

North East Public Health Observatory
National Drug Treatment Monitoring System
Data Quality Strategy
2011-12



Authors:	Jill Smith, Christopher Barzey, Michelle Cook David B Chappel
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BACKGROUND TO NE NDTMS DATA COLLECTION

The National Drug Treatment Monitoring System (NDTMS) captures data on the numbers of people presenting to services with problem drug and alcohol misuse. In the North East, there is a team based at the North East Public Health Observatory (NEPHO) which supports the processes required for ensuring that the ongoing primary data collection is maintained and that monthly deadlines and quality targets are met.

There are currently 9 NDTMS teams supporting 9 regional areas most of which are also based within regional Public Health Observatories but 3 of which are maintained within regional offices for the National Treatment Agency (NTA). The teams conduct their business according to a Service Level Agreement (SLA) from the NTA who undertake half-yearly reviews to ensure ongoing compliance and improvements.

The North East NDTMS team has been receiving electronic data on a monthly basis for the NDTMS database since 2004. At that time, a decision was taken that to support the maintenance of high data quality levels a method of refreshing all data captured (every month) would be implemented and adopted by all data providers across the region.

This method has the very positive effect of ensuring the absence of 'orphaned' records, of duplicate open episodes, of overlapping episodes, etc., but it also means that no agency is ever 'de-activated' and that archived historic agency files need to be uploaded to ensure a complete load of data is accomplished each month. It also requires measures to ensure changed values are monitored and that files are of an appropriate size.

From 1st April 2011, all North East providers will be implementing a system of submitting data via the NTA provided and updated software DAMS III which will ensure that all regions are refreshing and updating data in the same way. For the North East, this will entail a relaxing of our requirement to have all data submitted every month back to when a service first started delivery to the lesser volume of data from the January of the previous financial year e.g. if the current Month is August 2011 then we would expect to receive data back to 1st January 2010 as a minimum.

Data Quality Performance 1st April 2010

At the end of the financial year 2009-10, the North East (NE) had an Overall balanced score for NDTMS Data Quality of 14 – a Green rating which only the NE achieved at that time. Subsequently, there have been new interim measures introduced and the NE team have responded and improved our overall rating shown as a Red Amber Green (RAG) score to 13 by January 2010.

In addition, and as a result of ongoing Data completion work during 2008-09, the average rate of Data Completeness (as measured by the NE own index which is based on all data for tiers/ages/drugs provided) had improved to 0.97% at April 2009 from 0.96% at April 2008.

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NE NDTMS TEAM SLA REQUIREMENTS

The NDTMS teams are required to meet data quality targets to ensure that the NTA has access to good quality data and that the data is submitted to a monthly timetable.

In order to ensure that data quality meets those targets and continues to improve, the NE NDTMS team are obliged to deliver on outputs in five main areas during 2011-12:-

Data Collection and Submission (DCS)
Data Quality (DQ)
NTA System Administration (SYS)
Technical Liaison Support (TLS)
Regional Analysis and Reporting (RAR)

This document is the NE data quality strategy required under the DQ 1 SLA Output.

Aims of this Strategy

To fulfil the requirements of the SLA held between the NTA and NEPHO to acknowledge and inform in advance of the financial year on the focus, concerns and risks with regards to ongoing NDTMS data collection in the North East region.

This document outlines the strategic framework for the data quality work which will be delivered during 2011-12 by the NE NDTMS team in order to ensure the NTA has continued access to the highest quality data possible from NE substance misuse treatment services which in turn will achieve the highest quality contribution to the National Statistics which are based on NDTMS data.

It also outlines how issues will be prioritised and which DATs, services or system suppliers will be engaged, what actions will be taken and the levels of improvement expected. The details of how this will be effected will be outlined fully in the NE Data Quality Work Plan to be submitted to the NTA during April 2011.

SLA Outputs 2011-2012

Ref	Output 2011-2012	Deadline
DQ1	Annual Data Quality Strategy	1st April 2010
DQ2	Work Plans for targeted data quality improvement programmes to address NTA defined data quality metrics.	28th April 2010.
DQ3	Demonstrable evidence that data quality is being effectively addressed	Ongoing

ACHIEVEMENTS

The NE region has been providing an extremely high quality of data for NDTMS for a number of years; this can be partially attributed to the method of monthly refreshing data but is also a reflection of the continued input from the NE NDTMS team and of the ongoing cooperation and support provided by the NTA regional team and the 12 DATs and their commissioned treatment providers. During 2010-11 we were able to maintain a high level of performance against most of the previously existing metrics with just ongoing monitoring and attention but in addition, were able to focus on those fields where data completion remained a possible barrier to representative analysis. This was achieved through training and increased monthly data quality activity whilst the on-going monitoring of the standard (and interim) metrics continued.

Enhanced Understanding

The importance of ensuring improving levels of understanding around NDTMS by all key workers throughout the region resulted in the delivery of an ongoing programme of training events centred on the purpose of recording NDTMS and Treatment Outcome Profile data (TOP). 11 events training 254 people took place during 2010-11. This was in addition to guidance being provided via the web-based Analysts forum and newsletters. **The outcome of this training is believed to be evidenced in the increased levels of data completeness and enhanced delivery on TOP.**

Data Completeness

Whilst the NE NDTMS team cannot monitor if all clients at any agency are being included in the submitted data, (this would be an issue for the local commissioners to pursue where numbers fall short of targets), we can monitor the completion of all data fields in a record provided, appropriate to the stage of the episode. At the beginning of the year, monthly data (field) completeness reports were made available for both new presentations and for all active clients, showing levels of completeness for all data provided at agency and DAT level. These reports gave an overall index rating and individual ratings for certain fields; the reports concentrated on e.g. **Hidden Harm, Blood Borne Virus and other core fields likely to support more detailed analysis for the purposes of treatment improvement and public health intelligence. However, performances across the Partnerships were losing any degree of granularity due to the number of generic fields included in the Index. In order to provide a more useful measure of from June of 2010, new reports were made available focussing entirely on these 'special' fields. ThisProgress is identified below:-**

Data Completeness Progress in NE			
	Apr-08	Apr-09	Dec-09
Co Durham	96%	98%	99%
Darlington	94%	96%	99%
Gateshead	90%	94%	99%
Hartlepool	90%	98%	100%
Middlesbrough	93%	96%	98%
Newcastle	96%	96%	99%
North Tyneside	89%	97%	99%
Northumberland	96%	99%	100%
Redcar & Cleveland	95%	97%	99%
South Tyneside	95%	98%	99%
Stockton	99%	99%	100%
Sunderland	94%	95%	98%
Average	94%	97%	99%

Treatment Outcome Profile

There are 20 questions in NDTMS which are asked at certain intervals within the treatment journey and are for the purposes of tracking outcomes of treatment. These questions are referred to as Treatment Outcome Profile or TOP data. The tables below shows the level of achievement in completing these records since April 2009 for both Adult & YP Services

Adult Services

	Starts		Reviews		Exits	
	Apr-09	Dec-09	Apr-09	Dec-09	Apr-09	Dec-09
Darlington	88.6%	89.2%	36.7%	69.2%	66.7%	76.5%
Durham	59.9%	91.1%	52.3%	87.5%	64.3%	82.4%
Gateshead	80.2%	80.0%	30.8%	55.4%	20.0%	55.0%
Hartlepool	80.0%	86.6%	48.8%	95.0%	50.0%	76.5%
Middlesbrough	90.9%	94.0%	41.8%	84.9%	26.8%	87.1%
Newcastle	77.7%	85.7%	34.9%	78.2%	23.8%	74.4%
North Tyneside	66.7%	86.7%	52.8%	80.0%	64.3%	78.6%
Northumberland	78.0%	85.0%	54.8%	93.5%	50.0%	62.8%
Redcar & Cleveland	87.5%	90.9%	36.9%	56.1%	66.7%	96.3%
South Tyneside	81.5%	69.0%	18.6%	62.5%	53.8%	55.6%
Stockton	78.3%	85.1%	36.8%	88.5%	50.0%	68.0%
Sunderland	66.4%	90.6%	40.0%	77.3%	52.6%	67.9%
Average	78%	86%	40%	77%	49%	73%

Young People Service

	Starts		Reviews		Exits	
	Apr-09	Dec-09	Apr-09	Dec-09	Apr-09	Dec-09
Darlington	100.0%	100.0%	50.0%	100.0%	16.7%	90.9%
Durham	61.5%	90.5%	60.0%	66.7%	25.0%	100.0%
Gateshead	86.7%	0.0%	0.0%	N/A	75.0%	0.0%
Hartlepool	60.0%	85.7%	33.3%	80.0%	50.0%	100.0%
Middlesbrough	90.0%	64.3%	60.0%	100.0%	90.0%	85.7%
Newcastle	95.8%	100.0%	100.0%	100.0%	61.5%	100.0%
North Tyneside	100.0%	100.0%	33.3%	100.0%	88.9%	90.9%
Northumberland	89.5%	100.0%	44.4%	85.7%	100.0%	100.0%
Redcar & Cleveland	100.0%	100.0%	80.0%	75.0%	90.0%	88.9%
South Tyneside	100.0%	100.0%	72.7%	100.0%	80.0%	83.3%
Stockton	100.0%	100.0%	33.3%	100.0%	100.0%	91.7%
Sunderland	92.9%	91.7%	47.1%	75.0%	50.0%	100.0%
Average	90%	86%	51%	89%	69%	86%

It should be noted that during 2009-10 the continued production of NE-based, ranked and RAGged TOP exception reports aided the escalation of improvement in the region. In addition training around the opportunities to 'correct' data in NDTMS following a Start TOP continued to be incorporated in all events.

Correct use of Treatment Complete discharge reasons

The re-defining of these discharge reasons led to a newsletter, and to their specific inclusion at all training events during 2009-10. Training packs also included the NTA letter laying out the reasons for the new definitions. During the latter months of 2009-10, a monthly data quality metric and process was implemented by the NDTMS Data Manager to improve and correct old/new code/client issues.

PRIORITIES AND IMPLEMENTATION

The priorities for the NE region for 2010-2011 are:

- **Key Data Quality Metrics**
- **Data Completeness**
- **Business Continuity and Security**
- **Core Data Set Compliance**
- **TOP Completion**
- **Successful Discharge Rates**
- **National Data Audit**

During 2010-11, there will be monthly meetings of a data quality strategy group. This group will consist of the Regional NTA Manager, the Regional NTA Lead for Data, the Regional NDTMS Manager and the NDTMS Data Manager. A review of progress and updates with regards to this strategy will be discussed and new elements introduced to facilitate any new focus required by the NTA if and when appropriate.

Monthly Data Quality processes are already in place and have been documented by the NDTMS Coordinator and Data Manager. These include the population/creation of attributed data files showing which records are failing to meet which data quality metric by the NDTMS team and their secure transmission to the provider's administrator. In addition, to support these processes a 'point-scoring' programme has been implemented which escalates newly occurring issues of lateness and ongoing non-correction of notified issues to the provider's Drug Action Team and to the Regional NTA team for further investigation or action as required.

Most of the NE data quality work can and is conducted through telephone contact with providers but where an ongoing issue highlights a need for further training, then this will be offered by the NDTMS team. This training is offered at individual agency, regional organisation, or regional level as appropriate. Training is also offered to all providers to assist with new staff or to for refreshing the knowledge of existing staff.

Whilst priorities for NE NDTMS data quality have been agreed with the Regional NTA Manager these will be kept under review and progress documented through the monthly data quality strategy group.

Key Data Quality Metrics

To maintain established monthly procedures to issue clear instructions and data to facilitate and ensure highest level of performance against metrics by all providers, paying particular attention to the Questionable Modalities (M12-M13) and to data submissions from known problematic agencies/suppliers (refer to NE NDTMS Work Plan 2010-11 for further details).

Responsible Lead: Data Manager

Data Completeness

To enhance available information through the delivery of a more focussed report including previous fields analysed (such as Hidden Harm and BBV fields) and new fields such as YP start and end fields, YP & Adult second and third substance and Previously Treated. This

will be further developed during the course of 2010-11 to incorporate filters around YP/Adult services, Drug/Alcohol services, Tiers of delivery and Open/New episodes.

Responsible Lead: System Integration Manager

Business Continuity and Security

We will deliver our annual Business Continuity Audit report for the September 2010 panel reviews but will supplement this with an Agency Audit to establish accurate and up to date registration of agencies with regards to Tiers of Delivery (which will impact on the Questionable modalities metric), substances being treated and current managers. We will also use this as an opportunity to investigate and remove any group email accounts being used to access NDTMS systems.

Responsible Lead: Team/Liaison Manager

Core Data Set Compliance

Following the late implementation of CDS-F by some suppliers and our delayed notice of inappropriate and incomplete compliance, we will conduct an analysis of CDS-G fields with regards to their utilisation in all non-DET systems during August 2010.

Responsible Lead: Data Manager

TOP Completion

TOP will continue to be a high priority and supported by the NE NDTMS team through:

- all NDTMS training will include TOP
- NE NDTMS Input sheets will carry TOP forms on reverse
- NE RAGged exception reports will be made available

Responsible Lead: Team/Liaison Manager

Successful Discharge Rates

Successful Discharge rates will continue to be a high priority and supported by the NE NDTMS team through:

- all NDTMS training – discharge reasons will be embedded in all training
- attributed lists will be disseminated to providers

Responsible Lead: Team/Liaison Manager

National Data Audit

Due to the method adopted by the NE of refreshing the whole dataset on each monthly load of data, there are no requirements for cleansing of records as required by a National Data Audit process in other regions. However, the NE will participate in so far as it will be necessary to examine clients whose main problematic substance is Alcohol but who have a drug in the second problematic substance field and will also examine those clients who show Opiate or Crack use in Start TOP documentation but not in the main NDTMS problematic substance fields.

ROLES AND RESPONSIBILITIES

This data quality strategy can only be achieved by the NE NDTMS team through the cooperation of key stakeholders as detailed below:

Stakeholder	Lead Role	Responsibility
Treatment Providers Managers, Key workers and administrators	A named, authorised data lead responsible for data quality issues will be nominated and the NE NDTMS team will ensure an up-to-date list is maintained.	To be the key contact when data quality issues arise and to respond to requests to achieve 100% data load and data quality into DAMS by the monthly deadline which will be 7 th of the calendar month except for July (middle of month as notified) and August when there is no data submission. This will be achieved by:- <ul style="list-style-type: none"> • correcting errors/warnings in time for next submission • responding to requests to address specific data quality problems • alerting the NE NDTMS team in advance to any risk to achieving timely submission or data quality • ensuring the NE NDTMS Programme Board is made aware of any potential changes in system utilisation
Drug Action Teams/ Partnerships Commissioners and Analysts	A nominated lead responsible for data quality and performance within the Partnership – usually the DAT data analyst/Information Analyst.	<ul style="list-style-type: none"> • To ensure that treatment providers in their area are utilising the DET or an electronic casefile management system capable of providing NDTMS extracts appropriate for the current core data set and in accordance with NTA published documentation. • To ensure that procedures are in place around the IT system to assure appropriate capture, recording and reporting of the current core data set. • To identify and correct Treatment System wide design practices which form barriers to the delivery of good quality data. • To attend bi-monthly NTA/NE NDTMS/DAT data Manager meetings and to cascade information to all providers within the Partnership. • To attend and monitor the attendance of Partnership treatment Providers at NEW NDTMS training events as required.
NE Regional NTA	A nominated Deputy Regional Manager with lead role around data	<ul style="list-style-type: none"> • To support Partnership or NE NDTMS team in dealing with any escalated issues around data quality with Partnerships or treatment providers.

		<ul style="list-style-type: none"> • To monitor on-going data quality reports from the NTA central team and from the NE NDTMS team to ensure advice and guidance is available as required. • To work in cooperation with other DRM colleagues in ensuring that providers and Partnerships have appropriate staff and infrastructure to deliver ongoing NDTMS data. • To monitor the Annual Business Continuity Audit for reassurance around ongoing NDTMS data delivery
<p>NE NDTMS Team</p>	<p>The Public Health Liaison Manger has overall responsibility for NDTMS data quality in the NE.</p> <p>The NDTMS System Integration Manager will provide support on technical issues both with DET and DAMS system users and with non-DET system agencies.</p> <p>The NDTMS Data Manager is responsible for the day-to-day data quality operational processes and monthly processes in support of maintaining and raising NE NDTMS data quality.</p> <p>The NDTMS Coordinator will support the Data Manager in these day-to-day tasks.</p>	<p>The NE NDTMS team will maintain and raise data quality standards through:</p> <ul style="list-style-type: none"> • Monthly monitoring of data submissions and validation reports from the DAMS with follow-up of issues and support to treatment providers through the production of attributed data files or other means as appropriate to ensure understanding of any issues and methods of correction • Monthly monitoring of the central and regional data quality metrics, prioritising actions and communicating with nominated data quality leads to ensure and support compliance. • Deliver the NE Data Quality programme (point-system) to treatment providers, Partnerships and Regional NTA data lead to notify of continuing or new failures in data quality/timeliness. • Identify any data quality issues resulting from non-DET systems and report these to the NE NDTMS System Integration Manager. • Identify any data quality issues resulting from DET/DAMS systems and report these to the NE NDTMS System Integration Manager. <p>(If required, these issues for non-DET or DET/DAMS systems will then be escalated to Regional and/or Nation NTA teams and other NDTMS regional teams will be advised as appropriate.)</p> <ul style="list-style-type: none"> • To respond as required to any specific data quality or data completeness initiatives received from the national NTA or which have been agreed by the regional data quality group.

		<ul style="list-style-type: none"> To pro-actively provide and escalate to the Regional and Central NTA teams monthly verification reports as required by SLA Output DCS2 and particularly when issues which might impact on the national dataset occur e.g. failure to meet deadline for regional submission, significant increase/decrease in numbers in treatment, closure of agencies and data cleansing activities.
North East NDTMS Programme Board	<p>Regional Stakeholder group</p> <p>DAT partnership commissioners, and analysts;</p> <p>PCT (alcohol) commissioners and analysts;</p> <p>YP Commissioners and analysts;</p> <p>Regional NDTMS and NTA teams</p>	<ul style="list-style-type: none"> To share best practice and learning experiences To jointly develop and support data migration projects mitigating against: <ul style="list-style-type: none"> lowering of data quality inconsistent movement in performance information unnecessary financial cost To oversee strategy and work programmes for the regional NDTMS team
National NTA team		<ul style="list-style-type: none"> To support NE NDTMS team in negotiating solutions with software suppliers where data quality issues are known and not resolved e.g. non-compliance with current core data set. To communicate to and support NE NDTMS team when data quality issues are caused or exacerbated by DET/DAMS software and ensure prompt resolution of such issues.

RISK MANAGEMENT

The factors which might pose some risk to the ongoing achievement and improvement of data quality in the NE are detailed below with proposed mitigating actions for 2010-11:-

Implementation of Core Data Set G (non-DET systems)

Risk: Following implementation of core data set F, it was some time before non-DET system issues arising from non-compliance with and misunderstanding of the technical specification documentation were noted. This could occur with core data set G.

Mitigation: *The Data Manager will conduct an analysis of data from non-DET systems to verify usage of new fields and reference items.*

Publication of NTA national data quality metrics for 2010-11

Risk: There may be a delay in final publication which could impact on finalising regional data quality work plan details.

Mitigation: *The NE NDTMS Team will provide a draft Work Plan detailing data quality taking into account known national metrics and regional priorities by 1st April. Final submission of Work Plan will be made when possible. Monthly data quality processes will continue in the absence of a finalised Work Plan.*

Migrations

Risk: The NE NDTMS team and the NDTMS Regional NDTMS Programme Board has been made aware of the forthcoming migration from the DET to the Poppie System across the County Durham Treatment System. Previous migrations to Poppie elsewhere in the region has impacted on high level indicators such as numbers in treatment and an extended period of testing and validation work by the System Integration Manager.

Mitigation: *Experience gained from previous migrations suggests that early notification and cooperation by the Partnership should assist in ensuring minimal disruption and validation of new data. Programme Board to be kept informed of progress.*

Risk: The Tees, Esk & Wear Valley Foundation Trust has asked to commence submitting NDTMS extract files generated through the PARIS system. This will impact on most of the South Tees Partnership areas.

Mitigation: *TEWV representatives are to attend Programme Board in late March to present their proposals and for the members to discuss. The NE NDTMS team will then comply with the requirements (including timetable) of the Programme Board*

Risk: Other migrations may occur during 2010-11 such as from DET to Careworks (Sunderland).

Mitigation: *These will be project-managed and discussed at the Programme Board as per established processes.*

Mergers/Splits

Risk: Whilst there are no known forthcoming agency splits in the region, County Durham has suggested they may wish to compress 3 codes into 1 in 5 separate localities and has sought guidance from the NE NDTMS and Regional NTA Teams.

Mitigation: Implications with regards to performance monitoring will be discussed at the NDTMS Regional NDTMS Programme Board meeting during late March.

Changed Values

Risk: Because of the 'refresh of data' method adopted in the NE, in order to identify changes in values it has been necessary to compare the previous month's data with the current month. This was easily facilitated under ECMS (the previous NTA system for data submission). Since October 2009 and the introduction of DAMS as the means of data submission, there has not been a facility that can retain two sets of the data for comparison.

Mitigation: *Following the provision of comparison tools by the East Midlands NDTMS team, this will now become part of the NE monthly processes as before. It should be noted that until October 2009, there were minimal changes being made and mostly due to 'correcting' data as is required and appropriate.*

