Alder Hey Children's Hospital

Our administrative team:

Ann Mason, Camilla Spengler

Our dieticians:

Sophie Chidlow, Joanne Elliott, Emma O'Sullivan

Our doctors:

Mark Deakin, Princy Paul, Atrayee Ghatak, Fulya Mehta, Claire McNamara, Julie Green, Tabitha Osborne

Our nurses:

Sue Kerr, Jonathan Mimnagh, Kath Millar, Keith Thornborough, Noala Bradshaw, Anna Bradley, Diane Brookman

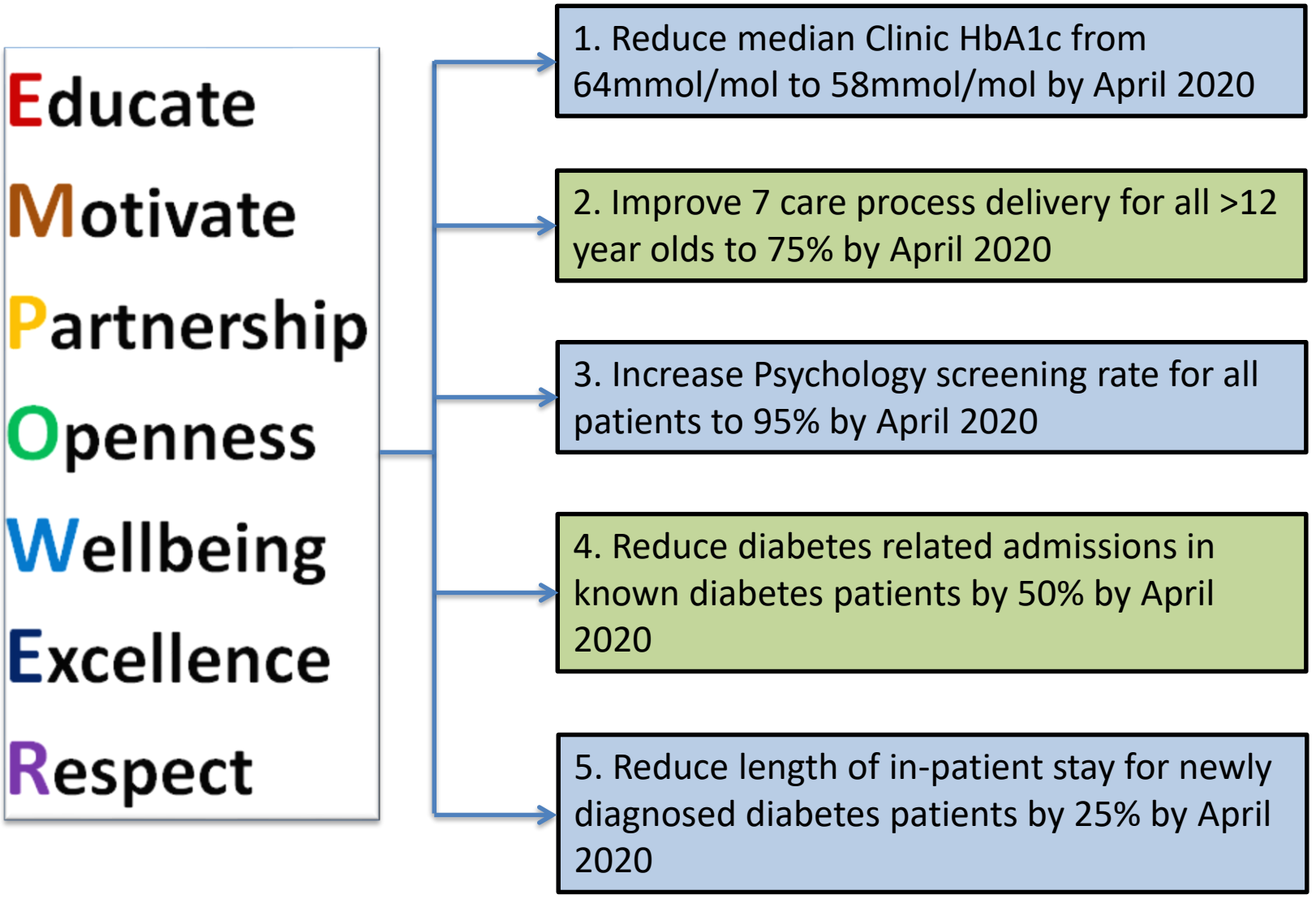
Our health care assistant:

Jackie Jones

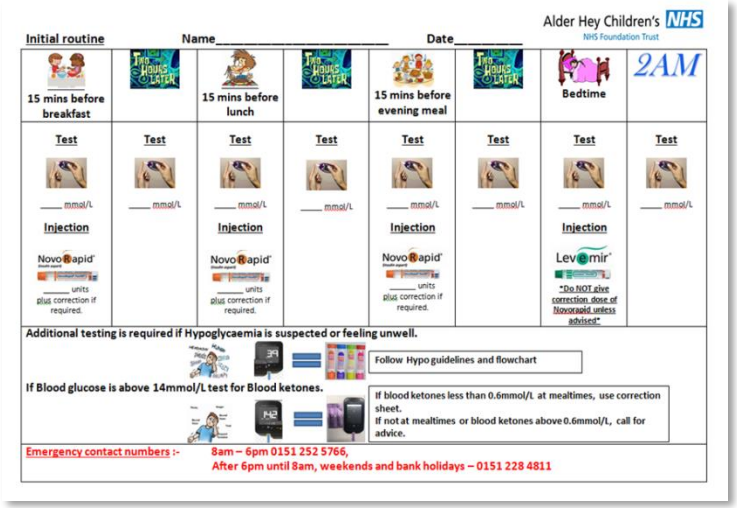
Our psychologists:

Anna Simmonds, Lyndsey Carlson,

Our purpose and our areas of work



Aim 1: Reduce median Clinic HbA1c from 64mmol/mol to 58mmol/mol by April 2020



Alder Hey Children's NHS
NHS Foundation Trust

Initial routine Name_____ Date_____

15 mins before breakfast		15 mins before lunch		15 mins before evening meal		Bedtime	2AM
Test	Test	Test	Test	Test	Test	Test	Test
____ mmol/L	____ mmol/L	____ mmol/L	____ mmol/L	____ mmol/L	____ mmol/L	____ mmol/L	____ mmol/L
Injection		Injection		Injection		Injection	
Novo Rapid ____ units plus correction if required.		Novo Rapid ____ units plus correction if required.		Novo Rapid ____ units plus correction if required.		Levemir *Do NOT give correction dose of Novorapid unless advised*	

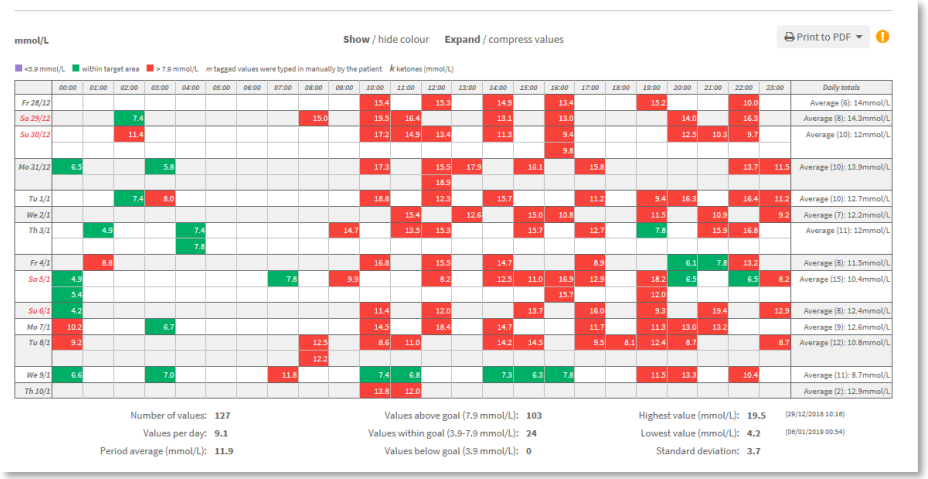
Additional testing is required if Hypoglycaemia is suspected or feeling unwell.

Follow Hypo guidelines and flowchart

If Blood glucose is above 14mmol/L test for Blood ketones.

If blood ketones less than 0.6mmol/L at mealtimes, use correction sheet.
If not at mealtimes or blood ketones above 0.6mmol/L, call for advice.

Emergency contact numbers :- 8am – 6pm 0151 252 5766,
After 6pm until 8am, weekends and bank holidays – 0151 228 4811



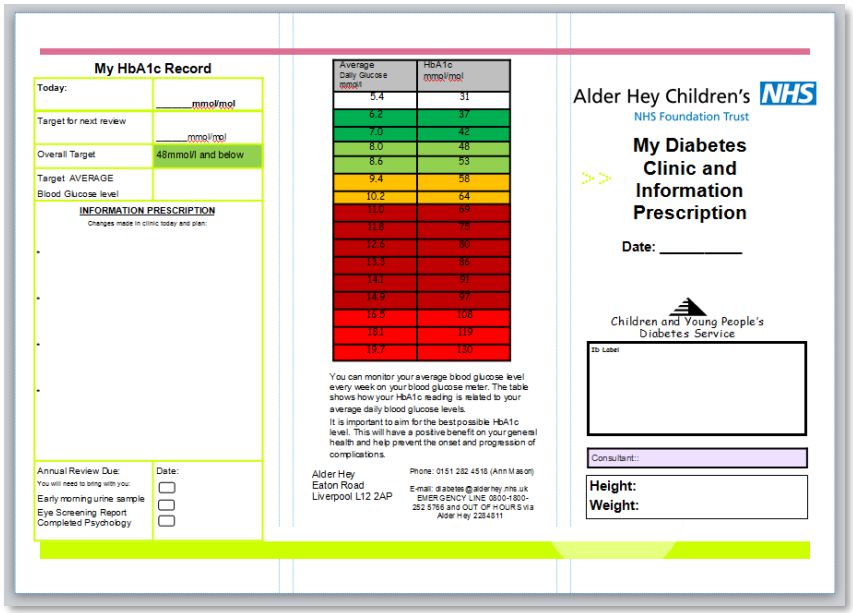
mmol/L — Show / hide colour — Expand / compress values — Print to PDF

<3.9 mmol/L | within target area | >7.9 mmol/L | m tagged values were typed in manually by the patient | k ketones (mmol/L)

	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Daily totals
Fr 28/12											15.4		15.3		14.9		13.4			15.2			10.0		Average (6): 14mmol/L
Sa 29/12			7.4						15.0		19.5	16.4			13.1		13.0				14.0		16.3		Average (8): 14.3mmol/L
Su 30/12			11.4								17.2	14.9	13.4		11.3		9.4				12.5	10.3	9.7		Average (10): 12mmol/L
																	9.8								
Mo 31/12	6.5			5.8							17.3		15.5	17.9		16.1		15.8					13.7	11.5	Average (10): 13.9mmol/L
													18.9												
Tu 1/1			7.4	8.0							18.8		12.3		15.7			11.2		9.4	16.3		16.4	11.2	Average (10): 12.7mmol/L
We 2/1												15.4		12.6		15.0	10.8			11.5		10.9		9.2	Average (7): 12.2mmol/L
Th 3/1		4.9			7.4					14.7		13.5	15.3			15.7		12.7		7.8		15.9	16.8		Average (11): 12mmol/L
					7.8																				
Fr 4/1		8.8									16.8		15.5		14.7			8.9			6.1	7.8	13.2		Average (8): 11.5mmol/L
So 5/1	4.9							7.8		9.9			8.2		12.5	11.0	16.9	12.9		18.2	6.5		6.5	8.2	Average (15): 10.4mmol/L
	5.4																15.7			12.0					
Su 6/1	4.2										11.4		12.0			13.7		16.0		9.3		19.4		12.9	Average (8): 12.4mmol/L
Mo 7/1	10.2			6.7							14.5		18.4		14.7			11.7		11.3	13.0	13.2			Average (9): 12.6mmol/L
Tu 8/1	9.2								12.5		8.6	11.0			14.2	14.5		9.5	8.1	12.4	8.1			8.7	Average (12): 10.8mmol/L
									12.2																
We 9/1	6.6			7.0			11.8				7.4	6.6			7.3	6.3	7.6			11.5	13.3		10.4		Average (11): 8.7mmol/L
Th 10/1											13.8	12.0													Average (2): 12.9mmol/L

Number of values: 127 | Values per day: 9.1 | Period average (mmol/L): 11.9
Values above goal (7.9 mmol/L): 103 | Values within goal (3.9-7.9 mmol/L): 24 | Values below goal (3.9 mmol/L): 0
Highest value (mmol/L): 19.5 (29/12/2018 10:16) | Lowest value (mmol/L): 4.2 (08/01/2019 00:54) | Standard deviation: 3.7

Improving patient education: from diagnosis and beyond



My HbA1c Record

Today:	_____mmol/mol
Target for next review	_____mmol/mol
Overall Target	48mmol/l and below
Target AVERAGE Blood Glucose level	

INFORMATION PRESCRIPTION
Changes made in clinic today and plan:

Annual Review Due:	Date:
You will need to bring with you:	
Early morning urine sample	☐
Eye Screening Report	☐
Completed Psychology	☐

Average Daily Glucose mmol/l	HbA1c mmol/mol
5.4	31
6.2	37
7.0	42
8.0	48
8.6	53
9.4	58
10.2	64
11.0	69
11.8	75
12.6	80
13.3	86
14.1	91
14.9	97
16.5	108
18.1	119
19.7	130

You can monitor your average blood glucose level every week on your blood glucose meter. The table shows how your HbA1c reading is related to your average daily blood glucose levels.
It is important to aim for the best possible HbA1c level. This will have a positive benefit on your general health and help prevent the onset and progression of complications.

Alder Hey
Eaton Road
Liverpool L12 2AP

Phone: 0151 282 4516 (Ann Mason)
E-mail: diabetes@alderhey.nhs.uk
EMERGENCY LINE 0800-1800-252 5766 and OUT OF HOURS via Alder Hey 2284811

Alder Hey Children's NHS
NHS Foundation Trust

My Diabetes Clinic and Information Prescription

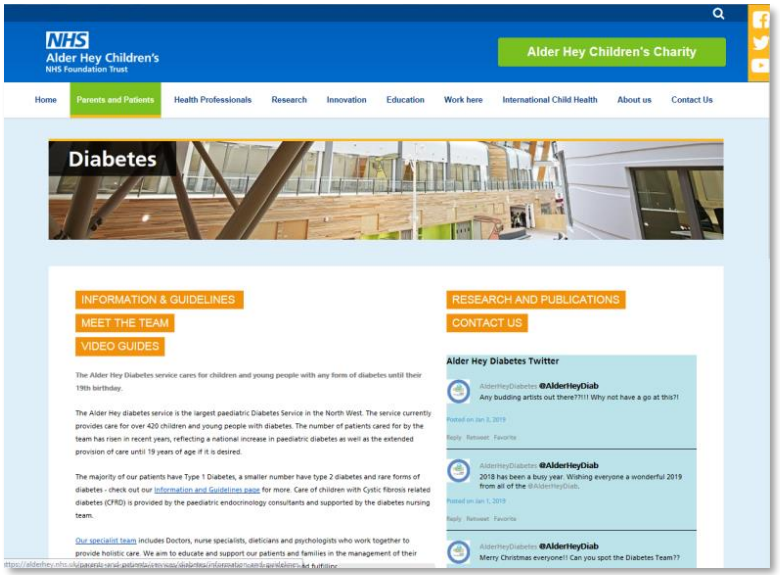
Date: _____

Children and Young People's Diabetes Service

ID Label

Consultant::

Height:
Weight:



NHS Alder Hey Children's NHS Foundation Trust

Alder Hey Children's Charity

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Diabetes

INFORMATION & GUIDELINES
MEET THE TEAM
VIDEO GUIDES
RESEARCH AND PUBLICATIONS
CONTACT US

The Alder Hey Diabetes service cares for children and young people with any form of diabetes until their 19th birthday.

The Alder Hey diabetes service is the largest paediatric Diabetes Service in the North West. The service currently provides care for over 420 children and young people with diabetes. The number of patients cared for by the team has risen in recent years, reflecting a national increase in paediatric diabetes as well as the extended provision of care until 19 years of age if it is desired.

The majority of our patients have Type 1 Diabetes, a smaller number have type 2 diabetes and rare forms of diabetes - check out our Information and Guidelines page for more. Care of children with Cystic fibrosis related diabetes (CFRD) is provided by the paediatric endocrinology consultants and supported by the diabetes nursing team.

Our specialist team includes Doctors, nurse specialists, dieticians and psychologists who work together to provide holistic care. We aim to educate and support our patients and families in the management of their

Alder Hey Diabetes Twitter

@AlderHeyDiab Any budding artists out there?!!! Why not have a go at this?!

@AlderHeyDiab 2018 has been a busy year. Wishing everyone a wonderful 2019 from all of the @AlderHeyDiab.

@AlderHeyDiab Merry Christmas everyone!! Can you spot the Diabetes Team??

Aim 1: Reduce median Clinic HbA1c from 64mmol/mol to 58mmol/mol by April 2020

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:

Mean HbA1c	Median HbA1c	Number of admissions	Number of DKA admissions	Required additional psych support
64.0 (from 403 records) 52.5 (from 15 records [0-4]) 58.2 (from 79 records [5-9]) 63.1 (from 179 records [10-14]) 70.1 (from 123 records [15-19+])	62.0 (from 403 records) 52.5 (from 15 records [0-4]) 57.5 (from 79 records [5-9]) 61.5 (from 179 records [10-14]) 67.0 (from 123 records [15-19+])	45	4	147 (from 407 records)

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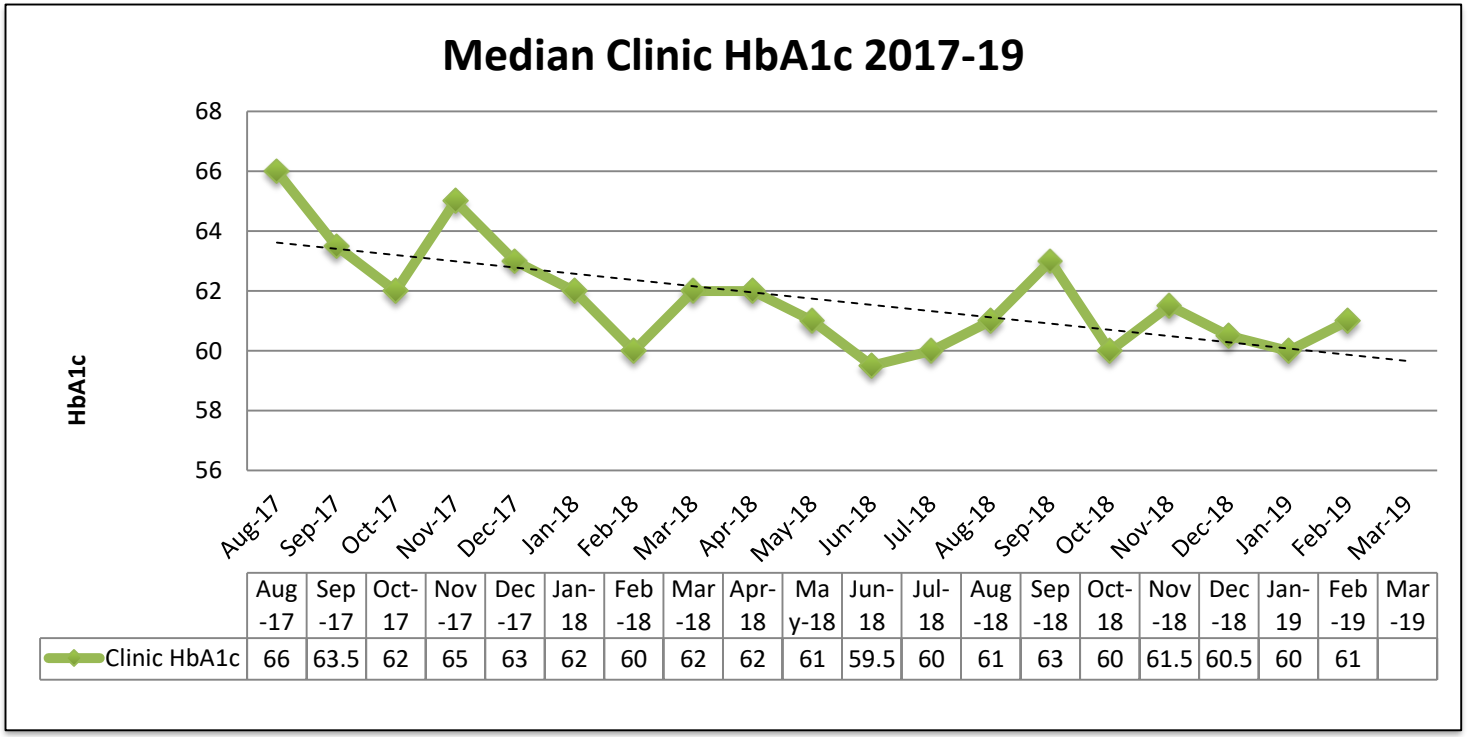
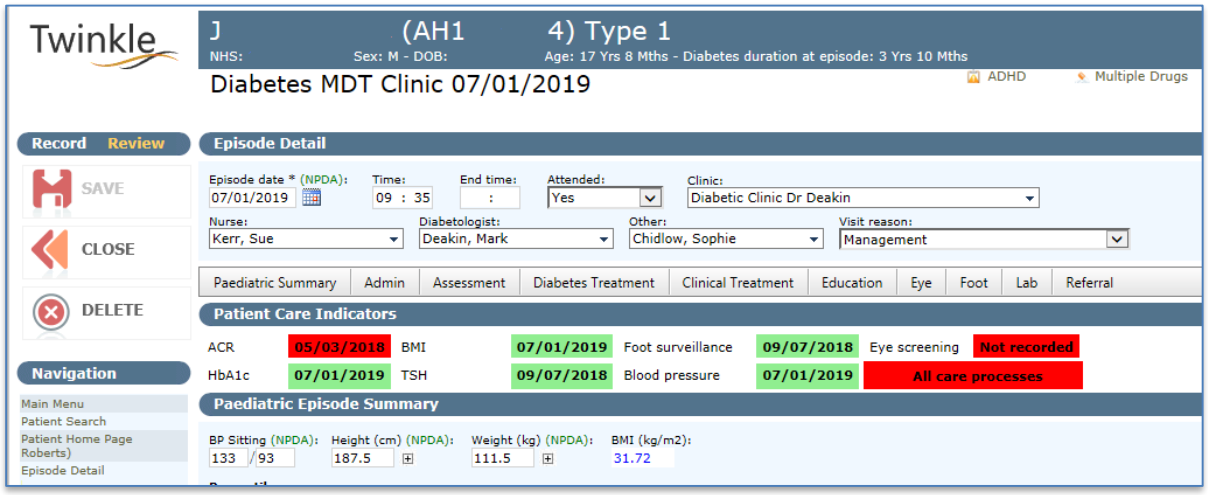


	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Clinic HbA1c	66	63.5	62	65	63	62	60	62	62	61	59.5	60	61	63	60	61.5	60.5	60	61	

Improve 7 care process delivery for all >12 year olds to 75% by April 2020

Audit banner in clinic



Data Champion

Annualised care delivery

Monthly NPDA uploads

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	100.0% (161/161)	99.4% (160/161)	93.8% (151/161)	N/A	N/A	N/A	N/A	93.2% (150/161)
12 & Over	100.0% (192/192)	99.5% (191/192)	91.1% (175/192)	99.5% (191/192)	90.1% (173/192)	70.8% (136/192)	94.3% (181/192)	60.9% (117/192)
Overall	100.0% (353/353)	99.4% (351/353)	92.4% (326/353)	99.5% (191/192)	90.1% (173/192)	70.8% (136/192)	94.3% (181/192)	75.6% (267/353)

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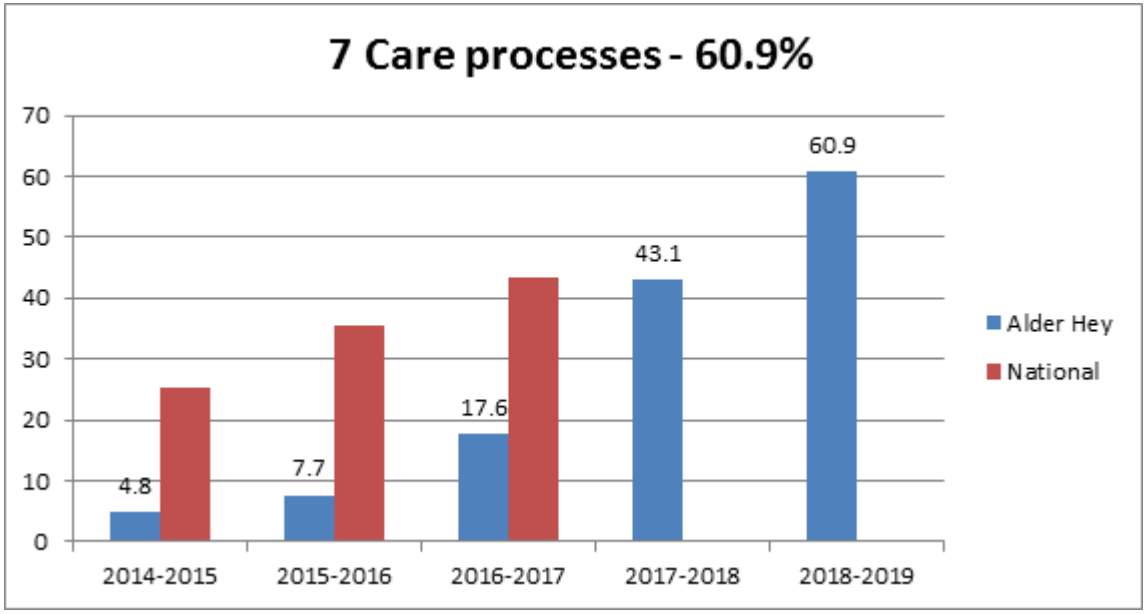
Improve 7 care process delivery for all >12 year olds from 60% to 75% by April 2020



QI process started January 2018

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	100.0% (161/161)	99.4% (160/161)	93.8% (151/161)	N/A	N/A	N/A	N/A	93.2% (150/161)
12 & Over	100.0% (192/192)	99.5% (191/192)	91.1% (175/192)	99.5% (191/192)	90.1% (173/192)	70.8% (136/192)	94.3% (181/192)	60.9% (117/192)
Overall	100.0% (353/353)	99.4% (351/353)	92.4% (326/353)	99.5% (191/192)	90.1% (173/192)	70.8% (136/192)	94.3% (181/192)	75.6% (267/353)

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Increase Psychology screening rate for all patients to 95% by April 2020

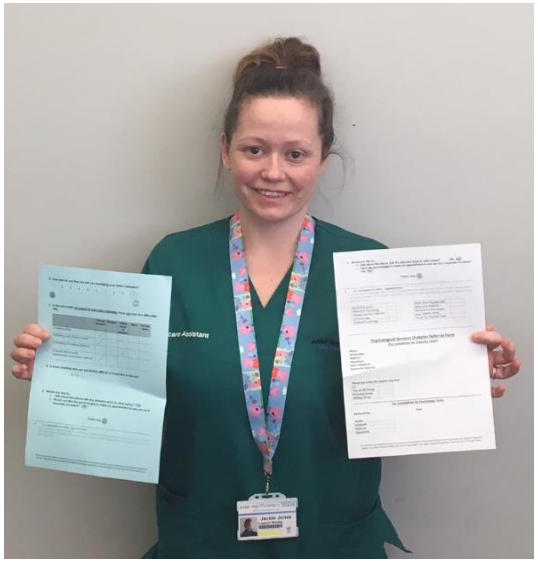
Process improved

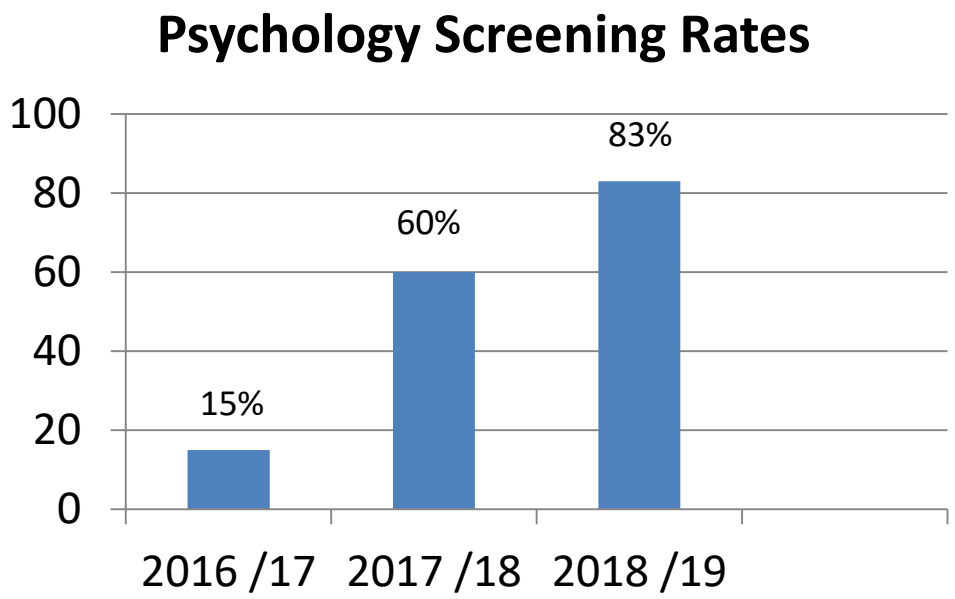
- Shortened form
- Completed before clinic appointment
- Used as a prompt for clinic discussions
- Referral to psychology on back of form

Data quality improved:

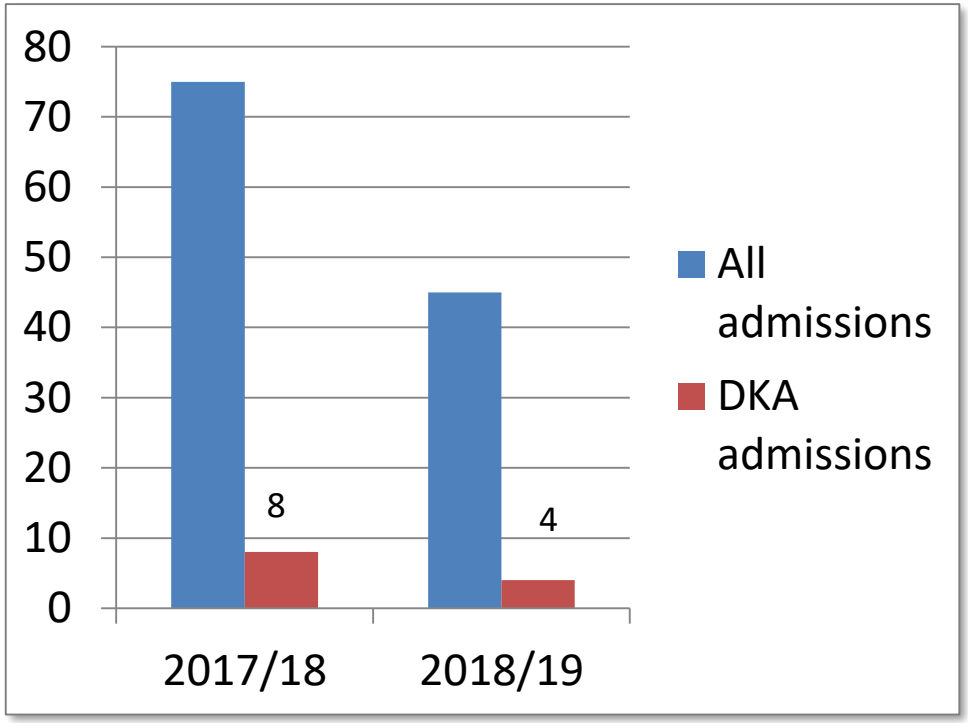
- Screening ticked in clinic
- Psychology team tick patients under active treatment

Next Step: Jackie. HCA in clinic ensuring questionnaires given out



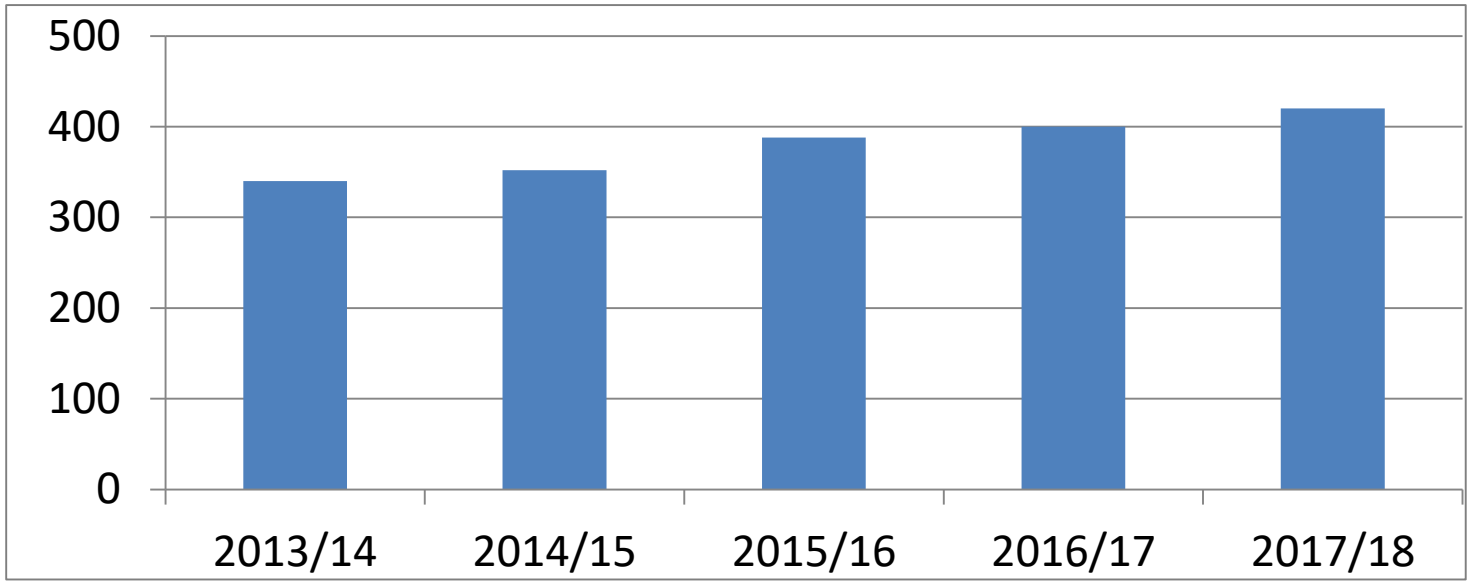


Reduce diabetes related admissions in known diabetes patients by 50% by January 2020



- Improved data quality with monthly coding review
- Further work to understand accuracy of data

Reduce length of in-patient stay for newly diagnosed patients by 25% by January 2020



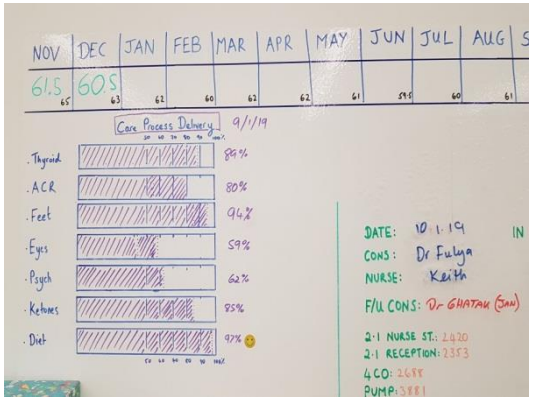
- Challenging area – short staffed within the diabetes team
- Ward training proving to be a much bigger job
- Community Nursing team – difficult to engage
- Unable to secure diabetes training room
- Still an area to work on but ward training the priority

Barriers to Progress

Embedding and Sustaining Quality Improvement

Celebrating Success

Data Data Data!!!



CYP and Family engagement

Stealing ideas