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Waiting Time Policies in the Health Sector

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1. Introduction

The main purpose of this Briefing is to discuss waiting time policies in the health sector from an international perspective and to highlight which policies have worked in the last decade in OECD countries. I will also touch on how to compare waiting times internationally and where the UK stands in those international figures. Finally, I will discuss waiting time inequality based on socioeconomic status (SES), which has been somewhat neglected in the large literature on inequalities of access and utilisation.

2. Waiting time policies across the OECD

I will provide a summary of the OECD Health Policy Study on waiting time policies that I co-edited with Michael Borowitz and Valerie Moran (Siciliani, Borowitz and Moran, 2013). We reviewed various policy options that policy makers have used to tackle excessive waiting times in 13 countries: Australia, Canada, Denmark, Finland, Ireland, Italy, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden and the UK. In this Briefing, I will refer only to a subset of these countries.

This is the second OECD project on waiting times with a number of improvements compared to the first written with Jeremy Hurst ten years ago (Siciliani & Hurst, 2005) in relation to empirical evidence, quality of the data and, most importantly, effectiveness of the policies to reduce waiting

times.

If I were to summarise the latest OECD study, I would say that the most common policy across the OECD countries is some form of maximum waiting time guarantee. The implementation and the details around these guarantees can, however, be quite different.

There are at least three ways to use maximum waiting time guarantees. The first is to use them as a target with sanctions for hospitals that do not bring the waiting times down. This approach has been used in England and Finland.

The second approach is to link maximum waits with competition and choice policies. For example, if the patient waits more than two or three months she may be entitled to have treatment in another public or private hospital at the expense of the National Health Service. That has been the case in Denmark, the Netherlands and Portugal.

The last approach is related to prioritisation: to set up maximum waiting times for different subgroups and severity levels. This has been used in New Zealand and to some extent in Canada. Increasingly, maximum waits are differentiated between the traditional elective conditions and the more urgent cancer/heart conditions.

Based on the OECD review, my key policy message is that supply policies – putting more money into the system – are no guarantee of success. However, they can work to reduce waiting times if you have a system that keeps the demand under control, so that when you increase the supply, the demand does not increase by the same amount. The maximum waiting time policy is a good way to achieve this demand control. For example, you could tell a hospital that you will give extra resources to increase supply but that if the waiting times do not reduce, the resources will be withdrawn. I think it is this combination of maximum waiting time guarantees and increases in supply that have managed to bring down waiting times.

Generally, the data on waiting times are now good enough for policy evaluation, although perhaps there should be some investment in making sure they cannot be easily manipulated. Sometimes the data are integrated within DRG (diagnosis-related group)-type systems; sometimes there is separate data collection.

I will focus on the success stories. Success is admittedly defined in a narrow way – reductions in waiting times. In the remainder of this section, I will discuss specific waiting time policies in England, Finland, Denmark, the Netherlands, Portugal, New Zealand and Norway.

2.1. England

Some of the data that we collected in the first OECD waiting times project showed that England was not doing particularly well (Siciliani and Hurst, 2003). For hip replacements, for example, the mean waiting time was 244 days in 2000, which was among the highest, together with Finland.

When waiting time targets were implemented in 2005, the managers of the hospitals that would not satisfy the targets had a higher chance of losing their jobs. Some academics called this the 'targets and terror' policy (Propper et al., 2008). This study used Scotland as a control group, with a difference-in-difference natural experiment set up. The effect of the sanctions can be estimated by comparing changes in waiting times with those in Scotland (where no policy was introduced). The

proportion of patients waiting more than six months reduced significantly in England and converged to the Scottish level. There was an improvement of about 6/7 percentage points. A follow-up paper found that quality of care did not suffer as a result, as measured by mortality rates and readmission rates (Propper et al., 2010).

Dimakou et al. (2009) raises issues about the potential misprioritisation that maximum waiting time guarantees might introduce. The study shows the probability of being treated over time for three specialities during 2001/2002. For all medical areas, the probability of the patients being treated increases with time. As the target approaches, the provider becomes increasingly concerned about missing the target and the patient's probability of being treated increases. Once the patient has passed the maximum, it is too late – the provider has missed the target and relaxes again (as shown by reduced probability of being treated, and by the peak at ~15 months). This tells a story about potential of misprioritisation, which is very much a concern whenever these maximum waits are discussed.

In the NHS Constitution it says that patients have "the right to access services within maximum waiting times". In legal terms, these maximum waits have elevated in terms of their importance. In England there is now a new way of measuring waits, which is the referral to treatment within 18 weeks. If the provider does not treat 90 per cent of the patients within the target, then some resources will be retained.

2.2. Finland

Finland also had long mean inpatient waiting times in 2000. For hip replacement, the wait was 200 days, and for knee replacements it was 270 on average.

In 2005 a healthcare guarantee was introduced. For primary care, it was determined that patients should be seen within three days; for specialist referral within three weeks; and for surgery within six months. These maximum waits worked, in the sense that, if you look at the evidence, the number of patients waiting over six months decreased from 126 to 66 per 10,000 population.

How did they achieve this? Having a strong regulator was vital. The regulator, Valvira, the National Supervisory Agency, had the authority to issue orders for improvements and to penalise municipalities that failed to comply with the health care guarantee. In fact it did not issue any fines, as the threat of a fine seemed to work sufficiently.

2.3. Denmark

In Denmark, the policy used to influence waiting times was related to choice and competition. In 2000 the mean waiting times for hip or knee replacements were about 110 days and slightly lower for the other surgical procedures.

Denmark has a long tradition of choice policies. In 1993 there was already a maximum waiting time guarantee of three months from GP or specialist referral to treatment. This was linked to free choice of hospital: if the wait was longer than three months, patients would be entitled to treatment somewhere else. This was brought down to two months in 2002 and to four weeks in 2007. These guarantees are targets and are not legally binding. The idea here is that if the hospital could see that for a patient the maximum wait would not be satisfied, the patient could choose another public hospital or even a private hospital and the bill would be sent to the National Health Service. The patient could

have the treatment either within that region or in different regions in Denmark.

The proportion of patients who chose to go private increased from 2 to 4 per cent and possibly this, together with some incentive effect, contributed to some reductions in waits. I would say that the reductions were not dramatic. For 18 treatments with long waiting times, including hip replacements and cataracts, they went from around 25 weeks to around 20 weeks.

2.4. Netherlands

I come now to the most interesting or successful waiting time policy. In 2000 the Netherlands did not have particularly long waiting times compared to the other countries but they still thought that they were too long – roughly three months for a hip replacement or a knee replacement – and so they tried to do something about it. Within a decade, average waits for a number of procedures were brought down from roughly fifteen weeks to five weeks. I would argue that this is a large reduction in waiting times.

How did they do it? Initially they discussed whether they should introduce a maximum waiting time guarantee, but they did not want to call it that, because the word 'guarantee' has legal implications, and so they decided to call it a 'socially acceptable' waiting time. An important point about the Dutch case study is that instead of the government coming up with some maximum, they brought together the patients, the medical profession, local government and the Department of Health, and ultimately agreed on a sensible, socially acceptable maximum wait. The agreed level was four weeks for specialist diagnosis; six weeks for day treatment; and seven weeks for inpatient treatment. In order to address concerns about mis-prioritisation, they also specified a proportion of patients who should be treated within a shorter time.

At the same time as this socially acceptable waiting time was introduced, the government changed other incentives, to increase supply. In 2001, the hospitals changed from fixed budgets to activity-based payments, the so-called 'cash on the nail' scheme. They also abolished restrictions on the number of specialists that the hospitals could have. In 2008, they changed the specialist payment system from lump sum payments to output-based payments and hospital production increased rapidly, and so did health expenditure. In summary, the waiting time policy worked but it was not for free.

2.5. Portugal

I have one more success story, which is Portugal. Portugal started with relatively long waiting times. The average wait for hip procedures was 140 days; the starting point was quite high.

The first Portuguese policy was to introduce a new information system called SIGIC (Integrated Management System of the Waiting List for Surgery) in 2005, which facilitated the collection of good quality data. This helped to clear and validate the waiting lists. They then introduced incentives in the form of a voucher: if a patient approached 75 per cent of the maximum wait, they would be entitled to a voucher, which they could use for treatment through a different provider, either public or private, at the expense of the originating hospital. As a result, the waits went down substantially. The waits for procedures such as hernia, vein litigation, carpal tunnel release, eye procedures and cholecystectomy, were reduced over the period 2006 to 2010. For vein ligation the wait went from 250 to 167 days; for hernia from 150 to 116 days, for example.

2.6. New Zealand

Above, I discussed supply-side policies combined with maximum waiting time guarantees or targets. What if you do not want to change the supply? What if a government is not willing or able to increase expenditure? In these cases, you might need prioritisation policies, such as those implemented in New Zealand.

A while ago they introduced a booking system in which there are three groups. The first group is called 'booked', where the patient is booked within six months and told their treatment date. The second group is 'certainty of treatment', where the patient is not given an exact date of treatment but they know that it will be in the next six months. Then there is the third group, which is 'active care and review'. In a way this is the novel part of the system. The patients in this group have some needs but they are not high enough to be compatible with available supply, and so they are not added to the waiting list but sent back to their GP who will provide pain management and other solutions.

To help clinicians to prioritise, governments invested in prioritisations tools called CPACs (Clinical Priority Assessment Criteria). These have been developed up to either a specific procedure level or specialty level, and are used to help specialists to consistently assess need and ability to benefit from treatment. There are analogies with some experiments in Canada. The idea is that the doctor can assess the severity of the patient and come up with a score that translates into a waiting time. Waiting times in New Zealand now are reasonably under control. The number of patients waiting more than six months for specialist assessment and for surgery has gone down.

2.7. Norway

I have mentioned several times the potential tension between a maximum waiting time that applies to everyone and the potential for mis-prioritisation. Some Scandinavian countries have taken this point very seriously. Norway was creative in coming up with a policy that included a different maximum waiting time for every patient. This is like a new legalised maximum waiting time guarantee that gives a lot of discretion to the provider.

In Norway patients are divided into three groups: (1) 'emergency'; (2) 'elective with individual maximum waiting time'; and (3) 'elective without maximum waiting time'. The assessment of the patient's condition is determined on the basis of the degree of severity, the expected efficacy of the treatment and the cost in relation to the expected outcome of the treatment. Patients in Group 2 are able to file a complaint if their wait exceeds the maximum (although very few do). Hospitals have two weeks to comply otherwise the patients can be treated in a different hospital (public or private), and billed to the original hospital.

There has been assessment of whether these policies had any effect on either the average waiting times or the degree of prioritisation, and it shows that not much has changed. Despite this, the policy remains conceptually interesting.

2.8. Prioritisation in the NHS

The prioritisation policies in New Zealand and Norway described above led me to think about prioritisation in the UK NHS. If you look at waiting times across procedures, across different treatments, you can see clearly that there is a lot of prioritisation. For example, waiting times for hip replace-

ments are quite high but for coronary bypass they are much lower.

But how much prioritisation is there within a treatment? Within a particular treatment, are doctors prioritising patients on the list? If they see a hip replacement patient in greater pain, would they give them higher priority or not?

With some colleagues at the University of York (Nils Gutacker and Richard Cookson) we test the extent of prioritisation in the NHS using patient-report outcome measures (PROMs), which provide a good measure of the pre-operative score (Gutacker et al., 2016). For hip replacements, patients who are in greater pain or are less mobile wait around five days less. If you look at knee replacements, only pain matters to determine priority on the list. There seems to be prioritisation on the list but not to a great extent. It is unfortunate that PROMs data are only available for recent years, so we cannot compare how much prioritisation there was in earlier years when waiting times were much longer.

Overall, there seems to be scope for reinforcing and enhancing prioritisation in the system.

2.9. Conclusions on waiting time policies across the OECD

The following key messages come out of the OECD research: (1) there are several new policies that work; (2) maximum waiting time policies are used extensively, specified in different ways and integrated with other policies; and (3) there is a range of policy options, some demand-oriented, some supply-oriented and some a mix of the two.

Having a maximum waiting time seems to be the dominant type of policy but there is a dilemma regarding how you set it up. If you make it unconditional, so that everyone is subject to the same maximum wait, it is easy to operationalise but could potentially contradict prioritisation. On the other hand, if you make the policy conditional and have individual maximum waiting time guarantees, like the Norwegians, this does not tend to work. Some countries have now started to compromise by exploring unconditional guarantees alongside shorter ones for more urgent treatments such as those for heart conditions or cancer.

3. Waiting time policies across the OECD

I now move onto a second piece of work which was about comparing waiting times across OECD countries. There are many different ways to collect waiting time figures. You can do it at specialty level, although specialties are more difficult to compare across countries, or at surgical procedure level. You can either collect waiting times for 'patients treated', which is the retrospective collection of waiting times, or you can take a snapshot of 'patients on the list' at one point in time and you measure how long they have been waiting.

Siciliani, Borowitz and Moran (2014) compare waiting times across OECD countries for specific procedures such as hip replacement or cataracts. They show that waiting times for England, Scotland and Finland were high but that they have converged towards the other countries over time. There are more countries in the last decade that have started to collect these data. My conjecture is that there is much less variation now, compared with a few years ago.

Which one is the better way to measure waiting times? Should we use 'patients on the list' or 'patients treated'? I think there are benefits to both measures depending on how you want to use them. If the purpose is monitoring, you may want to use 'patients on the list' since it is more up to date.

If it is to assess effectiveness of policies, you may want to use the patients treated since it captures the full duration of patients' experience.

4. Inequalities in waiting times by socioeconomic status

The third and final piece of work I will discuss is about inequalities in waiting times by SES. As I said earlier, there is quite a lot of literature about inequalities in access of healthcare. Empirical studies show that in some countries for specialist assessment richer people tend to be seen more frequently compared to poorer people, for a given level of need. For GP services possibly it is the other way round. For hospital care there tends to be not much of a difference in most countries.

There is a small emerging literature on inequality in waiting times. This links, to some extent, to the prioritisation policies described above. If we accept waiting times as an appropriate allocation mechanism, then everyone is supposed to wait the same amount of time for a given level of need. But is it the case that we all wait the same amount of time for a given level of need or, perhaps, do more educated and richer people wait less within publicly-funded systems?

In Siciliani and Verzulli (2009) we used data from the Survey of Health, Ageing and Retirement in Europe (SHARE) to test whether waiting times for specialist consultation or inpatient surgery differed across patients with different incomes and education. We found a large difference across a few European countries.

Cooper and colleagues tested a similar hypothesis with administrative data for specific procedures (Cooper et al., 2009). This paper suggests that patients who were more deprived were waiting longer for hip replacements in the late nineties, controlling for need. With Mauro Laudicella and Richard Cookson I did an analysis to test whether these inequalities were across different hospitals or within the hospitals. Is it the case that richer people get shorter waits because they live near a hospital which has a shorter wait or is it because, within that same hospital, you have patients who are treated differently? We found that it was the latter. Inequalities are mostly within the hospital but again this is for the 2001/2002 data, when waiting times were quite long (Laudicella et al., 2012).

This effect is also present in some Scandinavian countries. For hip replacement a recent study suggests that in Norway richer men wait 12 per cent less than poorer men, and for educated women it is about the same (Monstad et al., 2014). For Sweden there is a study at specialty level, which shows a large 27 per cent difference in wait between the rich and the poor (Tinghög et al., 2014). This also seems to be the case in Australia (Johar et al., 2013; Sharma et al., 2013).

You may wonder whether these inequalities are present for less urgent care only. In a recent working paper with Giuseppe Moscelli, Nils Gutacker and Richard Cookson, we test for inequalities in waiting times for coronary bypass, arguably an urgent procedure. In 2002 the waiting times of the most deprived were 170 days and 144 days for the least deprived, a 30 per cent difference, controlling for need. As time passes and the waiting times go down, so does the gradient. We need to think more carefully about the mechanisms behind this gradient. It could be that the richer patients are more assertive and they manage to get ahead in the queue, or that the poor stay behind and have more difficulty in keeping up with the healthcare system.

There is some more work to be done to explain the mechanisms through which people with higher SES wait less.

For more information, please see the OECD Waiting Times book (Siciliani, Borowitz and Moran, 2013) and the Health Policy paper by the same authors (Siciliani, Borowitz and Moran, 2014).

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