This analysis models the health & economic benefits of enabling substantial improvement in secondary prevention of cardiovascular disease (CVD).

Increase in the uptake of 4 high impact but underused treatments is modelled.

3 ambition scenarios are considered: Step Change Improvement, Advanced Improvement and Full Uptake.

The headline table below shows the impact of achieving Step Change – defined as a realistic near-term improvement ambition.

Suffolk and North East Essex ICB **Year 3 – Step Change Scenario**	
Events prevented: • 176 Heart attacks • 316 Strokes • 533 Heart failure admissions • 43 End stage kidney disease	**1,069 events*** **~ 8,183 bed days** (excl ESKD) *Total events may not match due to rounding
Health/social care savings	**£20 million**
Productivity gains	**£22 million**
Benefit to cost ratio	**3.6** (Over £3 saved for every £1 spent, with break-even for NHS in first year of Step Change)

For full report and detailed results for England and every ICB, visit:

www.into-action.health/impactreport

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A realistic step change improvement in secondary prevention will prevent thousands of serious cardiovascular events, deliver huge savings in health and social care, and add £ billions to the national economy in 3 years.

The CVD Prevention Challenge

Secondary prevention – using medication to treat high risk conditions like blood pressure and cholesterol – is very effective at preventing cardiovascular disease. But under use of NICE recommended, high impact treatments that prevent CVD is substantial and longstanding – with little change over many years.

The CVDACTION Health Economic Impact Model

- **4 high risk conditions**: high blood pressure, high cholesterol, chronic kidney disease and diabetes
- **4 high impact treatments** that are NICE recommended but substantially under-used (Blood pressure lowering, cholesterol lowering, renin angiotensin inhibitors, SGLT2 inhibitors)
- **4 major outcomes:** heart attack, stroke, heart failure, end stage kidney disease
- **3 scenarios:**
  1. **Step Change** as the minimum realistic near-term improvement level. For example, step change for blood pressure = 80% patients treated to target.
  2. **Advanced** (representing substantial improvement on the way to Full Uptake)
  3. **Full Uptake** (not fully achievable in practice as medicines will not be appropriate for every patient)
- **Modelled costs include** use of CVDACTION, structured support for primary care transformation and increased medication use (>90% of the total costs).

CVDACTION targets the HOW of optimising prevention in the real world, with 3 essential pillars to enable primary care teams to work differently:

1. Smart data - routinely detect patients who are not on optimal treatment, and prioritise for optimisation

2. Structured support for transformation enabling teams to adapt workforce and pathways to optimise at scale and within capacity

3. **Structured support for delivery** – supporting teams to set and achieve step-change objectives in secondary prevention

For more information on CVDACTION contact Rosa@Into-Action.Health

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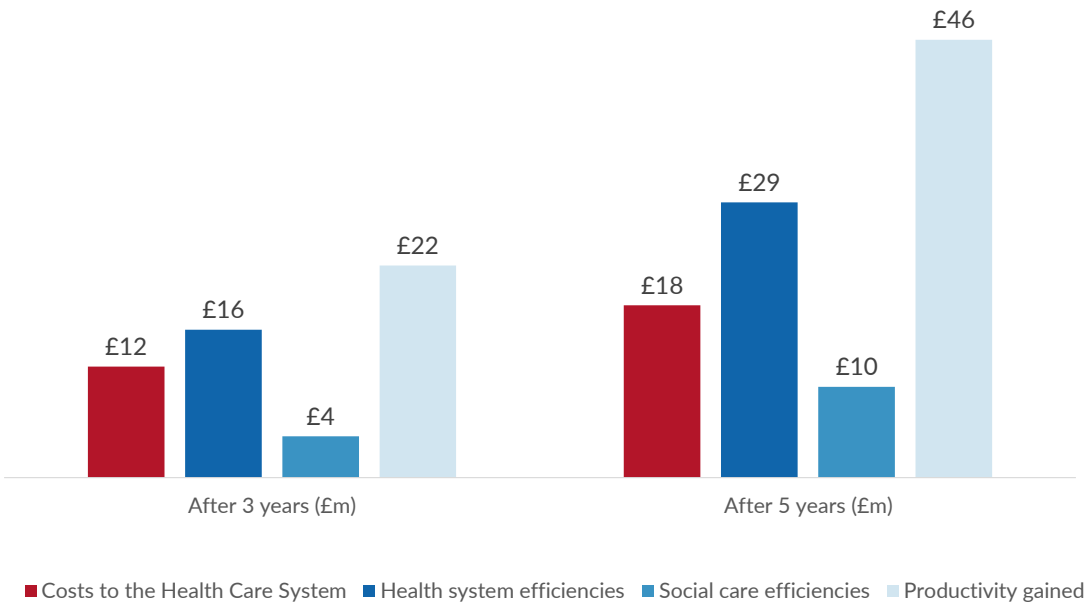
CVDACTION Modelled Impact (Step Change Scenario)

Headline Costs and Benefits

Location	Suffolk and North East Essex Integrated Care Board
CVDACTION optimisation cohort	All
Number of patients optimised in year 1	41,082

	After 3 years	After 5 years
Events Prevented		
Myocardial infarctions	176	286
Strokes (ischaemic)	316	510
Heart failure admissions	533	842
End stage kidney disease	43	68
Total	**1,069**	**1,706**
Costs to the Health Care System	**£12m**	**£18m**
Benefits		
Health system efficiencies	£16m	£29m
Social care efficiencies	£4m	£10m
Productivity gained	£22m	£46m
Total	**£42m**	**£84m**
Total Benefits to Costs Ratio (Gross)	**3.6**	**4.7**



All costs and benefits are discounted

Model by GtD SOCIAL IMPACT ANALYTICS

Economic analysis by EBD

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CVDACTION: Costs and Benefits by Year

Location: Suffolk and North East Essex Integrated Care Board

Scenario: Step Change

RESULTS (CUMULATIVE)

	After 1 year	After 2 years	After 3 years	After 4 years	After 5 years	After 10 years	After 15 years
Number avoided with CVDACTION							
Myocardial Infarctions	60	119	176	232	286	540	757
Strokes	109	214	316	414	510	945	1,319
Heart failure admissions	188	366	533	691	842	1,496	2,006
End stage kidney disease	15	29	43	56	68	122	165
Costs of CVDACTION and treatment (discounted)							
CVDACTION	£216,058	£216,058	£216,058	£216,058	£216,058	£216,058	£216,058
Transformation cost	£270,073	£270,073	£270,073	£270,073	£270,073	£270,073	£270,073
Treatment	£4,036,617	£7,701,794	£11,178,035	£14,477,084	£17,609,454	£31,099,709	£41,674,085
Total	**£4,522,748**	**£8,187,924**	**£11,664,165**	**£14,963,214**	**£18,095,584**	**£31,585,840**	**£42,160,216**
Value by economic category (discounted)							
Health costs avoided	£4,284,798	£9,544,690	£15,540,643	£22,031,580	£28,904,807	£65,384,578	£99,907,496
Social care costs avoided	£862,399	£2,341,260	£4,338,557	£6,760,842	£9,541,583	£26,702,642	£45,635,408
Informal care costs avoided	£4,640,930	£10,845,945	£18,357,875	£26,891,833	£36,323,153	£90,966,936	£148,541,992
Lost productivity avoided	£462,086	£1,830,449	£3,923,966	£6,575,874	£9,656,049	£28,501,570	£48,393,602
Total	**£10,250,213**	**£24,562,345**	**£42,161,040**	**£62,260,129**	**£84,425,592**	**£211,555,726**	**£342,478,498**
Value by clinical event (discounted)							
Myocardial Infarctions	£896,873	£2,021,388	£3,323,482	£4,768,522	£6,311,437	£14,870,408	£23,291,642
Strokes	£8,137,615	£18,758,280	£31,451,074	£45,748,725	£61,467,174	£151,701,625	£246,098,698
Heart failure admissions	£579,719	£1,870,971	£3,691,159	£5,890,579	£8,366,478	£22,468,041	£36,295,628
End stage kidney disease	£636,006	£1,911,707	£3,695,325	£5,852,303	£8,280,503	£22,515,652	£36,792,529
Total	**£10,250,213**	**£24,562,345**	**£42,161,040**	**£62,260,129**	**£84,425,592**	**£211,555,726**	**£342,478,498**
Benefit to cost ratio (Gross)							
Health costs avoided	0.9	1.2	1.3	1.5	1.6	2.1	2.4
Social care costs avoided	0.2	0.3	0.4	0.5	0.5	0.8	1.1
Informal care costs avoided	1.0	1.3	1.6	1.8	2.0	2.9	3.5
Lost productivity avoided	0.1	0.2	0.3	0.4	0.5	0.9	1.1
Total	**2.3**	**3.0**	**3.6**	**4.2**	**4.7**	**6.7**	**8.1**

*Numbers less than 10 suppressed

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CVDACTION Optimisation Cohorts Analysis After 3 Years

Location Suffolk and North East Essex Integrated Care Board

Step Change Scenario After 3 Years

Optimisation Cohort	Heath System Costs	CVD Events Prevented[1]	Health System Efficiencies	*Social Care Efficencies*	*Informal Care Avoided*	*Productivity Gained*	*Total Benefits*
Hypertension							
1 .Blood pressure not treated to target	£438,896	347	£5,241,562	*£2,007,675*	*£8,507,708*	*£1,181,812*	*£16,938,758*
Cholesterol							
2. CVD not on Lipid Lowering Therapy (LLT)	£151,961	55	£1,052,592	*£447,167*	*£1,894,888*	*£202,154*	*£3,596,802*
3. CVD on suboptimal dose or intensity of statin	£259,839	58	£910,653	*£273,108*	*£1,153,361*	*£194,750*	*£2,531,872*
4. CVD on max statin but not treated to target	£549,720	24	£454,351	*£145,688*	*£621,629*	*£86,265*	*£1,307,934*
Chronic Kidney Disease							
5. RAA indicated but not prescribed	£28,461	31	£627,843	*£106,685*	*£458,877*	*£180,830*	*£1,374,236*
6. SGLT2i indicated but not prescribed	£3,401,601	145	£1,235,202	*£0*	*£0*	*£446,941*	*£1,682,143*
7. CVD and Statin not prescribed	£30,692	20	£409,689	*£176,965*	*£757,035*	*£73,337*	*£1,417,026*
8. BP not treated to target	£32,552	48	£752,532	*£292,444*	*£1,233,867*	*£170,614*	*£2,449,457*
Diabetes							
9. RAA indicated but not prescribed	£187,846	136	£2,520,971	*£462,661*	*£1,946,493*	*£729,458*	*£5,659,582*
10. SGLT2i indicated but not prescribed	£6,504,811	138	£1,220,174	*£0*	*£0*	*£413,305*	*£1,633,479*
11. DM and HTN with BP not treated to target	£62,491	60	£973,200	*£368,070*	*£1,540,374*	*£217,365*	*£3,099,009*
12. DM with CVD not on LLT	£15,295	7	£141,874	*£58,093*	*£243,642*	*£27,133*	*£470,742*
Total	**£11,664,165**	**1,069**	**£15,540,643**	*£4,338,557*	*£18,357,875*	*£3,923,966*	*£42,161,040*

All costs and benefits are discounted

1 Events include heart attacks, strokes, heart failure admissions and end stage kidney disease.