

NPDA User Guide:

Navigating the Data Completeness Report (DCR)



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What is the Data Completeness Report (DCR)?

The DCR has been created as a guide to help units track their progress throughout the audit year. It provides a clear, visual summary of the various audit measures for the NPDA.

The DCR uses the data that you have submitted for your unit onto the NPDA online data capture system via either patient questionnaire or CSV methods and is updated upon each new submission.

However, as the data needs to be cleaned, validated, and analysed, the results provided are to be used as a **guide only** and are not the official NPDA published results. All data extraction, cleaning, validation, and analysis is based on the raw data that each unit submits onto the data capture system, and not on the system generated reports.

Accessing the DCR

Step 1

Once you have logged into the NPDA online data capture system:

- Select the 'Clinical' tab at the top of the page which will release a drop-down menu.
- Select 'DCR reports 2017+'



Step 2

Select the unit and the audit year, then click 'View overview' - this will bring up the following screen.

DCR Reports (2017+)

The following data completeness report (DCR) is generated from data submitted by your PDU using algorithms matching the analysis process used in the NPDA.

It should be viewed in conjunction with the data quality report (DQR) generated upon submission of CSV (not applicable to those entering data via additional questionnaire). The DQR is available to download immediately after your submission. It is imperative that you attend to the warnings and errors highlighted within your DQR in order to ensure the quality of your data and accuracy of the results ultimately reported.

The results within the DCR below are unlikely to exactly match your final unit's results for the audit year as we cannot perfectly recreate the manual data validating and cleaning processes completed by the NPDA team in the course of the analysis of your data, and so it does not replace your annual local report. However, the DCR should help you identify missing or incomplete data and enable tracking of clinic and patient outcomes across the audit year.

The DCR will re-generate following each data from your unit.

Please note that this report contains patient-identifiable data (NHS numbers) so if you are downloading or sharing it, please ensure that it is downloaded to a secure location, sent via a secure and encrypted channel, and is only shared with people who have permission to view it.

Site:

Dataset Period:

Save DCR report in pdf format (or a specific section of it)

Report required:

Patient characteristics for Bedrock hospital (Hospital) [PZ000] in period 2018-2019

Total number of eligible patients submitted	43
Total number of eligible patients with Type 1 diabetes	31
Number of patients aged 12 and above on day 1 of audit with Type 1 diabetes	25
Number of patients with Type 1 diabetes with a complete year of care in audit period	29
Number of patients with Type 1 diabetes aged 12+ with a complete year of care in audit period	24
Number of patients who died within audit period	0
Number of patients who transitioned/ left service within audit period	1
Number of patients using a realtime continuous glucose monitor (CGM) with alarms	3
Number of patients with coeliac disease	5
Number of patients with thyroid disease	4
Number of patients using (or trained to use) blood ketone testing equipment	9

[View treatment regimen](#)

Individual Values				Site Values			
<input type="button" value="7 Key Processes"/>	<input type="button" value="Additional Processes"/>	<input type="button" value="Care at diagnosis"/>	<input type="button" value="Outcomes"/>	<input type="button" value="7 Key Processes"/>	<input type="button" value="Additional Processes"/>	<input type="button" value="Care at diagnosis"/>	<input type="button" value="Outcomes"/>

Viewing your DCR

Step 1 – Viewing Overview Summary data

- You can use the first line of the overview to check that all your eligible patients have been entered
- A summary of the **patient characteristics** will be presented. This can be expanded further to view the **treatment regimen**
- Separate audit measures can be viewed by clicking on the menu tabs at the bottom of the page. This provides feedback both at the **individual patient level**, and the **site (PDU) level**.

Patient characteristics for Bedrock hospital (Hospital) [PZ000] in period 2018-2019

Total number of eligible patients submitted	43
Total number of eligible patients with Type 1 diabetes	31
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[View treatment regimen](#)

Individual Values

7 Key Processes | Additional Processes | Care at diagnosis | Outcomes

Site Values

7 Key Processes | Additional Processes | Care at diagnosis | Outcomes

Step 2 – Viewing Individual Values

You can view individual values for 7 key processes, additional processes, care at diagnosis and outcomes. Clicking on each of these tabs, you will be presented with a screen like the image below. Clicking on any of the headers will sort the list by that header but will take you back to the main screen where you will have to click the values button again.

Please take note of the key which will help you interpret the **symbols** used, and the **description**, which will tell you which patients have been included for these measures.

Individual Values

7 Key Processes | Additional Processes | Care at diagnosis | Outcomes

⊗ Patient data is missing/incomplete

✓ Patient data is complete

Site Values

7 Key Processes | Additional Processes | Care at diagnosis | Outcomes

■ Patient left in period

■ Patient diagnosed in period

■ Patient died in period

N/A Patient not included <12yrs old






Seven Key Care Processes

These care processes show the completion rate, per patient, for all 7 key care processes for Type 1 patients. Three of these are mandatory for patients of all ages: HbA1c, BMI and Thyroid. Blood Pressure, Urinary Albumin, Eye Screen and Foot Exam are only mandatory for patients aged 12 and above.

NHS	12+	HbA1c	BMI	Thyroid Screen	Blood Pressure	Urinary Albumin	Eye Screen	Foot Exam	Total
777777777	N	⊗	✓	⊗	N/A	N/A	N/A	N/A	1/3 ⊗
950000028	Y	⊗	⊗	⊗	⊗	⊗	✓	⊗	1/7 ⊗
980000001	Y	⊗	⊗	⊗	⊗	⊗	⊗	⊗	0/7 ⊗

Step 3 – Viewing Site Values


You can view site values for 7 key processes, additional processes, care at diagnosis and outcomes. Clicking on each of these tabs, you will be presented with a screen like the image below showing **site percentages**. Please take note of the **description**, which will tell you which patients have been included for these measures.

Individual Values				Site Values			
7 Key Processes	Additional Processes	Care at diagnosis	Outcomes	7 Key Processes	Additional Processes	Care at diagnosis	Outcomes
 Patient data is missing/incomplete		 Patient left in period		 Patient died in period			
 Patient data is complete		 Patient diagnosed in period		N/A Patient not included <12yrs old			

Site Values - Completion of seven key care processes for patients with Type 1 diabetes

Note: These care processes show the completion rate for all 7 key care processes for Type 1 patients. The criteria for inclusion in the denominator for HbA1c, Thyroid and BMI was all Type 1 patients receiving a complete year of care in the audit period (i.e. patients who were not diagnosed, did not leave PDU care and did not die within the audit period). For albuminuria, retinopathy, blood pressure and foot examination, the denominator was all patients aged 12 years or older on the first day of the audit who received a complete year of care.

The Overall Completeness is patients aged 12 years or older on the first day of the audit with a complete year of care, who received all seven key care processes:

Age	HbA1c	BMI	Thyroid	Blood Pressure	Urinary Albumin	Eye Screening	Foot Examination	Total
Less than 12	87.5% (14/16) 	0.0% (0/16)	N/A	N/A	N/A	N/A	N/A	0.0% (0/16)
12 & Over	89.0% (73/82)	1.2% (1/82)	2.4% (2/82)	87.8% (72/82)	73.2% (60/82)	97.6% (80/82)	92.7% (76/82)	0.0% (0/82)
Overall	88.8% (87/98)	2.0% (2/98)	2.0% (2/98)	87.8% (72/82)	73.2% (60/82)	97.6% (80/82)	92.7% (76/82)	0.0% (0/98)

Understanding your DCR results

The DCR uses a series of complex algorithms to generate the report results as a **guide only**. For further information, please download the NPDA Core Dataset from the [NPDA Data Submission Information page](#).

Seven Key Processes

- This shows the completion of each of the key care processes for each patient.
- For children 12 years and older - All seven care processes are mandatory (HbA1c, BMI, blood pressure screening, urinary albumin screening, thyroid function screening, eye screening, and foot examination).
- For children less than 12 years - Only three care processes are mandatory: HbA1c, BMI and thyroid function screening.

Individual Values:

Individual Values				Site Values			
7 Key Processes	Additional Processes	Care at diagnosis	Outcomes	7 Key Processes	Additional Processes	Care at diagnosis	Outcomes
	Patient data is missing/incomplete				Patient left in period		
	Patient data is complete				Patient diagnosed in period		
					Patient died in period		
					Patient not included <12yrs old		

Seven Key Care Processes

These care processes show the completion rate, per patient, for all 7 key care processes for Type 1 patients. Three of these are mandatory for patients of all ages: HbA1c, BMI and Thyroid. Blood Pressure, Urinary Albumin, Eye Screen and Foot Exam are only mandatory for patients aged 12 and above:

NHS	12+	HbA1c	BMI	Thyroid Screen	Blood Pressure	Urinary Albumin	Eye Screen	Foot Exam	Total
7777777777	N				N/A	N/A	N/A	N/A	1/3
9500000028	Y								1/7
9800000001	Y								0/7

Site Values:

Children are included in the overall site value if they have:

- Type 1 diabetes
- Received a complete year of care (i.e. diagnosed prior to the start of the audit year)

Indicates how many of the key care processes have been completed overall

Site Values - Completion of seven key care processes for patients with Type 1 diabetes

Note: These care processes show the completion rate for all 7 key care processes for Type 1 patients. The criteria for inclusion in the denominator for HbA1c, Thyroid and BMI was all Type 1 patients receiving a complete year of care in the audit period (i.e. patients who were not diagnosed, did not leave PDU care and did not die within the audit period). For albuminuria, retinopathy, blood pressure and foot examination, the denominator was all patients aged 12 years or older on the first day of the audit who received a complete year of care.

The Overall Completeness is patients aged 12 years or older on the first day of the audit with a complete year of care, who received all seven key care processes:

Age	HbA1c	BMI	Thyroid	Blood Pressure	Urinary Albumin	Eye Screening	Foot Examination	Total
Less than 12	0.0% (0/5)	0.0% (0/5)	0.0% (0/5)	N/A	N/A	N/A	N/A	0.0% (0/5)
12 & Over	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)
Overall	0.0% (0/29)	0.0% (0/29)	0.0% (0/29)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/24)	0.0% (0/29)

Additional Processes

- This includes additional care processes that are recommended by NICE or are included in the Best Practice Tariff criteria for England for children and young people with Type 1 diabetes.
- For all children and young people with Type 1 diabetes who have received a complete year of care, this includes:
 - Having four or more HbA1c checks
 - Psychological screening
 - Offers and uptake of dietetic appointments
 - Recommendation of influenza immunisation
 - Provision of sick day rules
- For children who are 12 years and older, screening of smoking status is included as an additional process. Referral to cessation services is also included for all children aged 12 years and older who are screened as a current smoker.

Individual Values:

Individual Values				Site Values			
7 Key Processes	Additional Processes	Care at diagnosis	Outcomes	7 Key Processes	Additional Processes	Care at diagnosis	Outcomes
	Patient data is missing/incomplete		Patient left in period		Patient died in period		
	Patient data is complete		Patient diagnosed in period	N/A	Patient not included <12yrs old		

Completion of additional care processes

This table shows the completion rates, per patient, of additional care processes recommended by NICE for children and young people with Type 1 diabetes. These apply to all ages, with the exceptions of smoking status ascertainment and referral to smoking cessation services, which are shown for patients aged 12 and above at the start of the audit year.

NHS	12+ HbA1c 4+	Psychological assessment	Smoking status screened	Referral to smoking cessation service (%)	Additional dietetic appointment offered (%)	Patients attending additional dietetic appointment (%)	Influenza immunisation recommended (%)	Sick day rules advice (%)	Completed	
9800000001	Y									4/8
9800000002	N			N/A	N/A					3/6
9800000003	Y	N/A	N/A		N/A					4/7
9800000004	N	N/A	N/A	N/A	N/A					0/6
9800000005	N	N/A	N/A	N/A	N/A					2/6
9800000006	N	N/A	N/A	N/A	N/A					0/6

Site Values:

Site Values - Completion of additional care processes for patients with Type 1 diabetes

Note: These care processes show the completion rate, per patient, for 3 additional care processes for Type 1 patients. Two are recommended for patients of all ages: Four or more HbA1c checks and Psychological Assessment . Smoking status is recommended for patients aged 12 and above:

HbA1c 4+	Psychological assessment	Smoking status screened	Referral to smoking cessation service	Additional dietetic appointment offered	Patients attending additional dietetic appointment	Influenza immunisation recommended	Sick day rules advice
2.04% (2/98)	86.73% (85/98)	75.61% (62/82)	15.79% (3/19)	61.22% (60/98)	8.16% (8/98)	93.88% (92/98)	93.88% (92/98)

Care at Diagnosis

- NICE have also recommended the following care processes to take place at the time of diagnosis.
- For all children and young people with Type 1 diabetes who have been diagnosed within the audit year, this includes:
 - Coeliac screening within 90 days of diagnosis (dates will be accepted up to 90 days after diagnosis date)
 - Thyroid screening within 90 days of diagnosis (dates will be accepted up to 90 days after diagnosis date)
 - Level 3 carbohydrate counting education within 14 days of diagnosis (dates will be accepted up to 14 days after diagnosis date)

Individual Values:

Individual Values				Site Values			
7 Key Processes	Additional Processes	Care at diagnosis	Outcomes	7 Key Processes	Additional Processes	Care at diagnosis	Outcomes
	Patient data is missing/incomplete				Patient left in period		
	Patient data is complete				Patient diagnosed in period		
					Patient died in period		
				N/A	Patient not included <12yrs old		

Care at diagnosis

NICE recommends that children and people with Type 1 diabetes are screened for thyroid and coeliac disease and provided with level 3 carbohydrate counting education at diagnosis. The denominator for the coeliac and thyroid screening results below includes all children and young people with Type 1 diabetes diagnosed in the audit year more than 90 days before the end of the audit period, and the numerator is the number of those who received screening within 90 days. The denominator and numerators for carb counting are the same as above, although the tolerance is 14 rather than 90 days.

NHS	12+	Coeliac disease screen following diagnosis of Type 1 diabetes (%)	Thyroid disease screen following diagnosis of Type 1 diabetes (%)	Carbohydrate counting education received
9800000003	Y	N/A	N/A	
9800000005	N			

Site Values:

Note that the total number of patients entered will be lower for coeliac/thyroid screening than carb counting education if you have patients who were diagnosed in the final 3 months of the audit year as the timeframe for completing these care processes may not have elapsed before the end of the audit year.

Site Values - Care at diagnosis

Note: It is recommended by NICE that children and people with Type 1 diabetes are screened for thyroid and coeliac disease at diagnosis. The results below includes all children and young people with Type 1 diabetes diagnosed in the audit year more than 90 days before the end of the audit period, between 01/04/2018– 31/12/2018. Patients are classified as having received screening for coeliac and thyroid if they received screening within 90 days of the date of diagnosis:

Coeliac disease screen following diagnosis of Type 1 diabetes (%)	Thyroid disease screen following diagnosis of Type 1 diabetes (%)	Carbohydrate counting education received
9.52% (2/21)	4.76% (1/21)	4.35% (1/23)

Outcomes

This section displays the various outcomes at both individual patient level, and also at site level, including:

- Mean and median HbA1c results at individual and site level
- Median HbA1c run charts by PDU and age
- Number of admissions in total (rather than per patient)
- Number of DKA admissions in total (rather than per patient)
- Number of patients who required additional psychological support.

Individual Values:

Individual Values				Site Values			
7 Key Processes	Additional Processes	Care at diagnosis	Outcomes	7 Key Processes	Additional Processes	Care at diagnosis	Outcomes
Patient data is missing/incomplete	Patient left in period	Patient died in period					
Patient data is complete	Patient diagnosed in period	N/A Patient not included <12yrs old					

Outcomes

The HbA1c data presented below is for all children and young people with Type 1 diabetes with one or more valid HbA1c measurements in the audit period taken > 90 days following diagnosis.

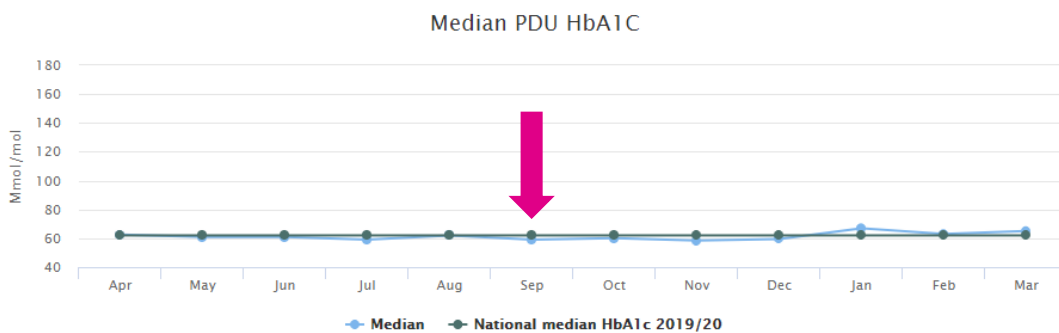
NHS Number	Mean HbA1c	Median HbA1c	Number of admissions	Number of DKA admissions	Required additional psych support
9800000001	76.0	76.0	1	1	0
9800000002	67.0	66.5	2	2	0
9800000003			1	0	0
9800000004	58.2	58.2	0	0	0

Site Values:

Site Values - Outcomes

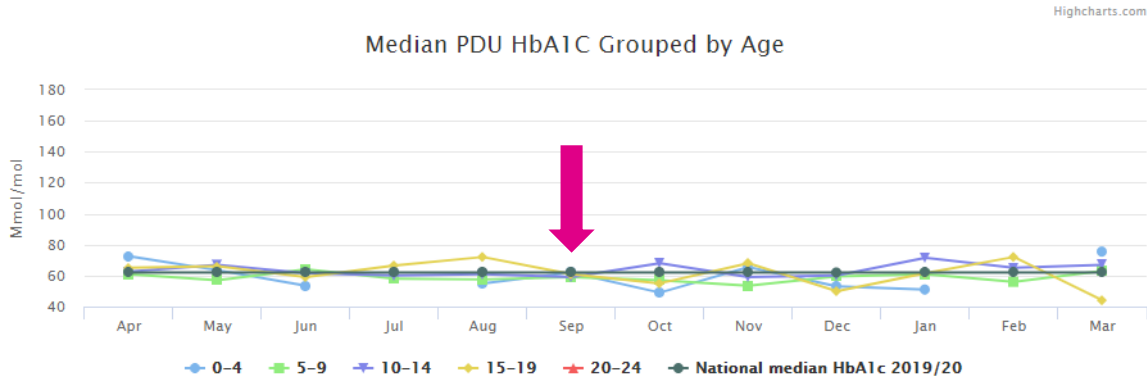
Note: The data presented below on HbA1c relates to the results for the children and young people with Type 1 diabetes and one or more valid HbA1c measurements in the audit period:

Please note the 'Grouped by Age' chart displays the median Mmol/mol while the datatable shows the total number of cases.



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Median	62.5	61.0	61.0	59.0	62.0	59.0	60.0	58.5	59.5	67.0	63.0	65.0
Cases	48	25	53	53	35	61	39	58	52	48	39	33
Min	40.0	46.0	32.0	37.0	40.0	31.0	32.0	33.0	37.0	31.0	34.0	39.0
Max	118.0	104.0	93.0	130.0	107.0	100.0	105.0	130.0	117.0	130.0	130.0	106.0
IQR	19.0	16.5	14.5	20.0	20.0	15.5	18.0	16.0	12.5	26.5	15.0	16.5

Hover over each data point to see the HbA1c value. Results are displayed against the national average HbA1c for the selected, or most recently published, audit year. **Number of cases** = Number of HbA1c valid values in the data submitted that are >3 months post diagnosis. Includes multiple values from the same patient in the same month.



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
0-4 Years	2	2	2	0	3	1	1	2	4	1	0	2
5-9 Years	13	11	13	16	12	12	12	18	16	15	11	11
10-14 Years	24	11	30	27	14	38	17	29	27	22	20	19
15-19 Years	9	1	8	10	6	10	9	9	5	10	8	1
20-24 Years	0	0	0	0	0	0	0	0	0	0	0	0

Hover over each data point to see the HbA1c value. Results are displayed against the national average HbA1c for the selected, or most recently published, audit year. **Numbers in the table** represent the number of included HbA1c values for each month by age group. If a patient has data submitted for May, June, and July, they will be included in all three counts.

Highcharts.com

Mean HbA1c	Median HbA1c	Number of admissions	Number of DKA admissions	Required additional psych support
64.0 (from 185 records)	61.0 (from 185 records)	51	16	169 (from 186 records)
57.6 (from 10 records [0-4])	53.8 (from 10 records [0-4])			
59.5 (from 47 records [5-9])	58.0 (from 47 records [5-9])			
64.5 (from 92 records [10-14])	61.8 (from 92 records [10-14])			
70.1 (from 34 records [15-19+])	62.5 (from 34 records [15-19+])			

Further information

More information and guides can be found on the [NPDA Data Submission Information](#) page.

If you have any queries or comments, please contact the NPDA Team (npda@rcpch.ac.uk)