Office of Health Economics Research

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Seminar Briefing 22

NHS Agency Staffing and the Impact of Recent Interventions

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1. Introduction

This seminar focuses on the NHS staffing markets and the use of temporary staff, specifically in the NHS provider sector, i.e. foundation trusts[1] and NHS trust. (which include hospitals). To provide background and context, the discussion begins with an overview of the NHS labour market and the role of staffing agencies in providing temporary staff. The core of the seminar is an examination of previous strong growth in expenditure on such staffing, particularly during the early part of this decade; the effects to date of government intervention to address that spending; and possible lessons for other sectors from the limited evidence now available.

2. Demand, Supply and Pay Levels in the NHS Labour Market

The NHS labour market is not a perfectly competitive market. On the demand side are around 250 trusts — groups of hospitals, mental health trusts and other trusts — that are influenced by a range of incentives. Although the trusts compete to some extent for the same staff in the same labour markets, strong incentives for cooperation are built into the system.

The health care labour market is a relatively closed system, with the NHS as the main employer. Some competition with the private sector occurs, as does some competition with labour demand in other sectors (e.g. social care); some international competition exists; and, particularly in border

[1] NHS trusts and hospitals employ three types of staff: substantive, bank, and agency. Substantive staff are full-time, permanent employees. Bank staff are temporary staff drawn from a staffing system run by the trust. Agency staff are temporary staff hired from for-profit third parties.

areas, the NHS in England competes with the Scottish NHS and the Welsh NHS.

Taken as a whole, the NHS is a massive labour market, employing 1.7 million staff across all NHS services. In practice, however, the NHS comprises many small labour markets around the country, with a certain amount of geographical differentiation in market operation. NHS staff characteristics vary by type of staff (doctors, nurses, and administrative staff), specialty, grades, seniorities, and experience levels.

Demand is very difficult to predict in the NHS nationwide, but even more so locally. Demand even differs with the time of day. Crises arise without warning, filling more beds and requiring more staff. Such unanticipated and sudden increases in demand have made staffing through third-party agencies important.

On the supply side, the situation varies for doctors and nurses, but the government exerts significant control over the numbers of doctors and nurses that are trained. That is being liberalised now, particularly on the nursing side. However, the long lead time for training health care staff means that increasing the labour pool can take years, which in turn affects the nature of competition. International sources of labour, which can and do mitigate this to some extent, are subject to a variety of barriers that limit flexibility.

Differences in supply also exist across types of staff. Compared to nurses, for example, doctors typically are more elastic in supply and more discretionary about wages. There are also differences between particular specialties.

An important feature of the NHS labour market is how pay is set. Wages are set centrally across the country, with the NHS operating to a certain extent as a single buyer. This both contains NHS cost to the taxpayer and avoids the price escalation that might otherwise occur in small sub-markets.

Wage levels are set nationally and vary by type of staff and level of experience. Although some differentiation across the country does exist, it is relatively broad-brush. It offers higher pay for staff in higher cost-of-living areas (e.g. inner London). There is limited scope for more fine-tuned modification of wages to ensure supply, particularly when meeting sudden and unanticipated surges in demand. This is why recruitment agencies and individual locum staff have become important suppliers of labour, albeit often at premium rates.

From an economist's point of view, these labour market characteristics can be beneficial for the NHS for several reasons.

- The NHS can keep wages for permanent staff at an affordable level for the country as a whole.
- Opportunities for flexible working within temporary staffing may attract people who would otherwise not be prepared to work. Since society is itself demanding more flexible working arrangements, this can help maintain and potentially increase supply.
- Such staffing sources provide temporary, rather than permanent, solutions to temporary surges in demands. Hiring permanent staff may not be an efficient way of meeting those fluctuations; it is logical to pay a small premium for temporary staff to fill temporary vacancies.
- Supplementing with temporary staff can allow the NHS to overcome challenges to continuity of service or safety by ensuring that wards are adequately staffed.

While the use of agency can play an important role in the NHS, it also presents important challenges.

- In small, individual "spot" markets, agencies have substantial, perhaps excessive, market power. Consider, for example, a trust on a Friday night facing a particular issue that appeared suddenly. The trust may have little choice but to hire temporary help from an agency, which in turn may be tempted to charge exceptionally high prices to meet this urgent, short-term demand.
- Using agency presents an administrative challenge to NHS. Procuring temporary staff from third parties is a phenomenon that grew quickly in a short period of time. The NHS has not traditionally had experience with this, nor has it been able to effectively influence local hiring of temporary staff. Because the temporary demand arises in individual wards, procurement often takes place at a local level, potentially involving people not in a position to negotiate strongly. This may be exacerbated by the complexity of incentives across the NHS; finance is not the sole concern, or the primary concern in many situations.
- An agency market can encourage NHS staff in substantive roles (i.e. permanently employed) to resign and move into the agency market. This phenomenon may increase over time as more and more people see agency work as a viable and acceptable career path. Potentially, a situation could be created where the substantive workforce increasingly moves to the agency market, leading the NHS needing for even more agency staff, creating a dangerous rising spiral in labour costs.
- Although no strong evidence exists to support it, quality also is a concern. There are potential downsides in using temporary staff who may not know a hospital as well as the substantive staff.

The agency market acts as a secondary market when the substantive market cannot meet demand; more accurately, the agency market is a tertiary market in the NHS. The preferred approach for filling temporary NHS vacancies is through the "staff bank", a flexible staffing system operated by the trust itself or by groups of trusts. The pay rates for such staff typically are somewhat below those for agency staff. The preferred pathway for the NHS, then, is to first attempt to meet demand with substantive staff, then through the staff bank, and only as a last resort through an agency.

3. The Growth of Agency Expenditures

As explained above, agency staffing is meant to fill temporary gaps in staffing. The immediacy and nature of the need for staff, however, has meant that agencies have been able to command premium prices. Precise figures are difficult to come by. because accountancy definitions have changed what is included and when, but the increase in spending is clear nonetheless. For three years from 2011, agency spending was growing at around 25 percent per year in the NHS, a staggering rate of growth. Over the first six months of the 2015/16 fiscal year, that year-on-year growth rate rose to 30 percent and the agency staffing bill was on track to hit £4 billion for the first time. Agency spending was running at double the level of four years previously and accounted for over seven percent of total staff spending. This was a major contributor to the financial challenges faced by the NHS.[2]

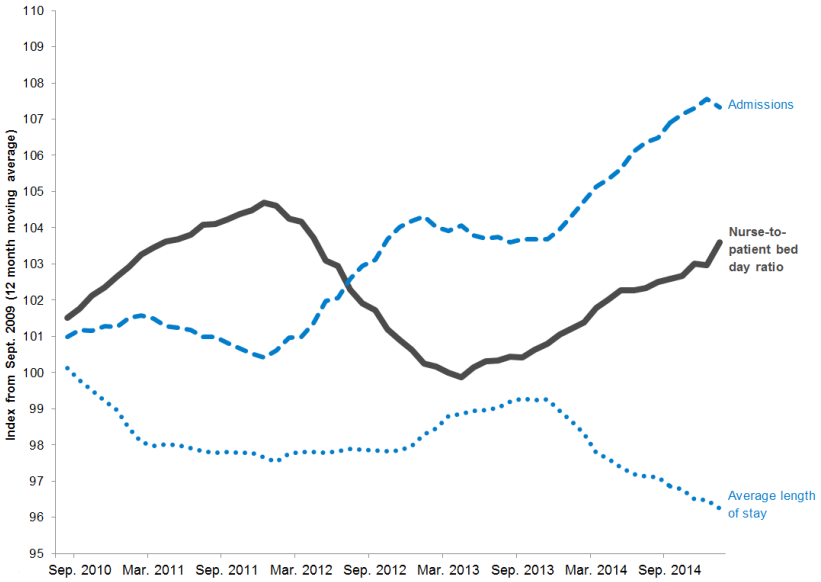
Around 2015, the media sensationalised the temporary staffing story with headlines such as "NHS locum doctor paid £11,000 to work a weekend" and "£3,200 for just one shift in A&E". Although this may have been helpful in prompting action, it is not clear that increases in prices were occurring overall. Agencies did charge very high rates in certain circumstances, but the increase in expenditure between 2011 and 2015 was driven predominantly by a sharp rise in the volume of agency shifts. By

[2] The statistics in this paragraph are based on data that are not available publicly.

2015 every single trust was using agency staff every single week; it had become common practice nationwide.

What explains this growth in agency spending and volume? A range of factors may be responsible. A change in the supply-demand dynamic likely explains much of the increase. Supply is relatively constrained and, indeed, the NHS had been planning its workforce to achieve high levels of productivity growth demand. But increased over the period, as Figure 1 shows- admissions continued to grow, in part offset by the NHS successfully reducing the average length of stay.

Figure 1. Trends in nurse-to-patient ratio, admissions and length of stay 2010 to 2015 (substantive nurses only)



Source: NHS Improvement, 2016b, p. 4

During this period, the nurse-to-patient bed-day ratio returned to historic levels, which highlights the increased emphasis on safety following the serious care issues revealed at the Mid Staffordshire NHS Foundation Trust. The Francis Report, the result of an inquiry into that situation, was released in 2013 (The Mid Staffordshire NHS Foundation Trust Inquiry, 2013). It included recommendations about safety in the NHS and discussion of the ratio of staff to patients. It is likely that this led to an increase in demand for staff, which in turn resulted in increased demand for agency staff. Cost may have been a secondary concern and some trusts did not exert strong control over spending on agency support.

In many cases, it is entirely appropriate to hire temporary agency staff. However, absent from many trusts were consistent management approaches intended to reconcile the use of such supplemental staff with the objectives of the organisation as a whole. There may have also been a "band-wagon" effect: hiring agency staff had become commonplace. At the same time, the agencies would have been aware of their exceptionally strong position in certain markets and some may have acted to make the most of the opportunity.

The dramatic increase in the use of agency staff also may have had an impact on the nature of the labour supply. As substantive and bank staff worked more routinely alongside agency hires, that career option may have become more acceptable and the flexibility of that workstyle more attractive.

In fact, in designing the price caps, it was decided not to cap bank rates as a way of signalling that working as bank staff was more attractive than working as agency staff.

These are just a few of the hypotheses about what affected the rapid rise in agency use. At its base, the drivers were basic supply and demand dynamics: activity was increasing in the NHS, supply was relatively constrained, and a potential "Francis effect" may well have added further to demand.

4. Introducing "Price Caps" and Other Interventions

Jeremy Hunt said in June 2015 that:

> Expensive staffing agencies are quite simply ripping off the NHS. It's outrageous that taxpayers are being taken for a ride by companies charging up to £3,500 for a doctor. The NHS is bigger than all of these companies, so we'll use that bargaining power to drive down rates and beat them at their own game. (Department of Health, 2015)

Obviously, this was phrased for maximum impact, but the important point is that it made clear the government's intention to use the weight of the NHS to seek to moderate prices and spending in the agency market.

Trusts were very much in favour of this approach. Many felt they were, in effect, being held to ransom by the agencies and they were eager for national help to strengthen their negotiating power and achieve more reasonable prices. The situation was exacerbated by an agency market dominated by a few particularly large suppliers operating under multiple brands, which meant competition may have been limited in some markets.

The Secretary of State decided to cap agency spending by introducing a price cap on agency rates. Any economist would have some scepticism about such an approach. Indeed, if "pure" price caps were to be imposed below the equilibrium rate, quantity supplied would be restricted. In an NHS context, this could create continuity issues in the provision of services as well as safety issues.

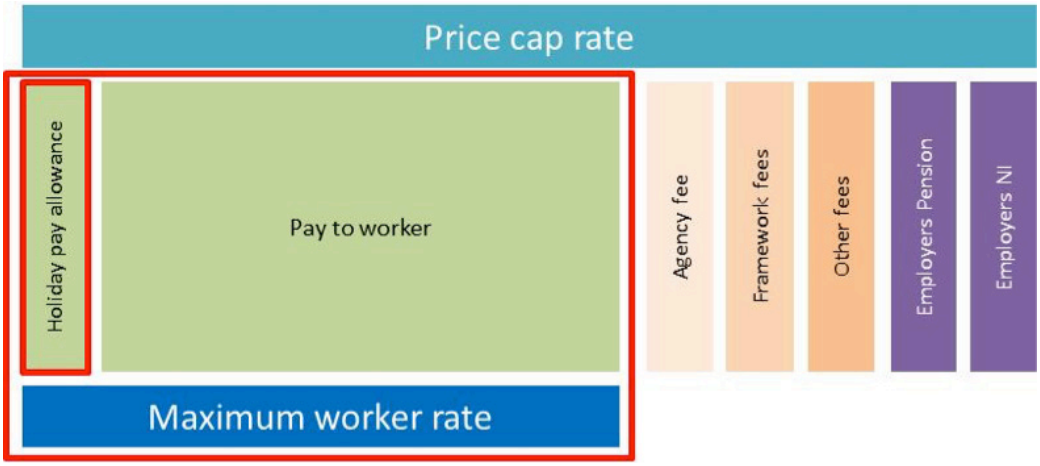
History has not always looked favourably on price caps either. For example, when price caps were introduced in the energy market in California, a crisis ensued that included blackouts. Other factors were at play there, but price caps were highlighted as a particular driver of those problems. Similarly, attempts at capping apartment rents in some US cities, now mostly abandoned, meant that the both the quantity and quality of housing suffered (Krugman, 2000).

Despite some initial scepticism, I was pleased, as an economist, to be asked to take the lead in the design and implementation of the NHS price caps. It offered an opportunity to design them specifically to address the issues at hand.

NHS caps on agency staffing

Usually price caps are imposed on the supply side. Since the NHS has leverage over trusts but not over agencies, however, these price caps were introduced on the demand side. Figure 2 illustrates the components of the price cap level: the rate that would be paid an equivalent substantive worker plus all add-on costs, i.e. fees and employer costs. The price cap currently is equal to the worker's rate plus 55 per cent.

Figure 2. Components of the price cap rate



This approach was based on the government's wish to not only introduce price caps, but to set those to be level with the wage rate of substantive staff thereby offering no premium for agency staffing. The intent was to send a very clear signal to staff that they would not be better off joining an agency than working for the NHS or the NHS's bank staff market.

An important feature of the design was implementation in stages, testing the market's response and whether the approach was working at each stage. If the desired effect was not being achieved, then continuing would be inadvisable. Safety was an important consideration. Implementation was monitored carefully by NHS Improvement; trusts provided weekly reports, intended to immediately flag any safety issues that might arise.

Although this did introduce some administrative burden, the importance of monitoring safety was deemed sufficient to warrant that.

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Table 1. Phasing in price caps

	Junior doctors	Other clinical staff	Non-clinical staff
Nov 2015	**+150%**	**+ 100%**	**+ 55%**
Feb 2016	**+ 100%**	**+ 75%**	**+ 55%**
Apr 2016	**+ 55%**	**+ 55%**	**+ 55%**

The NHS price cap approach is unique in that it has a "break glass" feature, which allows trusts to override the price caps on "exceptional patient safety grounds", based on a "robust escalation process sanctioned by the trust board" (NHS Improvement, 2016a). Any such overrides must be included

in a weekly report. From an economist's perspective, this is hugely important because it mitigates the effect of caps that inadvertently may have been set too low. The Care Quality Commission was particularly supportive of the break-glass mechanism.

In practice, this override option means that the price cap is not the definitive upper limit on what will be paid. Even so, the price cap provides the trusts with an important lever in negotiations and also provides a touchstone for determining at the ward level whether the price cap may be overridden and whether additional agency staff are truly needed. So, although these are not "pure" price caps, the approach still drives incentives for hiring outside staff and negotiations between trusts and agencies.

The price caps were not introduced in isolation; other changes introduced at the same time included the following:

- Framework agreements were retendered and included the designation of "approved agencies" that agreed to align pricing with the caps. This was a major structural change in the market.
- Expenditure targets for trusts were set, providing stronger financial incentives.
- Development of and national sharing of "best practice" was initiated and led by NHS Improvement. This was designed to improve the capacity of trusts in, for example, effective management of staff rosters, negotiating with agencies, and planning for meeting unanticipated needs.
- Agency spending was included explicitly in the assessment of trusts by NHS Improvement, another strong incentive for attentive management of outside staffing.
- New governance requirements were set for spending on agency staffing.
- The focus on communication was heightened.

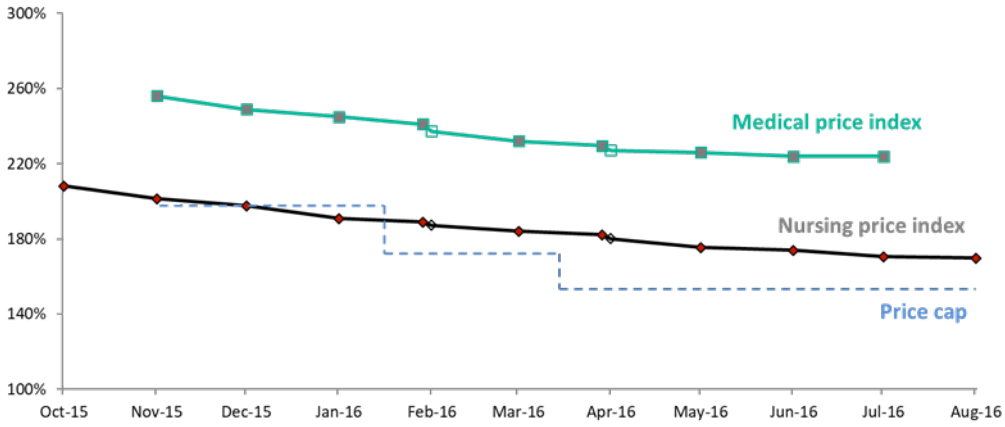
5. Impact of Interventions: What We Know So Far

The impact of the price cap and the other measures introduced at the same time seems clear. As noted above, spending on agency staff was growing at a rate of 25-30 per cent per year; this increase has not only been halted, but is in reverse. While spending was nearing £4 billion a year in 2015/16, it is now on track to be around £2.5 billion in 2017/18. That is a significant turnaround in spending. To provide another example, spending on agency staff was around £300 million in June 2015, £250 million in June 2016, and £200 million in June 2017.

It is difficult to know with certainty whether the quantity of agency staff changed, although the extent of change suggests a likely decline in volume.

Figure 3 suggests what effect price caps may have had on price: prices for agency nursing staff declined by about 18 per cent and agency medical staff by about 13 per cent. Again, despite some limitations of the data, this is a substantial change in what trusts were paying for agency staff.

Figure 3. Price index: average agency total charge as a percent of substantive pay



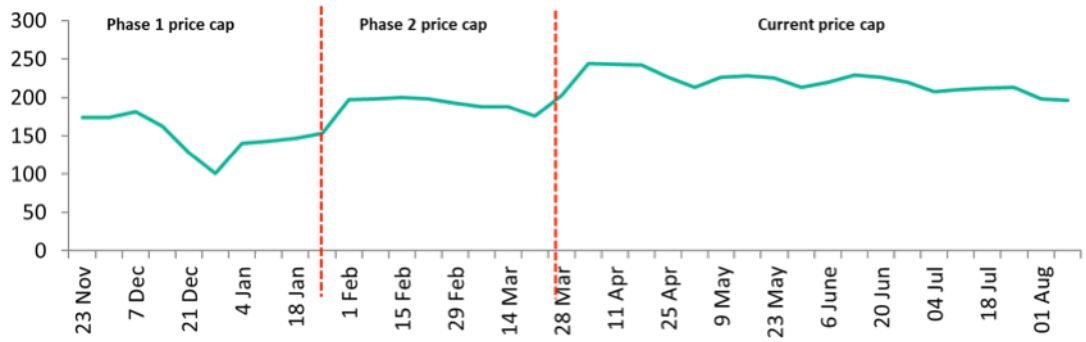
Source: NHS Improvement

Note: Based on data from a sample of trusts. May not be representative of all trusts.

Initial progress was greater for nursing staff because trusts were already better able to manage the nursing workforce. Progress was slower for the medical staff, but some of the greater gains in the past year have been in that area. The greater progress for nursing staff earlier in the period may also be linked to a greater reticence of doctors to work at lower agency rates.

Figure 4 shows the average number of weekly break-glass overrides reported between November 2015 and August 2016. During the time when the first price caps were in effect, overrides averaged 150 a week, i.e. on average, trusts were hiring agency staff at above price cap for 150 shifts. That increased somewhat during the second phase, when the price cap was lowered, and increased further with additional lowering in the third phase, to about 250 per week. Recent data suggest a 20 per cent decline since 2016.

Figure 4. Average reported weekly overrides per trust, Nov 2015 – Aug 2016



Source: NHS Improvement

The bottom line is that trusts have used the break-glass provision; it was not just a theoretical construct. Most trusts still are using the override, but importantly the average price paid for agency staff is lower. Volume probably also has decreased — price reductions alone cannot explain total reduction in expenditure.

A shift is clear in the balance between agency and bank staff. Before the price caps, agencies accounted for far more of the temporary staffing market; bank staff dominate no. Of course, this shift also means higher expenditure on temporary staff from the banks, but this typically is at lower rates, resulting in net savings to the NHS.

NHS Improvement asked trusts for their assessment of the price cap programme; responses may not be completely honest because trusts were responding to a survey from their regulator. Nonetheless, the statistics are interesting. In March 2016, 76 per cent of trusts said that agency prices had fallen, and 3 per cent said they had increased. Sixty-seven per cent said the caps had delivered net savings and 2 per cent said they had added costs. When asked whether they supported the third phase, making price caps equal to the costs of substantive staff, 71 per cent of trusts said yes, and 16 per cent said no. Although the spending on agency staff may not on average meet that cap, trusts viewed this step as an important negotiating lever.

6. Reflections

Despite initial scepticism about price caps, this programme has to date been an important success for the NHS. Spending on agency staff is down by around 40 per cent; prices are down by around 15 per cent; and the intention to shift the balance from agency staff towards bank and substantive staff has been achieved. However, the price caps are a short-term part of the solution; achieving in the long term a better balance between supply and demand requires a better understanding of the labour market and continuing efforts to shape it. Still, this set of policies collectively has had a positive effect, although I may have a vested interest in saying so.

This does not mean that price caps will work for all markets, or that their risks can be ignored. The NHS price caps are not price caps in the traditional economic sense. They were introduced as a constraint on the demand side, rather than the supply side, and were a soft constraint because of the break-glass override. This explains why prices have not declined all the way down to the price cap. But the override exception also explains why few service continuity or safety issues appear to have arisen.

It is also not clear how much of the decline in spending and prices is due to the price caps themselves. Other aspects of the process have probably been as influential in changing behaviour: altered incentives; greater cooperation and sharing of best practice across trusts; and the NHS acting co-operatively rather than trusts competing with one another on price, which previously allowed agencies to play trusts off against one another on price. Additional thoughts about the effect of this more co-operative approach are available on the NHS Confederation website in a blog by Chris Walters (2016). In sum, more changes have occurred than could have been created by price caps alone.

The NHS experience may offer important lessons for other areas where the hiring of temporary agency staff is increasing — social care and education, in particular.

- NHS price caps are not pure price caps. Introducing a pure price cap may have very negative effects.
- Be clear about which market failures are being targeted and how. This is why other policies were introduced alongside the price caps. Some of the market failures required a change in incentives within organisations separate from the price caps. Interventions, then, must be tailored to the

situation in the particular market at the time.

- Understand that the measures that achieve results in the near term may not be what are needed to address longer term issues of supply and demand.
- Challenges are multi-dimensional; actions must be complementary to one another. The particular combination of measures in the NHS programme has been important in achieving a positive result.
- The solutions to "imperfect" market issues may be "imperfect" policy solutions. The issues the NHS faced required a different policy response than would have been true if the NHS was treated as a perfectly functioning competitive market.

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