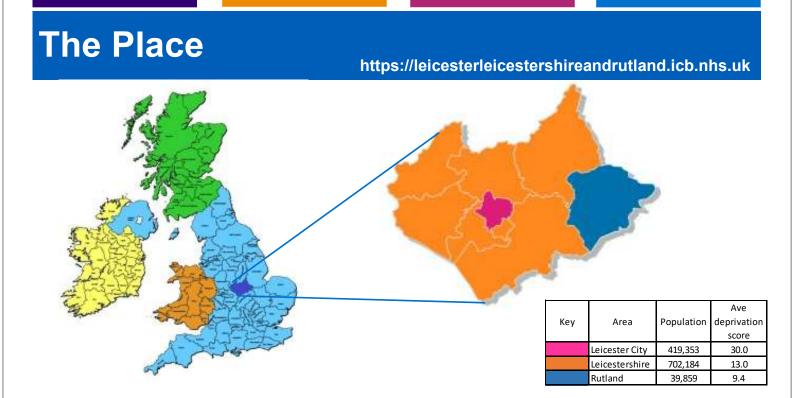


Using case mix adjustment to devise a fairer resource allocation formula in UK primary care

David Shepherd, Alan Thompson, James Barrett, Stephen Sutch, Mark Pierce





The Problem

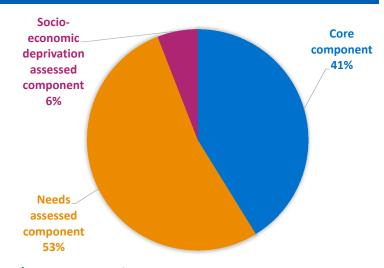
- An outdated family doctor funding formula (the Carr-Hill formula) and no political drive to change it
 - Inconsistent match of funding to actual need due to the ecological fallacy
 - Money does not follow patients, resulting in cream-skimming
 - Systematic mis-funding is embedded by continued use of the old formula
- Impending NHS re-organisation into Integrated Care Systems
 - Charged with addressing health inequality but stuck with a funding formula that embeds them
 - Very diverse practices expected to work together despite this

The Solution

- A better funding formula using resource more efficiently by shrinkwrapping it more closely to the needs it is to address
- Made practically possible by making patient-level data...
 - Available through the arrival of big data in the NHS
 - Useable through adjustments to correct for missing data
 - Manageable through sophisticated case mix analysis tools like The Johns Hopkins Adjusted Clinical Groups (ACG®) System
- Made politically possible by our 'no-loser' approach

The Formula

Creating a currency of need



- The structure
 - Core component
 - Needs assessed component
 - Socio-economic deprivation assessed component

The Formula – needs assessment process

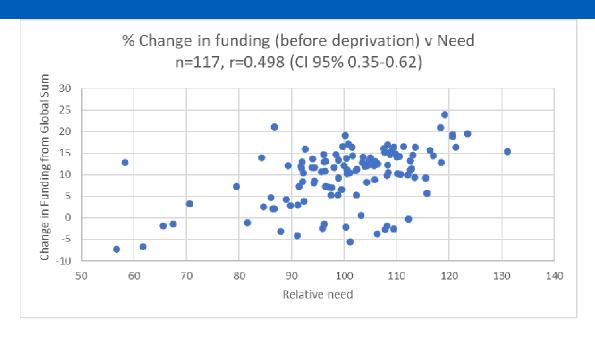
Coding adjustment

Case mix adjustment using ACGs

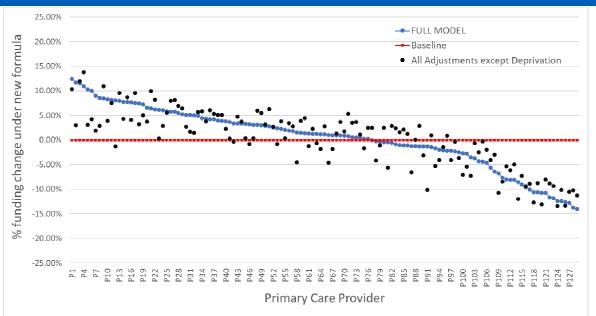
Patient turnover adjustment

Communications adjustment

The Findings – is it better?



The Findings – how the elements stack up



Average Dispersions

Coding 4.08%

Case Mix 12.52%

Turnover 1.62%

Comms 3.24%

Deprivation 5.53%

The Findings – a case study: X and Y

2018 Patient Experience Survey: Practice X's score minus Y's

Had conversation with a practice HCP re what's important when managing condition(s)?

Confidence can manage any issues arising from your condition (or conditions)

Overall experience of GP practice

Thinking about the reason for your last appointment, were your needs met?

At last appointment, did you have confidence and trust in the HCP you saw or spoke to?

At last appointment, were you involved as much as you wanted in decisions re your care?

At last appointment, did you feel that the HCP recognised / understood your MH needs?

At last appointment, how good was the HCP at: Treating you with care and concern

At last time you had appointment, how good was the HCP at: Listening to you

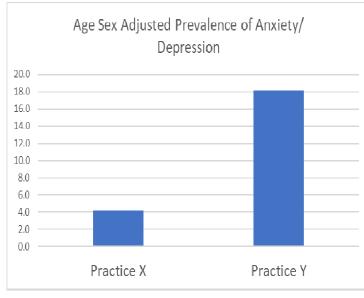
At last appointment, how good was the HCP at: Giving you enough time

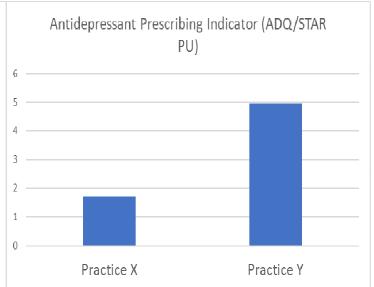
X is scored by patients as providing better appointment access

Overall experience of making an appointment
Whether offered a choice of appointment
Frequency of seeing preferred GP
Satisfaction with general practice appointment times
Helpfulness of receptionists at GP practice
Ease of getting through to someone at GP practice on the phone

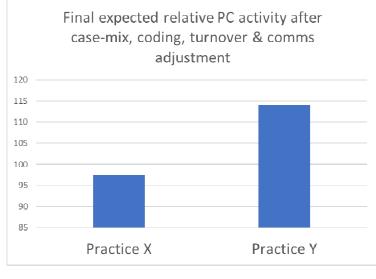


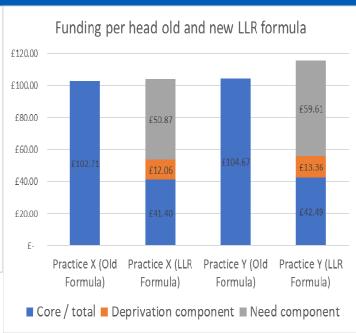
The Findings – a case study: X and Y





The Findings – a case study: X and Y





The Implementation

- Alongside the formula development LLR undertook service harmonisation and simplification of payment processes
- Extensive engagement with GP board and lay members from across the 3 CCGs, their staff and interested parties took place over 14 weeks
- · An outcomes measures framework has been developed for monitoring
- The formula was formally adopted by the LLR governing body in May 2021
- For LLR population of 1.16 million patients, the formula was used to allocate £114.6m amongst 130 primary care providers.
- It led to increases in funding attributable to the new formula for 76 primary care providers totalling £2.8m, whom it had determined had been under-resourced under existing funding arrangements.

The Verdict

"It is great to see an excellent example of working collaboratively to look at the needs of local populations.

The way the system pulled resources together creatively to address these needs and narrow health inequalities is a great example of local initiative, collaboration and system working."

Dr Bola Owolabi - Director - Health Inequalities NHS England