Implemented Functionality

Patient data is exported according to version 1.10 of the Pen Computer Systems Clinical Audit Tool specification. However, the following features are currently out of scope:

- · Colorectal screening
- Antibiotics Systemic
- · Antithrombotics > Anticoagulants
- Antithrombotics > Antiplatelets
- Anticoagulants > Dabigatran
- Lipid Modifying > Fibrates
- Gestational Diabetes
- · Left Ventricular Hypertrophy
- Glucose 2H Tolerance Test
- Patient Smoking Quit Date
- Alternate MBS items for 715, 721 and 723
- · Birth ethnicity
- Health Fund name and number
- · Sexuality field

For compliance with nKPI reporting the following additional patient data from version 1.15 IS EXPORTED and will be picked up by CAT: Pregnancy – completed weeks at first antenatal visit (PI13)

Reference Date

The CAT export tool will export data from Communicare as of a reference date rather than the current date. By default, the reference date is set to the current date and time. The reference date can be set to a date in the past using the user interface, whereby all data occurring up to and including the reference date will be exported from Communicare. The time component of the reference date will be ignored except when run on today's date. Running the CAT Export will generate a pair of XML files:

- An unidentified data file, and
- · A Link XML file to identify the data should it be required.

The reference date will form part of the XML filenames. For example:

MedicalMicrodata-DEMO_ALL_LOCALITIES-201105112359-650-v1_10-data.xml

For a date in the past, the time portion will always be '2359' (i.e. 11:59pm). For today's date, the current time will be used.

The reference date is also recorded in the XML. For example:

<extract_date>2011-05-11T23:59:00.000Z</extract_date>

Note: This is not the date and time the export is run, unless the reference date is today.

Patient

Patients in Communicare with status of 'Fictitious' or 'Non Patient' are excluded from the export. All other patients who have joined the practice prior to or on the reference date will be exported. Patient data such as status, age, allergies, and child age in months, are calculated relative to reference date.

Child Immunisation Status

If the patient is a child between 6 months and 7 years old, the CAT Export will calculate the child's immunisation status. If the child had no overdue 'immunisation' recalls and no overdue 'immunisation review' recalls, or had a completed 'immunisation review' recorded that matches the type (based on age) specified in Appendix G-7, then they are counted as 'fully immunised'.

nKPI Fully Immunised

CAT will flag fully immunised to true as follows:

- A check of the actual immunisations given as last birthday meets the nKPI criteria OR
- The Immunisation Status flag indicates all immunisations have been given

Smoking Data

The most recent smoking status and smoking review date prior to and including reference date are exported. See 'Appendix G-1' for information regarding smoking status mapping details.

Alcohol Data

The most recent alcohol data (alcohol status, consumption frequency and consumption amount), along with the alcohol review date (relative to reference date), are exported. See 'Appendix G-1' for information regarding alcohol data mapping details.

Prescription Count

CAT Export will calculate the number of medications that had been prescribed as of the reference date, that had not been stopped or deleted, or were stopped or deleted only after the reference date.

Activity

A patient is considered 'active' if there have been at least three contact services (excluding No Client Contact services) provided in the two years prior to or on the reference date, by any provider.

Status

The Communicare patient status that was current as of the reference date is submitted as a patient's status:

- C=Current Patient
- T=Transient Patient
- B=Banned
- P=Past Patient
- D=Deceased
- F=Fictitious (not exported)
- N=Non Patient (not exported)

Pregnancy

A patient is counted as pregnant if they have a clinical item recorded with system code of "PRE" and rule code of "PR-START" (normally Pregnancy Confirmed) recorded before the reference date and no clinical item recorded with system code "PRE" and rule code of "PR-END" (e.g. 'Normal vaginal delivery'), or one dated after the reference date. The values for the latest pregnancy LMP, gestation at birth, first antenatal visit, antenatal visits total, pregnancy statuses, and birth weights for this pregnancy are also exported.

Note: The Obstetrics tab will display 'Pregnancy outcome not recorded' or 'Pregnant (gestation unknown)' if the pregnancy gestation is >= 50 weeks or unknown, respectively. This status is not described in the export.

Service Counts

The following counts of services are calculated for each patient:

- A GP in the last 3, 6, and 12 months from the reference date
- A Dietician in the last 6 months from the reference date
- A Midwife in the last 6 months from the reference date
- · A Podiatrist in the last 6 months from the reference date
- A Psychologist in the last 6 months from the reference date
- A Registered Nurse in the last 6 months from the reference date
- An AHW in the last 6 months from the reference date
- A Trainee Medical Practitioner in the last 6 months from the reference date

Assigned Providers Communicare

Each patient is exported with an Assigned Provider. This has no bearing on the activity status of the patient and is simply a means of trying to find the patient's regular doctor. The Enabled and Specialty properties of providers (and how often a patient has seen the provider) are used to determine Assigned Providers. See *File* | *Reference Tables* | *Providers* to view Enabled and Speciality properties of providers.

There are four rules for determining an assigned provider. If no provider is found from the first rule, the following rules are applied until a provider is found.

- 1. Active (enabled) provider, with speciality General Medical Practitioner, who has seen each patient the most number of times in the 18 months previous to (and including) the reference date.
- 2. Inactive (disabled) provider, with speciality General Medical Practitioner, who has seen each patient the most number of times in the 18 months (relative to the reference date) previous to (and including) the reference date.
- 3. Active (enabled) provider, with speciality General Medical Practitioner, who has seen each patient most recently in the 5 years (relative to the reference date) previous to (and including) the reference date.
- 4. Inactive (disabled) provider, with speciality General Medical Practitioner, who has seen each patient most recently in the past 5 years (relative to the reference date) previous to (and including) the reference date.

Diagnoses Conditions

The CAT Export will export any diagnosis recorded on or previous to the reference date that has an ICPC code listed in the to the CAT Condition mapping table (see 'Appendix G-4'). If several diagnoses have been recorded for a patient that are in the same CAT Category, then only the earliest one of these is exported.

Measurements

The CAT Export will export measurement data recorded for each of the exported patients that matches CAT measurement mappings. Only measures belonging to clinical items dated prior to or on the reference date will be exported. Measurements take precedence over procedures; in other words, if a concept has been recorded as both a procedure and measurement in a patient's clinical record, then the date of the measurement is exported in preference to the date of the procedure (even if the date of the procedure is more recent than the date of the measurement). See 'Measurements Mapping' for information regarding measure mapping details.

Procedures

The CAT Export will export procedure data recorded for each of the exported patients that matches CAT procedure mappings. Only procedures belonging to clinical items dated prior to or on the reference date will be exported. Measurements take precedence over procedures; in other words, if a concept has been recorded as both a procedure and measurement in a patient's clinical record, then the date of the measurement is exported in preference to the date of the procedure (even if the date of the procedure is more recent than the date of the measurement). Procedures are only exported when there is no equivalent measurement to export. See 'Medication Mapping' for information regarding procedure mapping details.

Medications

The CAT Export will export medication data recorded for each of the exported patients that was prescribed on or before the reference date, and that matches CAT medication mappings. Only the latest medication from each medication group is listed. The active statuses of the medications are also calculated relative to the reference date e.g. a medication that was stopped after the reference date will be counted as active. See 'Medication Mapping' for information regarding medication mapping details.

Immunisations Communicare

The CAT Export will export immunisation data recorded for each of the exported patients as of the reference date that matches the CAT immunisation mappings. The immunisation data are grouped by the immunisation types. Note: An immunisation active status will always be set to 'True', unless it is a Fluvax immunisation that was done more than 12 months previous to the reference date. See 'Childhood or Adult Immunisations Mapping' for information regarding immunisation mapping details, and a definition of what is counted as a 'Fluvax' immunisation.

Provider

The CAT Export will export data for providers that were enabled as of the reference date. The total number of medications and the number of medications without reasons for each of the providers in the 3 months on or prior to the reference date are also exported.

Medicare Benefit Schedule

The CAT Export will export MBS items for each patient that belongs to a service that occurred prior to or on the reference date. Only MBS items included in the mapping (see MBS Item Numbers Communicare Mapping), that have been recorded against a patient more than once are included; as are the most recent service date and provider.

OSR Data

The CAT Export will export certain patient related OSR (Online Services Report) data that occurred prior to or on the reference date. The following data (if available) is included:

| Data | Related OSR Report |
|--|-----------------------|
| Stolen Generation' generation Determined by the most recent 'Stolen Generation' (central) qualifier from any clinical item. Third and fourth generation are combined into 'Third and subsequent'. | SE-6, L-6 |
| Number of contact episodes, excluding episodes while a client was in residential care. Services are not counted if they are 'no client contact' services (according to Encounter Mode); 'waiting', 'booked' or 'cancelled'; services provided by providers with a speciality of 'transport worker' and services recorded using the Transport module. See the 'Days in Residence' data element below for details of how residential care is determined. | CS-1, CS-3 |
| Worker type is determined by mapping provider specialty to the Workforce Classifications specified in the OSR data collecting instrument. Transport Services module contacts are not included because they are anonymous and therefore cannot be related to a patient in a CAT export. Transport Management module contacts are included (they are related to individual clients). Services are not counted if they are 'no client contact' services (according to Encounter Mode); 'waiting', 'booked' or 'cancelled'. | CS-2 |
| Number of MBS (Medicare Benefits Schedule) Item 715 health checks Determined by counting the number of 715 Medicare claim items attached to a patient's services. | CS-4, MCH-1 |

| Data | Related OSR Report |
|---|-----------------------|
| Number of alternative indigenous adult health checks This is the number of adult health checks that the patient has received with a system code of AHC. If both a 715 and an AHC clinical item exist in the same service, then only the 715 is counted. | CS-4 |
| Number of MBS Item 721 GP chronic disease management plans • Determined by counting the number of 721 Medicare claim items attached to a patient's services. | CS-4 |

| MCH-1 |
|------------|
| |
| MCH-2 |
| |
| SE-6, SE-7 |
| |
| L6, L7 |
| |
| S-6 |
| |
| |

| Data | Related OSR Report |
|--|-----------------------|
| Number of days spent in residence This is the total days that the patient spent in a residential care facility. Residence is the period between an Enrolment clinical item and an Exit clinical item (export code of DA-EXIT). Enrolments are identified by export code DA-ENROL with a 'Treatment delivery setting' qualifier (DA-TDS export code) set to 'Residential Treatment Facility'. | S-7, S-7a |
| Number of residential treatment episodes Residential treatment is identified by enrolments. Enrolments are identified by export code DA-ENROL with a 'Treatment delivery setting' qualifier (DA-TDS export code) set to 'Residential Treatment Facility'. | S-7b |
| Number of sobering up/residential respite/short-term episodes Sobering up/residential respite/short-term episodes are determined by the number of patient episodes with an export code of DR-ENROL or DA-SUOS. | S-10, S-11 |

Number of non-residential/follow-up/aftercare episodes

S-13, S-14

- This is the number of patient episodes with an export code of DR-ENROL, DA-SUOS, DA-ENROL, DR-EXIT or DA-EXIT, but NOT any ending with —GRP.
- · It also does not include any residential episodes.

Non-residential/follow-up/aftercare episodes is a count episodes that have at least one clinical item recorded in a service, excluding residential care and

groups, as identified by export codes 'DR-ENROL', 'DA-SUOS', 'DA-ENROL', 'DR-EXIT', 'DA-EXIT' and any code ending '-GRP' and excluding records during

a period of residence.

Practice Data

The CAT Export will export the following data for the entire practice. Note: this data is not organisation specific; the totals are calculated across all organisations.

- Number of deceased patients in the month up to and including the reference date.
- · Number of deceased patients in the month up to and including the reference date who are Aboriginal or Torres Strait Islander.
- Number of deceased patients in the month up to and including the reference date who are not Aboriginal or Torres Strait Islander.
- Number of OSR (Online Services Report) antenatal and maternal group activities up to and including the reference date. This data relates to OSR report MCH-3, and will produce a comma separated list of the group names with their counts. Antenatal and maternal group activities with an export code of:
 - MCH-GRPA will be resolved as 'Antenatal groups'.
 - MCH-GRPM will be resolved as 'Maternal and baby/child health groups'.
 - MCH-GRPP will be resolved as 'Parenting and parenting skills groups'.
 - o MCH-GRP will be resolved as the name of the clinical item.
- Number of OSR (Online Services Report) health promotion group activites up to and including the reference date. This data relates to OSR
 report HP-1, and will produce a comma separated list of the group names with their counts. Health promotion group activites with an export code
 of:
- HP-GRPT will be resolved as 'Tobacco use treatment/prevention groups'.
- HP-GRPA will be resolved as 'Alcohol misuse treatment/prevention groups'.
- HP-GRPP will be resolved as 'Physical activity/healthy weight activities'.
- HP-GRPC will be resolved as 'Chronic disease client support groups'.
- · HP-GRPL will be resolved as 'Living skills groups'.
- HP-GRPU will be resolved as 'Cultural groups'.
- HP-GRPM will be resolved as 'Mens groups'.
- HP-GRPW will be resolved as 'Womens groups'.
- HP-GRPY will be resolved as 'Youth groups'.
- HP-GRP will be resolved as the name of the clinical item.

STI Screening Report

This report is partially available - the report on screening for Chlamydia, Gonorrhoea, HIV and Syphilis are currently being exported from Communicare and can be used in CAT4.