

Combining multiple equality measures to better understand progression into higher education

UCAS Analysis & Research 2016

Charlie Brown

Seth Fleet



UCAS

Central organisation for processing applications to most full-time UK undergraduate courses

Process around 700,000 applicants, and 2.5 million applications each year

370+ higher education providers use our services



UCAS

Commitment to understand the services we provide

As part of this UCAS use the NPD to better understand patterns of entry into higher education for different groups



Practical application of NPD data

NPD contains a variety of characteristics

Provides a population base



Variety of characteristics

Ethnic group

Geography (census output area)

Free school meal eligibility

Key stage 4 attainment

School type

Others ...



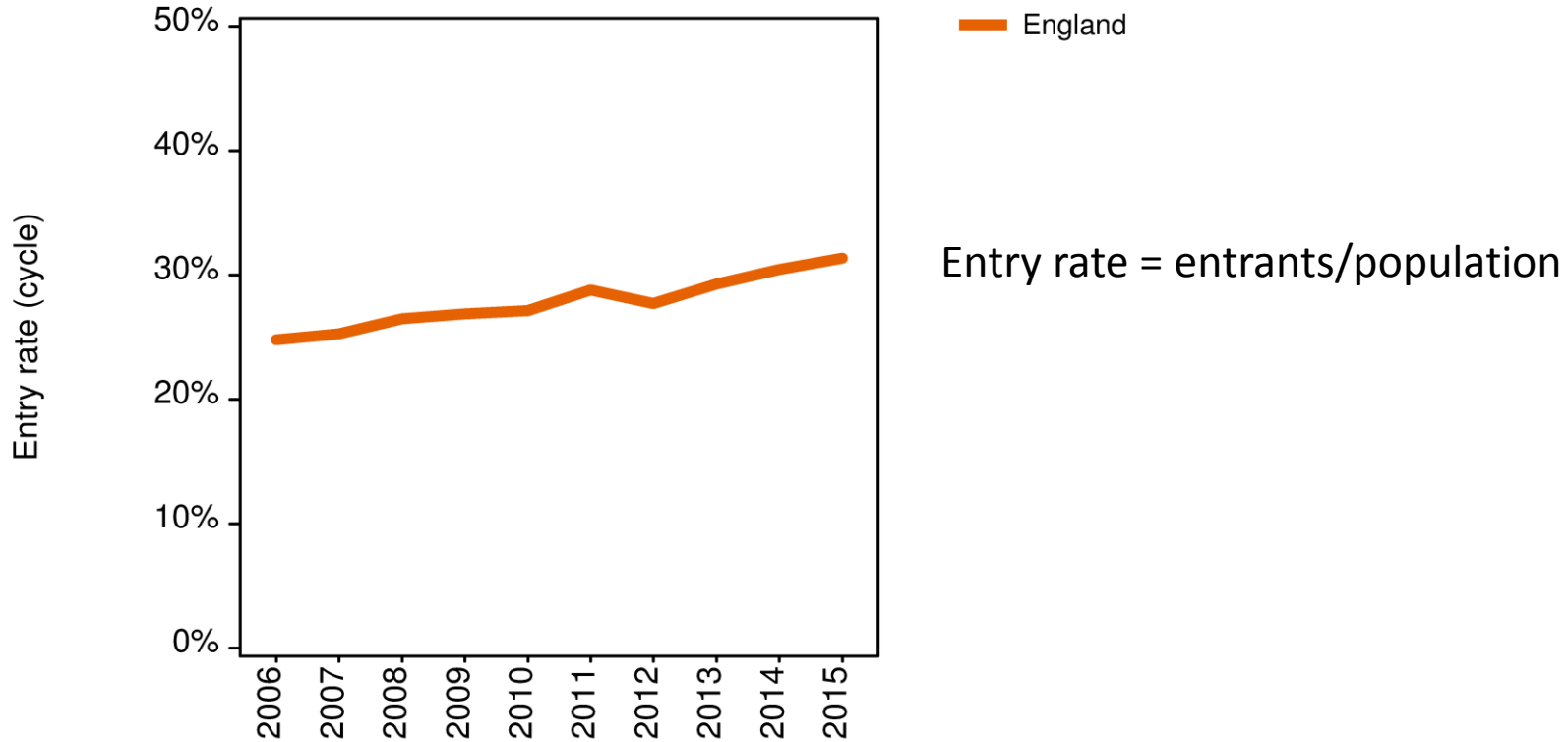
NPD as a population base

Pupil level data

- Enables linking to UCAS application data (96 per cent link rate)
- Means reporting of characteristics for applicants and non-applicants is consistent
- Allows creation of population bases for state school pupils in England for each characteristic

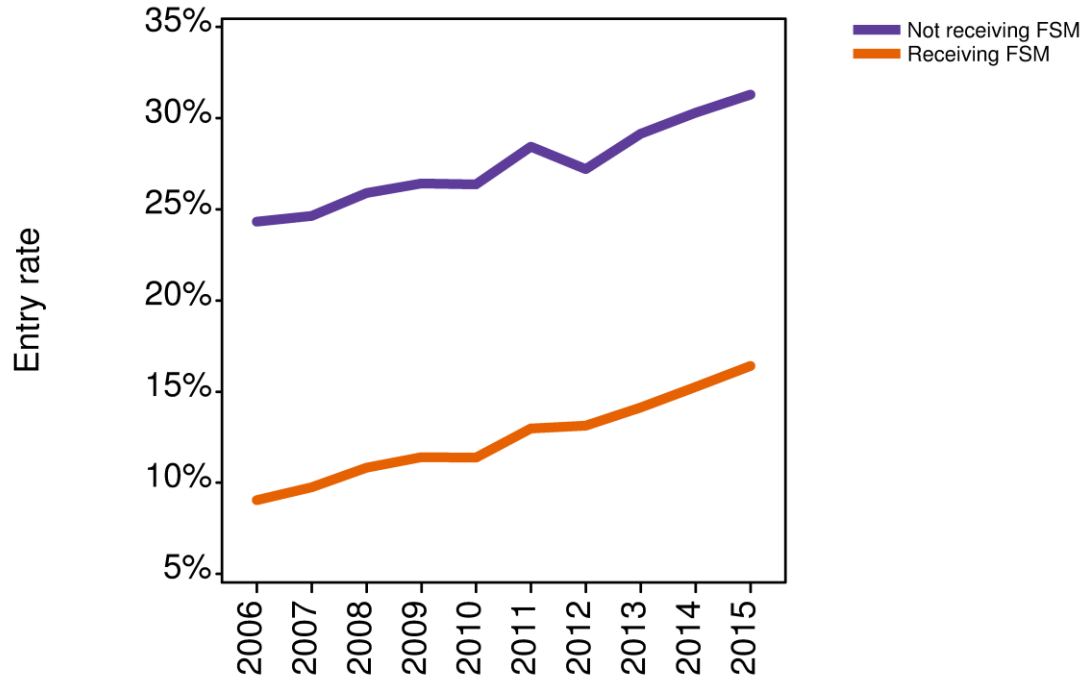


18 year old Entry rates



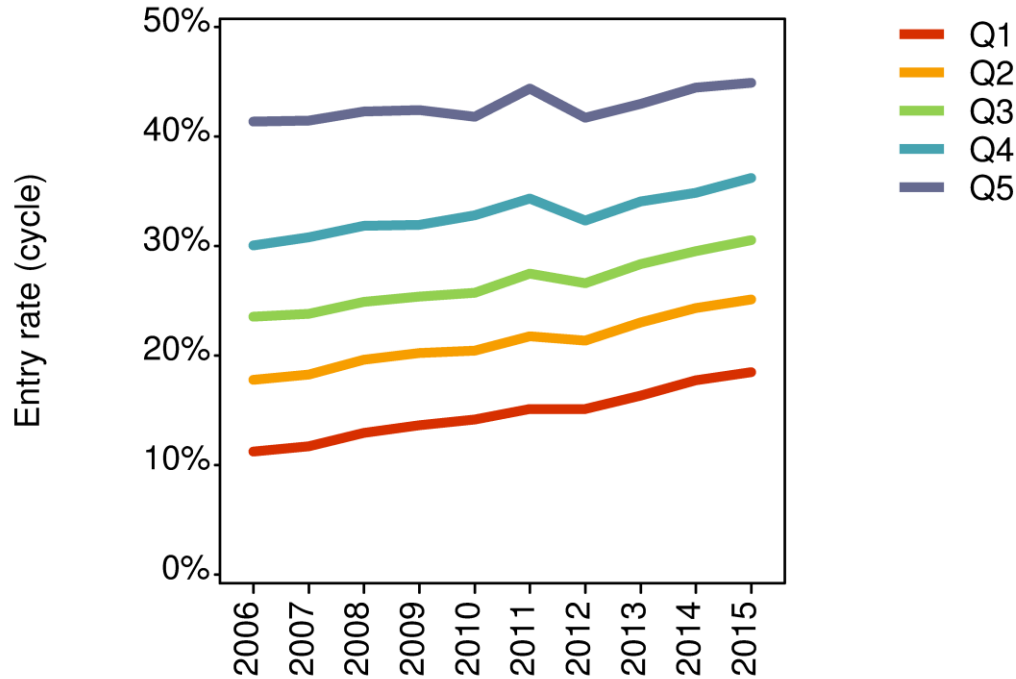
Entry rates by characteristics

Entry rates for English 18 year old state school pupils by free school meal (FSM) status at age 15



Entry rates by POLAR3

18 year olds in England entry rates by POLAR3 (Q5=advantaged) groups



Practical application

Use strengths of NPD in practical investigation of equality in entry to HE

Build on research to help applicants and providers



Targeting

Government targets

Outreach and university targeting



Government targets

A Unique learning experience
at a Caring university.



PROFESSIONAL JOBS SUMMITS RANKINGS 5

Universities told to focus on access for white working class boys

High dropout rate among black students also targeted in new guidance to Offa

February 11, 2016



By [Chris Havers](#) | Twitter: [@CHaversalTHE](#)



Source: PA

Jo Johnson, minister for universities and science

English universities will be required for the first time to prioritise getting more white working class boys into higher education, under new guidance being issued to the Office for Fair Access.

The government guidance, due to be published on 11 February, also identifies tackling high

The government's ambitions include meeting the Prime Minister's goals of:

- doubling the proportion of university entrants from disadvantaged backgrounds by the end of this Parliament from 2009 levels
- increasing the number of BME students going to university by 20% by 2020

Outreach and university targeting



Home About Realising Opportunities Students Student Resources School / Colleges Parents / Carers Professionals Mentoring Portal Login Blog Apply

INTERESTED IN TAKING PART?



Realising Opportunities (RO) is an innovative national programme which supports the progression of talented students to leading research intensive universities. The RO Programme will develop your skills and provide you with support and information to help you make informed decisions about your future.

Benefits Eligibility Programme

To take part in the Realising Opportunities (RO) Programme you must meet our eligibility criteria. Applications to the RO Programme are made in the Autumn Term of Year 12.

School/College

You must be in Year 12 at an eligible school or college which is participating in RO. You should check with your Head of Year/ Sixth Form or college tutor to find out if your school/college is participating in RO.

Your Eligibility

You must meet all of the following criteria:

- ✓ Have achieved at least 8 A* to C grades at GCSE (or equivalent, eg GNVQ, BTEC Certificate) including English Language and Mathematics*
- ✓ Of these 8 GCSEs or equivalent, at least 5 must be at grade A*, A or B*
- ✓ Be a Home/EU registered student or expect to be by the time you apply for higher education.

You must meet at least two of the following*

- ✓ Live in a neighbourhood which has a low progression rate to higher education or an area which has a high level of financial, social or economic deprivation. This is defined by home postcode
- ✓ Come from a home where neither parent attended university in the UK or abroad. (If one or more parent is currently studying their first degree, or graduated from their first degree within the last five years, an application will still be considered)
- ✓ Be in receipt of or entitled to discretionary payments/16-19 bursary/Pupil Premium at school/college
- ✓ Be in receipt of or entitled to free school meals

To take part in the Realising Opportunities (RO) Programme you must meet our eligibility criteria. Applications to the RO Programme are made in the Autumn Term of Year 12.

School/College

You must be in Year 12 at an eligible school or college which is participating in RO. You should check with your Head of Year/ Sixth Form or college tutor to find out if your school/college is participating in RO.

Your Eligibility

You must meet all of the following criteria:

- ✓ Have achieved at least 8 A* to C grades at GCSE (or equivalent, eg GNVQ, BTEC Certificate) including English Language and Mathematics*
- ✓ Of these 8 GCSEs or equivalent, at least 5 must be at grade A*, A or B*
- ✓ Be a Home/EU registered student or expect to be by the time you apply for higher education.

You must meet at least two of the following*

- ✓ Live in a neighbourhood which has a low progression rate to higher education or an area which has a high level of financial, social or economic deprivation. This is defined by home postcode
- ✓ Come from a home where neither parent attended university in the UK or abroad. (If one or more parent is currently studying their first degree, or graduated from their first degree within the last five years, an application will still be considered)
- ✓ Be in receipt of or entitled to discretionary payments/16-19 bursary/Pupil Premium at school/college
- ✓ Be in receipt of or entitled to free school meals.

Outreach and university targeting

The main aim of the Pathways to Law programme is to give support and encouragement to academically-able students, in Year 12 and Year 13, from non-privileged backgrounds who are interested in law, an access to both university and the legal profession. Each year we take on a new cohort of 35 Year 12 students from our local area and we support them through their A-Levels. Our local area covers schools in the local authority areas of Oxfordshire, Buckinghamshire, Milton Keynes, West Berkshire, Swindon and Hillingdon.

In order to qualify for a place the students are selected on the following criteria:

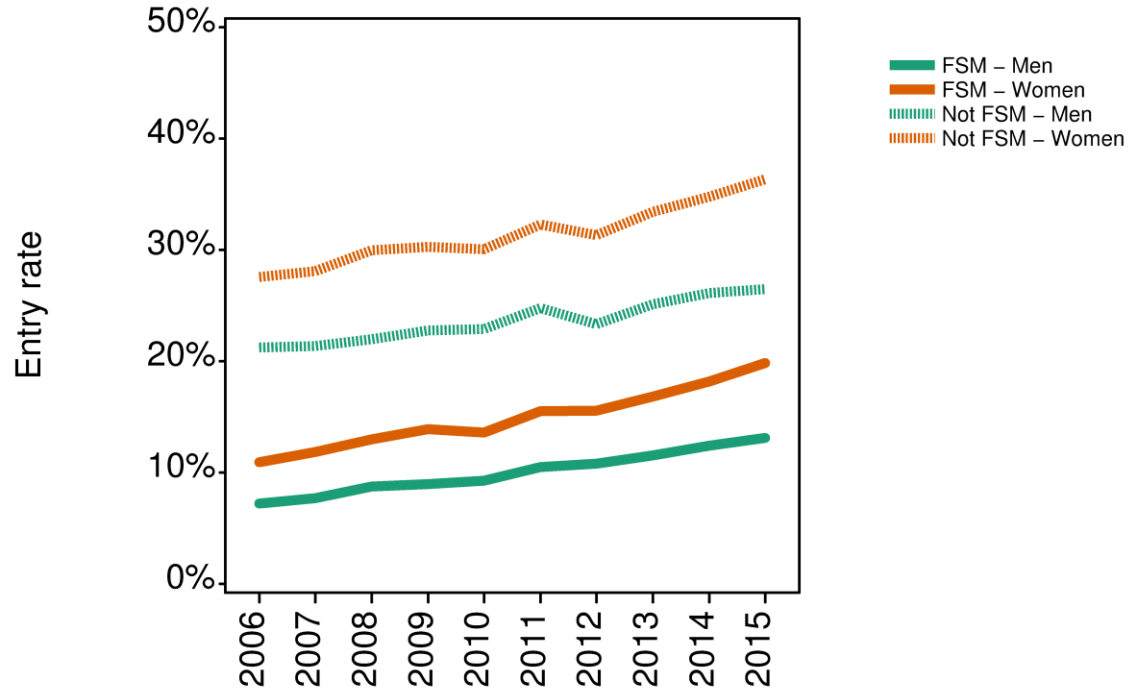
- Be starting Year 12;
- Have gained 5 A's or 5 A**'s at GCSE;
- Have an interest in studying law and/or law as a career;
- Be the first in their immediate family to consider going to university or be eligible for free school meals;
- Attend a state school or college;
- Are willing and able to commit to the programme for two years.

In addition, preference will be given to those students who are:

- In schools with below average levels of attainment/progression to University;
- In schools with high free school meals;
- From areas where progression to university is low (defined by postcode);

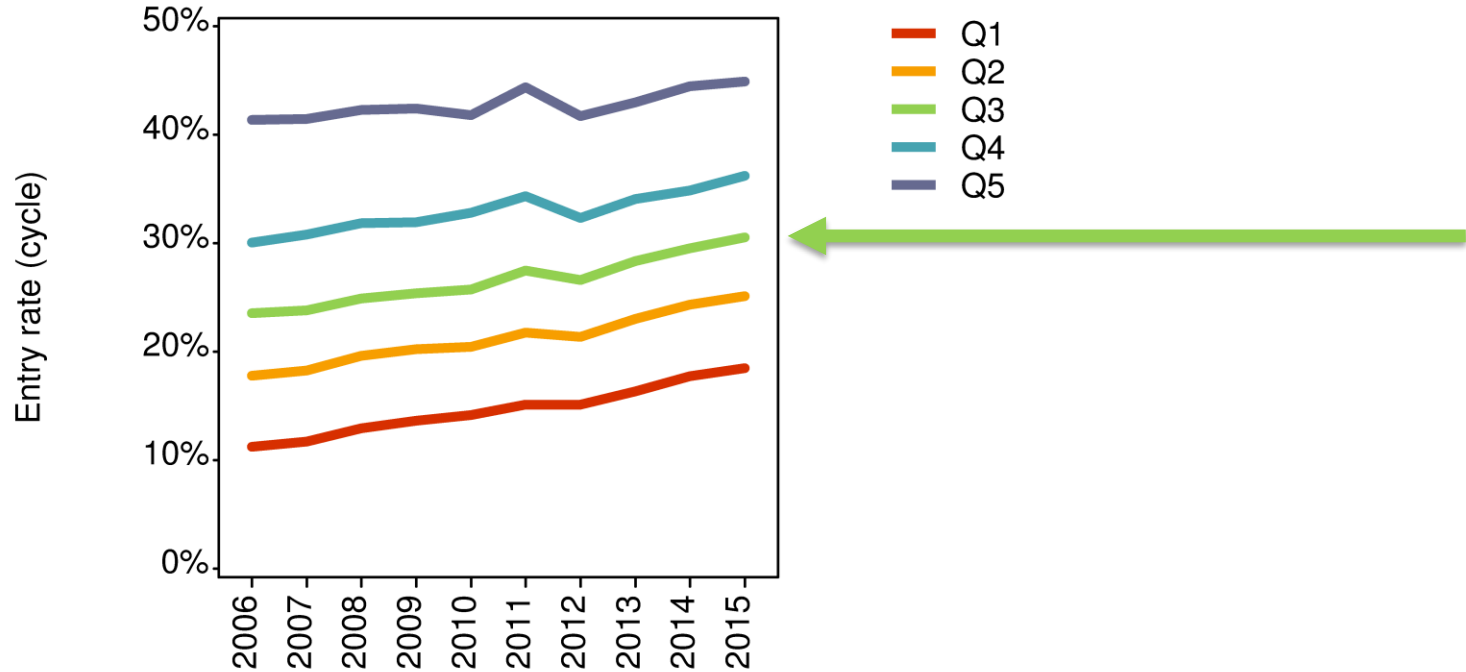
Equality is multidimensional

Entry rates for English 18 year old state school pupils by free school meal (FSM) status at age 15 and sex

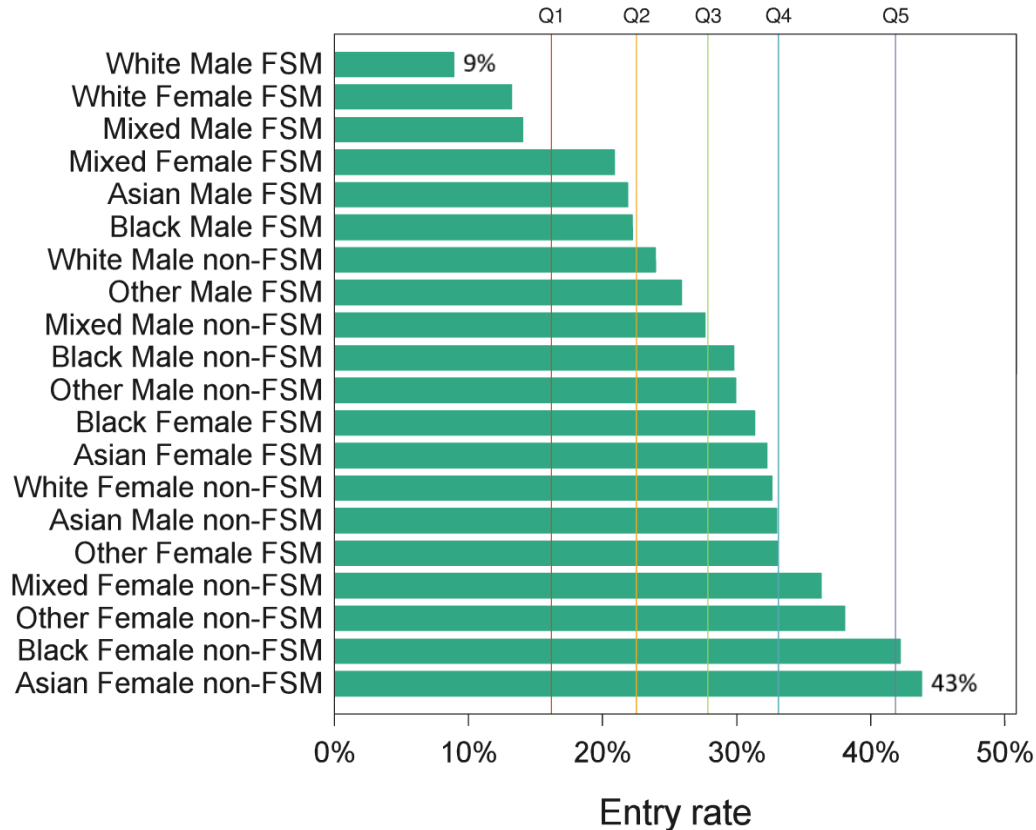


Focus on applicants in POLAR3 Q3

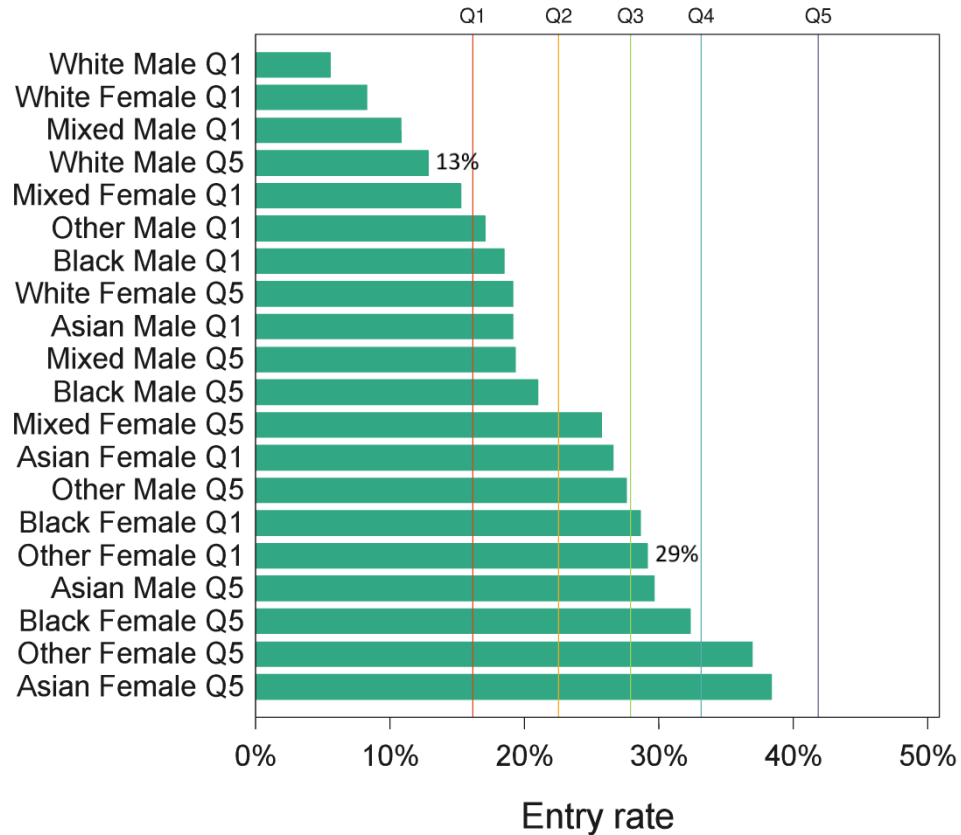
18 year olds in England entry rates by POLAR3 (Q5=advantaged) groups



Large variation in entry rates



Same for FSM eligible pupils



New equality measure

Accounts for multiple dimensions of equality simultaneously

More concise targets/targeting

Reduces blind spots



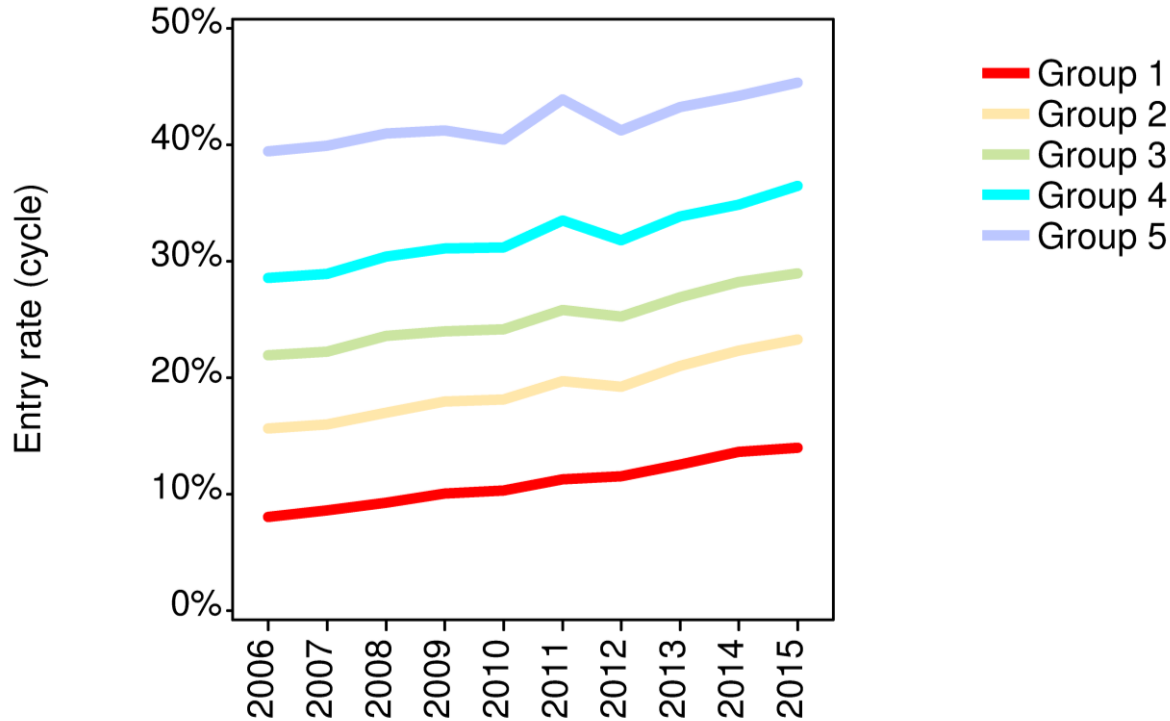
Model-based approach

Construct a model to predict probability of pupil applying to HE based on equality characteristics

Combines the effects of all characteristics on this likelihood into a single numerical value



Use in public reporting



Group composition – POLAR3

	Model Quintile					% Total population
	1	2	3	4	5	
POLAR3 Quintile						
1	66.4	37.4	0.7	1.2	0.1	20.9
2	16.6	45.1	39.7	1.7	2.5	20.8
3	10.8	13.2	36.0	38.2	4.5	20.8
4	5.3	1.8	22.5	42.1	25.2	19.7
5	1.0	2.4	1.1	16.8	67.7	17.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Group composition – ethnicity

	Model Quintile					% Total population
	1	2	3	4	5	
Ethnic Group						
Any Other Ethnic Group	0.9	0.7	1.0	1.0	1.5	1.0
Asian	3.1	3.7	4.1	5.5	19.1	7.1
Black	4.6	4.6	3.4	4.1	3.6	4.1
Chinese	0.0	0.0	0.0	0.2	1.7	0.4
Mixed	3.0	2.5	2.8	2.2	3.9	2.9
White	88.4	88.6	88.7	87.1	70.2	84.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

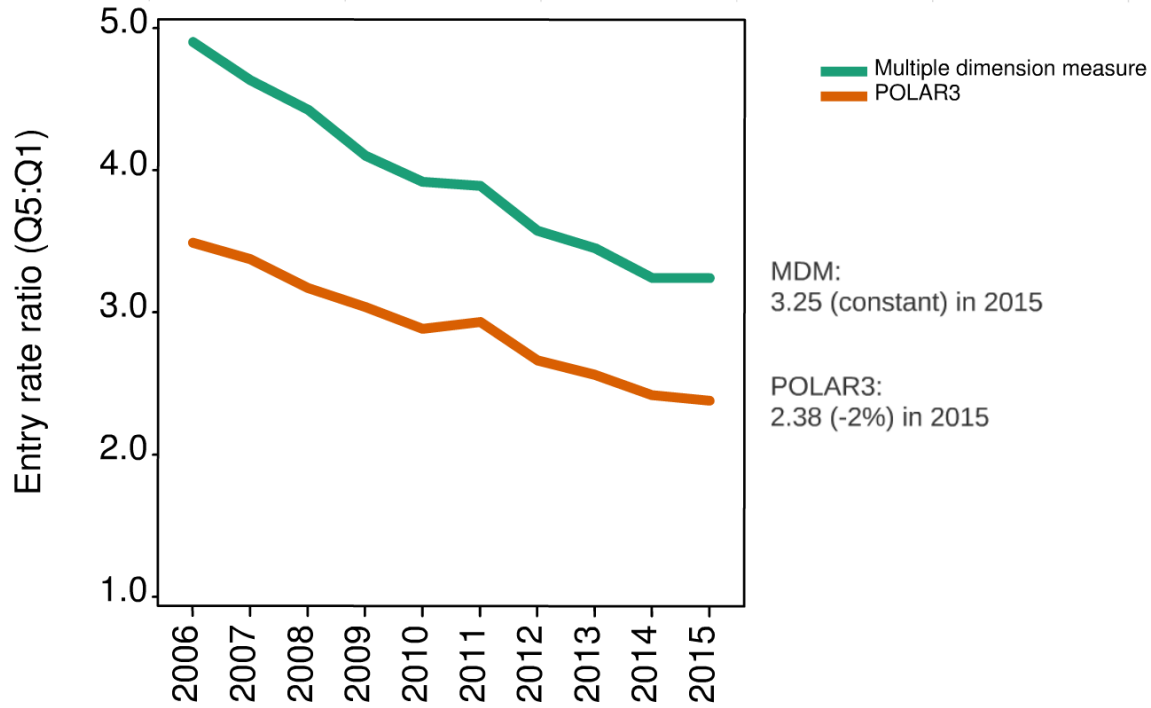
Group composition – sex

	Model Quintile					% Total population
	1	2	3	4	5	
Sex						
Women	27.9	43.0	44.7	60.5	69.5	49.2
Men	72.1	57.0	55.3	39.5	30.5	50.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

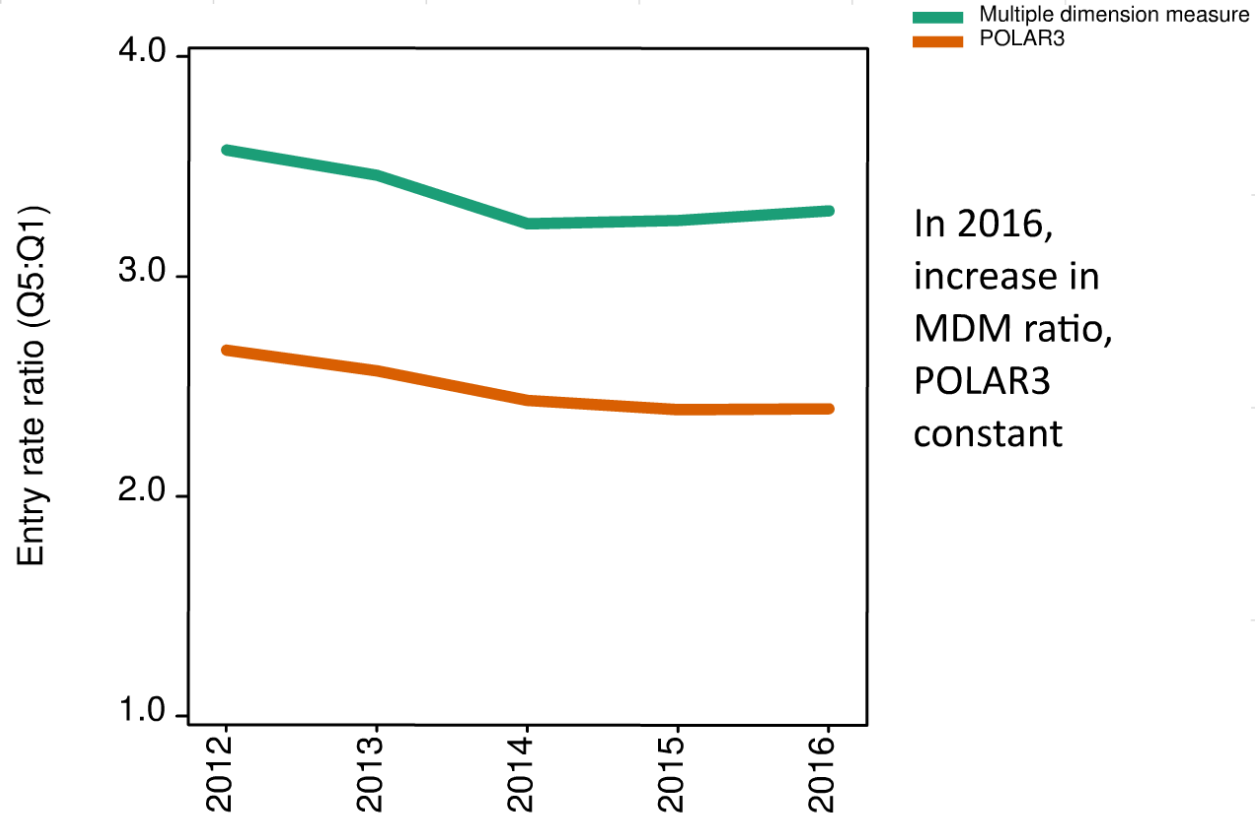
Group composition – FSM

	Model Quintile					% Total population
	1	2	3	4	5	
FSM Status						
Not FSM	47.0	92.2	95.9	98.1	99.6	86.5
FSM	53.0	7.8	4.1	1.9	0.4	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sector level analysis



2016 cycle picture



Benefits of this approach

Ensures equality measures are considered simultaneously – reduces blind spots

Evidence based

Flexible approach



Conclusion

Uses the strengths of the NPD to enhance our understanding of UCAS service

Builds on these strengths for practical purposes

Development of new measure of equality in higher education

