	3	6	4	15

Referrals by GP practice over 12 months:



BOXI

When an area requires exploration, we use BOXI to find and display information which does not appear on the dashboard. An example:

The dashboard showed an increased admission rate in our Central A CMHT compared to other groups, which required further investigation. Using BOXI, we discovered significant differences in outpatient engagement as seen in the table below:

Sum of COUNT	Column Labels				
Row Labels	Attended	Cancelled by Clinic	CNA	DNA	Grand Total
Central A	60.94%	10.91%	3.76%	24.39%	100.00%
Central B	70.83%	8.74%	9.14%	11.29%	100.00%
North	58.54%	17.16%	7.57%	16.73%	100.00%
South	65.39%	6.60%	10.63%	17.37%	100.00%
Grand Total	**64.37%**	**10.63%**	**7.66%**	**17.34%**	**100.00%**

The Central A caseload had a DNA rate far higher than other teams, and the lowest CNA rate – a figure which tells us how well our patients communicate with us.

Using this system, we were able to understand that this particular CMHT's GP practices cover a patient demographic which has always showed a poorer than average attendance rate. This information was recently fed back to operational groups. BOXI can now provide a list of CHI numbers of those with poor attendance, which can be used in conjunction with the RAG documents to understand which patients/patient groups show the highest DNA and admission rates. Together, this information provides us with a list of patients who need assertive outreach, and illustrates which diagnoses we should be preparing to focus on to prevent admissions.

Next steps

The example of how our systems are used together is only one occasion where we were able to promptly identify a difference and investigate/address it. Without some familiarity with these systems and how they work, I appreciate this can be difficult to imagine/follow. I am proud to say that our data analysis group has made many mistakes so that you don't have to. If you'd like to have a meaningful discussion about how data can help you manage your service, with a live example of how our system is used, please contact us.

Having completed a thorough scoping exercise of our CMHTs, our next goal is to expand this system into Aberdeenshire, Older Adult Mental Health, and our Substance Misuse/Integrated Alcohol Service.

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