



Surveillance and Quality of Antibiotic Prescribing

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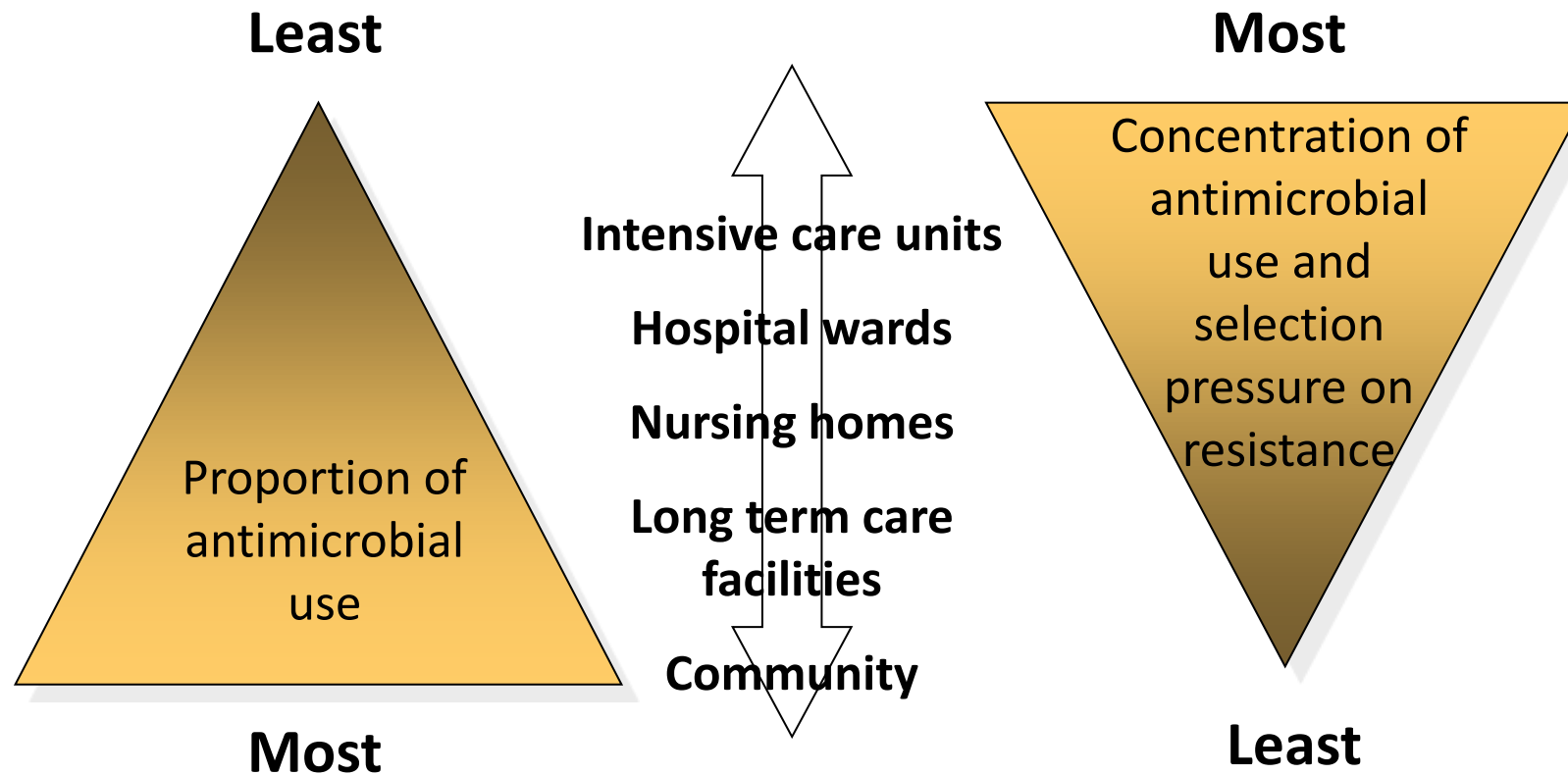
www.bsac.org.uk

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Cambridge University Hospitals NHS Foundation Trust
Cambridge, UK

November 2019

The pyramids of antibiotic use and the selection of resistance



Where antibiotics were prescribed, England 2018



Reasons for inappropriate prescribing

Community

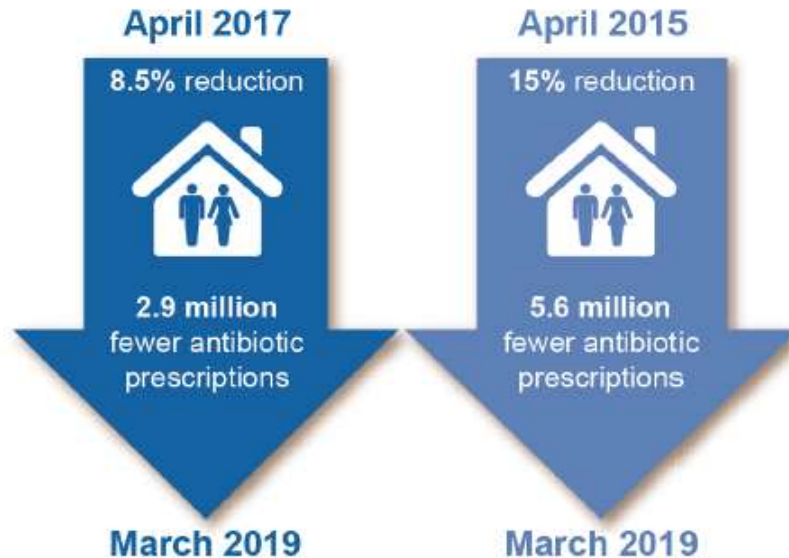
- Starting antibiotics in those who don't need them

Hospital

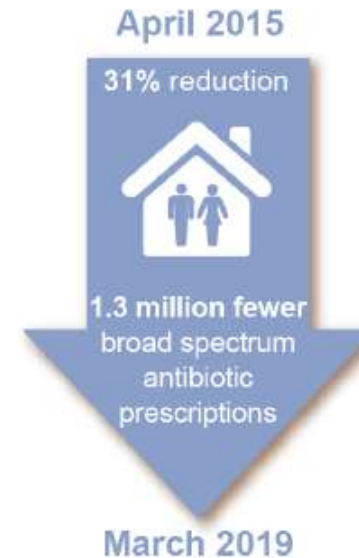
- Continuing antibiotics for too long

Quality premium in community practice

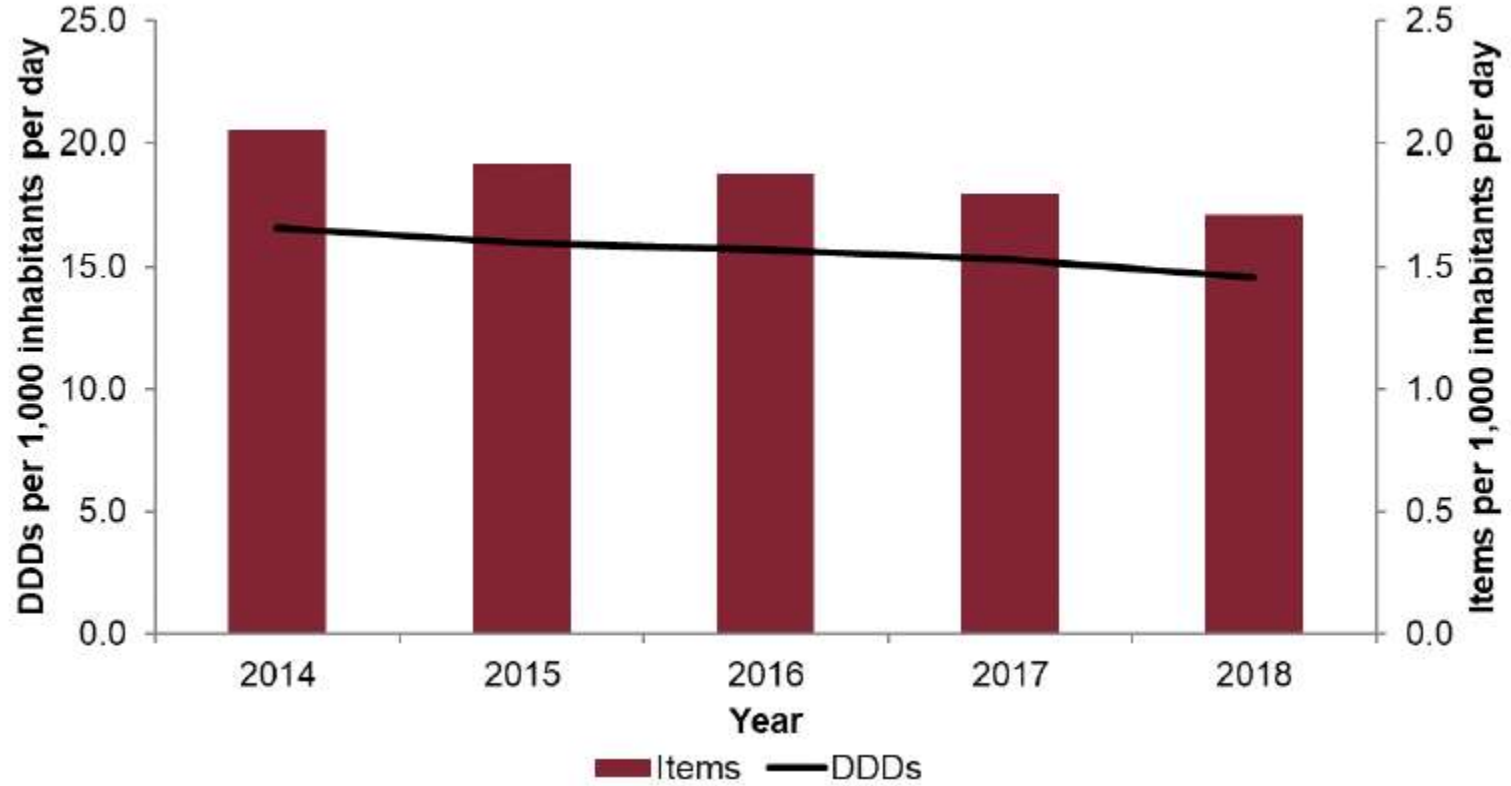
Reducing inappropriate antibiotic prescribing in primary care 2015-2019



Reducing broad spectrum antibiotic prescribing in primary care 2015-2019



Antibiotic consumption in primary care



Consumption expressed as DDDs and Items per 1,000 inhabitants per day

Acute Hospital Prescribing

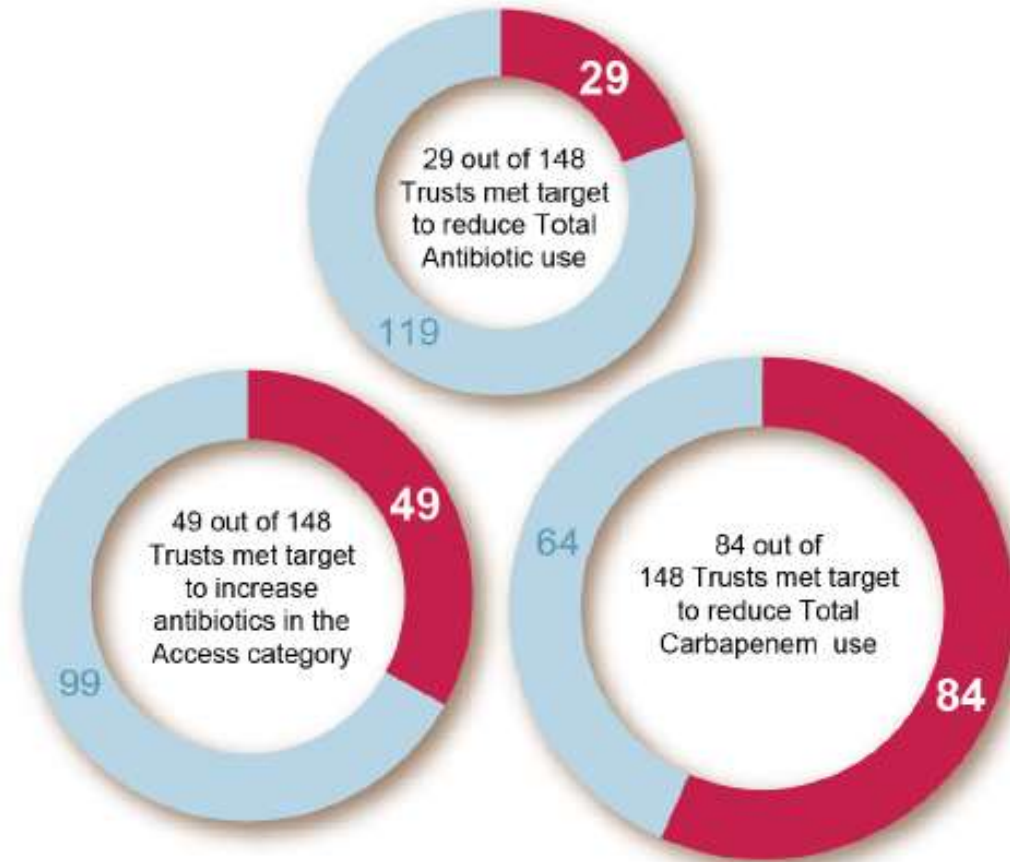
CQUIN (2018/19)

- Overall antimicrobial consumption reduced by 1-2% from 2016 baseline.
- Carbapenem consumption reduced by 1-2% reduction from 2016 baseline
- Use of WHO Access Group increased by 3%

CQUIN (2019/20)

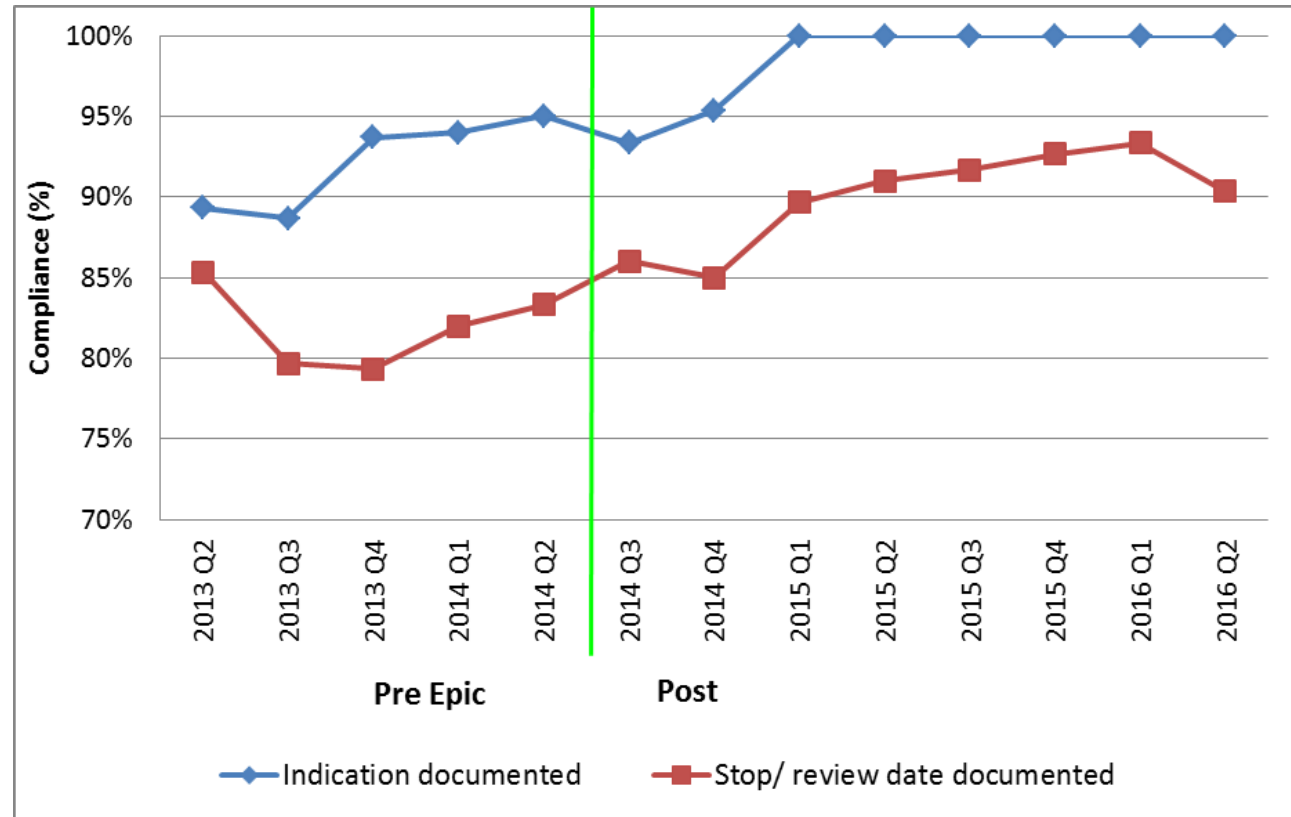
- Improve management of lower UTIs in older patients
- Antibiotic prophylaxis in elective colorectal surgery

CQUIN performance in secondary care



Acute Hospital Prescribing

Impact of the implementation of an electronic patient record



Public Health England

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AMR local indicators

Supporting NHS England Initiatives

Antimicrobial Resistance Antibiotic Prescribing Health Care Associated Infection Infection Prevention and Control Antimicrobial Stewardship All Trust All Clinical Commissioning Group

Overview Compare indicators Map Trends Compare areas Area profiles Definitions Download

Area type: CCG Benchmark: England

Area: MHS West Essex CCG Sub-region: East

Search for an area 10 most similar CCGs to West Essex

Compared with benchmark: Best, Good, Worst, Lower, Higher, Low, High, Not compared

Export table as image

Indicator	Period	England	East NHS region	NHS Basildon And Brentwood CCG	NHS Cambridgeshire and Peterborough	NHS Castle Point And Rossett CCG	NHS Great Yarmouth And Waveney CCG	NHS Ipswich And East Suffolk CCG	NHS MSH Essex CCG	NHS North East Essex CCG	NHS North Norfolk CCG	NHS Norwich CCG	NHS South Norfolk CCG	NHS Suffolk CCG	NHS Thurrick CCG	NHS West Essex CCG	NHS West Norfolk CCG	NHS West Suffolk CCG
Twelve month rolling total number of prescribed antibiotic items per STAR-PU	Mar 2017	1.07	1.14	1.20	1.11	1.13	1.16	1.07	1.13	1.28	1.11	1.16	1.02	1.18	1.14	1.17	1.20	1.15
< mean England prescribing (2013/14)																		
> mean England prescribing (2013/14)																		
Twelve month rolling percentage of prescribed antibiotic items from cephalosporin, quinolone and carbapenem class	Mar 2017	8.92	11.19	9.64	12.35	11.40	7.95	12.04	9.81	9.88	12.38	11.67	14.42	11.40	9.34	10.01	13.82	11.71
All C. difficile rates by CCG and financial year	2015/16	25.0	25.0	34.9	18.8	28.7	30.2	28.3	14.3	19.8	32.8	32.4	31.2	20.4	13.4	22.8	45.0	28.8
All E. coli bacteraemia rates by CCG and financial year	2015/16	70.0	83.1	67.9	58.9	79.9	81.8	58.4	47.3	67.9	61.8	58.8	76.4	60.6	68.1	50.7	73.2	79.8
Twelve month rolling proportion of trimethoprim class prescribed antibiotic items as a ratio of trimethoprim to rifampicin	Mar 2017	50.5	62.7	69.3	46.3	71.4	63.8	67.8	63.8	54.5	61.4	61.7	48.9	70.8	69.7	57.8	67.3	65.7

<http://fingertips.phe.org.uk/profile/amr-local-indicators/data#page/0>

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AMR local indicators

Supporting NHS England Initiatives | Antimicrobial Resistance | **Antibiotic Prescribing** | Health Care Associated Infection | Infection Prevention and Control | Antimicrobial Stewardship | All Trust | All Clinical Commissioning Group

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Area type: CCG

Area: NHS West Essex CCG | Sub-region: East

Benchmark: England

Compare with benchmark: Best Good Worst Lower Higher Low High Not compared

Export table as image

Indicator	Period	England	East NHS region	NHS Brighton And Hove trust CCG	NHS Cambridgeshire and Peterborough	NHS Greater Manchester and Eastern Cheshire CCG	NHS Great Yorkshire And Wainman CCG	NHS Ipswich And East Suffolk CCG	NHS IWM Essex CCG	NHS North East Essex CCG	NHS North Norfolk CCG	NHS Norfolk CCG	NHS South Norfolk CCG	NHS Southend CCG	NHS Thurrock CCG	NHS West Essex CCG	NHS West Norfolk CCG	NHS West Suffolk CCG
Total number of prescribed antibiotic items per 1000 resident individuals by quarter	2017 Q1	179.2	188.1	200.8	178.2	188.7	202.8	187.7	175.1	230.5	185.5	189.9	182.0	188.5	179.8	186.8	188.8	202.9
Total number of prescribed antibiotic items per STAR-PU by quarter	2017 Q1	0.28	0.31	0.31	0.30	0.31	0.31	0.30	0.31	0.35	0.29	0.31	0.30	0.30	0.30	0.30	0.30	0.30
Percentage of prescribed antibiotic items from cephalosporin, quinolone and co-amoxiclav class by quarter	2017 Q1	8.38	10.58	6.74	11.00	11.39	7.43	16.78	6.49	9.94	16.73	11.96	13.61	11.45	8.17	8.27	13.18	10.67
Twelve month rolling total number of prescribed antibiotic items per 1000 individuals per day	Mar 2017	1.74	1.99	2.01	1.88	1.94	2.98	1.83	1.77	2.21	1.93	1.94	1.91	1.91	1.79	1.89	1.98	2.02
Twelve month rolling total number of prescribed antibiotic items per STAR-PU	Mar 2017	1.07	1.14	1.22	1.11	1.12	1.16	1.23	1.33	1.28	1.11	1.08	1.32	1.18	1.14	1.17	1.20	1.25
Twelve month rolling percentage of prescribed antibiotic items from cephalosporin, quinolone and co-amoxiclav class	Mar 2017	8.82	11.19	6.64	12.36	11.43	7.95	12.04	6.81	9.98	12.38	14.42	11.49	8.34	8.01	13.82	11.71	
Twelve month rolling proportion of trimethoprim class prescribed antibiotic items as a ratio of	Mar 2017	55.5	82.7	69.3	60.3	71.4	63.4	67.8	63.8	64.3	61.4	61.7	60.8	69.3	69.7	67.8	67.3	66.7

<http://fingertips.phe.org.uk/profile/amr-local-indicators/data#page/0>

AMR local indicators

Indicator keywords

- Supporting NHS England Initiatives
- Antimicrobial Resistance
- Antibiotic Prescribing**
- Health Care Associated Infection
- Infection Prevention and Control
- Antimicrobial Stewardship
- All Trust
- All Clinical Commissioning Group

- Overview
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- Map**
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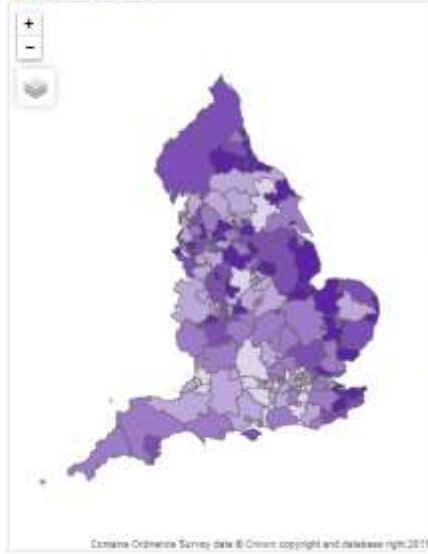
Area type: CCG Benchmark: England

Area: NHS West Essex CCG 10 most similar CCGs to West Essex

Indicator: Total number of prescribed antibiotic items per 1000 resident individuals by

Compare with benchmark: Best Good Worst Lowest Best Highest Low High See comparison

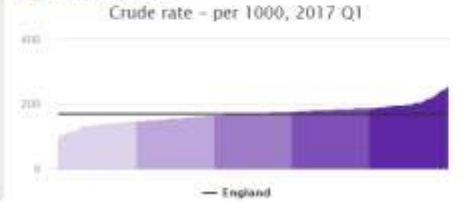
Export map as image



Map colour: Comparison to benchmark

Select an area from the map

Export chart as image



The current review and revise mindset



Continue
unless I
can justify
stopping

The ARK review and revise mindset



Stop
unless I
can justify
continuing