

# EHMA 2024

Shaping and managing  
innovative health ecosystems

## Hospitals vertically integrating with primary care practices

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#EHMA2024

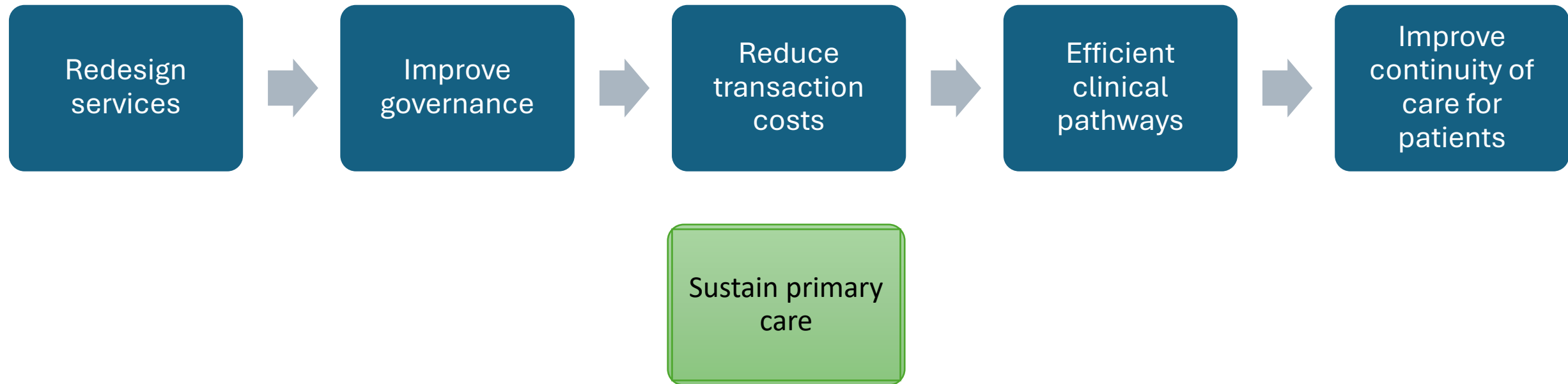
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The work reported here by Jon Sussex (RAND Europe) was undertaken by him and other members of the BRACE team, including Manbinder Sidhu (University of Birmingham), Catherine Saunders (University of Cambridge) and Charlotte Davies (RAND Europe)

The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care

# Vertical integration of hospitals and primary care

Why vertically integrate?



# Vertical integration in England, 31 March 2021

26 NHS trusts running 85 primary care practices

Vertical integration is scattered across England:

- both urban and rural areas
- no great difference in socioeconomic deprivation

Primary care practices integrating with NHS Trusts, compared to other practices, had on average:

- Fewer patients
- Fewer primary care physicians (full time equivalents)
- Lower 'Quality and Outcomes Framework' scores
- Greater likelihood of being on shorter-term contracts with the National Health Service



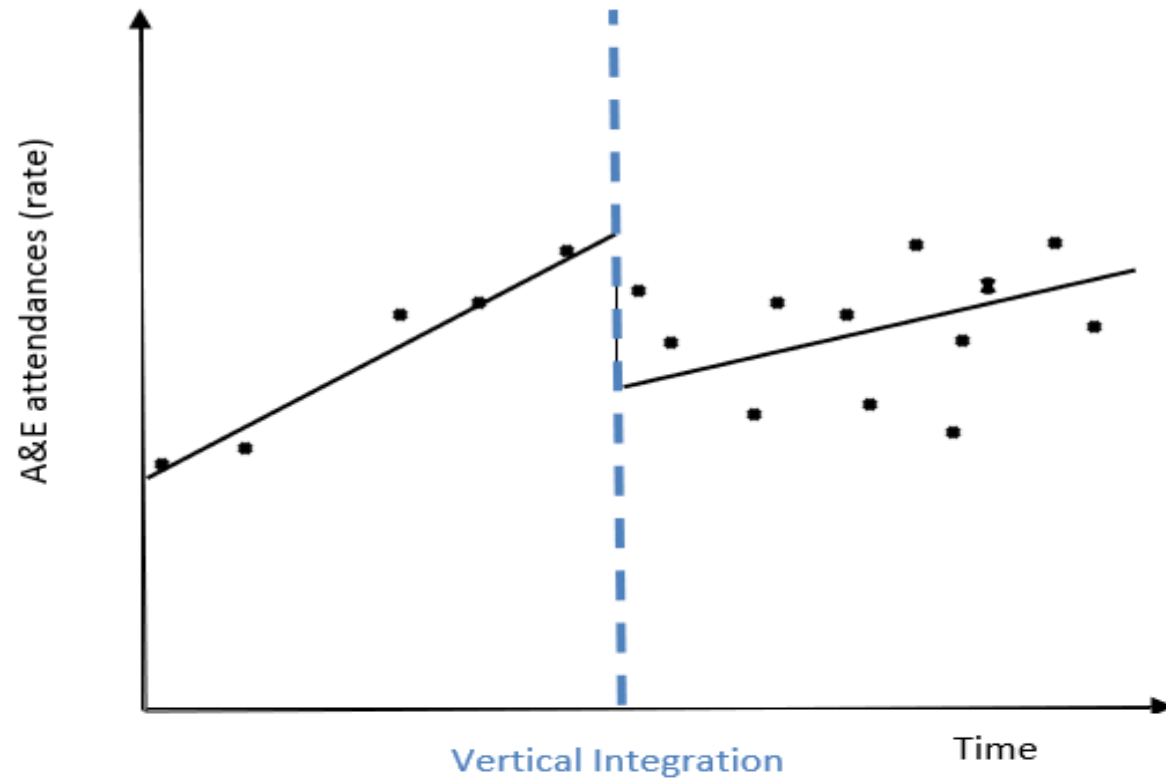


# Trends in hospital activity by patients of vertically integrated practices **relative to** a random sample of control practices: 2 years before and after vertical integration and step change at the date of vertical integration

**A&E attendance rate: falls 2% at time of VI but reduction is only temporary**

Additional yearly change in the pre-intervention period		Step change at time of intervention		Additional yearly change after the intervention	
Incident rate ratio (95%CI)	p-value	IRR (95%CI)	p-value	IRR (95%CI)	p-value
<b>1.03</b> (1.01-1.05)	0.0008	<b>0.98</b> (0.96-0.99)	<0.0001	<b>1.02</b> (1.00-1.04)	0.012

# Conceptual depiction of the pattern of A&E attendance rates for patients of vertically integrated practices **relative to** control practices



## Outpatient attendance rate falls 1% at time of VI but only temporarily

Additional yearly change in the pre-intervention period		Step change at time of intervention		Additional yearly change after the intervention	
Incident rate ratio (95%CI)	p-value	IRR (95%CI)	p-value	IRR (95%CI)	p-value
<b>1.03</b> (1.02-1.05)	<0.0001	<b>0.99</b> (0.99-1.00)	0.0061	<b>1.02</b> (1.00-1.03)	0.0064

## Emergency inpatient admission rate falls 3% at time of VI

Additional yearly change in the pre-intervention period		Step change at time of intervention		Additional yearly change after the intervention	
Incident rate ratio (95%CI)	p-value	IRR (95%CI)	p-value	IRR (95%CI)	p-value
<b>0.98</b> (0.96-1.00)	0.03	<b>0.97</b> (0.95-0.99)	0.0062	<b>1.00</b> (0.98-1.01)	0.61

## Emergency inpatient readmission rate falls 5% at time of VI

Additional yearly change in the pre-intervention period		Step change at time of intervention compared with “stable” GMS practices		Additional yearly change after the intervention	
Incident rate ratio (95%CI)	p-value	IRR (95%CI)	p-value	IRR (95%CI)	p-value
<b>0.97</b> (0.94-1.00)	0.093	<b>0.95</b> (0.91-1.00)	0.039	<b>1.01</b> (0.97-1.04)	0.74

### Vertical integration has no significant effect on:

- Total inpatient admission rate
- Ambulatory care sensitive conditions (ACSC) admission rate
- Length of stay



# Conclusions

- Main rationale for vertical integration has been to sustain primary care practice
- Which provides a platform for primary care service improvements
- Vertical integration can lead to modest falls in patients' use of hospital services
- But vertical integration locations are not typical
- So the findings do not imply support for a national roll-out of vertical integration



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