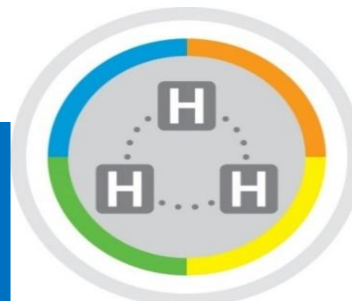
Reconfiguration of hospital services

A programme to sustain services and improve care

Appendix 6 – Financial Modelling

7 November 2017 V81



About these materials

The purpose of these materials is to summarise the potential financial implications of the proposals put forward by the mid and south Essex Success Regime

As stated in NHS England's guidance *Planning, assuring and delivering service change for patients* it is essential that only those options that are sustainable in service, economic and financial terms are offered publicly

This includes capital spend, transactional or transitional funds, savings etc

These materials cover

- *"At a glance"* – summary financial bridge and methodology
- *Base case, Business as Usual* – demand growth and efficiency savings
- *Future model* – system savings
- *National schemes and other investments*
- *Consolidated position*
- *Risks and mitigations – delivery and financial*

- *Detailed backup information*

"At a glance"

Executive summary (I of II)

The mid and south Essex Success Regime has a population of 1.2m; 5 CCGs, 3 Trusts and 3 Local Authorities; and had an annual health deficit of £99m in 2016/17

Demand pressures are projected to cause the in-year deficit to grow to £532m by 2021/22, in the 'do nothing' scenario, before efficiency schemes

If realised, CIPs, QIPPs and STF funding will reduce the 'do nothing' in-year deficit to £82m by 2021/22. This is dependant on:

- Acute Trust CIPs delivering £150m of efficiency savings;
- Non-acute QIPPs that will deliver £135m of efficiency savings;
- £87m of savings will be delivered by other commissioners and providers;
- £78m of Sustainability Transformation Fund (STF) funding

To unlock further savings and return to full financial sustainability, £244m of capital investment (including £30m related to FYFV investments and £77m relating to local health & care developments) will be required by 2021/22. An additional £40m of revenue pump priming investment is also included in our financial bridge over the period to 2021/22 in order to deliver the programme of transformation.

Executive summary (II of II)

Local Health and Care **initiatives are planned to contribute £26m in system savings by 2021/22 ...**

- Impact will be a 2% rise in A&E attendances, flat NEL and elective admissions, and an 4% net reduction in outpatients versus 2016/17

... these will contain acute hospital activity , facilitating ***In Hospital*** **clinical reconfiguration with corporate and clinical support changes.**

- The clinical steering group has identified various options for acute provision shortlisted to a preferred option for consultation

Overall savings in this areas are c.£86m as follows:

- Depending on the final option selected, this has the potential to deliver £21m in direct savings
- Acute clinical support and back office consolidation is projected to deliver £11m
- Acute-focused QIPP schemes and the benefits from scale delivery of services will release £55m

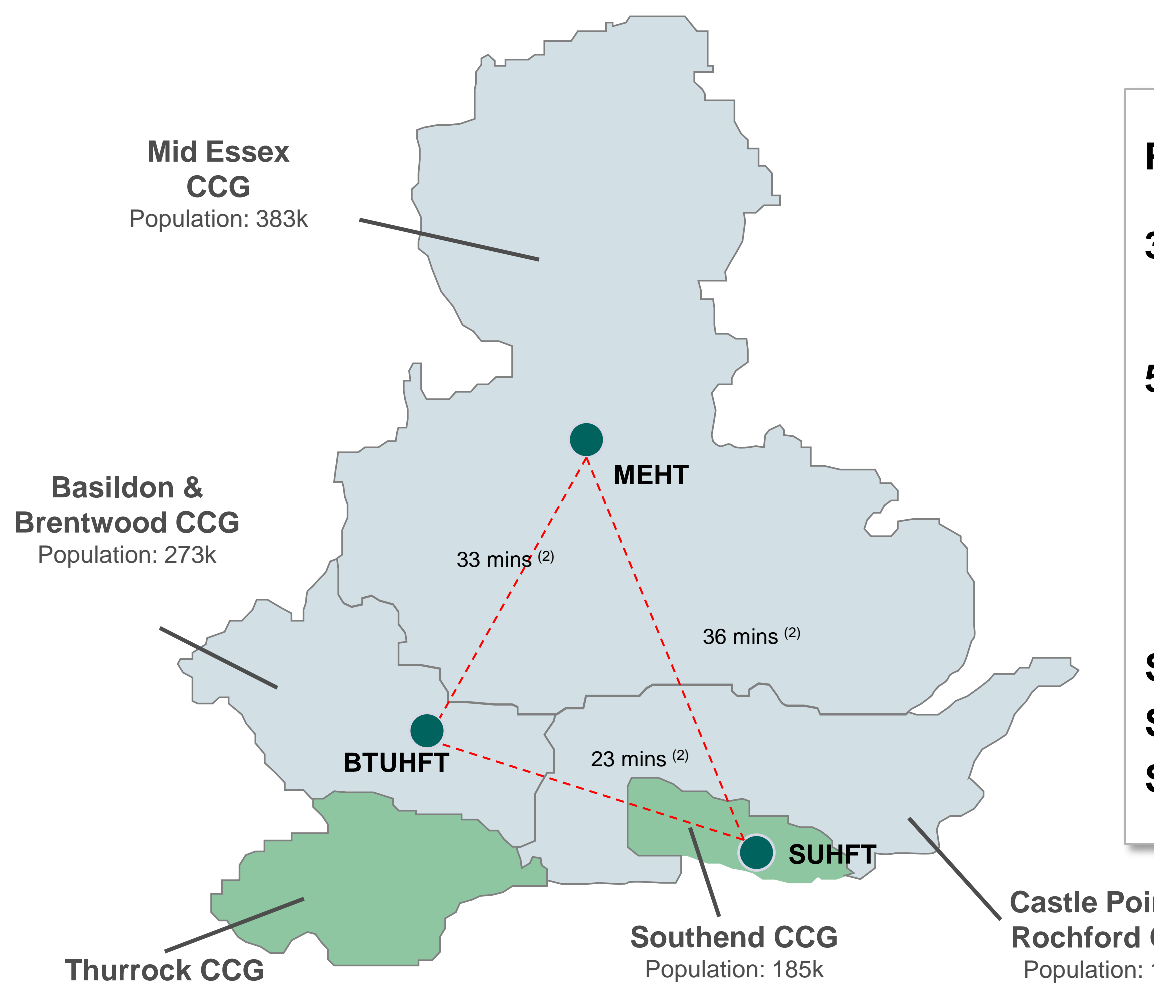
A further £15m has been targeted in order to achieve financial balance by 2020/21. This is focused on commissioner reconfiguration, estates efficiencies and repatriation of work to local NHS providers and is net of revenue costs associated with the proposed capital developments and transport infrastructure.

These in hospital changes will in turn facilitate investment in local health and care. The demands on local health and care will be the same in all options, except for travel requirements

- The same range of in hospital services will be offered for all reconfiguration options; patients will still access urgent and emergency care in the same way, and the majority of visits will still be to their local hospital
- However, there will be increased travel requirements for some patients and relatives for certain specialist services – CCGs will review transport provision to mitigate this

These initiatives will return the system to in-year financial balance by 2021/22, allowing investment of £44m, including in national schemes (7 day services, GPFV, cancer taskforce, etc.)

Key facts about mid and south Essex Success Regime footprint



Population: 1,195k[1]

3 local authorities:

- Essex; Southend; Thurrock

5 CCGs, 3 Acute trusts

- 85% of acute activity from 5 CCGs remains in Essex NHS trusts
- 93% of local trust activity is from Mid and South Essex patients

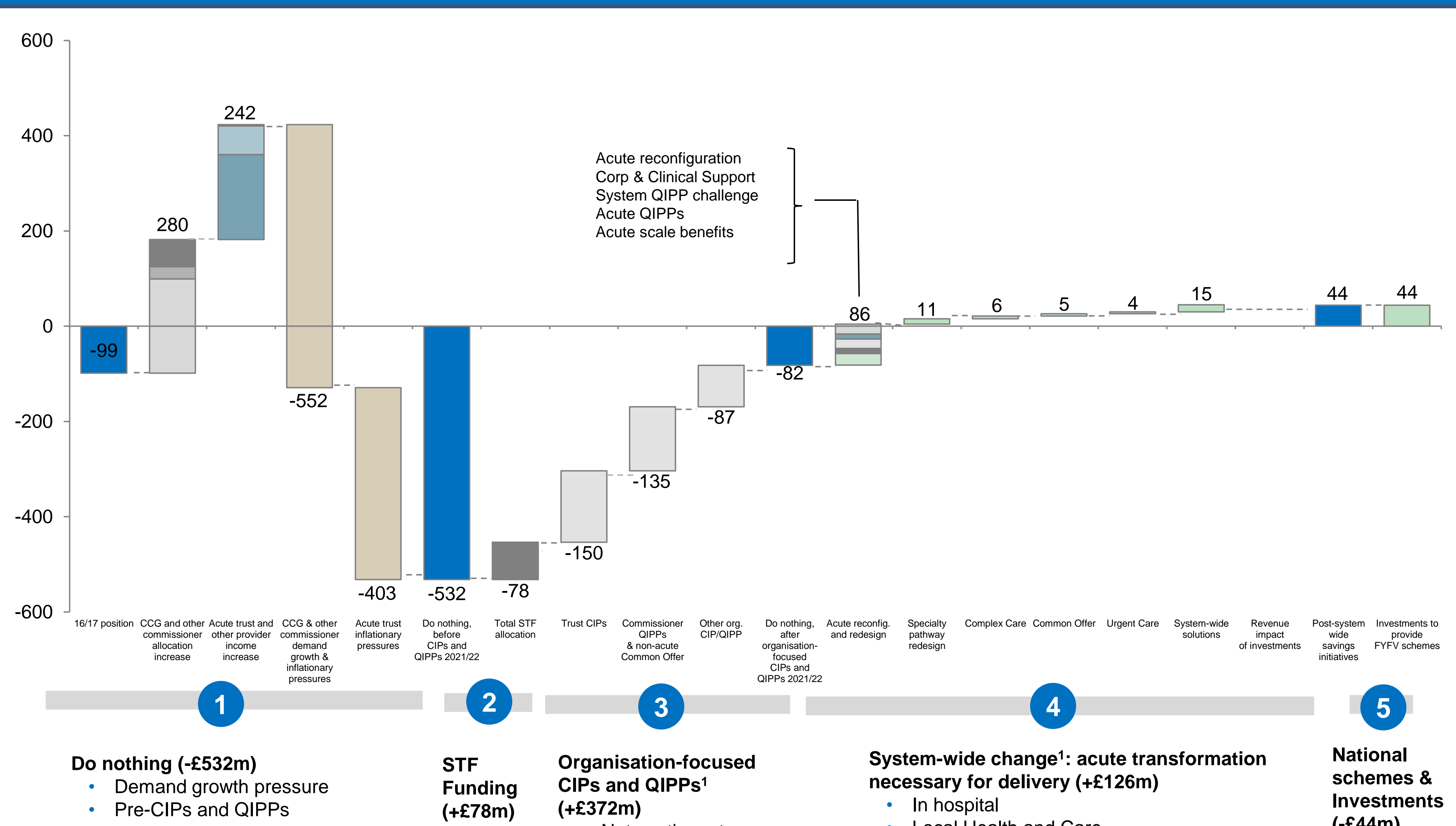
System health income 16/17[3]: £2,451m

System health and care exp. 16/17[3]: £2,550m

System health deficit 16/17[4]: £99m

Note: all financials are 2015/16 estimates: Version 13,12th Feb modelling assumptions
1. Population based on October 2015 2. Travel times without traffic from google (Jan 16)
3. Includes estimate of social care expenditure (based on 14/15 report) related to health and CCG mental health expenditure
4. Deficit relates to health only

Finance Bridge: 2021/22

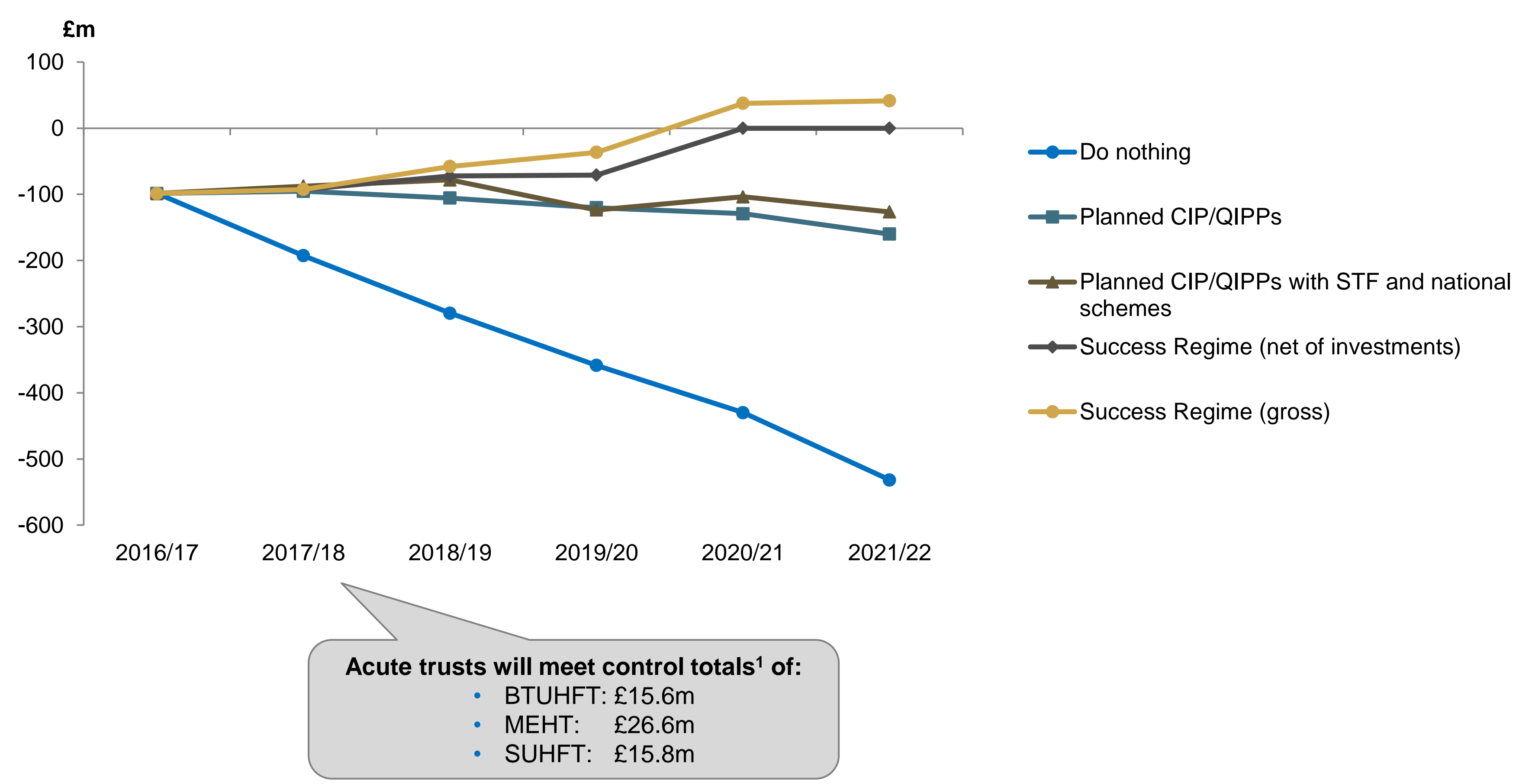


Direct efficiencies and pathway changes to enable each other, delivering ~£130m in in-year savings by 2021/22

	Initiative	Description	LHC Pathway changes	Acute reconfig	Other savings	Total impact (£m)
Direct efficiencies	Efficiency Savings	Consolidation of services to 1 or 2 sites will ensure adoption of most efficient model between the three sites		20.8		**20.8**
	Clinical support services	Pan-trust initiatives: including Radiology, Pathology, CSSD, Pharmacy		5.8		**5.8**
	Corporate support services	Pan-trust initiatives: including IT, Estates, HR, Finance etc.		4.7		**4.7**
	Commissioner efficiencies	Joint working initiatives			5.0	**5.0**
	System estates footprint	Rationalisation			5.0	**5.0**
	Other acute recon-figuration and redesign	Acute CIPs and QIPPs unlocked by system reconfiguration, overhead gain on growth, balance to achieve control totals			54.2	**54.2**
Pathway changes	Specialty Pathway Redesign	Reduce outpatient FUs by moving to community and using technology	11.2			**11.2**
	Complex care (Frailty, EOL and LTCs)	Frailty and EOL: Proactively manage complex cohorts in integrated neighbourhood hubs; Initial focus on frailty (>75s) through identification & care planning, proactive care delivery, acute interface (FAU1 & D2A2), and coordinated EoL services and pathway redesign to keep bed days flat. LTCs: Improve self-management and MDTs	5.7			**5.7**
	Common Offer	Reduce and restrict low value procedures in hospitals	4.9			**4.9**
	Urgent Care	Improved triage at Clinical Support Desk and on-scene to reduce number of conveyances to A&E, with enhanced clinical capabilities in 111 and ambulance service	4.0			**4.0**
	Repatriation of work	Repatriate profitable work from private providers; deliver profitable work currently done by London / out of Essex			5.2	**5.2**
	Total	These initiatives will support and enable a further >£100m in system savings	**25.8**	**31.3**	**69.4**	**126.5**

Note: Additional QIPP will need to be added across these areas

Momentum case: year-on-year financial system challenge



Note: STF funds are organisation-specific up to 19/20, but not in 20/21

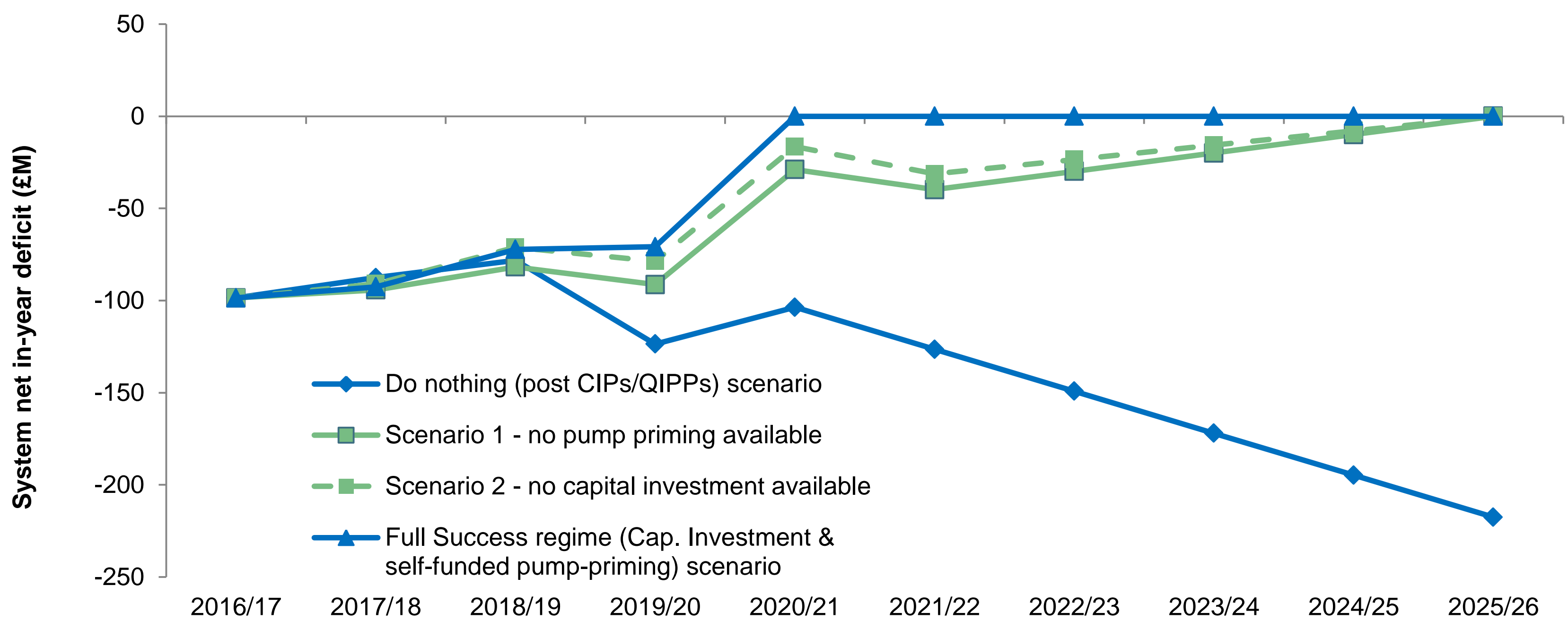
Summary of additional transitional expenditure required to deliver system savings

	Funding	Investment (£m)	17/18	18/19	19/20	20/21	21/22	Description
System transformation	External support required		0.0	0.0	0.0	0.0	0.0	• Assume no funding additional to the system
	Self-funded		1.0	1.0	0.0	0.0	0.0	• Corp & clinical transformation
			0.6	1.9	0.0	0.0	0.0	• Acute reconfiguration
			0.0	2.0	0.0	0.0	0.0	• Common offer
			0.0	3.0	3.0	0.0	0.0	• Specialist pathway redesign
			0.0	0.0	8.0	8.3	10.9	• System wide (inc project management, redundancy support, estate costs)
		Total	**1.6**	**7.9**	**11.0**	**8.3**	**10.9**	
		Total (cumulative)	**1.6**	**9.5**	**20.5**	**28.8**	**39.7**	

Capital requirements

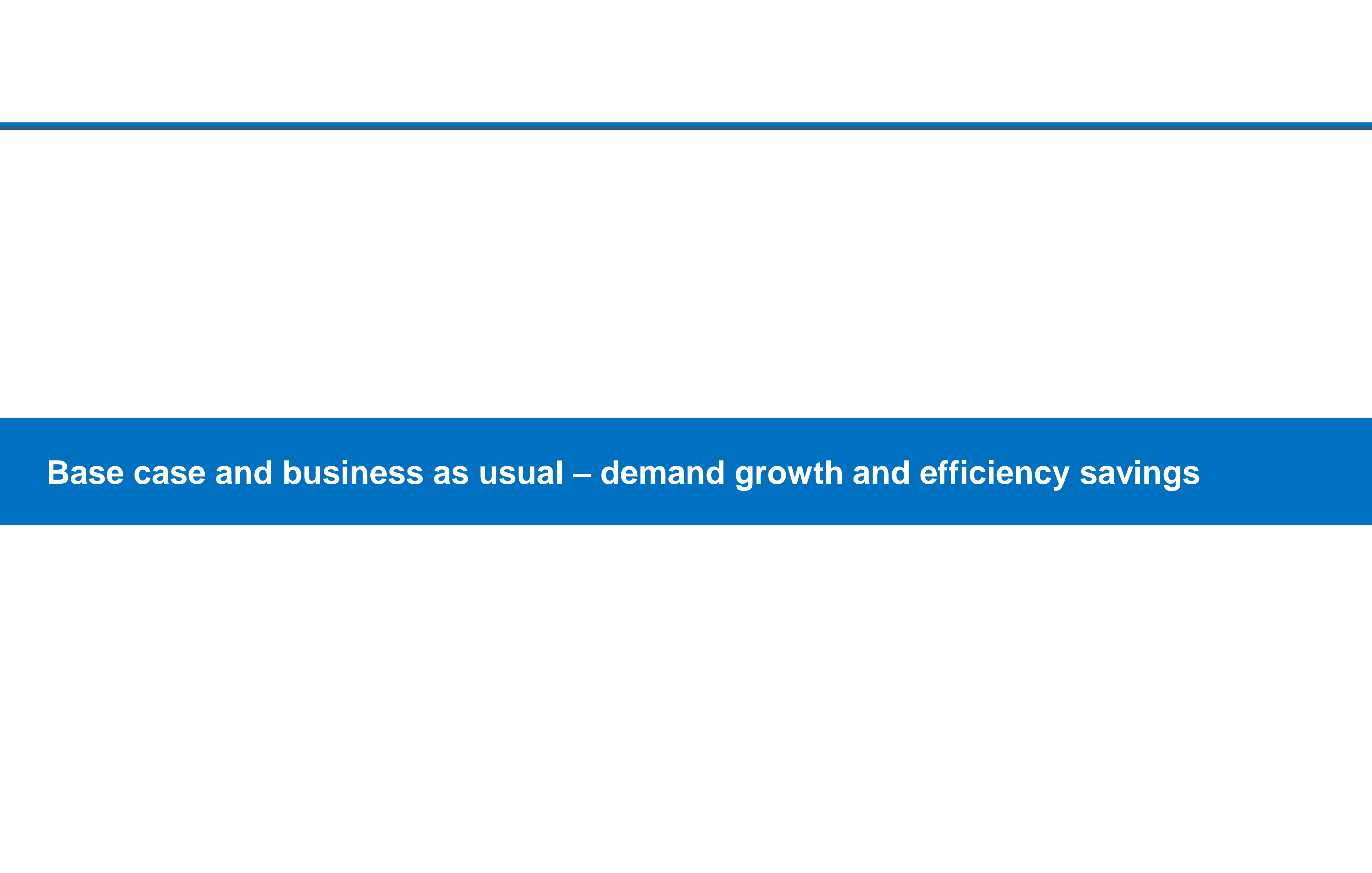
Type	Investment (£m)	17/18	18/19	19/20	20/21	21/22	Total 17/18-21/22	Total Scheme
Acute investment (preferred option)	BTUHFT	-	0.1	0.3	10	21	31	40
	MEHT	-	0.1	0.3	5	10	15	19
	SUHFT	-	0.1	0.3	10	22	33	41
	Other (net of disposal receipts)	-	0	0	4	9	14	18
	Total acute reconfiguration	**-**	**0.3**	**1**	**29**	**62**	**93**	**118**
Other system capital investment	Corporate and clinical support systems	-	6	8	5	-	19	19
	Commissioners (Local Health & Care)	2	30	34	10	1	77	77
	FYFV capital investment	-	7	8	9	7	30	30
	Total system investment	**2**	**43**	**50**	**24**	**8**	**126**	**126**
BAU Capital	Providers BAU Capital	46	46	31	31	30	185	185
	Total Capital Investment	**48**	**89**	**82**	**84**	**100**	**404**	**429**

Impact of Success Regime investments



In-year deficit 2021/22 (£M)	NPV[1]
Do nothing post CIPs/QIPPs	n/a
Impact if Capital investment only (i.e. no pump priming available)	~£87m
Impact if pump priming available only (i.e. no capital available)	~£95m
Full SR with pump-priming	~£126m

Note:. Based on discount rate of 3.5%. Capital investment scenario assumed to have half of impact of SR until 2020/21, then experiencing constant improvement until reaching 1% (~£31m) surplus in 20205/26. Full SR assuming achieving ~1% footprint surplus (~£31M based on 20/21 values in STP submission) from 2021/22 onwards with no further investment, excluding STF funding, and extrapolating do-nothing deficit growth. Note: This model is based on the preferred option.


Base case and business as usual – demand growth and efficiency savings

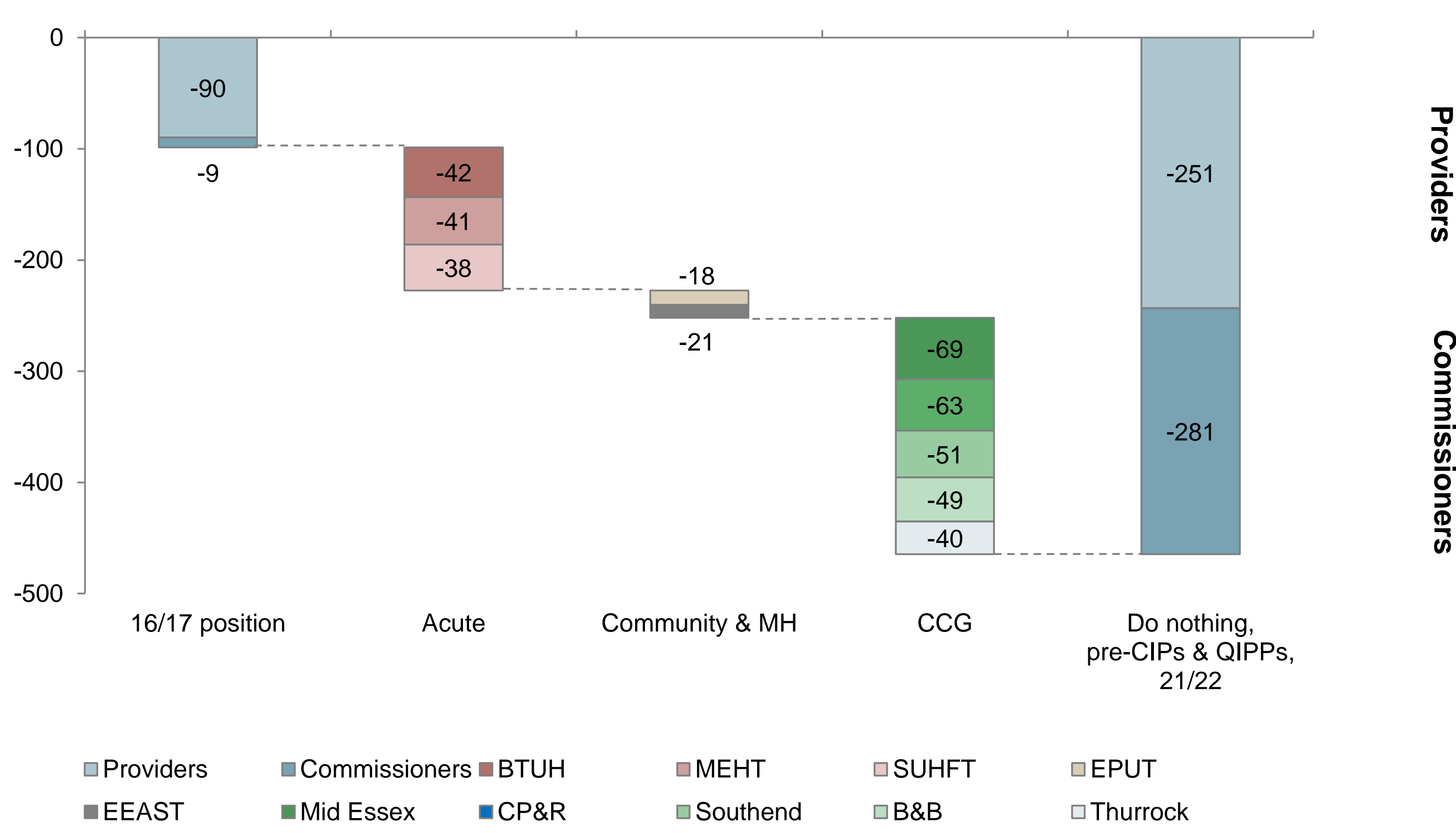
Base case and business as usual: context

Under the base case of care, momentum system income and expenditure is driven by:

Baseline deficit	• System-wide financial position for commissioners and providers in 2016/17 (in-year deficit of £99m)[1]
Momentum case	• Expected uplift in commissioner allocation, change in demand and inflationary pressures • Demographic and non-demographic drivers of demand for health services
Current CIP/QIPP plans	• Trust CIPs and CCG QIPPs and other organisations savings based on most recent plan submissions

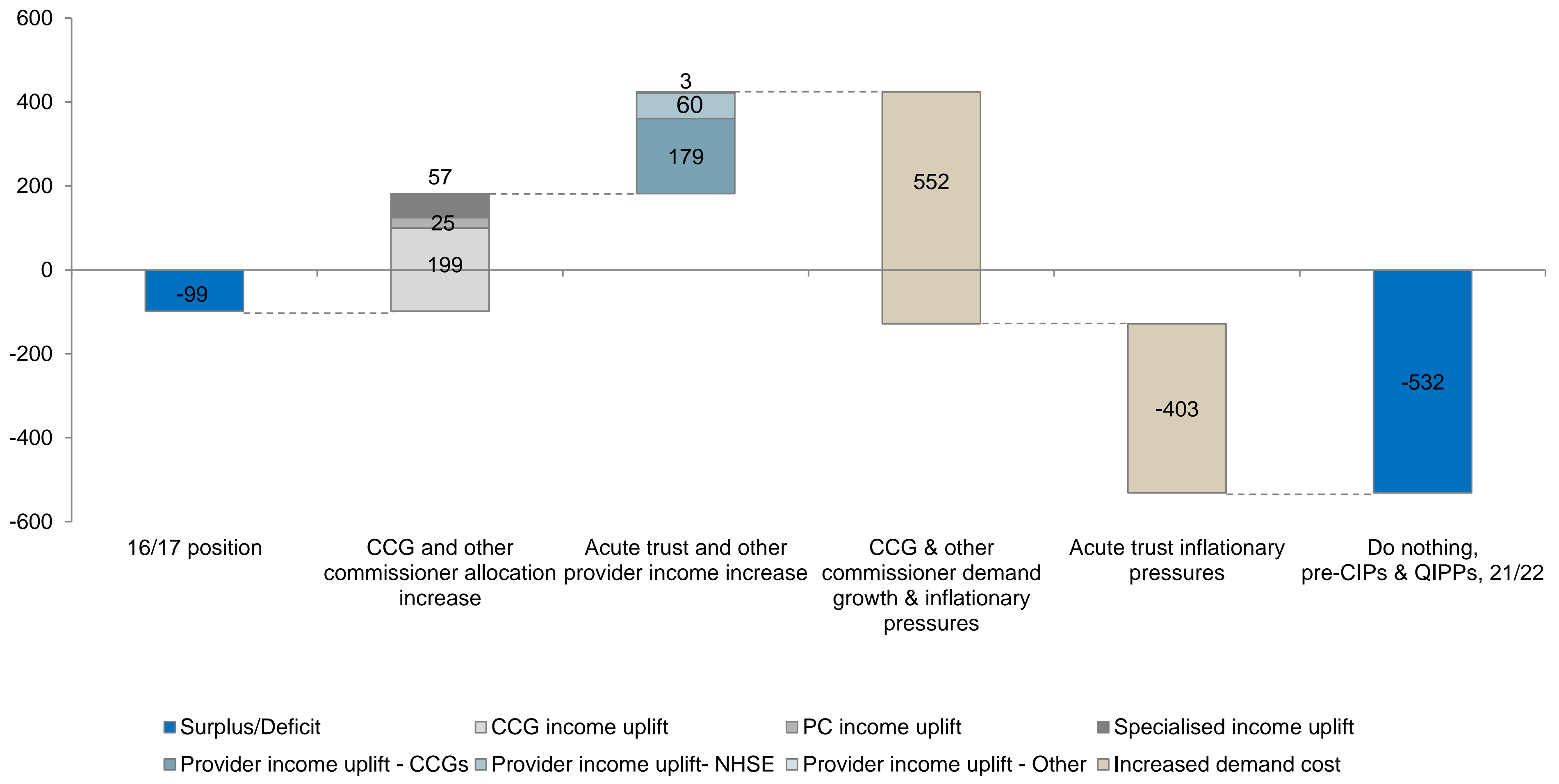
1. Excludes historic debt amongst 5 CCGs of £34m

Momentum case: drivers of the system challenge in 2021/22



Source: STP Submission 16.09.16, SR workstreams, Trust and CCG financials

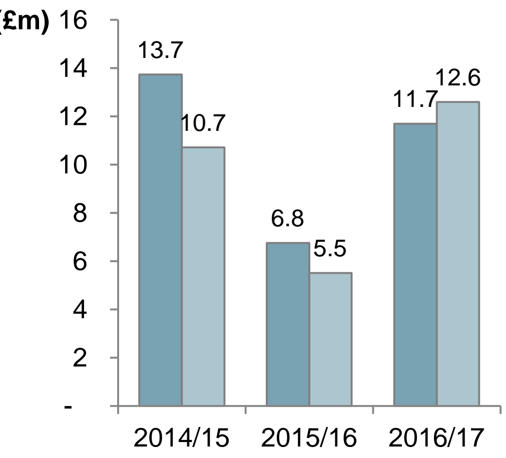
Do nothing: impact by 2021/22 *pre CIP/QIPP*



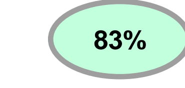
1. Demand growth pressure is the increased demand between 2016/17 in-year position and 2021/22 in-year position for services based on demographic and non-demographic demand growth projections based on national and local projections per organisation 2.Income uplift is the increase in allocations between 2016/17 in-year position and 2021/22 in-year position based on projected allocations to trusts, CCGs and other NHS organisations Source: STP Submissions, Trust and CCG financials

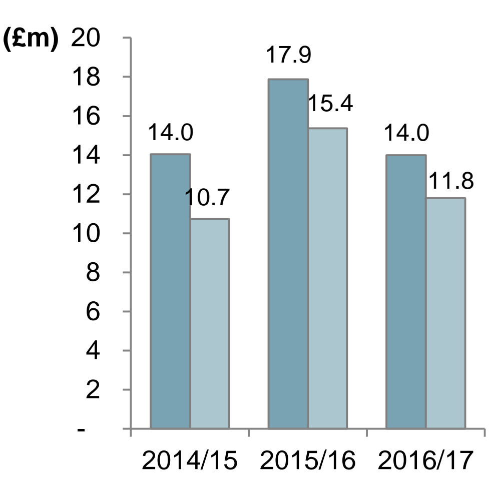
CIPs: predicted vs actual savings 2014/15 – 2016/17

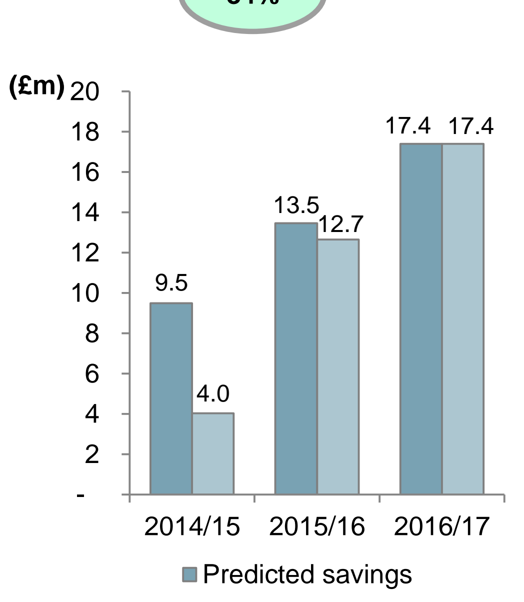
BTUHFT predicted vs actual CIPs savings



MEHT predicted vs actual CIPs savings

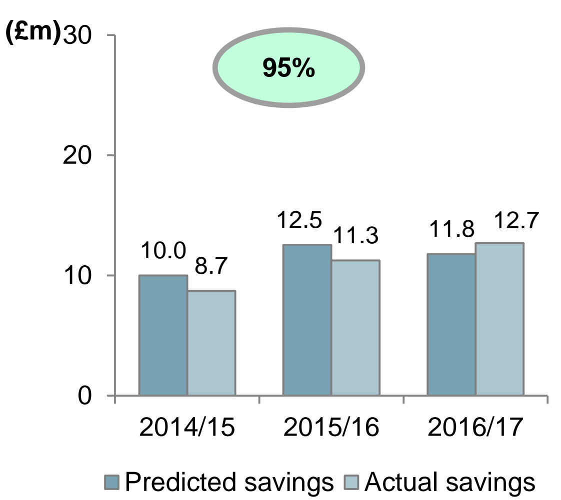


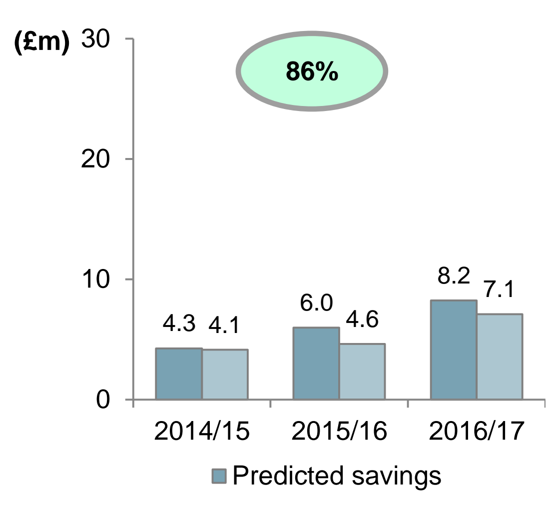


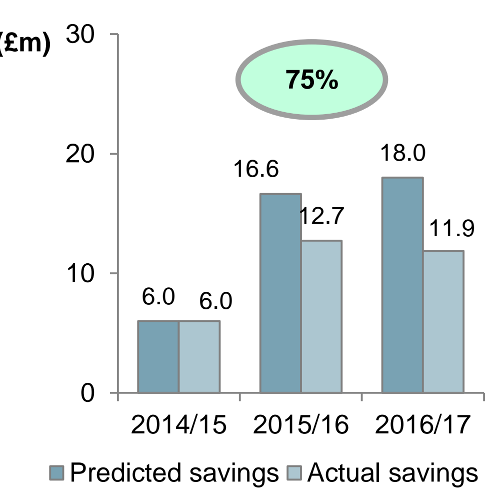


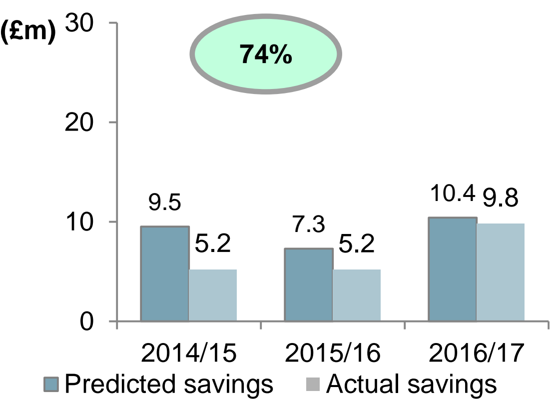
85% average achievement of CIPs

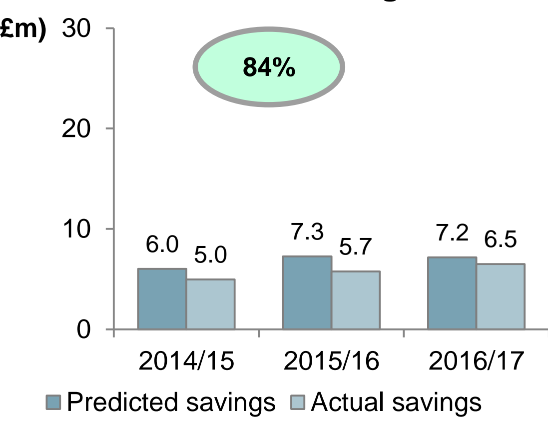
QIPPs: predicted vs actual savings 2014/15 – 2016/17











CIPs: savings assumptions by 2021/22

Assumed CIPs by organization (in £M, % of income in parentheses)

Trust	2017/18	2018/19	2019/20	2020/21	2021/22
BTUHFT	15.3	25.3	34.0	42.7	52.4
MEHT	13.3	24.0	32.1	40.9	50.4
SUHFT	8.8	20.5	28.4	37.3	47.3
Total	**37.4 (3.8%)**	**69.8 (3.6%)**	**94.5 (3.2%)**	**120.8 (3.0%)**	**150.1 (2.9%)**

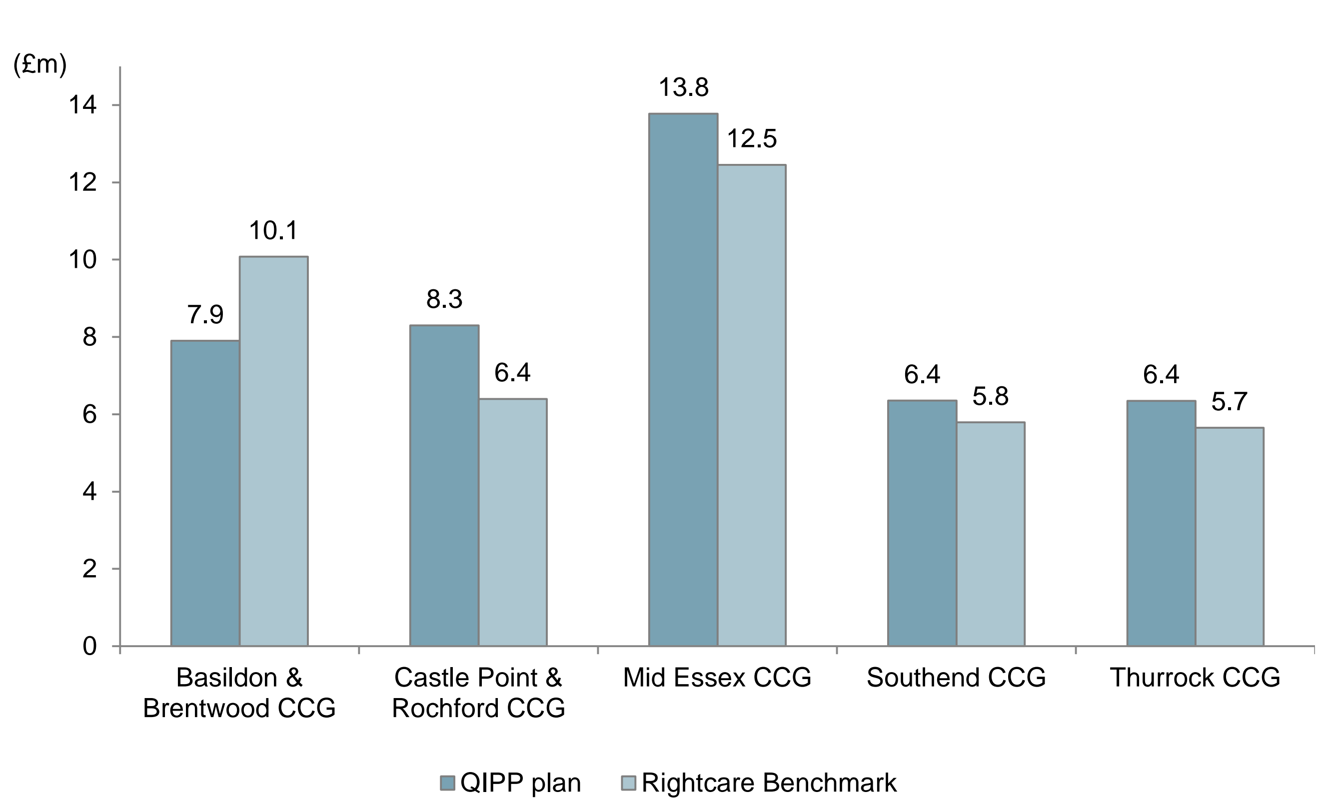
Assumed CIPs by category (£M), 2021/22

Initiative	Total
Workforce – substantive & bank	74.4
Workforce – agency	13.9
Drugs	7.9
Procurement (non pay)	47.9
Capital (revenue cost)	0.5
Litigation	1.0
Provider other	0.0
Income growth	4.5
Total	**150.1**

Source: STP submission

QIPPs: benchmarking with RightCare

Comparison of CCG QIPP schemes to RightCare benchmarks 2016/17



Comments

Mid Essex, CP&R, Thurrock and Southend are in line with RightCare benchmarking

Basildon and Brentwood has a target below RightCare targets as they are forecasting lower growth

All figures are taken from RightCare 'Where to look' documents January 2016

CCG QIPPs excl. acute: savings assumptions by 2021/22

Assumed QIPPs by CCG (£M)[1]

CCG	2017/18	2018/19	2019/20	2020/21	2021/22
Basildon & Brentwood	9.5	14.1	18.4	21.8	26.3
Castle Point & Rochford	5.6	13.4	20.0	26.6	33.6
Mid Essex	12.6	16.8	22.0	27.0	30.7
Southend	7.9	17.4	21.6	24.2	27.9
Thurrock	4.3	7.2	10.6	14.3	16.0
Contingency	Included in figures above				
Total	**40.1 (2.7%)[2]**	**68.9 (2.3%)[2]**	**92.6 (2.0%)[2]**	**113.9 (1.8%)[2]**	**134.5 (1.7%)[2]**

Assumed QIPPs by category (£M), 2021/22[1]

Initiative	Total
Mental health	19.7
Community health services	21.3
Other NHS	0.0
Continuing Care	38.8
Prescriptions	47.4
Other Primary Care	2.6
Admin	4.7
CCG Other	
Social Care Expenditure	0.0
Total	**134.5**

1. Figures include apportioned unallocated CCG savings schemes Source: CCG QIPP plans (2017/18, 2018/19 and minimum to achieve breakeven or control totals 2019/20, 2020/21, 2021/22))
2. Additional QIPP challenge to deliver 2.5% QIPP target is included within system solutions

Other organizations CIPs/QIPPs[1]

Assumed CIPs/QIPPs by organization (£M)

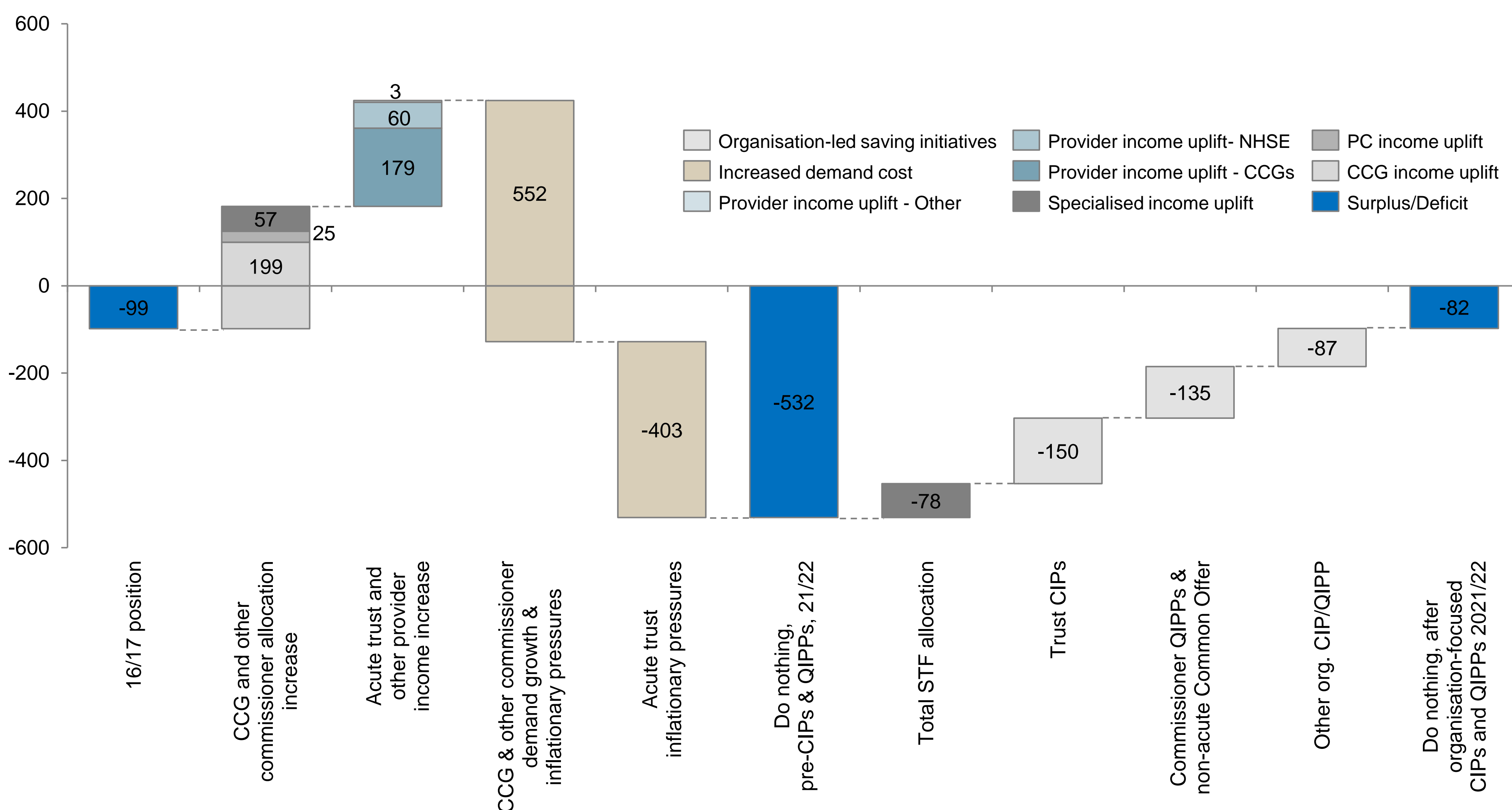
CCG	2017/18	2018/19	2019/20	2020/21	2021/22
EPUT	4.5	9.3	14.9	18.7	22.3
EEAST	9.3	13.1	16.1	18.7	21.1
Specialised Commiss'ng	6.1	12.8	20.2	28.5	43.7
Total	**19.9 (4.6%)**	**35.2 (4.0%)**	**51.2 (3.8%)**	**65.8 (3.6%)**	**87.0 (3.8%)**

Assumed CIPs/QIPPs by category (£M), 2021/22

Initiative	Total
Workforce – substantive & bank	29.6
Workforce – agency	1.5
Drugs	0.1
Procurement (non pay)	5.1
Capital (revenue cost)	0.5
Litigation	0.1
Provider other	6.4
Specialised commissioning	43.7
Total	**87.0**

1. Other providers: Essex Partnership University Foundation Trust (EPUT),, East of England Ambulance Service Trust (EEAST), Specialised Commissioning. Source: STP submission

Base case: system position without SR initiatives by 2021/22



1. Demand growth pressure is the increased demand between 2015/16 in-year position and 2020/21 in-year position for service based on demographic and non-demographic demand growth projections based on national and local projections per organisation 2. income uplift is the increase in allocations between 2015/16 in-year position and 2020/21 in-year position based on projected allocations to trusts, CCGs and other NHS organisations Source: STP Submission 16.09.16, SR workstreams, Trust and CCG financials

2021/22 base case: sensitivity analysis

Do nothing expenditure growth (p.a.)

Aggregate Cost Improvement Programmes (CIP & QIPP) as % of income

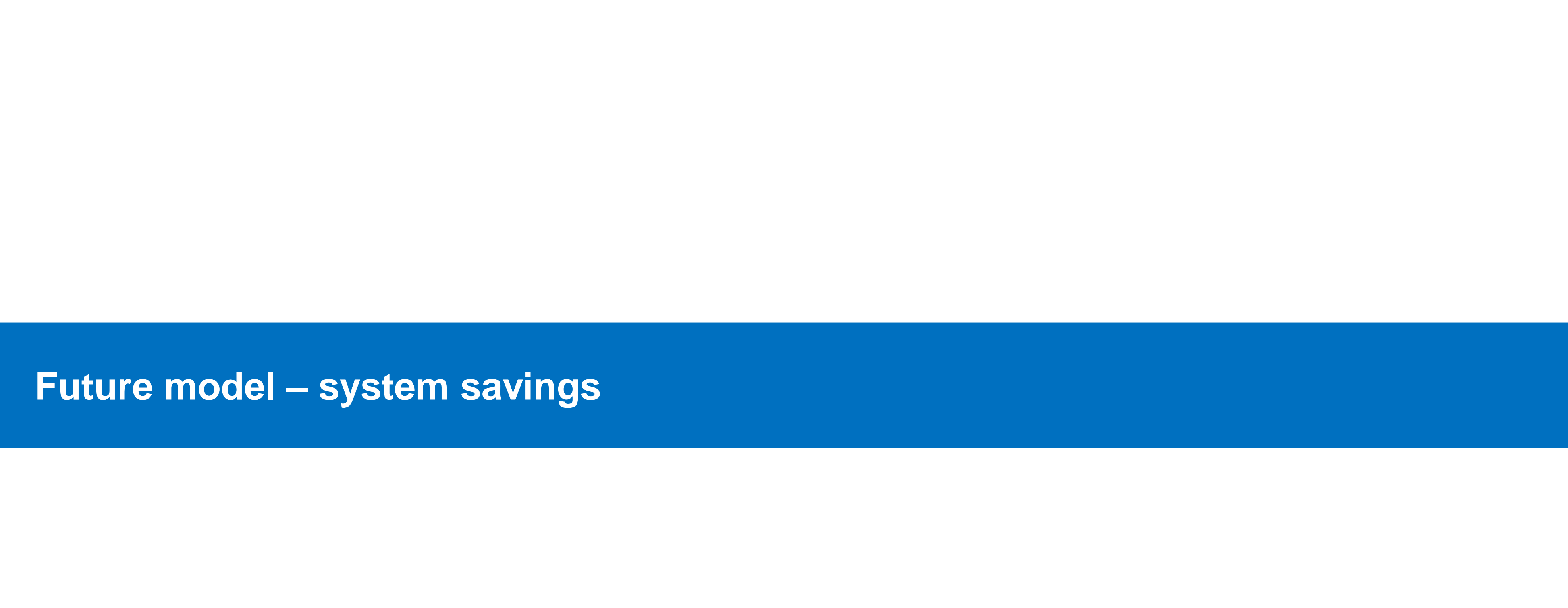
	2.56%	3.56%	4.56%	5.56%	6.56%	7.56%	8.56%
15.8%	564	391	210	23	-172	-374	-584
14.8%	529	356	175	-12	-207	-409	-619
13.8%	494	321	140	-47	-242	-444	-654
12.8%	459	286	105	-82	-277	-479	-689
11.8%	424	251	70	-117	-312	-514	-724
10.8%	389	216	35	-152	-347	-549	-759
9.8%	354	181	0	-187	-382	-584	-794
8.8%	319	146	-35	-222	-417	-619	-829

Momentum case

Deficit higher than in 2015/16

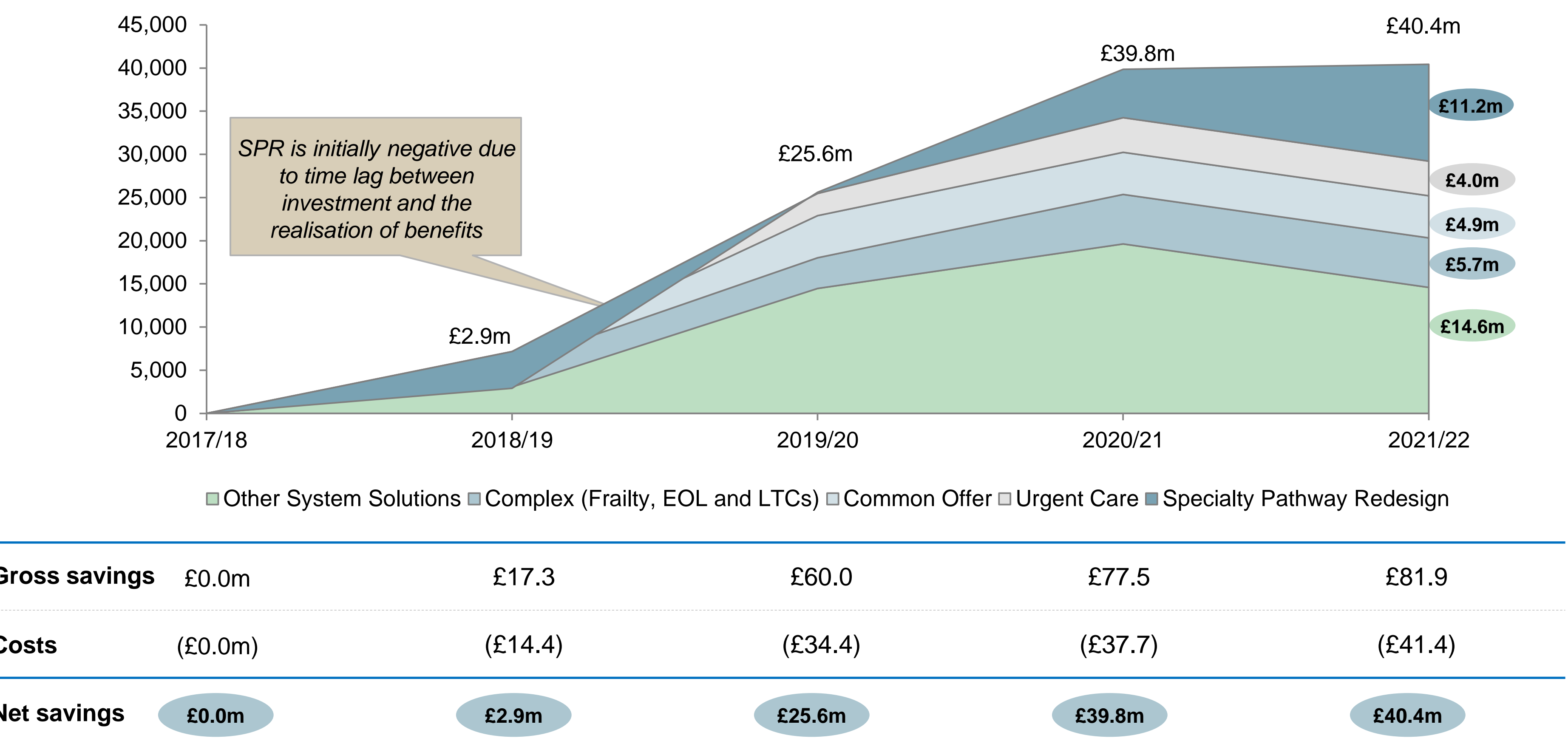
Deficit lower than in 2015/16

Surplus


Future model – system savings

Financial savings: phasing

Year by year impact of Local Health and Care savings



	2017/18	2018/19	2019/20	2020/21	2021/22
Gross savings	£0.0m	£17.3	£60.0	£77.5	£81.9
Costs	(£0.0m)	(£14.4)	(£34.4)	(£37.7)	(£41.4)
Net savings	**£0.0m**	**£2.9m**	**£25.6m**	**£39.8m**	**£40.4m**

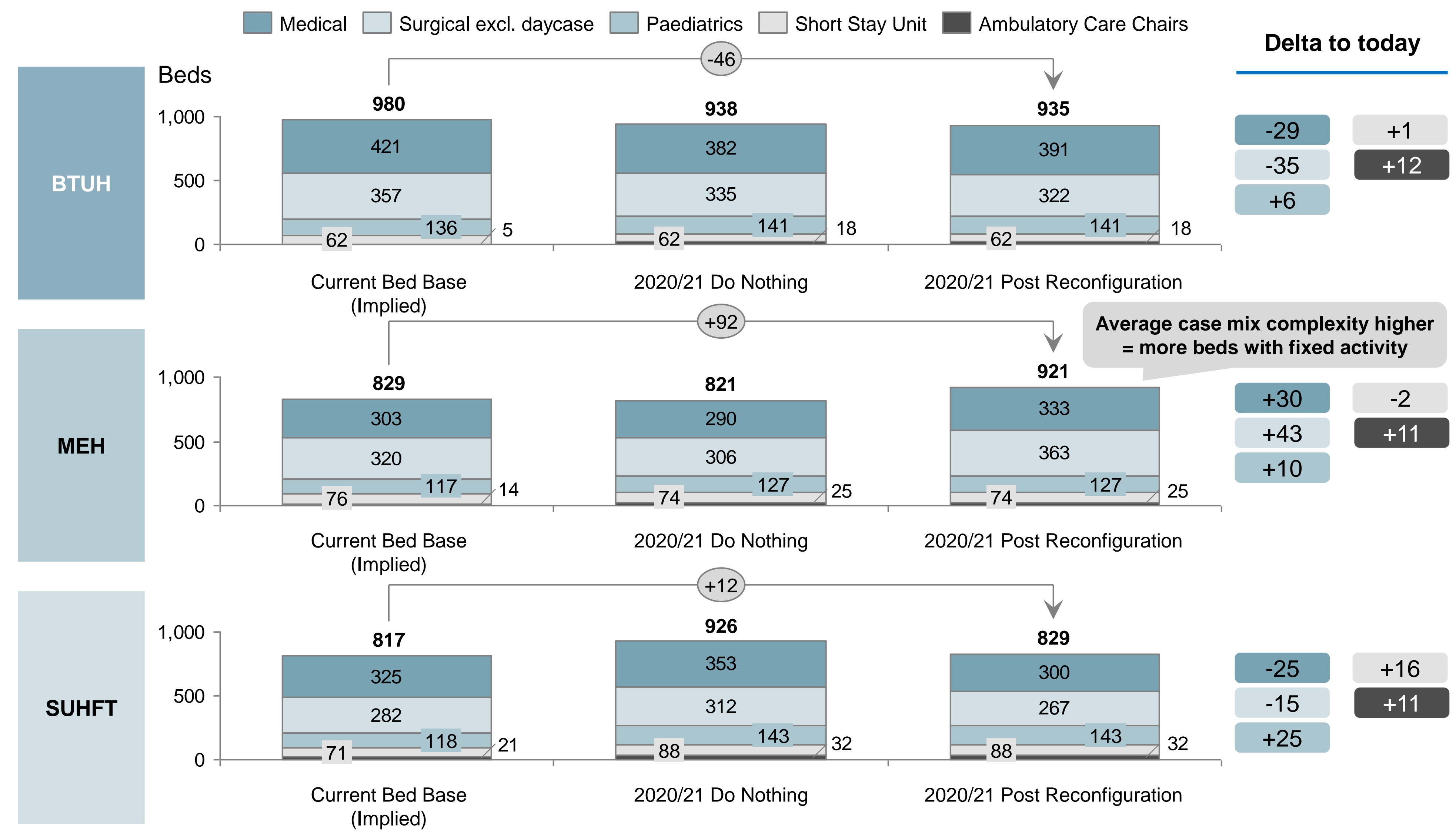
Source: Financial model

In hospital: introduction to acute reconfiguration proposed model of care

	Today	Future
Approach	MEHT, BTUH, SUHFT **3x District General Hospitals** with specialist services (Burns, CTC, Radiotherapy)	MEHT, BTUH, SUHFT **1x Specialist Emergency Surgical Hospital** **1x Specialist Emergency Medical Hospital** **1x Specialist Cancer and Elective Hospital**
Emergency Care	**24/7 Access to A&E** • Some specialist services go direct to specialist centre (e.g. Burns)	**24/7 Access to A&E, with enhanced Ambulatory Care** • Some additional specialist services go direct to specialist centre (e.g. Vascular Surgery) • Some patients with complex requirements may be **stabilised**/receive immediate treatment at their local hospital, before being **transferred** to a specialist hospital for their care (e.g. Stroke,)
Elective Care	**Most elective and daycase is delivered locally, unless it requires very specialized intervention**	**Most elective and daycase will remain local** • However, some Cancer and specialist surgery will take place in the specialist Cancer and Elective Hospital
Women's	**Delivered locally in hospital**	**Delivered locally in hospital except complex cases**
Paediatrics	**Delivered locally in hospital**	**Delivered locally in hospital except complex cases, provided at Children's Centre**
Frailty	**Delivered locally in hospital**	**Delivered locally in hospital except complex cases**
Outpatients	**Delivered locally in hospital**	**Delivered locally in hospital or in the community**

Reconfiguration: activity implications (IP)

Implied bed base at 92% occupancy (rather than actual bed base)



Source: IP Activity Modelling – 31 August 2017; Assumes 92% occupancy. Implied bed-base (not actual bed base). Includes cots as beds. Note: Includes daycase beds
Pre-reconfiguration data assumes both activity growth and local health and care initiatives to control demand

Reconfiguration: activity implications (Critical Care)

Total Critical Care bed days

	BTUH	MEHT	SUHFT	Total
15/16	6,363	6,074	9,790	22,227
20/21	8,296	9,694	8,449	26,439
Delta	**1,934**	**3,620**	**-1,341**	**4,213**
Growth (%)	**30%**	**60%**	**-14%**	**19%**

Total Critical Care beds required

	BTUH	MEHT	SUHFT	Total
15/16	17	17	27	61
20/21	23	27	23	72
Delta	**5.3**	**9.9**	**-3.7**	**11.5**
Growth (%)	**31%**	**59%**	**-14%**	**19%**

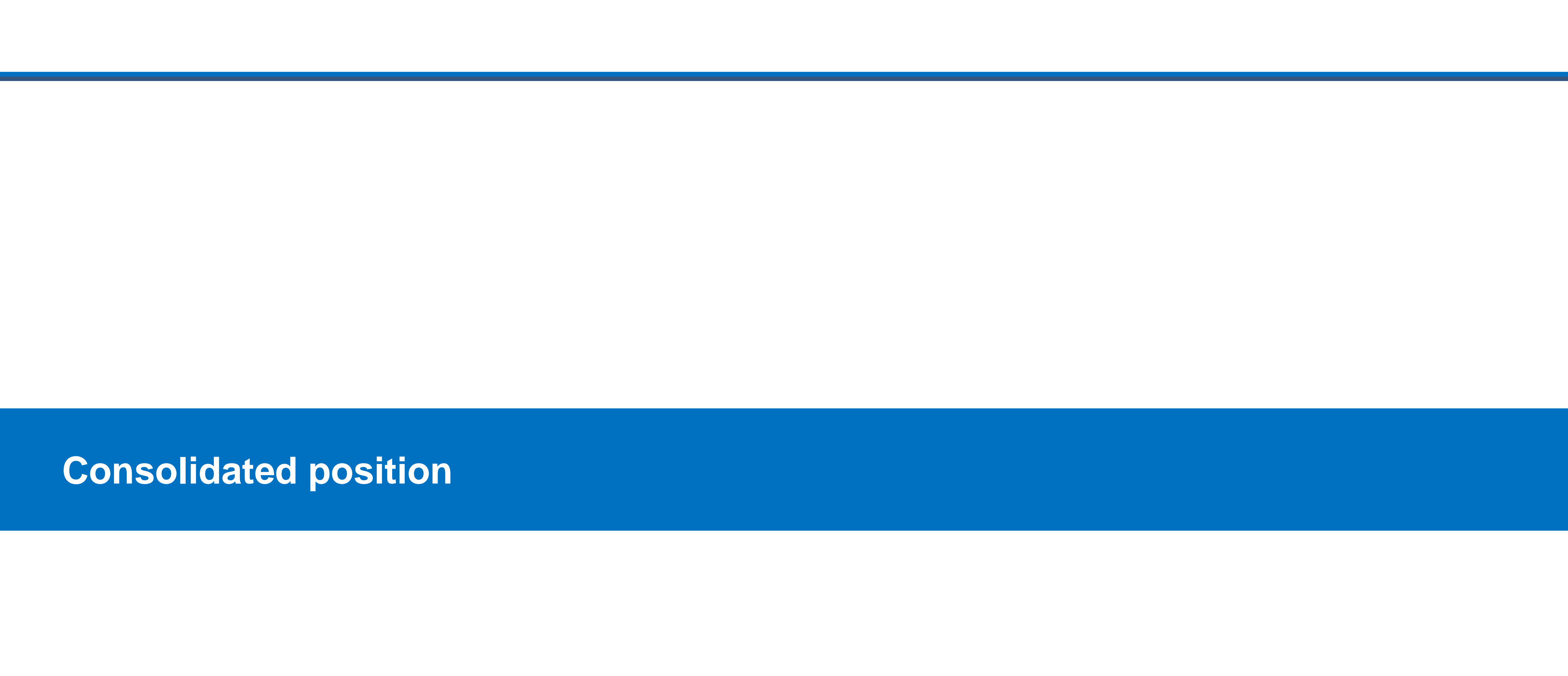
Reconfiguration: activity implications (Theatres)

	Today (2016/17)			Do nothing			Reconfiguration		
Category	**BTUH**	**MEHT**	**SUH**	**BTUH**	**MEHT**	**SUH**	**BTUH**	**MEHT**	**SUH**
Non-Elective	7,674	13,181	3,765	6,051	10,927	3,381	5,724	13,271	1,363
Elective	14,514	24,849	13,286	14,683	24,328	15,104	8,275	30,971	14,869
Total	22,189	38,031	17,051	20,733	35,255	18,485	13,999	44,242	16,232
Delta to today							**-8,190 (-37%)**	**+6,211 (+16%)**	**-819 (-5%)**

National schemes and other investments

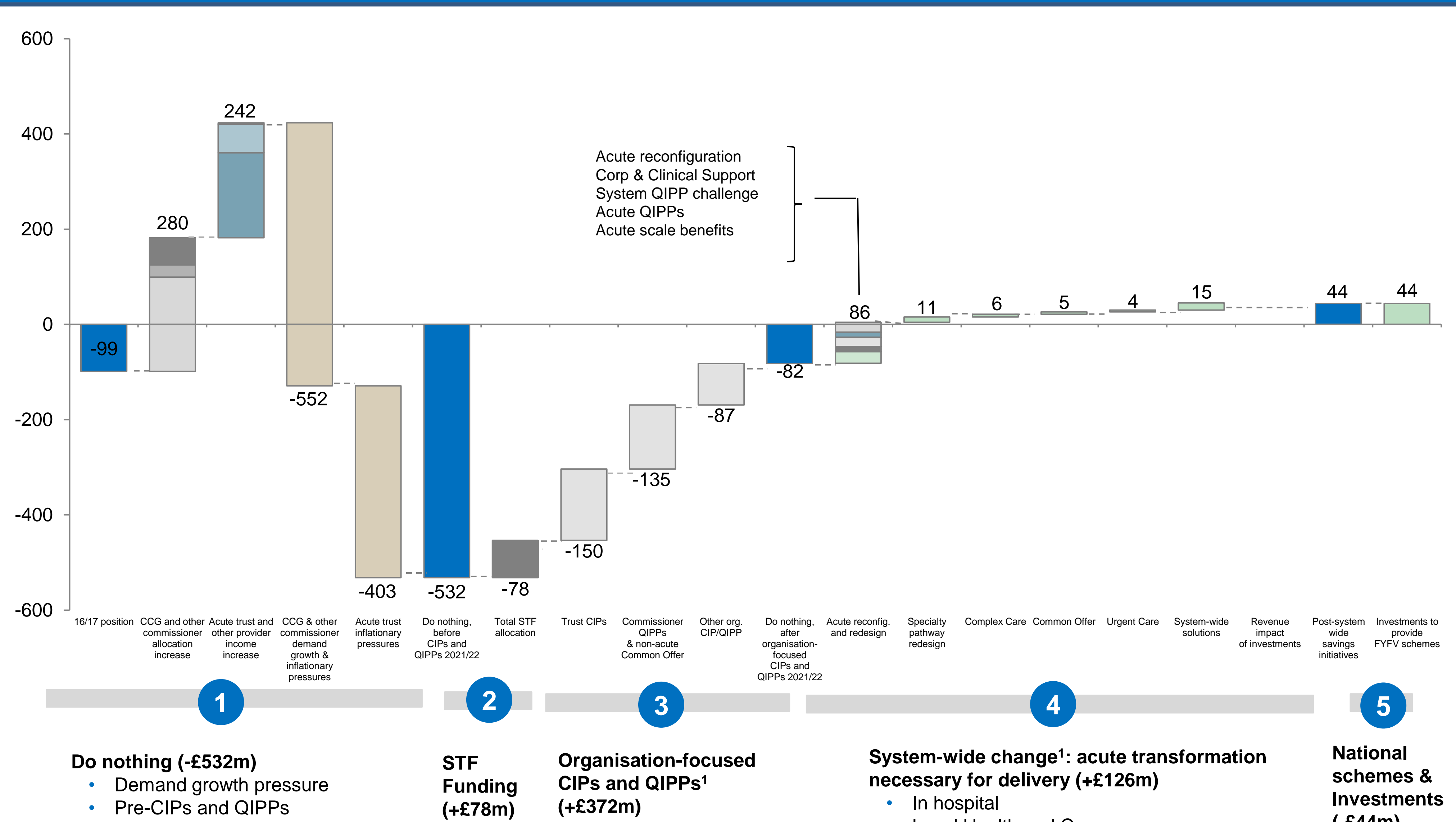
National schemes and other investments

Investments (£M)	17/18	18/19	19/20	20/21	21/22	Notes
Seven Day Services Roll Out Through To 2019/20	6.8	6.8	17.9	18.7	19.6	Gross costs, excluding savings. Based on 1.5% cost of acute services. MH & Community impact to be assessed.
Delivering GP Forward View and Extended GP Access	1.4	2.0	0.1	16.1	8.5	Additional spend above baseline plans to bring investment in primary care to £48m over 5 years in line with £2.4bn national investment.
Increasing children& adolescent mental health services and delivering access & wait targets for eating disorders services	0.4	0.5	0.6	0.6	0.6	Mid and South Essex impact of £30m national investment nationally by 2020/21.
Implementing The Recommendations Of The Mental Health Taskforce	2.7	2.0	1.7	5.6	3.3	Mid and South Essex impact of the requirements of the MH Taskforce, gross of central funding.
Cancer Taskforce Strategy	0.6	0.6	5.0	5.0	2.5	Costs as per Cancer Taskforce Strategy Implementation paper to NHSE Board 28/1/16. Assumed mid-point level of investment.
National Maternity Review	0.0	0.0	0.8	0.8	0.8	From National Maternity Review and based on early adopter costs (£150k per CCG by 2020/21).
Investment In preventing & tackling childhood obesity, improving diabetes diagnosis and care	0.0	0.0	2.7	3.1	3.1	Assumed impact of allocating 3.9% STF funding for prevention by 20/21.
Local Digital Roadmaps for Paper Free At Point Of Care & Elec. Health Records	0.1	0.1	2.0	2.5	1.0	Revenue impact of LDR implementation and on-going costs from 20/21.
National schemes total	**11.9**	**11.8**	**30.8**	**52.4**	**39.4**	
Provision for local investments	0.0	0.0	0.0	0.0	5.0	Local provision beyond scope of FYFV.
Transition costs (inc. 7 Day Services)	1.6	7.9	11.0	8.3	10.9	Included in financial bridge.
Total	**13.5**	**19.7**	**41.8**	**60.7**	**55.3**	



Consolidated position

Finance Bridge: 2021/22



Do nothing (-£532m)
- Demand growth pressure
- Pre-CIPs and QIPPs

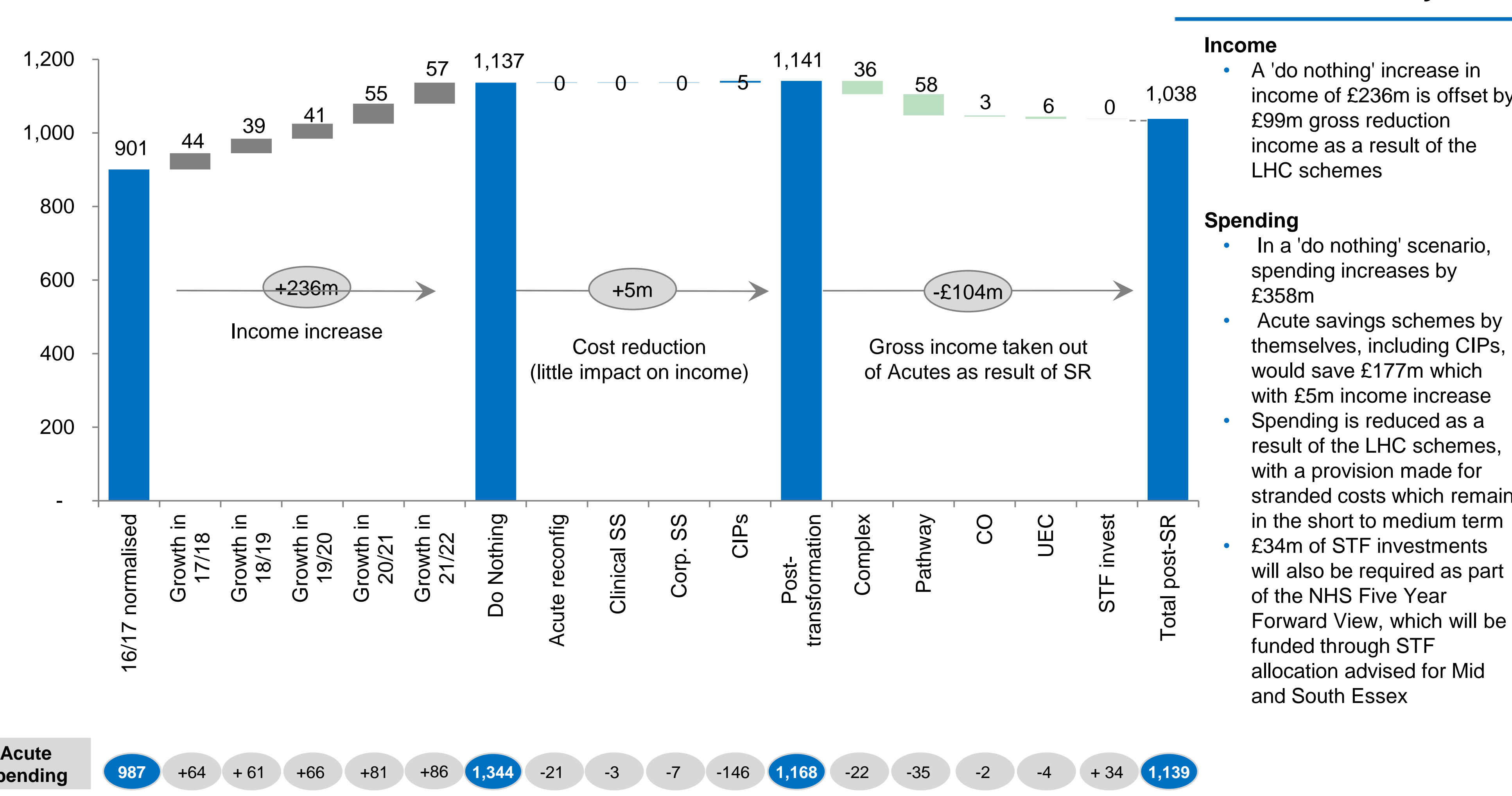
STF Funding (+£78m)

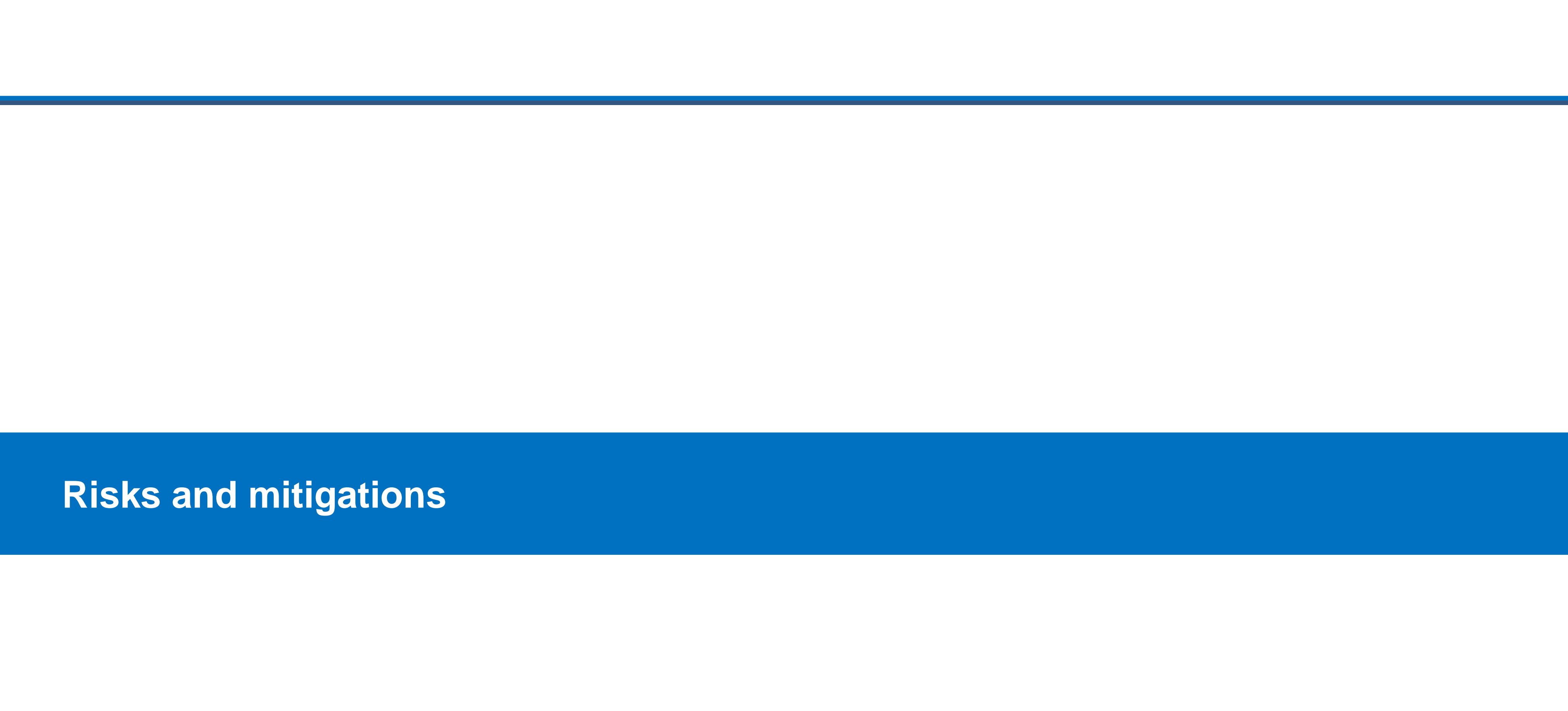
Organisation-focused CIPs and QIPPs[1] (+£372m)
- Not contingent on system change

System-wide change[1]: acute transformation necessary for delivery (+£126m)
- In hospital
- Local Health and Care

National schemes & Investments (-£44m)

Acute Trusts: revenue impact of SR

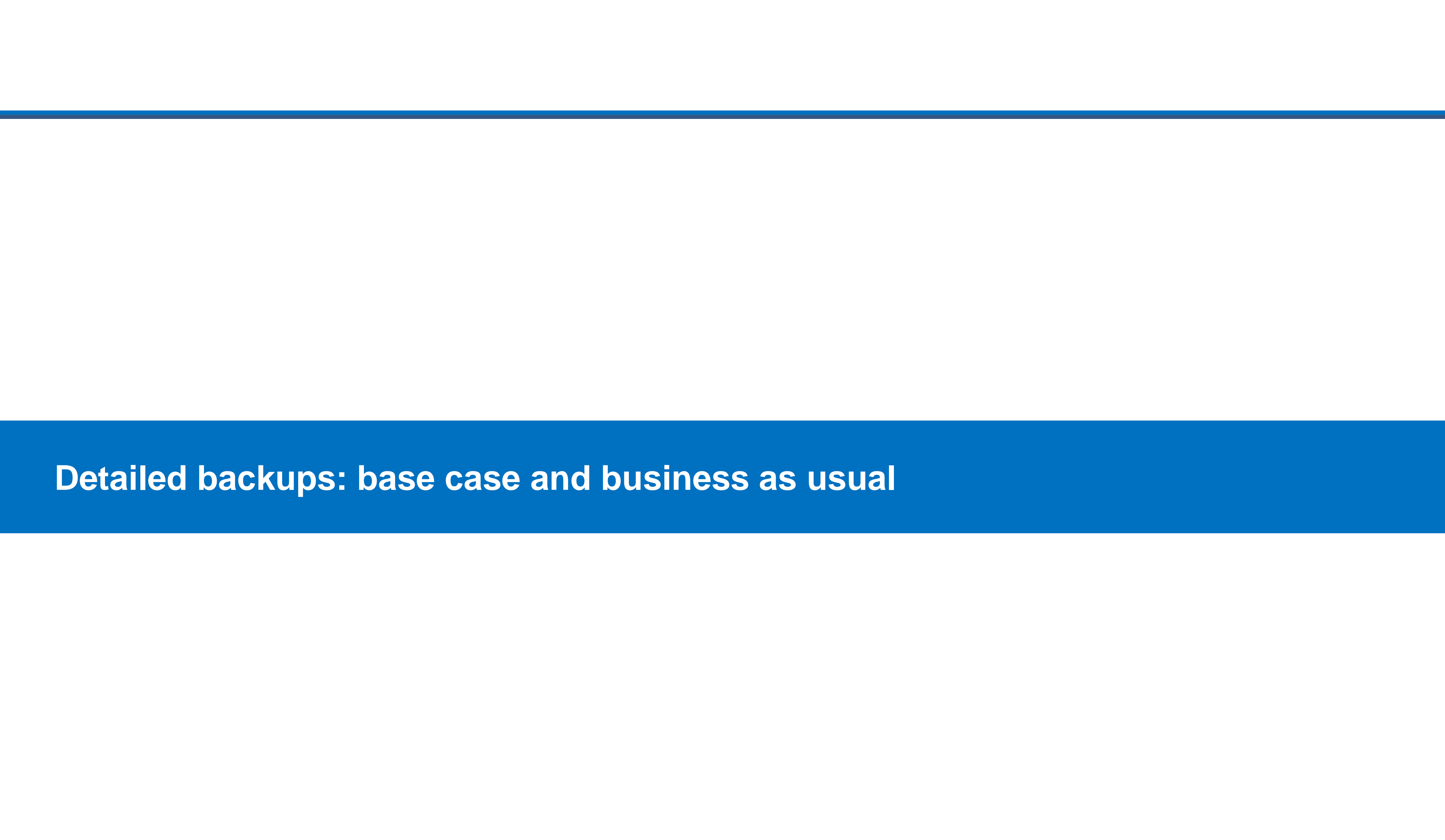




Risks and mitigations

Risk scenario modelling: finance

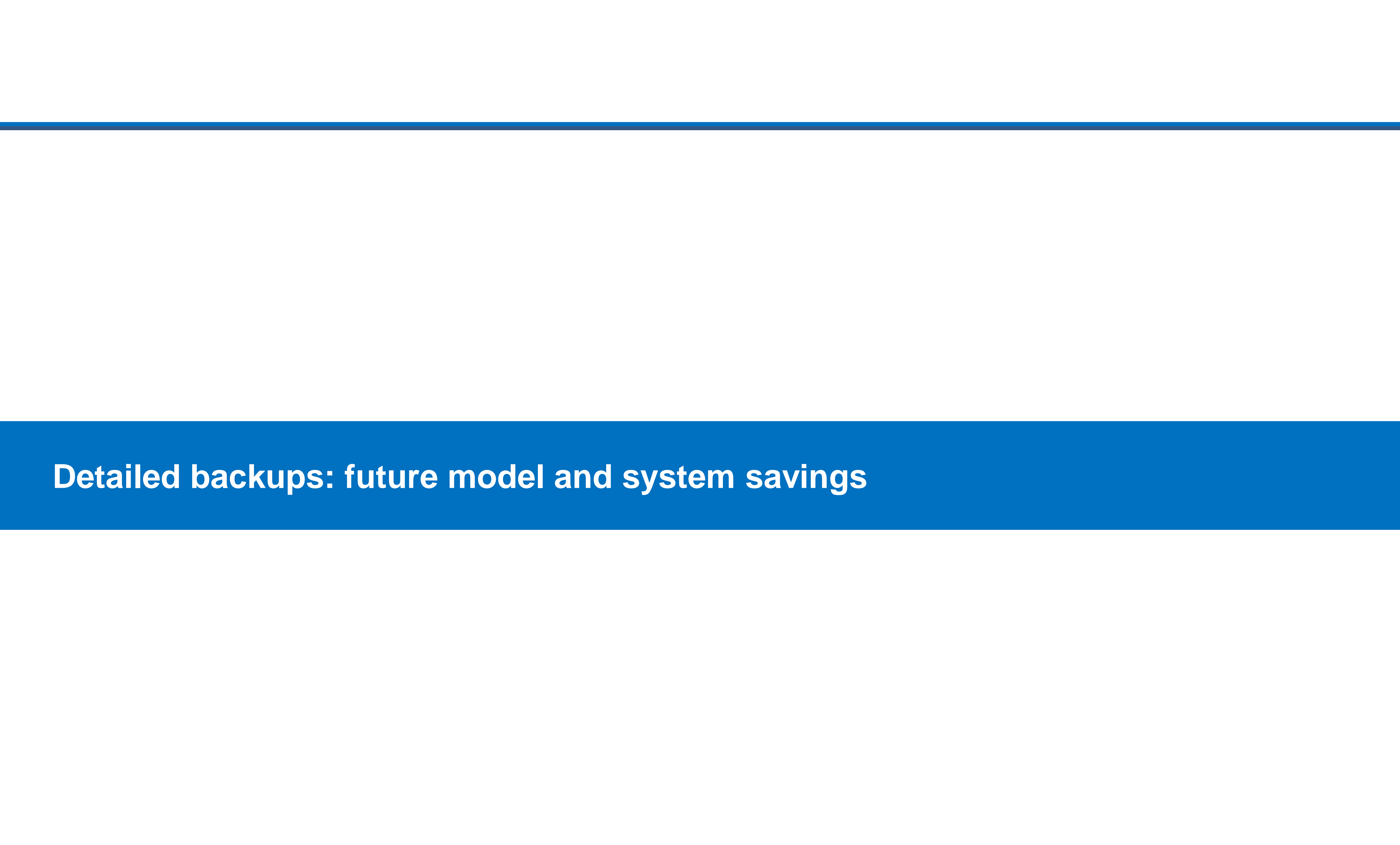
Area	Risk	Scenario modelled	Est. financial impact (2017-2022)	2021/22 bridge net of risk occurrence	Likelihood (1 - 5)	Impact (1 - 5)	RAG
Commissi-oners	**Activity growth** exceeds estimates and needs more funding	CCG activity growth is 10% more than currently forecast	~ £43m	~ £9m	2	4	AR
	QIPPs under-delivery, above contingency held by CCGs	Reduced QIPPs scheme saves by 10%	~ £45m	~ £13m	4	4	R
	LHC schemes under-delivery loss of savings	Reduced LHC scheme saves by 10%	~ £24m	~ £8m	3	3	AR
	LHC schemes delayed due to **implementation problems**	Out-of hospital savings delayed by 2 years	~ £160m	~ £22m	3	4	AR
	Impact of additional ambulance journeys following centralisation of some activity	Increase in ambulance costs by 10%	~ £14m	~ £5m	3	2	A
	Non-achievement of 2017/18 control totals	2017/18 control totals exceeded by 0.5% of allocation	~ £7m	-	2	3	A
Providers	**Activity growth** exceeds estimates and needs more beds	Activity Growth is 10% more than currently forecast	~ £38m	~ £9m	2	4	AR
	Impact of out of area commissioners (including specialist commissioning) on provider income	Reduction of out of area income by 10%	~ £49m	~ £11m	1	3	A
	Inflation is above expectation	Inflation 0.24% higher vs. modelled 2.4%	~ £47m	~ £18m	3	3	AR
	LHC schemes under-delivery increased need in beds	Only 50% of beds savings realised, 151 extra beds needed	~ £24m	~ £12m	4	3	AR
	CIPs under-delivery	Reduced CIPs scheme saving by 10%	~£62m	~ £19m	2	3	A
	In-hospital under-delivery	In-hospital saving reduced by 10%	~£11m	~ £6m	4	2	A
	Funding not secured and in-hospital delayed	In-hospital savings not realised until after 20201	~£87m	~ £27m	2	5	AR
	Workforce pressures not resolved through re-configuration causing ongoing high agency cost	£3m annual saving from in-hospital workforce not realised	~£9m	~ £3m	3	2	A


Detailed backups: base case and business as usual

Back up: do nothing pre-CIP/QIPP income vs. expenditure by year

Area	(£m)	16/17	Change in 17/18	Change in 18/19	Change in 19/20	Change in 20/21	Change in 21/22
CCG	Allocation	1464	18	35	38	65	42
	Expenditure	Not included to avoid double counting					
	Deficit	-9	-53	-50	-40	-30	-48
Acute	Income[3]	901	44	39	41	55	57
	Expenditure	987	64	61	66	81	86
	Deficit	-86	-20	-22	-25	-26	-29
Other	Other provider[3] & commissioner income[1]	613	16	15	18	24	14
	Expenditure	617	37	31	33	40	39
	Deficit	-4	-21	-16	-14	-15	-25
	Net Health deficit change	-	-94	-87	-79	-71	-102
	Total Health in-year deficit	-98	-193	-280	-359	-430	-532

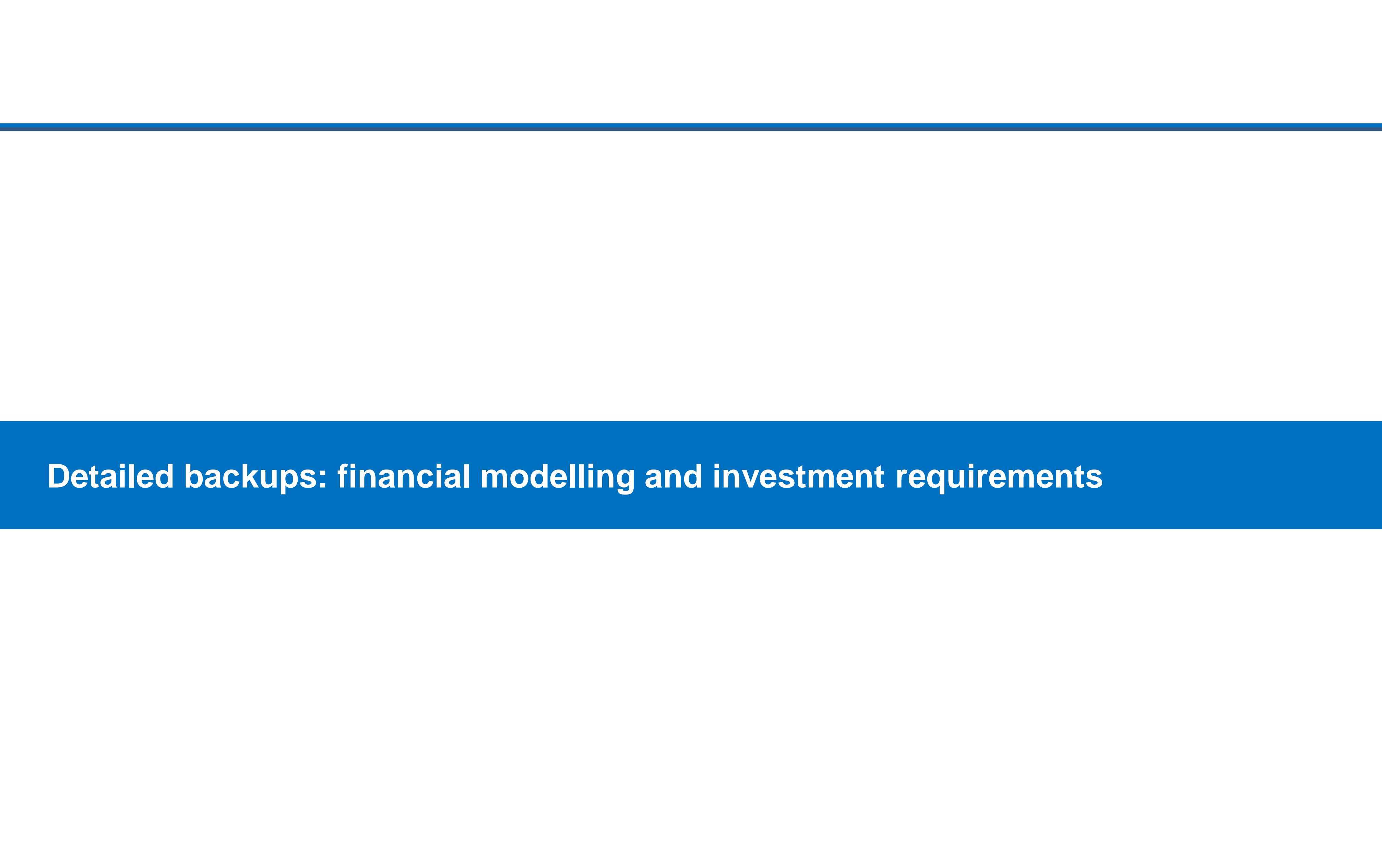
1. Includes Primary Medical Care (Mandate) and Specialised activity by commissioners, and other NHS organisations (Mental Health and Ambulance trusts); 2. If this saving is achieved, forecast in-year deficit can be maintained at 2015-16 levels. 3. Provider income is largely funded from CCG income
Source: STP Submission 9.5.17


Detailed backups: future model and system savings

Back up: local health and care phasing of savings – summary

Component	Gross saving (£m)	Cost (£m)	Net saving (£m)	% of final year annual gross savings realised				
				17/18	18/19	19/20	20/21	21/22
Specialist Pathway Redesign	34.4	23.2	11.2	0%	6%	82%	100%	100%
Frailty[2]	20.1	14.3	5.7	0%	15%	63%	100%	100%
LTCs[2]				0%	15%	63%	100%	100%
Common offer (acute and community)	6.2	1.3	4.9	0%	50%	100%	100%	100%
Urgent care	6.6	2.6	4.0	0%	37%	86%	100%	100%
System-wide transformation	14.6	0.0	14.6	0%	21%	99%	100%	100%
Total	**81.8**	**41.4**	**40.4**					

1. Estimate of addressable expenditure in 2020/21 in momentum case 2. From locality deep dives
Source: SR Workstream



Detailed backups: financial modelling and investment requirements

Back up: trust capital requirements for acute reconfiguration

Preferred option

		£M
Basildon	Emergency Health and Care Hub and associated enabling projects	8.1
	New theatre capacity (inc. capacity from Orsett)	17.6
	Site infrastructure costs	4.6
	Other	9.5
Broom-field	A&E and critical care capacity	7.3
	Inpatient capacity	6.0
	Repatriate daycase facilities	4.0
	Other	2.0
Southend	New theatre capacity	10.0
	Inpatient capacity	5.0
	Linac bunkers for cancer growth	8.0
	Re-provided outpatient space and ambulatory capacity	6.5
	Other	7.3
	Site infrastructure costs	4.6
Other	System urgent care centre capacity	7.3
	Teletracking	6.7
	Shared records	6.1
	Contingency	10.0
	Total (gross before disposal receipts)	**130.4**

Back up: activity modelling process

The financial model builds upon the financial case for change and capacity modelling sections, along with comprehensive stakeholder input, to develop financial projections under the future model of care.

Base case

- "Do nothing" scenario was submitted by and agreed by each organisation and collectively approved by finance directors via the Finance Working Group. It was then approved by the Success Regime Financial Oversight Group.

Local Health and Care proposals

- Based on projected changes in activity as per each initiative, based on worked-through assumptions from the system on impacts to patient flows
- Data inputs triangulate HES data; individual CCG records and assumptions validated with clinical input[1]

In hospital proposals

- Based on projected changes to A&E and inpatient activity under the preferred option
- Activity modelling uses hospital inpatient data, HES A&E data, internal theatres and critical care data, and outputs of the Local Health and Care modelling

Stakeholders included in this document

- All key NHS organisations that sit predominantly within the STP are included within this document – encompassing the five CCGs (Basildon & Brentwood, Castle Point & Rochford, Mid Essex, Southend, Thurrock) and three acute Trusts (BTUHFT, MEHT, SUHFT)

1. All assumptions aligned with 21st October STP submission

Back up: 'do nothing' modelling – Acute Trust cost assumptions

	Assumption		17/18	18/19	19/20	20/21	21/22
Income	Tariff inflator[1]		2.1%	2.1%	2.0%	2.9%	2.9%
	Tariff efficiency factor[2]		-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
	Demand growth	BTUHFT	2.5%	2.8%	2.7%	2.9%	2.9%
		MEHT	1.7%	3.4%	3.4%	3.2%	3.2%
		SUHFT	4.1%	5.7%	6.3%	7.1%	6.8%
	Overall income increase	BTUHFT	4.0%	3.2%	2.7%	4.0%	4.0%
		MEHT	4.8%	3.6%	3.6%	4.2%	4.2%
		SUHFT	5.8%	5.8%	6.2%	7.8%	7.6%
Spend[3]	Weighted demand increase	BTUHFT	1.0%	2.5%	2.4%	2.6%	2.6%
		MEHT	2.8%	2.9%	3.0%	2.8%	2.8%
		SUHFT	1.3%	5.0%	5.6%	6.3%	6.1%
	Inflation increase	All	2.1%	2.1%	2.0%	2.9%	2.9%
	Overall cost increase	BTUHFT	6.0%	5.0%	4.7%	5.7%	5.7%
		MEHT	6.6%	5.2%	5.2%	5.8%	5.8%
		SUHFT	6.8%	7.4%	7.9%	9.3%	9.0%

Source: Financial model, Trust and CCG financials
1. Normalisation excludes £9.2m S&T funding & adjustments to 16-17 plan & block income; CIPS is excluded at £14,041k; 2. Normalisation balances values back to Trust's approved budget.
3. All figures shown as percentage of expenditure Note: expected growth rates are based on local ONS population growth statistics and local trend forecasting

Back up: 'do nothing' modelling – CCG cost assumptions

		18/19	19/20	20/21	21/22	Notes
	Spend by CCG:					
B&B	Acute[1]	4.2%	4.7%	5.6%	4.9%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Mental health[1]	-0.3%	2.5%	5.0%	3.3%	
	Community health[1]	4.5%	2.5%	5.0%	4.5%	
	CHC	6.1%	7.0%	6.9%	6.9%	
	Prescriptions	9.4%	5.5%	5.5%	6.8%	
	Other PC	-2.7%	2.5%	4.3%	4.3%	
	Admin	7.8%	0.0%	0.0%	0.0%	
	CCG Other	-1.7%	1.2%	2.1%	5.0%	
	Social Care	1.9%	1.7%	1.7%	1.8%	
CP&R	Acute[1]	5.5%	7.1%	8.5%	7.4%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting Higher growth rates in Castle Point & Rochford across all areas due to large aging, cohort of 65–70 year olds (7.3% of the population, compared to 5.9% in the rest of Essex)—increasing costs
	Mental health[1]	2.1%	2.2%	3.6%	2.6%	
	Community health[1]	0.0%	1.1%	1.1%	1.1%	
	CHC	7.7%	8.0%	8.0%	7.9%	
	Prescriptions	4.8%	5.0%	5.0%	4.9%	
	Other PC	10.9%	0.0%	0.0%	3.6%	
	Admin	-0.2%	0.2%	0.2%	0.0%	
	CCG Other	9.2%	5.2%	5.2%	5.0%	
	Social Care	0.0%	0.0%	0.0%	0.0%	

1. Expenditure growth based on projected growth in activity, tariff inflator and tariff efficiency factor
Source: Financial model, CCG financials

Back up: 'do nothing' modelling – CCG cost assumptions

	Spend by CCG:	17/18	18/19	19/20	20/21	Notes
Mid Essex	Acute[1]	4.2%	4.3%	4.9%	4.7%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Mental health[1]	3.0%	2.7%	2.6%	2.8%	
	Community health[1]	2.8%	2.4%	4.2%	3.1%	
	CHC	6.9%	5.6%	5.2%	5.9%	
	Prescriptions	3.8%	3.6%	3.6%	3.7%	
	Other PC	23.1%	4.6%	2.4%	10.0%	
	Admin	0.0%	0.0%	0.0%	0.0%	
	CCG Other	401.4%	21.4%	18.9%	5.0%	
	Social Care	1.9%	1.7%	1.7%	1.8%	
Southend	Acute[1]	5.0%	6.0%	7.0%	6.0%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Mental health[1]	13.0%	2.2%	2.2%	2.2%	
	Community health[1]	1.4%	1.7%	1.7%	1.7%	
	CHC	6.7%	8.0%	8.0%	7.6%	
	Prescriptions	4.7%	5.0%	5.0%	4.9%	
	Other PC	19.8%	1.7%	1.7%	7.7%	
	Admin	0.0%	0.0%	0.1%	0.1%	
	CCG Other	1.0%	5.2%	5.2%	5.0%	
	Social Care	0.0%	0.0%	0.0%	0.0%	

1. Expenditure growth based on projected growth in activity, tariff inflator and tariff efficiency factor
Source: Financial model, CCG financials

Back up: 'do nothing' modelling – CCG cost assumptions

		17/18	18/19	19/20	20/21	Notes
	Spend by CCG:					
Thurrock	Acute[1]	7.3%	3.4%	4.1%	3.7%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Mental health[1]	2.4%	3.0%	4.0%	4.0%	
	Community health[1]	5.1%	3.0%	5.0%	5.0%	
	CHC	7.7%	7.0%	8.5%	8.5%	
	Prescriptions	5.1%	5.4%	6.5%	6.5%	
	Other PC	13.8%	2.8%	2.8%	6.5%	
	Admin	0.3%	0.0%	0.0%	0.1%	
	CCG Other	2.4%	46.8%	46.2%	8.0%	
	Social Care	0.0%	0.0%	0.0%	0.0%	

1. Expenditure growth based on projected growth in activity, tariff inflator and tariff efficiency factor
Source: Financial model, CCG financials

Back up: 'do nothing' modelling – CCG activity assumptions

CCG	Activity	17/18	18/19	19/20	20/21	21/22	Notes
B&B	Outpatient Activity	2.1%	2.4%	2.4%	2.4%	2.4%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Elective and Day Case Activity	3.5%	3.5%	3.5%	3.5%	3.5%	
	Non Elective Activity	1.3%	1.3%	1.3%	1.3%	1.3%	
	A&E Activity	4.3%	4.3%	4.3%	4.3%	4.3%	
CP&R	Outpatient Activity	1.3%	7.6%	7.6%	9.1%	8.8%	Higher growth rates in Castle Point & Rochford across all areas due to large aging, cohort of 65-70 year olds (7.3% of the population, compared to 5.9% in the rest of Essex) – increasing costs
	Elective and Day Case Activity	6.2%	9.6%	6.7%	8.2%	8.0%	
	Non Elective Activity	1.5%	3.8%	6.8%	8.1%	7.9%	
	A&E Activity	5.0%	5.5%	7.5%	8.9%	8.9%	
Mid Essex	Outpatient Activity	4.2%	4.1%	4.1%	3.9%	3.9%	Expected growth rates are based on local ONS population growth statistics and local trend forecasting
	Elective and Day Case Activity	2.4%	2.4%	2.3%	2.1%	2.1%	
	Non Elective Activity	2.8%	2.5%	2.8%	2.3%	2.3%	
	A&E Activity	7.0%	7.0%	7.0%	7.0%	7.0%	
Southend	Outpatient Activity	3.8%	6.3%	7.2%	7.4%	7.0%	
	Elective and Day Case Activity	2.0%	4.5%	5.4%	5.7%	5.2%	
	Non Elective Activity	1.7%	4.4%	5.7%	5.4%	5.0%	
	A&E Activity	2.1%	4.7%	5.6%	5.8%	5.4%	
Thurrock	Outpatient Activity	4.2%	4.4%	3.9%	4.0%	4.0%	
	Elective and Day Case Activity	2.5%	2.7%	2.1%	2.3%	2.3%	
	Non Elective Activity	0.9%	1.4%	1.1%	1.7%	1.7%	
	A&E Activity	2.5%	2.8%	2.4%	2.5%	2.5%	

Back up: local health and care activity reduction split by acute trust

		2017/18			2018/19			2019/20			2020/21			2021/22		
Workstream	**POD (000s)**	BTUHFT	MEHT	SUHFT	BTUHFT	MEHT	SUHFT	BTUHFT	MEHT	SUHFT	BTUHFT	MEHT	SUHFT	BTUHFT	MEHT	SUHFT
Frailty	**NEL admissions**	0.0	0.0	0.0	-0.4	-0.5	-0.7	-0.8	-1.0	-1.5	-0.9	-1.1	-1.7	-0.9	-1.1	-1.7
LTCs	**NEL admissions**	0.0	0.0	0.0	-1.0	-0.8	-1.5	-1.8	-1.6	-3.0	-1.9	-1.6	-3.3	-1.9	-1.6	-3.3
LTCS	**Outpatients**	0.0	0.0	0.0	-10.9	-11.9	-15.5	-28.0	-30.5	-41.0	-28.9	-31.2	-43.9	-28.9	-31.2	-43.9
Specialist Pathway Redesign	**Outpatients**	0.0	0.0	0.0	-27.5	-35.1	-30.7	-70.8	-89.7	-81.4	-73.0	-91.6	-87.2	-73.0	-91.6	-87.2
UEC	**Ambulance dispatches**	0.0	0.0	0.0	-1.7	-1.3	-1.4	-6.3	-4.8	-5.1	-9.3	-7.0	-7.5	-9.5	-7.2	-7.6
UEC	**A&E Attendances**	0.0	0.0	0.0	-2.7	-2.1	-2.3	-9.8	-7.8	-8.4	-14.6	-11.9	-12.9	-14.6	-11.9	-12.9
Common Offer	**EL / daycases**	0.0	0.0	0.0	-0.3	-0.4	-0.6	-0.5	-0.9	-1.2	-0.5	-0.9	-1.3	-0.5	-0.9	-1.3
Common Offer	**Outpatients**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.1