

# Rapid evaluation in the Improvement Analytics Unit

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# The Improvement Analytics Unit

We are working in partnership with NHS England to establish a resource that can:

- Evaluate whether local change initiatives, implemented as part of national programmes, are improving care
- Feed back to local and national level quickly, to help improve care
- Use state-of-the-art evaluation methods from causal inference, as applied to existing data sets

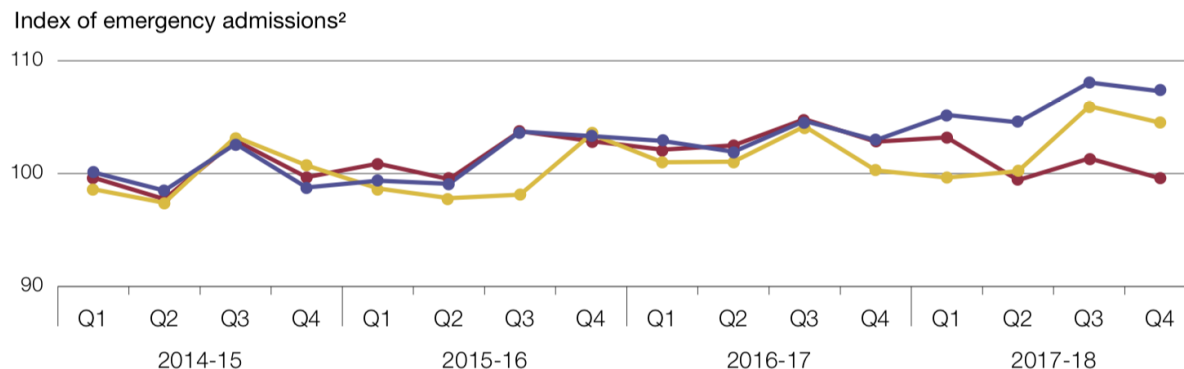


# National context

Trends in emergency admissions for NHS vanguards and non-vanguard areas, 2014-15 to 2017-18

Early indications are that vanguards have helped to moderate growth in emergency admissions

Integrated primary and acute care systems (PACs) and multispeciality community providers (MCPs) vanguards versus non-vanguard areas



Source: National Audit Office. Developing new care models through NHS vanguards. HC 1129 SESSION 2017–2019 29 JUNE 2018

→ **What approaches are contributing to these reductions in admissions? How can they be identified and spread?**

# Local context

- Transforming services in the NHS is hard (!)
- Demand for evaluation exists (to the credit of local teams) as it helps with learning
- But local teams can find support with evaluation quite hard to access
- And evaluation doesn't always deliver what is needed for example because findings are not actionable or timings for the evaluation are not aligned with the decision making process

# Example: enhanced support for care home residents in Rushcliffe

Introduced from April 2014 as part of multispecialty community provider vanguard, for 24 local care homes

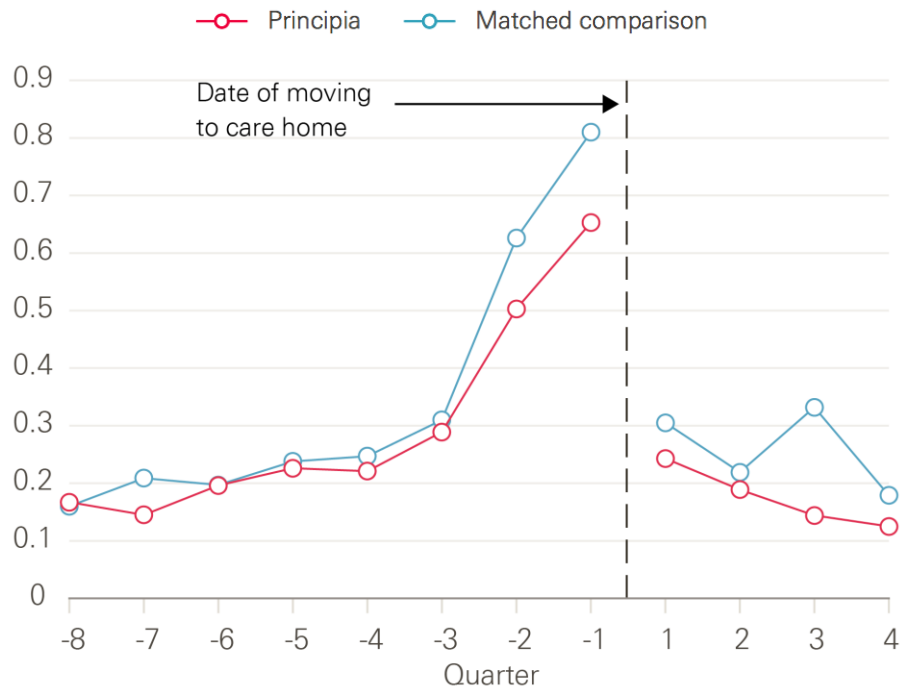
Evaluated the impacts on hospital use for care home residents



# Main elements of the enhanced support package

- Alignment between general practices and care homes
- Advocacy and independent support from Age UK Nottingham and Nottinghamshire
- Enhanced specification of general practice care for frail older people living in care homes
- Improved peer-to-peer support from community nurses for nurses employed within care homes
- Work to engage and support care home managers

# Results: A&E attendances



# Results

|                                  | Principia residents<br>(number per person per year) | Matched residents<br>(number per person per year) | Relative difference<br>(adjusted rate ratio) | 95% confidence interval  |
|----------------------------------|---|---|--|--------------------------|
| A&E attendances                  | 0.74  | 1.02  | 29% lower                                    | 11% to 43% lower         |
| Emergency admissions             | 0.64  | 0.78  | 23% lower                                    | 3% to 39% lower          |
| Potentially avoidable admissions | 0.22  | 0.30  | 28% lower                                    | 0% to 49% lower          |
| Elective admissions              | 0.11  | 0.13  | 29% higher                                   | 36% lower to 163% higher |
| Outpatient attendances           | 1.99  | 1.85  | 11% higher                                   | 12% lower to 40% higher  |



# Implications

“These results were very positive, and a testimony to a lot of hard work, but we still need to do more work to understand what the active ingredient was and to continue improvement further. Understanding what is at the core of a successful initiative is important for pinpointing what works and how this can be replicated elsewhere.

Following the evaluation, the IAU did further work with us to understand better the causes of potentially avoidable admissions from care homes. Subsequently, we’ve put in place new ways to improve the health and care of residents, including approaches to improve diagnosis of urinary infections and boost nutrition.”

**Nicole Bacon, Development Manager and Programme Lead at the Principia vanguard**

# Why does the IAU aim to evaluate rapidly?

- Limited opportunity to influence decisions about funding or the evolution of services
- If we want evaluation results to be used in practice, then results need to be ready when decisions regarding services are taken
- Strong message from current and potential clients that rapidity is important to them
- Secondary reason: helps us become more efficient

# Our aim for rapid evaluation



**Aspiration: 2-3 months**  
**Currently: 5-6 months**

**Whole process: 12 months**

# How does the IAU evaluate rapidly?

1. Standardise evaluation offering (to a degree)
2. Use of evaluability assessment
3. Produce evaluation protocols (with background information on intervention and context, theory of change, evaluation methods, issues to do with interpretation)
4. Rapid execution of evaluation protocols, supported by reusable, modular code
5. Regular data flows, constant work to improve data quality and linkages
6. Quality assurance as early in the process as possible
7. Publishing findings outside of peer-reviewed journals
8. Peer review through protocols + external input into interpretation during workshops
9. Supportive staffing model (programme management, statisticians, data architects, information governance, client management, etc.)
10. Attention to workflows (separating business as usual from innovation functions)
11. Agree roles and responsibilities with local teams at outset, and approach to publication

# Some of the more challenging messages to emerge from the evaluation of the Improvement Analytics Unit

“I think that the process needs to be speeded up.”

“We were originally told it would be a ‘quick fire, rapid evaluation’, to take around 3 months. But it’s now been a bit longer. They seemed to have a few issues getting hold of the datasets they needed in a timely manner.”

# Difficulties faced in rapid evaluation

- Client management (getting background information)
- Interpretation takes time even if analysis is automated
- Handling of results
- Access to data: changes to information governance landscape, reliability of data suppliers
- We cannot pre-empt every challenge in the protocols (sometimes encounter difficulties during statistical modelling)

# Publications so far from the Improvement Analytics Unit

**Briefing**  
March 2017


## Briefing: The impact of providing enhanced support for care home residents in Rushcliffe

Health Foundation consideration of findings from the Improvement Analytics Unit  
Therese Lloyd, Arne Walters and Adam Stawerton

**About this briefing**

The analysis within this briefing was conducted by the Improvement Analytics Unit, a partnership between NHS England and the Health Foundation. This Health Foundation briefing considers the findings of the analysis.

The briefing looks at the impact of a package of enhanced support for older people living in care homes. The enhanced support was introduced in April 2014 and was developed by Phoenix, a local partnership of general practitioners, patients and community services that aims to provide better quality of care for people in Rushcliffe in Nottinghamshire, England. The briefing outlines the enhanced support package, then describes the methods the Improvement Analytics Unit used to derive the linked data used in the analysis, select a matched comparison group, and compare hospital utilisation between the two groups. The briefing also sets the results of the analysis and discusses the findings. It concludes by looking at the implications and priorities for future research and improvement activity. More detail about the methods used is available in an accompanying technical appendix, available from [www.health.org.uk/publication/improvement-analytics-unit-analysis-principles](http://www.health.org.uk/publication/improvement-analytics-unit-analysis-principles)



**Briefing**  
December 2017

## Briefing: The impact of redesigning urgent and emergency care in Northumberland

Health Foundation consideration of findings from the Improvement Analytics Unit  
Stephen O'Neill, Arne Walters, Adam Stawerton

**Key points**

- Health and care partners in Northumberland have been pursuing an ambitious programme to redesign the way care is delivered for their local population. The first phase was implemented in June 2016 and involved opening the UK's first patient-centred, specialist emergency care hospital in Coalingford.
- The new hospital aims to provide better care for patients with potentially life-threatening conditions by providing faster access to consultants and diagnostics and shortening length of stay. It is staffed by accident and emergency (A&E) consultants 24 hours a day, 7 days a week, and by specialist consultants 7 days a week from 08:00 to 20:00.
- After it opened, three existing A&E departments were gradually reduced to providing care for minor injuries and illnesses. The aim was to convert these departments to be urgent care centres, staffed 7 days a week by a mix of hospital doctors, GPs and emergency nurse practitioners. However, over the period covered by this evaluation, the three existing departments were not fully converted and continued to provide A&E care. Also, despite hospitals in surrounding areas, to which some of the population of Northumberland Clinical Commissioning Group (CCG) looked for treatment.
- This report examines the initial impact of these changes on hospital care for people registered with a GP in the Northumberland CCG area, over a 12-month period from August 2015. Comparisons were made against a synthetic control area that were formed by combining data from several other CCGs in England. The report considers the early impact of the redesign programme with the aim of informing ongoing efforts to improve the quality of care provided for the local population.



**Improvement Analytics Unit briefing**  
June 2018

## Briefing: The impact of providing enhanced support for Sutton Homes of Care residents

Findings from the Improvement Analytics Unit  
Stefano Corti, Caroline Gori, Martin Caunt and Adam Stawerton

**Key points**

- This briefing presents the findings of an evaluation into the effects of providing enhanced support for older people living in care homes in Sutton, south London. Specifically, the Improvement Analytics Unit examined whether the enhanced support had a discernible effect on hospital utilisation for new residents who moved into one of 28 residential and nursing care homes in Sutton between January 2018 and April 2017.
- The enhanced support was commissioned by the Sutton Homes of Care (engaged from March 2016 for all care homes within the Sutton clinical commissioning group's (CCG) area. It was organised around three priority areas for support). The first pillar was a series of measures aimed at improving integrated care, and included the hospital transfer pathway (the Red Bag scheme) and weekly health and wellbeing reviews.
- The second pillar supported ongoing education and development for care home staff, for example through enrolling on dementia care, dementia care and person-centred thinking. The third pillar promoted quality assurance and safety, for example through a joint intelligence group to share information among local health and care partners and a dashboard to benchmark care home performance.
- The support offered by Sutton Homes of Care consisted of multiple initiatives carried out at different times in different ways and degrees of coverage to different care homes. While some elements of the support were available to all homes, nursing homes were initially the focus of the intervention from November 2016 to June 2017, with residential care homes receiving more attention from November 2016. We examined hospital utilisation data up to April 2017.



# Stay in touch

- [www.health.org.uk/IAU](http://www.health.org.uk/IAU)
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- #ImprovementAnalytics
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# Thank you

Any questions?

