

BRADFORD'S HEALTHY HEARTS



Live longer, better



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CVD landscape in Bradford

- Still one of the **leading causes of death** in the UK and in the CCG – 350k population, 40 practices
- Bradford Districts CCG has the **7th worst CVD mortality rate under 75** in England
- Over **28% of all deaths under 75**
- **14.3%** of people have **hypertension**
- Over **21k have cholesterol above 4mmol/l**



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Bold and clear ambition

- By 2020, we will reduce cardiovascular events by 10% which will result in 150 fewer strokes and 340 fewer heart attacks
- We will no longer be the 7th worst CCG in the country!



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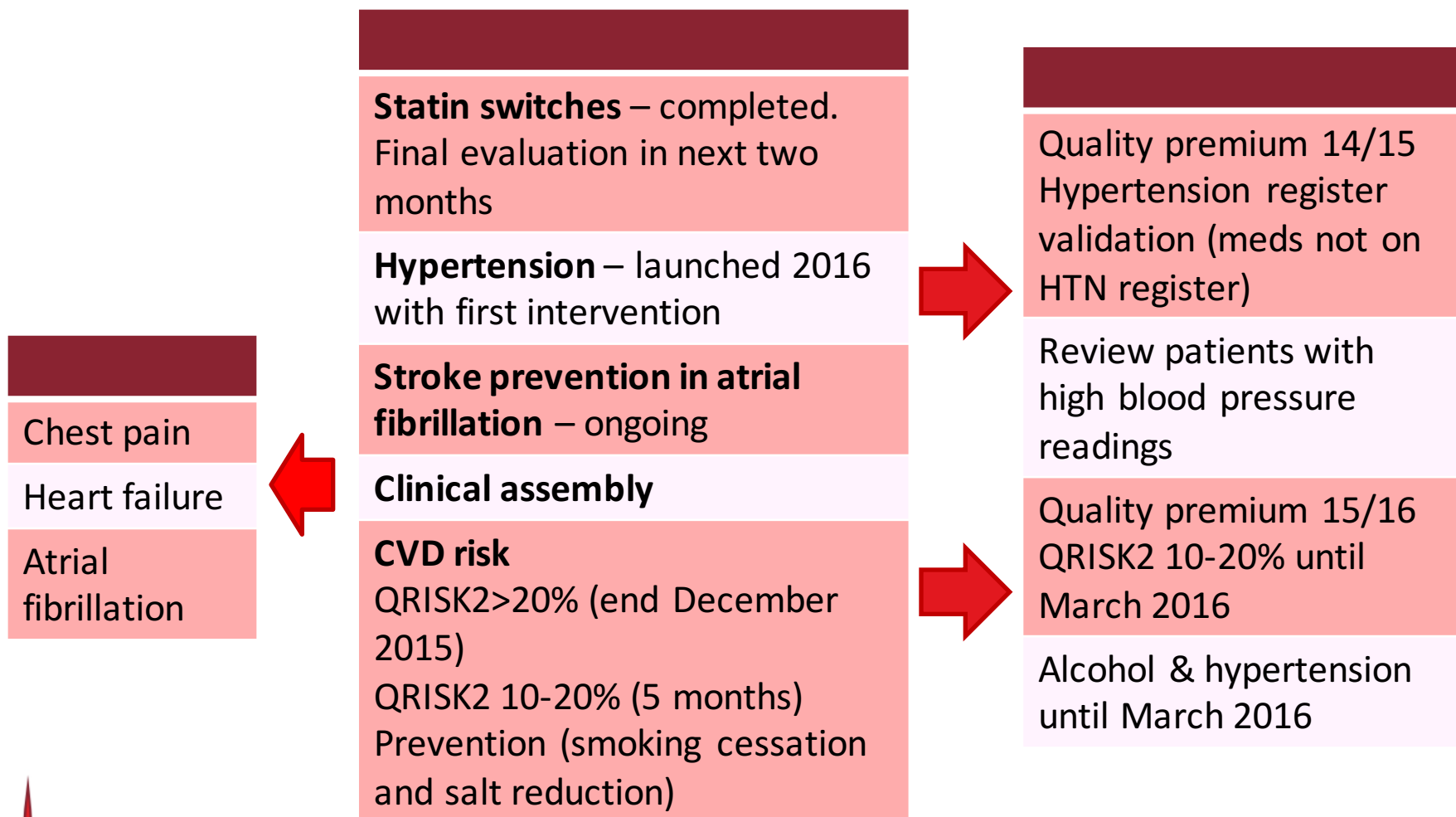
Clinical leadership - strategy

- Strategic - governing body, council of representatives, clinical board
- NHS Right Care - the story, workshop, clinical assembly
- Stakeholder involvement: primary and secondary care, pharmacists, voluntary sector, local authority
- Public engagement and patient involvement throughout
- Communications and engagement ++

Summary: wide-ranging engagement with a broad range of health care stakeholders including the hospital consultants, so GPs and consultants working together



Programme overview



Clinical leadership – delivering outcomes

- Credible (local clinicians, strong links to secondary care), clinical knowledge and personable
- Secondary care engagement: unified message across primary and secondary care, population approach, permissions
- Programme guidelines
- Regular educational and progress meetings, practice engagement at solution finding
- Developing clinical leadership across the system in primary and secondary care; lead clinician in practice (GP, practice nurse, pharmacist)



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Clinical leadership – delivering outcomes

- Working with regional clinical network
- Data sharing, IT interventions (searches - streamlined into “work to do” rather than overload with searches; alerts in strategic places with easy access information to explain risk to patients, pop-ups), monthly dashboard, comparative performance
- Consistency and focus – eg few measures run repeatedly and then stopped
- Incentives – collaborative money, QoF
- Primary care support at CCG level, prizes, awards



Key success factors

- Its 'our' problem - CCG/practices/patients
- Primary care led solutions and owned by practices
- “Achievable benchmarks of care” [reducing unwarranted variation]
- Secondary care understanding the population
- Work at scale
- Workload-light for busy clinicians
- Proactive patient approach
- Flexibility
- Passion, enthusiasm and momentum!!



Our key questions

What's the target outcome?

How can we be smart about this?

Do we need to amend local clinical guidelines to achieve this?



So what have we done?

Cholesterol



Atrial fibrillation

Hypertension



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Lipids / Statins



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Extra workload – the challenge of large scale QI

- Just for statin work, if done in traditional way with face to face appointments, would need:

An additional **26,000-39,000 appointments!**

- Overall Qrisk work: In one medium sized city in UK, estimated >40,000 with Qrisk 10-20%! (est 4.5 million patients in England)
- So NICE guidance might result in two to three visits per patient in first year = extra 80,000 - 120,000 appointments
- NICE mention limited capacity of healthcare!



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26,000 extra appointments? Or even 80,000??



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Examples of simplified approach - statins

- Same multi-faceted approach across the board
- Agreed protocol with secondary care, simplified, aimed at reduced primary care workload and “fire and forget” approach:
 - ❖ primary prevention: atorvastatin 40mg
 - ❖ secondary prevention: atorvastatin 80mg
- Work at scale with **letters** sent to patients rather than face-to-face consults. Supported by website, YouTube channel, wide ranging comms package, patient education sessions, patient participation groups.



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Statin switches (1)

- Over **6000** on **simvastatin** with total cholesterol above 4 mmol/l or LDL >2 mmol/l were **switched to atorvastatin 40/80mg**: achieved 0.56 mmol/l reduction in LDL (and TC 0.5mmol/l) over 3 months ($p<0.001$).
Some patients had cholesterol improve from 8 to 3!
- Approximately 5,000 for primary prevention and approx 1,000 for secondary prevention

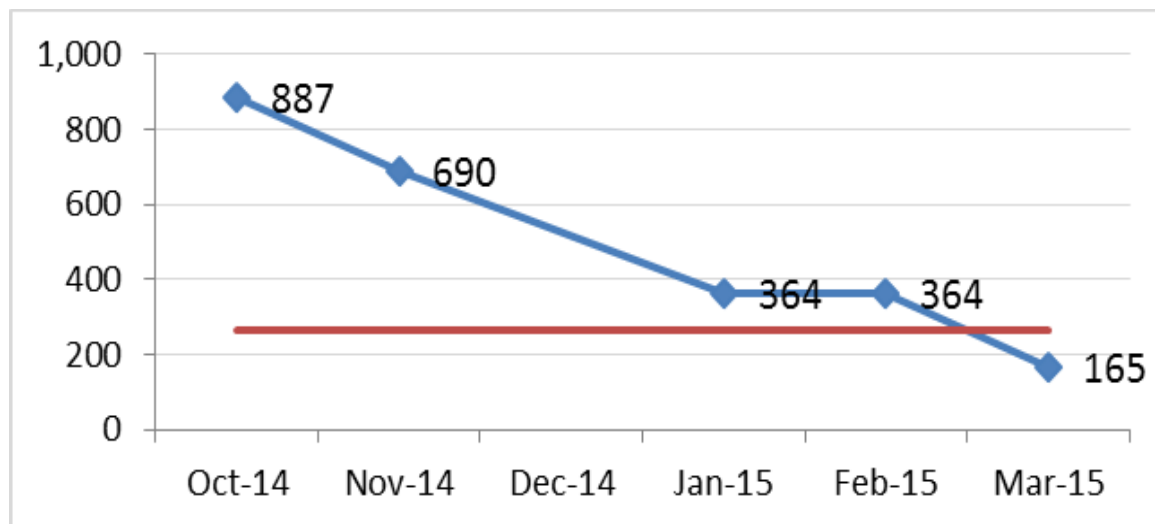
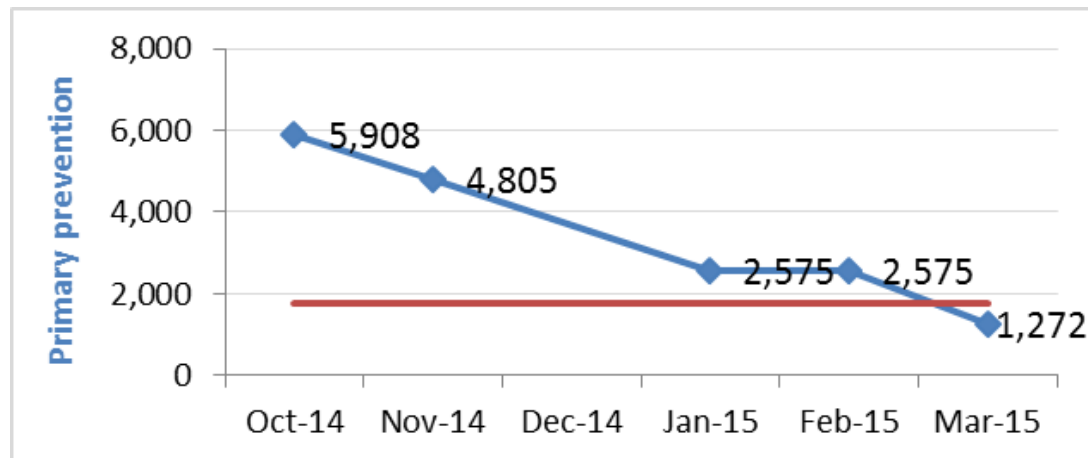


Statin switches (2)

- Innovative work at scale – letters sent out, supported by website, comms, large patient education programme.
- Used complex GP computer searches but simple output – one list of patients, sent letters to these and bulk switch repeat template, **takes 1-2 minutes.**



STATIN switch: outcomes achieved



QRISK2

- New NICE guidance on QRISK2 10-20%
- In Bradford 4% coded with QRISK2 10-20% (14,000)
- Another estimated 30-40,000 not yet coded/assessed
- 4,600 (32%) of patients with coded QRISK2 10-20% were on statin
- Potential problems with a full implementation due to lack of resources
- **QRISK2 (10-20 and >20%): overall, 7000 patients took up offer of statin.** Preliminary figures show around 70-80% uptake but follow-up figures being compiled currently to assess longer term adherence



Total cholesterol range for QRISK2

Early results: (for QRISK 10-20% and >20%)

- n=2163
- Mean total cholesterol reduction was **0.39 mmol/l reduction in that population**
- **P<0.001 for change**



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Stroke prevention in AF



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Examples of simplified approach: AF

- Education and mentoring programme based on NICE guidance. Nominated clinical champion in every practice in CCG. Regular meetings and public benchmarking against targets. Competitions.
- Complex searches in SystmOne but simple output: just one list of “work to do” for patients not on OAC
- Alerts on home screen and icon alerts in record with CHADSVASc score, stroke risk and also stroke reduction that would be gained by OAC (see screenshot). NNTs.
- Template (see screenshot)
- Use of pharmacists
- Use of industry-supported but independent education and review programmes such as APODI for those practices who wanted it (strict clinical governance framework)



Summary of OAC treatment options personalised for patient's score

Configure

CHA2DS2-VASc score =2

NO THERAPY

Patient's ANNUAL risk of stroke+thromboembolism with no antithrombotic therapy=**2.9%**

WARFARIN INR 2-3

Patient's ANNUAL risk of ischaemic stroke+thromboembolism with warfarin INR 2-3 =**1%**

Relative risk reduction: 66%
Absolute risk reduction:1.9%
Chance of benefit per year: 1 in 51

RIVAROXABAN 20mg once daily

Patient's ANNUAL risk of ischaemic stroke+thromboembolism with rivaroxaban =**1%**

Relative risk reduction: 66%
Absolute risk reduction:1.9%
Chance of benefit per year: 1 in 51

APIXABAN 5mg twice daily

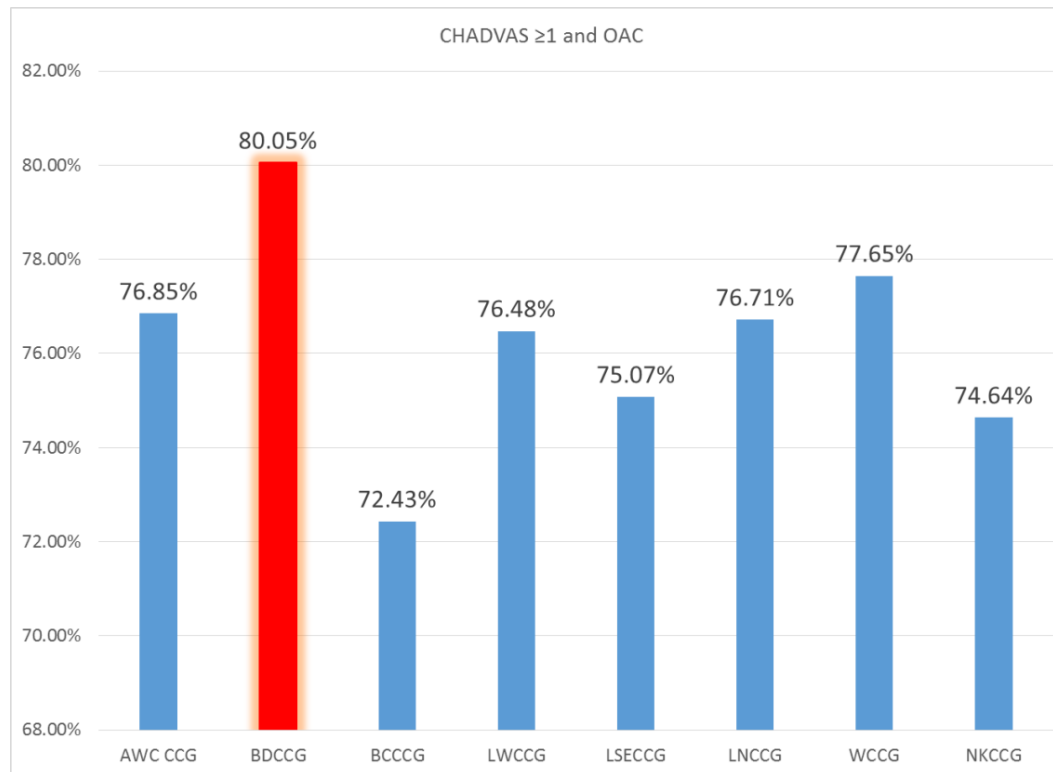
Patient's ANNUAL risk of ischaemic stroke+thromboembolism with apixaban =**0.8%**

Relative risk reduction: 74%
Absolute risk reduction:2.1%
Chance of benefit per year: 1 in 47

Ok Cancel



AF across West Yorkshire (Feb 2016)



BD CCG: The highest achievement across West Yorkshire (which is 300-400 GP practices, total pop 1.5 million people). **May 2016**: even higher at **82% anticoagulated** and still rising.



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Population impact

Mean CHADVASc = 4, NNT to prevent one stroke = 11

Potentially programme could prevent 82 strokes (per 1.5-1.7 years depending on study)

Using NICE's assumption, cost of stroke = £11,000

This could potentially save £900,000

Also frees up 2,200 “bed days” per year in hospital



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Hypertension



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Undiagnosed hypertension

- Estimated 37,000 with **undiagnosed** hypertension in the CCG.
- Started collaboration with the CDC in USA and developed two initiatives

Patients With Undiagnosed Hypertension Hiding in Plain Sight

Hilary K. Wall, MPH¹; Judy A. Hannan, RN, MPH¹; Janet S. Wright, MD¹

JAMA 2014

- Developed a system to:
 - ❖ Flag any patients with undiagnosed hypertension “hiding in plain sight”
 - ❖ Identify people on anti-hypertensive medication and not on a hypertension register – about 1% increase in prevalence achieved with just a few clicks of GP software. Completed over around 1-2 months



Aim of hypertension workstream

- Aim to achieve blood pressure control for a minimum 76% of patients in the next 2 years
- Current achievement 63%; in order to get to 76% over 4400 patients need to get their blood pressure under 140/90
- Already improved by 700 patients over just a few weeks!
- Service recently procured:
- Education programme for all new hypertensives
- Self-monitoring [with machine] instruction
- Self titration of medication



Combined outcomes

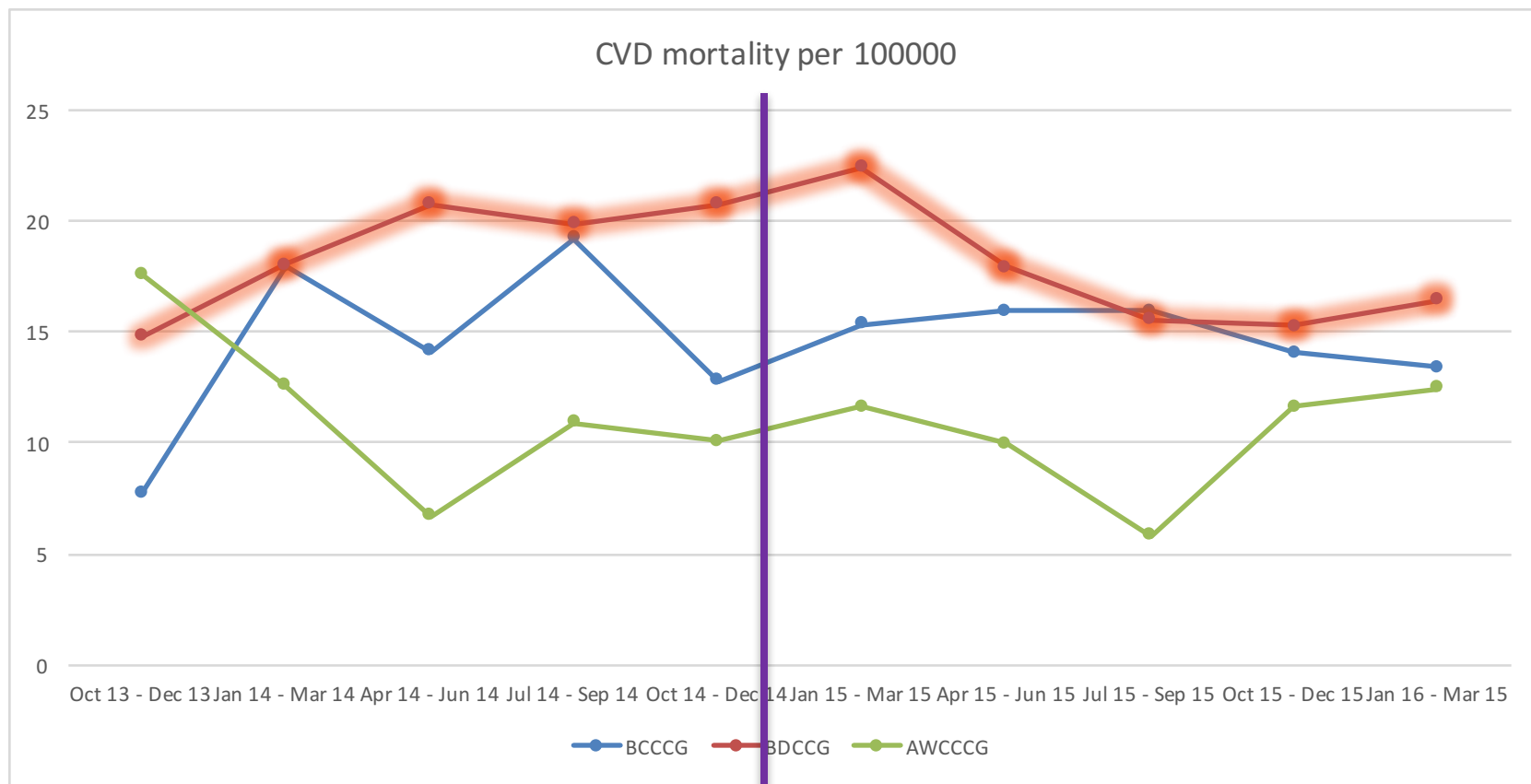
To date for Bradford's Healthy Hearts:

- Switched 6000 statins
- QRISK >20%: 4000 started on statins
- QRISK 10-20%: 3000 started on statins
- AF: >1000 started on OAC
- Hypertension: over 2,500 newly diagnosed, nearly 1% increase in prevalence. Nearly 700 with BP newly to target

Over 15 months, more than 17,000 people had an intervention that improved their health.



CVD mortality rate under 75 per 100,000 population pre-BHH versus post-BHH



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Percentage change in CVD mortality under 75 (absolute numbers)

Airedale, Wharfedale & Craven CCG

- Increased 3%

Bradford City CCG

- Reduced 6.5%

Bradford Districts CCG

- Reduced 6.6%

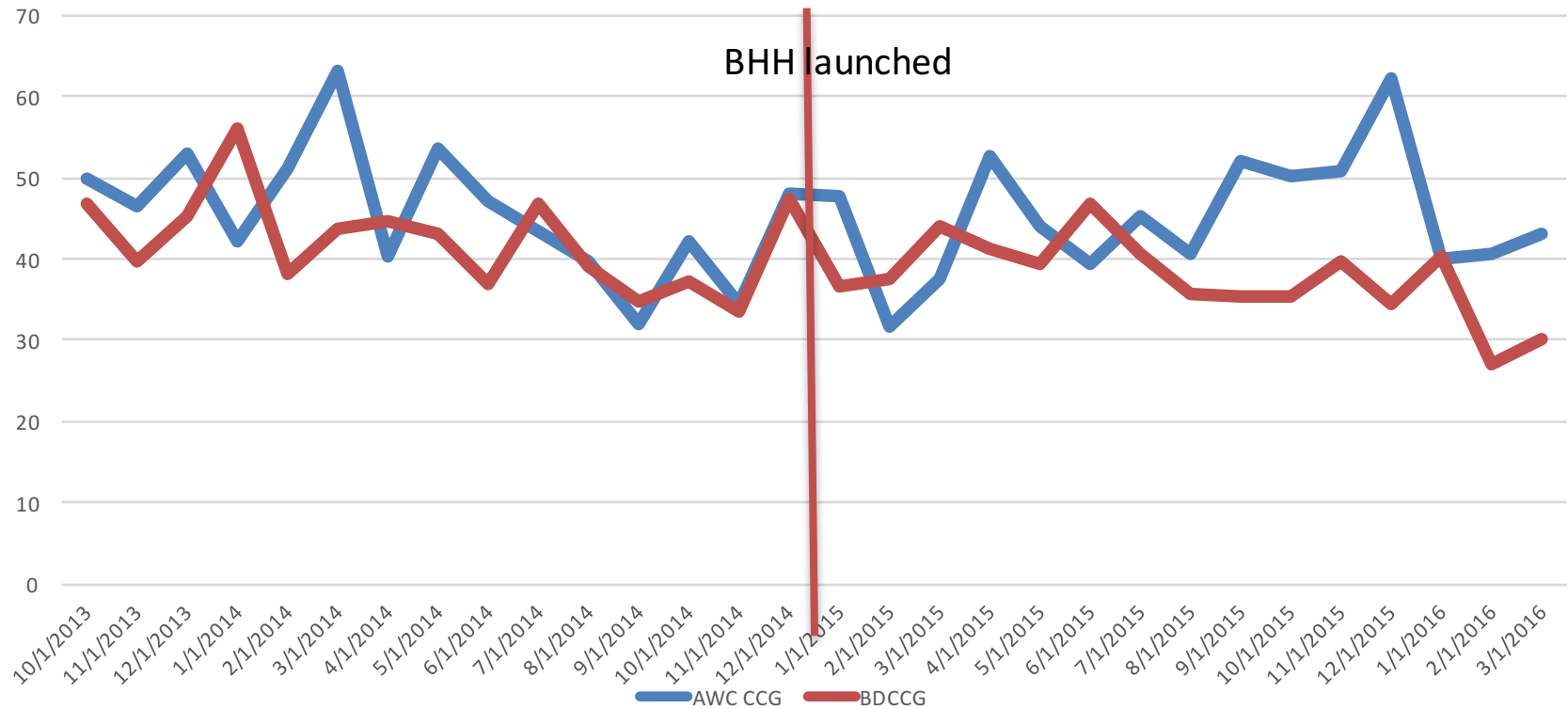


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Under 75 non-elective admissions for CVD (MI and stroke)



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Non-elective admissions before BHH intervention vs “control group”, AWC CCG

Airedale, Wharfedale & Craven CCG

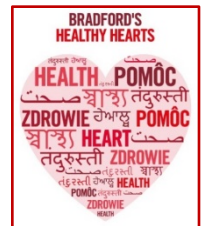
- Mean CVD non-elective per month per 100,000 population = 46.4/m/100,000

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- Mean CVD non-elective per month per 100,000 population = 42.8/m/100,000

P = 0.1 for difference between groups

No statistical difference between groups



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Non-elective admissions after BHH intervention vs “control” group

Airedale, Wharfedale & Craven CCG

- Mean CVD non-elective per month per 100,000 population = 45.7/m/100,000

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- Mean CVD non-elective per month per 100,000 population = 37.6/m/100,000

P=0.003 for difference between groups
8.1 fewer admissions per month per 100,000



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Non-elective admissions: change over time*

Airedale, Wharfedale & Craven CCG

- CVD non-elective admissions change over time = -1% (-8 fewer CVD events)

Bradford City CCG

- CVD non-elective admissions change over time = +6% (32 additional CVD events)

Bradford Districts CCG

- CVD non-elective admissions change over time = -10% (**-211 fewer CVD events**)
- 137 fewer MIs and 74 fewer strokes



Conservative cost savings based on real outcome figures

Cost of stroke = £11,000

$74 * 11000 = £814,000$

Cost of MI = £5,500

$137 * 5500 = £753,500$

Gross savings £1,567,500

Net savings approximately £1,200,000 over first 15 months



Quote from BMJ

Winner, BMJ awards 2016:

“Inspirational leadership at scale, taking forward ambitious targets to tackle long standing public health challenges, and the engagement with the public whilst balancing demands on the clinical workforce was impressive.”



Summary

- Population-based mind-set and approach
- Engagement at all levels, across all organisations
- Multiple approaches to the population but not ‘please see your GP/PN to discuss further’
- Flog IT to produce what you want
- Be ambitious and brave!



Thank you from the team of Bradford Districts CCG



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