Data Quality and Information Flow

NHS Lothian’s community based specialist Mental Health services use Patient Information Management System (PIMS) as their electronic patient record and administrative system. During phase one of the DCAQ project, a number of pieces of analysis were undertaken, using data from PIMS for both services involved in the project. However, a combination of how the system works and how it was being used led to the following barriers to progressing with DCAQ analysis;

- It was not possible to identify how many referrals were going specifically to the psychological therapies service(s) for assessment (PT services are delivered as part of wider mental health services).
- It was not possible within PIMS to identify how many people were waiting for a Psychological Therapy, how long for and for what.
- It was difficult for clinicians to get information back on activity, which led to low motivation to record or use data to inform service delivery and to localised development of unsupported, standalone data recording tools.
- There were several different ways of capturing activity, which led to inconsistencies in how data was recorded.
- There was a lack of clarity around clinical ownership of the data at service level.
- Although there was a function for capturing clinical outcomes within PIMS, it was not routinely used or reported.

As a result, a number of recommendations were made in the Phase One report to address these issues. Specifically the recommendations targeted improvement in the quality and accessibility of demand, activity and queue data, and of clinical outcomes data.

As this is likely to be an issue encountered by a number of mental health services, this document outlines the steps that were taken to address the issues surrounding data quality and information flow.

1. For each service, PIMS data was checked against case notes. Variation across each team in current information capture processes were documented.
2. A Psychology Assistant undertook a piece of work to map the current practice for using PIMS with each service. This involved speaking with key individuals along the patient pathway both from admin support and with clinicians from each part of each service, asking each person, for each step in the pathway:
   a) what information is recorded?
   b) where is it recorded?
   c) who records it?
   d) approximately how long does it take?
e) what sort of timeframe is it recorded in? (e.g. 2 days after receipt of referral)

Some of the questions asked either could not be answered or had several different answers. This was useful in highlighting gaps and inconsistencies in the data collection process. From the information gathered from interviews, a “current state” information flow diagram (below) and document for discussion was developed.

A structured meeting was then facilitated amongst the clinical team, the PIMS manager, the administrative support staff, informed by the pre-work. The meeting afforded the opportunity for issues and concerns to be captured and parked so that the discussion remained constructive. Clear aims of the meeting were set and shared prior to the meeting. These were:

1. Agreed an information flow for Midlothian Psychological Therapies Service, along with timings for data entry

2. Identified a clear set of training needs in relation to using PIMS. (After the meeting we will then formulate a plan to address those training needs)

3. Identified what changes need to be made to PIMS to support the DCAQ work and ongoing management of demand data (again, post-meeting the project team will work with PIMS to develop a plan to address these changes)

The key actions were captured, and a plan was then agreed, with timescales and task owners.

Using the diagram as a guide, the PIMS manager made some changes to the PIMS system to enable the team to follow the new process, and training was then made available for all of the team on how to use PIMS in line with the new process. Supporting training guides were produced for reference along with a period of telephone support by the PIMS training team.

A similar approach was applied in East Lothian Psychological Therapies Service, supported by input from the Transformation Station on particular aspects of training and embedding of clinical outcomes data collection.

The new information flow process was then implemented. Data quality reports were produced to help identify issues with the new data collection process, along with random checks of case notes against data quality.

As a result of the work done, NHS Lothian now has a robust information flow process, easily articulated and demonstrated, supported by training materials and expertise which will enable the approach to be rolled out across the other teams offering Psychological Therapies within the Health Board.
There are also now a set of routine reports for each service which cover demand, activity and queue data, data quality and completeness for ongoing monitoring, and clinical outcomes data.
**Mapping Information-flow for Midlothian PTS – CURRENT STATE**

*Note: All staff, except Psychologists, will be referred to as Psychological Therapists (PT) in this document*

**Referral – pre-allocation**

The secretaries receive all referrals from Sky Gateway. They input all referrals into the local database and set up an Excel spreadsheet for them that is passed on to Medical Records. Medical Records will then record all the referrals on PiMS and send out the patient files to the service.

*Recorded in:* Local database / PiMS

*By whom:* Secretaries / Medical records

*Date taken from:* Referral letter

*Time between Referral and Allocation:* approx. 1 week

**Allocation**

All referrals are being considered at the allocation meeting and their appropriateness for the service decided upon. ‘Appropriate’ referrals are aligned to matrix level, type of therapy and therapist.

**Referral – post allocation**

After the allocation meeting, the secretaries update the local database with the outcome of the allocation meeting and make up the patient notes for all of them (both ‘appropriate’ and ‘inappropriate’ referrals). They will then return the ‘inappropriate’ referrals to the GP by sending them a letter and record this on PiMS. This is usually done within 2 -3 days.

*Recorded in:* Local database / PiMS / patient file / letter to GP

*How:* Matrix alignment, therapy alignment and therapist alignment are being recorded and ‘inappropriate’ referrals managed accordingly

*By whom:* Secretary

*Time spent on task:*

*Completed within:* 2 – 3 days after allocation

*How can it be established how many referrals go to either PT, Psychology or are ‘inappropriate’ referrals?*
Team is specified in local database.

‘Inappropriate referrals’ can be identified on the basis of not having an opt in date, no 1st appt and no discharge date.

**Opt-in**

Within 2 - 3 days the secretaries send out opt-in letters to all allocated (‘appropriate’) referrals, send a copy of it to the GP and put one into patient file.

*Recorded in:* Local database / patient file / letter to GP

*How:* Date of when the opt-in letter was sent is being recorded

*By whom:* Secretary

*Time spent on task:* 2 – 3 days after allocation

The opt-in letter gives clients 14 days to respond, but secretaries usually allow for about 21 days before discharging them.

**Appointment letter**

In response to the opt-in letters, appointments are arranged over the phone by the secretary. The secretaries hold a list of each clinician’s availabilities to do assessments. Appointment letters are then send out to the clients and copies of it forwarded to the GP and put in patient file. The patient notes are then passed on the clinician assessing. The date of the arranged appointment is added to the local database.

*Recorded in:* Patient file / local database / letter to GP

*By whom:* Secretary

*Time spent on task:* 2 days after opt-in

First assessment appointment dates are given within 18 weeks from referral.

**First appointment / assessment:**

Most clinicians will make a note of the date of this appointment in their diaries.

After assessment, the clinician adds the client to their case-load on PiMS and records attendance details there (here we have inconsistencies as some clinicians do add them to their caseload on PiMS and others don’t because they need to be taken off again if intervention will be done by someone else - NEEDS TO BE CLARIFIED!!!).
Clinician will also write case notes and adds them to the patient file and writes a letter to the GP.

*Recorded in:* Clinicians diary / PiMS / patient file / letter to GP

*How:* Clinicians add the client to their caseload on PiMS at this point (?) and record date of appointment and attendance on it after assessment (what option is chosen in PiMS to indicate 'Purpose of session' when it is a first appointment/assessment? Teams?)

*By whom:* Secretary / Clinician

*Time spent on task:*

*Completed within:* All recording and letter to GP should be completed within 1 week (ie adhering to documentations standards)

**Waiting list**

The waiting list is determined by the Matrix level and type of therapy/intervention needed. Patients requiring long-term interventions on Levels 3 and 4 are put on the waiting list after assessment, while patients requiring short-term intervention on Level 2 are usually seen straight away. Patients on Level 2 and 3 requiring a group intervention may be put on the waiting list, depending on group availability (there may be a wait determined by the start date of the next group).

The clinician will pass on this information to the secretary after assessment who will record it accordingly on the local database (adding them to the appropriate waiting list there if required).

*Recorded in:* Local database

*How:* Matrix level and reason for wait (type of intervention required) – for most of the cases (this may need a bit more consistency). The length of time waiting is automatically generated as weeks go by.

*By whom:* Secretary

*Time spent on task:*

*Completed within:* 2 – 3 days after assessment ???

**Waiting list management:**

Once a clinician has capacity to offer a follow-up appointment to a client or a place in a group becomes available they will inform the secretary of this so that an appointment letter can be send out. The secretary will update this on the local database and remove the client from the waiting list.

**Group Intervention**
Referrals to groups are made internally. There are a range of groups offered to clients on Level 2 and 3, and one group to clients on Level 3 and 4. The groups run for 6 to 15 weeks, once a week, lasting approx. 1 to 2 hours each. They are usually facilitated by two members of staff / session.

Recorded in: Excel sheets (separate one for each group) (PT groups only) / PiMS (PT and Psychology) / patient file (outcome measures) / clinicians diary

How: For each client attending one of the PT groups (Level 2 and 3) it is recorded what group they attended, number of attendances and DNAs. The outcome measures are being kept in the patient file. Currently, psychology records group attendance in PiMS under ‘individual contact’ rather than ‘groups’.

By whom: Clinician

Completed within:

Follow-up appointments / Therapy

Once the clinician has capacity the secretary is informed and will send out a appointment letter. This letter will be copied to the GP and in the patient file. The clinician usually keeps a record of the appointment date in their diary.

After the follow-up appointment, the clinician will add the client to their case loads on PiMS (should they not be on there yet…TO BE CONFIRMED) and record date of appointment and attendance there. Case notes will be written for the patient file.

Recorded in: PiMS / patient file / clinicians diary

Recorded when: After session.

How: Date of appointment and attendance is recorded in diary and PiMS (what is being chosen as ‘Purpose of session’ on PiMS?). Case notes are filed in patient file. Any recording should be done within 1 week.

By whom: Clinician

Time spent on task:

Completed within: All recording is to be done within 1 week (ie adhering to documentations standards)

DNAs and CNAs
DNA/CNA are recorded on PiMS accordingly, by the clinician. It is also noted in front of the patient file for Psychology and on the outpatient sheet for PT (only DNAs). Some clinicians will keep a note of it in their diaries too.

**Recorded in:** PiMS / patient file / clinicians diary  
**By whom:** Clinician  
**Time spent on task:**

Completed within:

In the case of a DNA, the clinician will pass this information to the secretary, requesting an opt-in letter to be send out (see procedures for opt-in). Secretaries will send out letter, asking for people to opt-in again. If they don’t, within 14 days, they will be discharged.

### Outcome Measures

Clinician is responsible for collecting the data at assessment and last appointment (at discharge), using DASS and CORE34. In Psychology, the clinician will record the scores of the outcome measures on a sheet provided for it, which will be passed on to the secretary at discharge. The secretary will then record the scores in local database, when inputting the discharge information.

**Recorded in:** Information sheet / local database  
**When:** At discharge  
**By whom:** Clinician / Secretary  
**Time spent on task:**

Completed within:

### Discharge

Clinician discharges from PiMS, sends a discharge letter to GP (copy of which goes in patient file) and - in Psychology - completes a sheet that is handed to Secretary, who records in local database

**Recorded in:** PiMS / local database  
**When:** at discharge  
**By whom:** Clinician / Secretary  
**Date taken from:** Discharge letter  
**Time spent on task:**

Completed within:
More clarity and consistency is needed for when it is recorded and what date is used!

**Storage of files**

Current and discharge files are being kept locally (Psychology discharge files in secretary office). Currently, secondary storage space is not available (since moving out of Rosslynlee). The old files are at the REH at the moment, but this is a temporary measure only. It is unclear where their secondary storage will be. The location of the files is usually recorded in PiMS by the secretary (for Psychology) and Medical Records (for PT).

Generally, it is important to know whether all of the information above is recorded routinely, coherently and consistently. And establish the reasons for why it isn’t should that be the case. **To discuss with team leads / teams**
FUTURE STATE
A future state information flow diagram was then developed at the meeting and pulled together by the Psychology Assistant directly after the meeting, then circulated for comment. The diagram was then finalised as follows:
Referrals – Pre-allocation
SCI Gateway sends all referrals directly to Medical Records, who record them on PIMS and then pass them on to PTS (will patient files where possible)

Allocation (every week)
Matrix alignment, therapy alignment and therapist alignment are considered and decided upon.

Referrals – Post allocation (2-3 days after allocation)
Secretary adds all allocated referrals to team caseload on PIMS and records Matrix level, therapy and therapist alignment there. ‘Inappropriate’ referrals are recorded on PIMS and returned to GP/referrer. Patient notes are made up for all by secretary.

Opt-in (2 -3 days after allocation)
Secretary records date of letter sent out on PIMS, sends copy of it to GP and puts a copy in patient file. Secretary records whether patient opts in (‘Yes/No option) on PIMS. Discharging opt-outs from team caseload.

Appointment letter (2 days after opt-in)
Secretary records date of first arranged appointment on PIMS, sends out appointment letter to opt-ins, sends copy to GP and puts copy of it in patient file.

First appointment (Assessment) (recorded within 1 week)
Clinician notes appointment in own diary, records details of it as contact on PIMS and puts case notes in patient file. Outcome of assessment is recorded on PIMS (waiting list or not – level 2,3 or 4 -, group, discharge).

Level 2 – Short-term intervention
Straight into treatment (add to clinician caseload)

Level 3 and 4 – Long-term intervention
Clients go straight on waiting list on PIMS.

Group
Clinician records all group information on PIMS. Clients may go on wait list, depending on start date of group.

DNA / CNA
Clinician records DNA in diary, on PIMS and in patient file (recorded within 1 week)

Outcome measures
Clinician collects data at assessment and last contact and records scores on PIMS.

Waiting list
To be managed by PIMS only.

Follow-up appointment (recorded within 1 week)
Clinician makes note of appointment in diary, adds patient to their caseload on PIMS, records all details there (attendance; type of therapy) and puts case notes and correspondence in patient file.

DNA / CNA
Clinician records this in diary, on PIMS and patient file (within 1 week)

Level 2
Level 3
Level 4

‘Inappropriate’ Returned to GP / referrer

Opt-in
Secretary sends out letter and records on PIMS. Copy of letter send to GP and kept in patient file.

Discharge (recorded within 1 week)
Clinician discharges client from PIMS and sends discharge letter to GP. Copy of discharge letter in patient file.

Date of discharge should be the date of the discharge letter.