



NHS Coastal West Sussex CCG

Background

This chapter of the cardiovascular profiles focuses on diabetes and is produced by the National Cardiovascular Intelligence Network (NCVIN). The profiles are available for each clinical commissioning group (CCG) in England. Each profile is made up of four chapters which look at coronary heart disease (CHD), diabetes, kidney disease and stroke. This profile compares the CCG with data for England, and where data are available, a group of similar CCGs and the Sussex and East Surrey Sustainability Transformation Partnership (STP).

Key facts	Local	Comparator CCGs	STP	England
Diabetes prevalence in adults (per cent)	7.0	6.7	6.0	6.5
Estimated total diabetes prevalence in adults (per cent)	9.2	9.2	8.5	8.5
People with type 1 diabetes who have had the eight recommended care processes (per cent)	44.1	39.9	37.2	37.3
People with type 2 diabetes who have had the eight recommended care processes (per cent)	64.9	57.3	59.8	53.9
People with type 1 diabetes who met blood glucose, blood pressure and cholesterol targets (per cent)	16.4	16.1	19.3	18.3
People with type 2 diabetes who met blood glucose, blood pressure and cholesterol targets (per cent)	38.7	38.2	39.9	40.4

Key information

In 2016 there were 29,609 people aged 17 years or older who had been diagnosed with diabetes and included in GP registers in NHS Coastal West Sussex CCG. There were an estimated further 9,300 people who remain undiagnosed suggesting the total number of adults with diabetes in the CCG was approximately 39,000.

The percentage of people with type 1 diabetes who achieved the blood glucose target of ≤ 58 mmol/ml (7.5%) in this CCG was 29.4% compared to 29.6% in England.

The percentage of people with type 2 diabetes who achieved the blood glucose target of ≤ 58 mmol/ml (7.5%) in this CCG was 69.7% compared to 65.9% in England.

People with diabetes are at a higher risk of having a heart attack or stroke. In this area, people with diabetes are 96.5% more likely than people without diabetes to have a heart attack. This was lower than the figure for England which was 108.6%. People with diabetes were also 71.2% more likely to have a stroke. This was lower than the figure for England where there was a 81.3% greater risk.

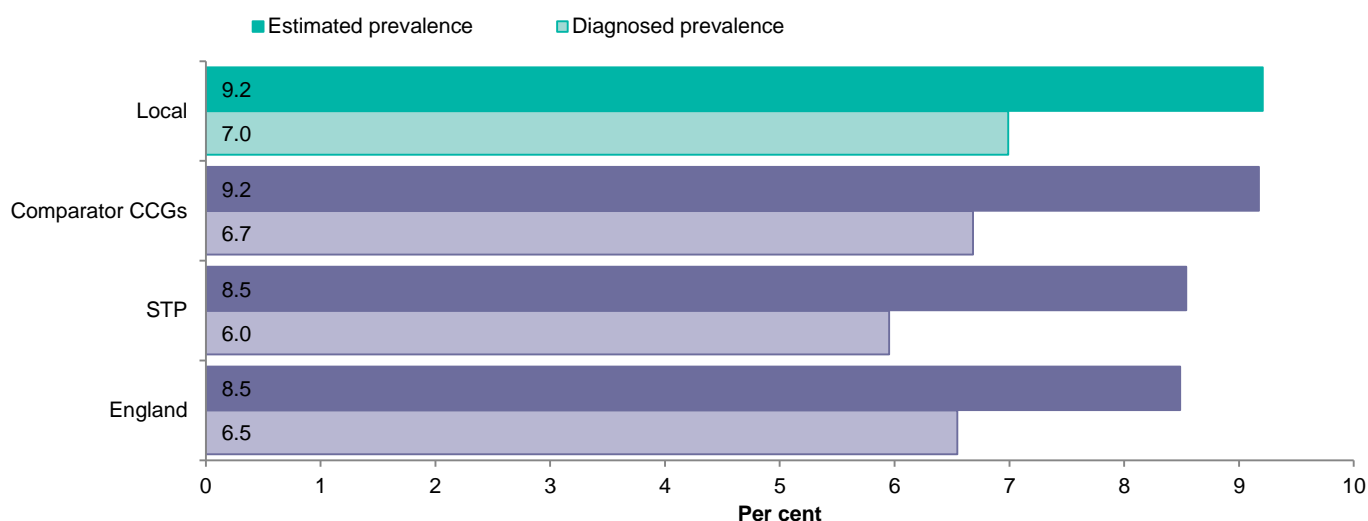
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Prevalence

Prevalence is the number of people in a given population with a particular condition at a given point in time. The diagnosed prevalence of diabetes is calculated from the returns submitted to NHS Digital as part of the Quality and Outcomes Framework (QOF) by each GP practice. No distinction is made between type 1 or type 2 diabetes. Diagnosed prevalence is the number of patients aged 17 years and over who are on the practice's diabetes register on 31 March in a given financial year. Practice returns are combined to calculate a prevalence rate for the local CCG.

The estimated prevalence is taken from the NCVIN diabetes prevalence model. The model uses data from three years of Health Surveys for England (HSE), 2012, 2013 and 2014. The estimates take into account the age, sex and ethnic group distribution, as well as deprivation of the area. It estimates the total number of people with diabetes (diagnosed and undiagnosed).

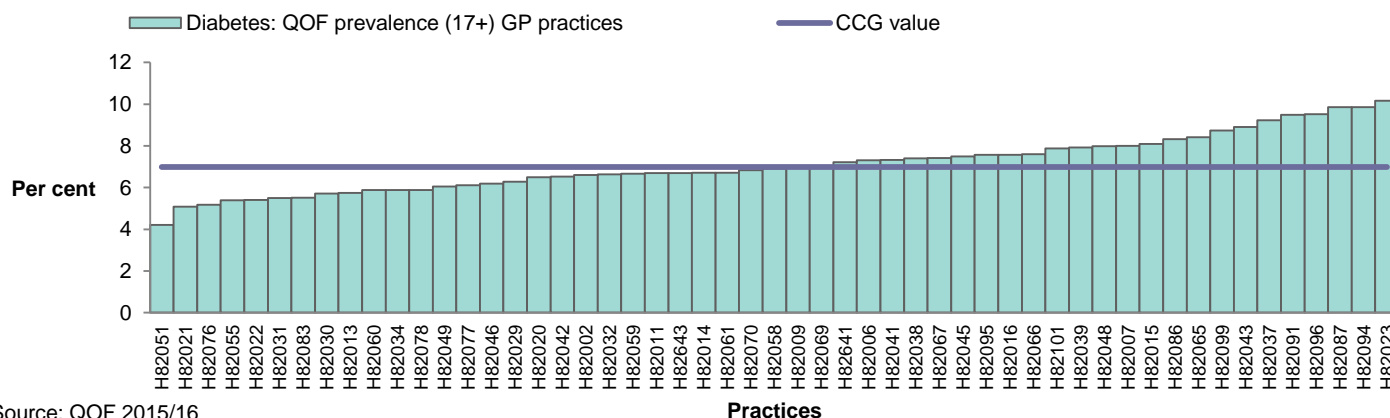
Diabetes diagnosed prevalence (2015/16) compared to estimated diabetes (2016)



Source: Quality and Outcomes Framework (QOF) 2015/16, Copyright © 2017, NHS Digital. All rights reserved. Diabetes Prevalence Model PHE 2016

In NHS Coastal West Sussex CCG, the prevalence of diagnosed diabetes was 7.0% and the estimated prevalence of diabetes was 9.2% for 2016. At GP practice level, the prevalence of diagnosed diabetes ranged from 4.2% to 10.2%.

Variation by general practice of diabetes prevalence, 2015/16



Source: QOF 2015/16

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National Diabetes Audit

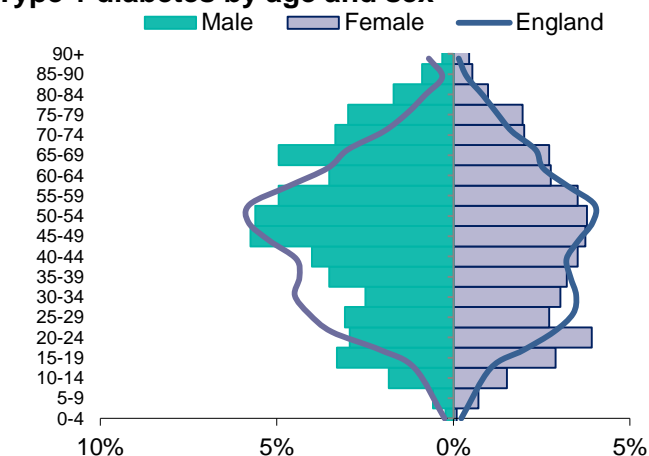
The National Diabetes Audit (NDA) is a major national clinical audit in England and Wales which measures the effectiveness of diabetes healthcare against NICE guidelines and quality standards. In 2015/16, 81.4% of GP practices in England and Wales participated in the audit. In NHS Coastal West Sussex CCG, 98.0% of practices participated.

Characteristics of people with diabetes

Type 1 diabetes is more common in men; in NHS Coastal West Sussex CCG, 56% of people with type 1 diabetes are male. Type 1 diabetes is usually diagnosed earlier in life with 36% of people with type 1 diabetes under the age of 40. Type 2 diabetes is also more common in men; 56% of people with type 2 diabetes in the CCG are male. People with type 2 diabetes are older than people with type 1 with 66% of people with type 2 diabetes aged over 65.

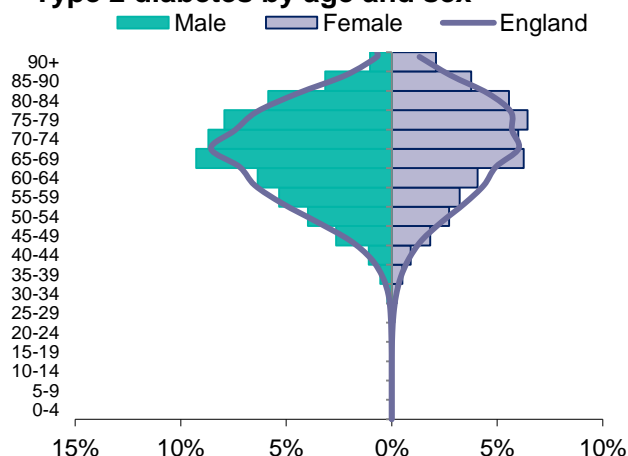
In NHS Coastal West Sussex CCG, 60% of people with type 1 diabetes are of white ethnicity and 2% are from a minority ethnic group. The remaining ethnicities are unknown. For people with type 2 diabetes, 62% are of white ethnicity and 3% from a minority ethnic group. The remaining ethnicities are unknown. 6% of people with type 1 diabetes are from the most deprived quintile in NHS Coastal West Sussex CCG compared to 20% in England and 5% of people with type 2 diabetes are from the most deprived quintile compared to 24% in England.

Type 1 diabetes by age and sex



Source: National Diabetes Audit 2015/16, NHS Digital

Type 2 diabetes by age and sex



Care processes and treatment targets

The National Institute for Health and Care Excellence (NICE) recommends nine care processes for diabetes. Five of these care processes relate to risk factors (body mass index, blood pressure, smoking, glucose levels (HbA1c) and cholesterol) and the remaining four relate to tests to identify early complications (urine albumin creatinine ratio, serum creatinine, foot nerve and circulation examination and eye screening (held by NHSDES and not included in the data presented)).

In NHS Coastal West Sussex CCG, 44.1% of people with type 1 diabetes had the eight recommended care processes compared to 37.3% in England. For people with type 2 diabetes 64.9% people had the eight recommended care processes compared to 53.9% in England.

Percentage of people who had the 8 recommended care processes by diabetes type, 2015/16

	Local	Comparator CCGs	STP	England
Type 1	44.1	39.9	37.2	37.3
Type 2	64.9	57.3	59.8	53.9

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Taking account of patient related factors when reviewing Care Process completion rates

The NDA has investigated whether results are influenced by patient characteristics. The statistical models derived showed that patient characteristics did impact on whether the eight recommended care processes took place but did not impact on the treatment results (HbA1c, BP, Cholesterol). The bandings contained within the tables below show whether the CCG is performing 'as expected', "lower than expected" or "higher than expected" based on what we know of the characteristics of their diabetic populations. The statistical models used to predict care process completion take into account the age, sex, ethnicity, Indices of Multiple Deprivation (IMD), smoking status and Body Mass Index (BMI) of the person with diabetes. This provides a way of correcting for the factors that are outside the control of the GP. The bandings should not be treated as an absolute assessment of performance, but rather as a tool to aid local investigation.

How to interpret the bandings

If a CCG has a banding of "lower than expected" this means that, the CCG is not achieving as high a rate of completion as would be expected given the demographics of their diabetic population. This does not mean that the CCG is under performing, but may indicate that further investigation could be beneficial.

If a CCG has a banding of "as expected" this means that, given the demographics of the diabetic population, the CCG is performing as expected. This does not mean that performance cannot be improved, but in line with other CCGs given the characteristics of their diabetic patients.

If a CCG has a banding of "higher than expected" this means that, the CCG is performing better than would be expected given the demographics of their diabetic population.

In NHS Coastal West Sussex CCG, 44.1% of people with type 1 diabetes received all eight care processes taken in 2015/16. This was higher than expected given the characteristics of their diabetic population. For people with type 2 diabetes, 64.9% received all eight care processes, which was higher than expected given the characteristics of their diabetic population.

The data are also available by GP practice at: <https://fingertips.phe.org.uk/profile/cardiovascular>

Percentage of people with diabetes who had the eight recommended individual care processes by diabetes type, 2015/16

	Type 1			Type 2 and other		
	Local	Banding	England	Local	Banding	England
HbA1C	79.9	As expected	84.5	94.7	As expected	95.1
Blood Pressure	86.1	As expected	89.4	95.5	As expected	95.8
Cholesterol	78.0	As expected	80.0	91.9	Lower	93.1
Serum Creatinine	82.1	As expected	82.1	94.9	As expected	94.8
Urine Albumin	55.2	As expected	51.0	74.0	Higher	66.8
Foot Surveillance	69.9	As expected	73.7	86.9	As expected	87.1
BMI	75.3	As expected	75.8	87.5	Higher	82.8
Smoking	80.8	Higher	79.0	88.9	Higher	85.4
All Eight Care Processes	44.1	Higher	37.3	64.9	Higher	53.9

Source: National Diabetes Audit (NDA) 2015/16

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Three treatment targets

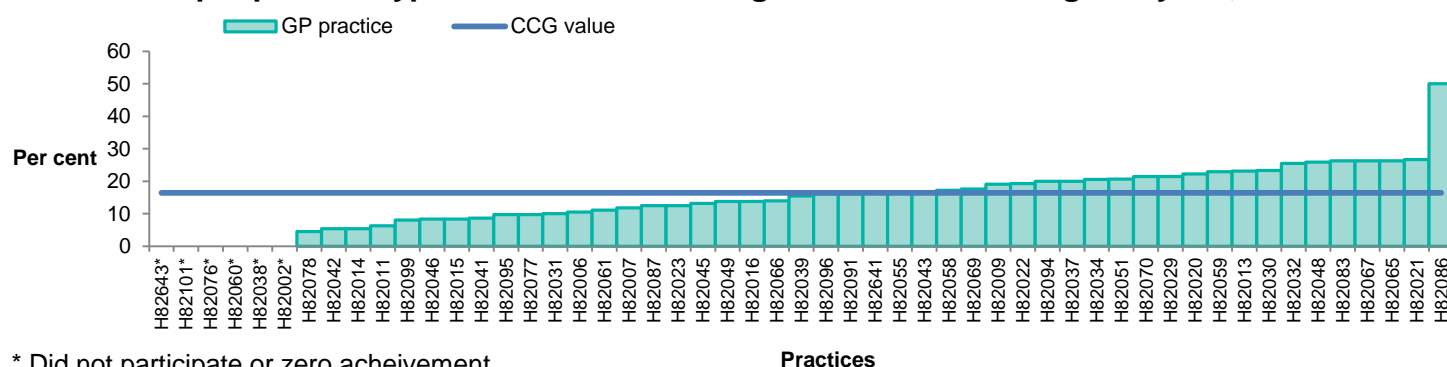
The demographics of the diabetic population were not found to have an impact on whether or not treatment targets were met (age, sex, ethnicity, deprivation). In NHS Coastal West Sussex CCG, 16.4% of people with type 1 diabetes achieved the treatment targets. In people with type 2 diabetes 38.7 % achieved the treatment target.

Percentage of people achieving their treatment targets for type 1 diabetes, 2015/16

Type 1 diabetes	Local	Comparator CCGs	STP	England
HbA1c <= 58 mmol/mol (7.5%)	29.4	26.7	32.6	29.6
Blood Pressure <= 140/80	77.6	75.6	75.8	75.7
Cholesterol < 5 mmol/L	68.9	70.1	71.1	70.9
All Three Treatment Targets	16.4	16.1	19.3	18.3

At GP practice level, the percentage of people with type 1 diabetes achieving their three treatment targets ranged from 4.5% to 50%.

Variation in people with type 1 diabetes achieving three treatment targets by GP, 2015/16



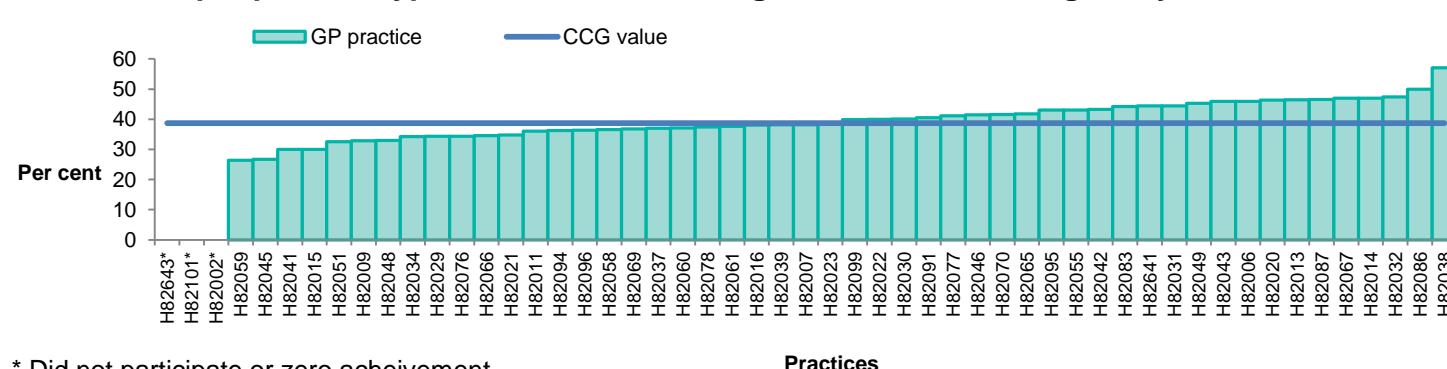
* Did not participate or zero achievement

Percentage of people achieving their treatment targets for type 2 diabetes, 2015/16

Type 2 diabetes	Local	Comparator CCGs	STP	England
HbA1c <= 58 mmol/mol (7.5%)	69.7	65.3	68.0	65.9
Blood Pressure <= 140/80	71.3	72.2	71.7	73.7
Cholesterol < 5 mmol/L	72.6	75.8	75.8	77.2
All Three Treatment Targets	38.7	38.2	39.9	40.4

At GP practice level, the percentage of people with type 2 diabetes achieving their three treatment targets ranged from 26.4% to 57.1% .

Variation in people with type 2 diabetes achieving three treatment targets by GP, 2015/16



* Did not participate or zero achievement

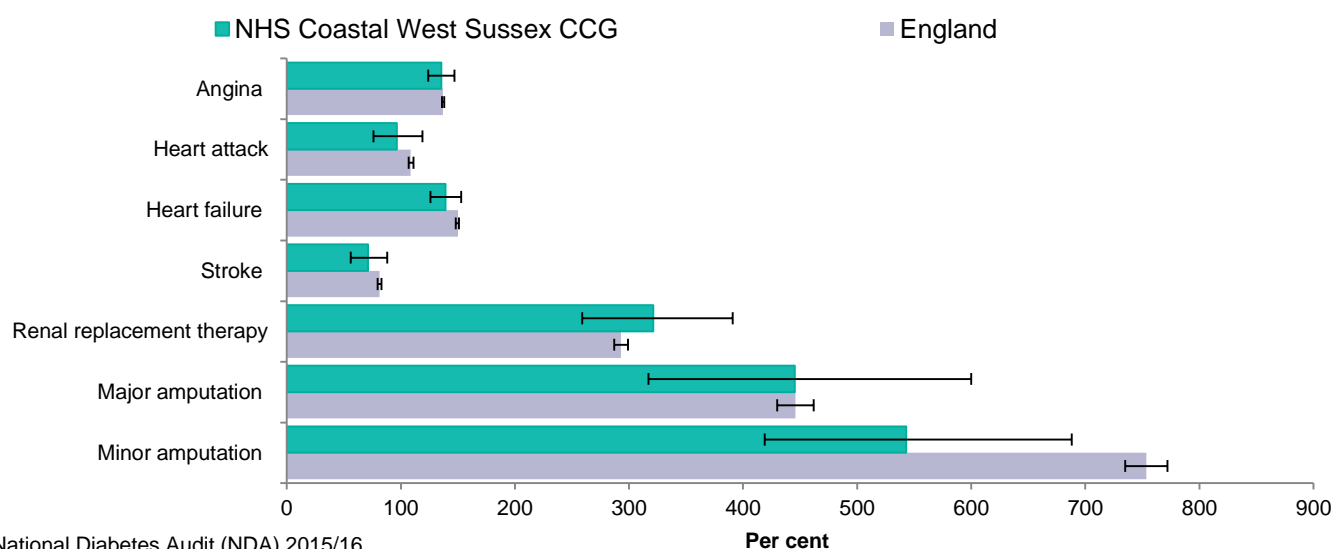
Source: National Diabetes Audit (NDA) 2015/16

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Additional risk of complications

A person with diabetes has a higher risk of cardiovascular complications (heart attack, angina, heart failure and stroke) and microvascular (amputation and renal disease) complications. The chart below compares the additional risk of complications for a person with diabetes to people without diabetes in the same CCG over a three year period. The figures have been adjusted to allow for the local variations in the age and sex of the population.

Comparison of the additional risk of complications for people with diabetes, 2010/11 - 2012/13



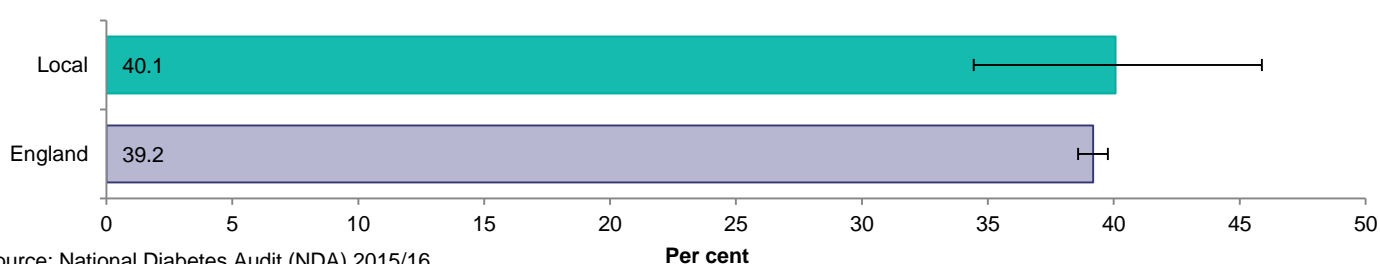
Source: National Diabetes Audit (NDA) 2015/16

Among people with diabetes in NHS Coastal West Sussex CCG the risk of a stroke was 96.5% higher and the risk of a heart attack was 71.2% higher compared to people without diabetes during the three-year follow up of the 2009/10 audit.

Mortality

People with diabetes rarely die as a direct result of diabetes. Most die from complications such as heart disease, stroke and kidney failure. People with diabetes are more likely to die than their peers of the same age and sex in the general population. In 2013 there were an estimated 22,060 additional deaths in England due to diabetes. The additional risk of mortality for people with diabetes was 40.1% in NHS Coastal West Sussex CCG, for England the additional risk was 39.2%.

Comparison of the additional risk of mortality in people with diabetes, combined total from 2009-2010, 2010-2011, 2011-2012 NDA audits



Source: National Diabetes Audit (NDA) 2015/16

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