Foreword

To the third edition by Dr Frank Atherton, Chief Medical Officer NHS Wales.

I am pleased to present this third and revised edition of the Guide to Good Practice produced by 1000 Lives Improvement and an Expert Reference Group from staff working in the NHS in Wales. It sets out a vision for sustainable good practice within NHS Wales in the management and provision of outpatient services. Case studies are included that showcase examples of work to redesign services, make better use of technology, and redesign clinical pathways.

Demographic shifts and changing lifestyles are leading to substantial changes in the health of the people of Wales, with many people living longer, in many cases, with multiple and more complex conditions.

Outpatient services are often the first point of contact for many of us when we need specialist care. The performance of outpatient services has a major impact on the public’s perception of the overall quality, responsiveness and efficiency of health boards. They form a critical first impression for many patients, and their successful operation is crucial in the delivery of services to patients.

The current system has failed to keep pace with the needs of an ageing population, the changing burden of disease, and rising patient and public expectations. Fundamental change to the system is needed.

This document will help staff to manage capacity and demand, improve processes and systems, and make best use of resources. Case studies provide examples that are helping to transform outpatient services, underpinned by the concept of Prudent Healthcare which aims to rebalance the healthcare system by strengthening primary and community-based care; secure improved health outcomes and greater value from healthcare systems for patients; support the establishment of a more equal relationship between patient and professional and remove waste from NHS systems and processes.

We have seen welcome improvements in some waiting times in Wales and evidence of systems changing so that improvements can be sustained. We have made a good start – now we need to spread the improvements that have been achieved so far and take the next step. This should help to ensure that more people receive the right care, from the right person, at the right time, in the right place, helping to create an improved outpatient service reflecting the emphasis on the Quadruple Aim, adapted for Wales and supportive of the requirements of the Wellbeing of Future Generations (Wales) Act 2015.

We have a challenging agenda ahead of us that will take time to deliver – there is no magic bullet. Working together we can help to build a healthier, happier and fairer Wales – transforming outpatient services that provide access to specialist advice, diagnostics and treatment that will be needed in the future.
This ‘Guide to Good Practice – Outpatients’ provides a suite of principles and tools to enable improved management of waiting lists and delivery of outpatient services. The Guide will help to manage capacity and demand, improve processes and systems, and make best use of resources. The Guide is based on a previous edition that has stood the test of time – the tools are as relevant today as they were in the original version.

An additional chapter that focuses on transforming outpatients has been added, along with case studies that showcase service improvements, redesigned services, use of technology and redesigned clinical pathways. The Guide will support the NHS in Wales to take outpatient services into the 21st Century.

The Prudent healthcare principles should be incorporated into the changes to outpatient services:

- Eliminate treatments which provide no clinical benefit or do harm.
- The minimum possible treatment should be performed to achieve the desired results.
- All staff in NHS Wales should operate at the top of their clinical competence.
- Treatment decisions should be based on the individual’s clinical needs.
- Create a new relationship between the public and NHS Wales, based on openness and sharing information.

The Guide has been co-produced by 1000 Lives Improvement and an Expert Reference Group from staff working in the NHS in Wales in response to a recommendation from Welsh Audit Office report ‘NHS waiting times for elective care in Wales’ January 2015. This report states “The main reason for long waiting lists is the inability, despite a lot of effort, to sustainably match supply with patient demand.....Based on performance to date it is unlikely that NHS Wales could achieve and sustain low waiting times if it tries to do more of what it has done in the past”.

This Guide is based on evidence of what works and contains examples of good practice, tools and techniques and links to other resources. The case studies, embellish the content of the Guide and are designed to encourage adoption and spread across NHS Wales helping to create an improved outpatient service which reflects the emphasis on Prudent Healthcare and the Institute for Healthcare Improvement’s Triple Aim of improving population health, enhancing the experience of care and reducing the cost of healthcare.

The Guide is intended to support the NHS in Wales to improve and transform outpatient services: moving away from the historical model of ‘a one size fits all’ response to referrals and embracing the second Prudent healthcare principle of meeting need with an appropriate response. This will help to ensure that the NHS does not over-provide for the low risk, while under providing for those at highest risk.
Chapter 1 examines two of the biggest issues in the outpatient system: patients being seen out of order and the effects of ‘did not attends’ on the smooth running of outpatient clinics.

Chapter 2 deals with waiting list management: validation, prioritisation and the calculation and use of Primary targeting lists, patient focused booking, management of referrals, pooling and appointment booking.

Chapter 3 focuses on person centred care, and provides an overview of co-production, shared decision making, self management support, health literacy and service user feedback.

Chapter 4 discusses some useful tools and concepts essential to improved process change in the management of outpatient services. This includes process mapping, analysis of activity, backlog, capacity and demand, understanding, measuring and reducing follow-up demand, constraints and bottlenecks, flow models and Carve Out.

Chapter 5 provides some insights into the opportunities for transforming outpatient services and the way in which we understand, diagnose and manage care. This chapter will be of particular interest to clinicians and managers. It is intended to be thought provoking and challenges some existing practice.

Who should use this guide?
The Guide is aimed at NHS Staff who are involved in the management and provision of outpatient services. This includes senior management, outpatient managers and managers of clinical services. It also includes clinicians: medical and nursing staff, professions allied to medicine, and diagnostic staff.

Chapters 1–4 will be of particular interest to clinic administrators and managers.

Chapter 5 will be of particular interest to clinicians and managers.

How should this guide be used?
Each chapter or tool may be used independently to suit the needs of your service, or as a part of an overall service improvement programme.
CHAPTER ONE:  
INTRODUCTION

The Welsh Government is committed to ensuring that people receive an appropriate response from the NHS with reference to the Prudent healthcare principles. The NHS should not make the assumption that all referrals to specialists will require an outpatient appointment; other ways of managing some patients are more appropriate – this is addressed in more detail in Chapter 5.

Achieving better waiting times will require a fundamental rethinking of the way in which outpatient services are provided.

The Guide is aimed at managers, clinicians and staff in outpatient services and provides a suite of principles and tools to support NHS Wales in the management and provision of waiting lists and delivery of sustainable outpatient services.

THERE ARE SIX CORE PRINCIPLES BEHIND THIS DOCUMENT:

1. Patient choice
Patients should always be offered a reasonable choice in their appointment. Whilst patients have the right to make choices relating to their appointment, this may influence their waiting time. Patients should be given any information that is needed when making choices about their appointment to ensure that an informed choice is made.

Reasonable patient choice as set out in Rules for Managing Referral to Treatment Waiting Times means that where an option is available, the patient has the right to choose that option.

2. An agreed appointment
The patient will have the opportunity to agree the date and time of an appointment with the health board, either in person, by telephone or electronically. This initial patient contact is an opportunity to update information. From the point that patients are added to a waiting list, they should be available for an appointment and provide reasonable information about any dates that they are not available.

3. Separate patient choice from health board performance
There will be times where patient choice conflicts with the health board’s efforts to meet targets or operate efficiently. Patients may choose a date that exceeds waiting time targets. The key principle in such a case is that patient choice is respected but that health board performance is not adversely affected.

4. Patients will be treated in turn within agreed clinical priority
Patients are usually assigned a clinical priority when a referral is received or they are placed on a waiting list. Wherever practicable, patients should be seen in priority order. Rules for Managing Referral to Treatment Waiting Times targets are maximum acceptable waiting times; patients should be treated as their clinical need dictates. Within each clinical priority, patients should be seen in chronological order i.e. the date they were placed on the list.
5. An integrated set of policies
Health boards should have an integrated set of policies for the management of waiting lists and patient access to outpatient services.

The policy should reflect procedures across all working practices in the health board and be consistent with other health board policies such as patient record policies, admission and discharge policy, staff leave policy, cancelled operations policy and cancer minimum standards policy. The integrated policy should include a statement which describes the purpose behind it and should cross-reference to procedures that support the operational management of waiting lists, such as scheduling. Clinicians, managers and GPs should all be involved in the development, on-going review and administration of the policy. The policy should be signed off by the health board Executive accountable for waiting list management and be formally adopted by the health board.

6. Health boards should aim to continually improve services
What is good practice in Wales today will be standard practice tomorrow. Organisations should never see good practice as a final goal.

Health boards should continuously improve services always seeking to reduce variation in services and remove waste in the system. ‘Good practice’ is a commitment to continuous improvement across the organisation.

TARGETS
Rules for managing referral to treatment waiting times describes the detailed guidance used in Wales to manage waiting lists. It states "The underlying principle of the target is that patients should receive excellent care without delay. For other than complex clinical reasons they should start their required treatment no later than 26 weeks from referral, with a maximum of 36 weeks to allow for clinically complex cases." This Guide will help health boards achieve the targets set by Welsh Government. 1000 Lives Improvement recommends that health boards set long term goals that reflect local need. These internal goals may be different to Welsh Government targets; both are equally relevant. They should be ambitious and guide action for continuous improvement. Internal targets or goals should be seen as the ultimate point to aim for; the point at which to say this is a service that meets all the needs of our patients and which has achieved waiting times that cannot be improved.

IMPROVEMENT GOALS
1000 Lives Improvement recommends that improvement efforts focus on six domains of healthcare quality. (source: Institute of Medicine 2002; Crossing the Quality Chasm; A New Health System for the 21st Century. NATIONAL ACADEMY PRESS Washington, D.C. https://www.nap.edu/read/10027/chapter/1). We believe that these six domains apply equally to the NHS.

Safety
Healthcare is not safe, either in absolute terms or in comparison to other industries or activities. The NHS must continually strive to make healthcare and hospitals safer for patients.
CHAPTER ONE: INTRODUCTION

Aims and principles 1.3

Effective
The NHS should continually work to improve the effectiveness of clinical services:

- Administrative processes and procedures must ensure that the right patient receives care from the right professional in the most appropriate way to meet their needs
- Where there is evidence that a procedure or treatment is effective, that treatment should be offered to those that need it
- Where there is little or limited evidence that a procedure or treatment is effective, the procedure or treatment should not be offered

Patient centred
All care should be centred around the patient, with the patient being an equal partner in all decisions about their care and treatment. Care should be respectful of and responsive to individual patient preferences, needs and values. This is discussed in more detail in Chapter 3.

Improvement efforts should include patients as active members of the team. Groups that set policy should involve patients. Patient views and concerns should be incorporated into all stages of any redesign of services.

Timely
Care should be provided in a timely fashion. Reducing waits and harmful delays is central to improving services.

Targets have been implemented since December 2009 that no patient in Wales will wait more than 26 weeks from GP referral to treatment, including waiting times for any diagnostic tests or therapies required.

Timeliness also applies to the administrative process. Standards should be set for time taken to respond to letters and for process times within the health board. Administrative procedures should not waste staff time and workflow through the clinical system should happen as quickly and smoothly as possible.

Efficient
Money wasted in the health care system could be used to treat patients. Health boards have an obligation to provide patient care in a way that is efficient, reducing non-productive practices and waste to a minimum. Quality should be built as a system across the whole process. For example, it is not easy to deliver high quality clinical care in an environment that does not practice quality in administrative practices.

Equitable
This Guide supports the premise of equitable high quality care for all patients across Wales. Care should be based on need and not vary in quality because of personal characteristics such as socio-economic status, ethnicity, geographic location or gender.
Aims and principles 1.3

CHAPTER ONE:  
INTRODUCTION

The cost of quality
The impact of poor quality in the NHS can be measured in a number of ways, including human costs, the cost of care, wasted resources, poor investment and variation in care. Whilst the NHS continues to improve the quality of services, it is important to demonstrate the financial impact of improvement. This will help to facilitate achievement of the Institute for Healthcare Improvement’s Triple aim of improving population health, enhancing the experience of care and reducing the cost of healthcare.
There are a number of points of good practice throughout this Guide. Here we present the points as a summary of good practice.

STANDARD INTEGRATED PROCESS
There should be an agreed set of principles for making all appointments within an NHS organisation. This should include new and follow-up outpatient appointments, elective inpatient and day case events.

TARGETS AND GOALS
Goals set within a service should be aspirational and meaningful to patients.

IMPROVEMENT GOALS
Health boards should aim to continually improve services to patients.

Improvement should focus on:

■ Patient safety
■ Provision of clinically effective services
■ Services centred on patients
■ Services provided in a timely way
■ Efficient provision of services
■ Equitable care

WAITING LISTS
Under the Rules for Managing Referral to Treatment Waiting Times, the waiting period begins on the date that an organisation receives a referral. However, a patient should only be placed on a waiting list when the referral has been accepted and prioritised by an appropriate clinician. On the occasions where a referral is not considered to be appropriate for secondary care, feedback should be given to the referrer. Consideration should be given to the provision of advice to the referrer as an alternative to the provision of an outpatient appointment. This is discussed in more detail in Chapter 5. It is good practice for a health board to have a standard for the time from receipt of a referral to the patient being placed on a waiting list.

VALIDATION
All waiting lists should be validated, initially when the patient is placed on the waiting list, then at regular intervals. Both clerical validation and clinical validation should take place. The longer the waiting period, the more frequently each patient will be validated. Chapter 2 gives more information on validation.

PRIORITISATION
Clinical prioritisation increases waiting times for lower clinical priority patients. Where clinical prioritisation is necessary, the fewest number of categories should be used. This is described in detail in Chapter 2.
PRIMARY TARGETING LISTS
Wherever patients are being selected from a waiting list, the waiting list must be prioritised and sorted. Waiting lists should be sorted first by clinical priority and then by the date the patient was added to the list. Patients should be removed from the top of the list with longest wait; urgent suspected cancer first then urgent and finally routine. This is covered in detail in Chapter 2.

PATIENT FOCUSED BOOKING
The key requirements of patient focused booking are that the patient is directly involved in negotiating the appointment date. This is dealt with in more detail in Chapter 2.

GENERIC REFERRALS AND POOLING
Referrals into health boards should usually be pooled within specialities. Referrals to a specific consultant by a GP should only be accepted when there are specific clinical requirements, or stated patient preference that has been agreed by the health board. Chapter 2 covers this in more detail.

PATIENT CENTRED CARE
Patients should be involved as partners at all points of the outpatient pathway. This is covered in more detail in Chapter 3.

COPYING LETTERS TO PATIENTS
Communications between health professionals regarding referrals should usually be copied to patients. Alternatives to a face-to-face appointment should have correspondence copied to GP or other health professional. Patients must be given the right to opt out of receiving letters.

MANAGING CAPACITY AND DEMAND
Staff managing services in health boards should have a clear understanding of the capacity of their service, the activity levels provided by the service, the demand on the service and the backlog of work in the system. Chapter 4 covers this in more detail.
There are many reasons patients wait. Traditionally, it has been assumed that waiting times are caused by a mismatch of capacity and demand – too many patients and too few resources. We will examine issues about capacity and demand in Chapter 4. But there are other reasons for waits. In this chapter we examine two of the biggest issues in the outpatient system: patients being seen out of order and the effects of ‘did not attends’ (DNAs) on the smooth running of outpatient clinics.

**WAITING FOR AN APPOINTMENT**

All too often patients experience their appointment being cancelled on at least one occasion – and at short notice. This may be the result of clinics being cancelled or reduced by the health board; data collection is not robust everywhere making it difficult to quantify this issue. It is recognised that this has an impact on the efficiency of the service as well as patients.

**Figure 1.1** shows all routine referrals made to one Consultant in a typical speciality during one month. Urgent appointments have been excluded. The range of waiting times is from less than one week up to 42 weeks. There is also a cyclical nature to the booking process; as referrals are received, they are processed in batches, affecting the ‘next available clinic’ time, which may change between batches as adjustments are made to clinics.

The extreme waits are due to clinic cancellations; these are people who have missed an appointment because either they or the hospital has cancelled their appointment and they have been re-booked. The red line marks the 13 week point; more people are seen within 13 weeks than outside.

The average (mean) wait is 10.8 weeks (the blue line). The median wait is 9 weeks; there are 32 patients waiting over 13 weeks and 119 waiting less than 13 weeks.
WAITING IN A CLINIC
The most common complaints relating to outpatient appointments are for the time between GP referral and the hospital appointment and the time people spend in the clinic waiting to see a clinician. Typically a large number of people are waiting at the start of the outpatient clinic; there are always a lot of people in the waiting room and the clinics run late.

Why is this?
Consider a typical outpatient department. Assume each patient spends 10 minutes with the consultant, or 15 minutes with a registrar. Over the course of a busy 3 hour clinic, at best 30 patients could be seen by these two doctors (the actual figures are not important at this stage).

On average 15% of patients do not attend (DNA) their outpatient appointment. Because there are long waiting times for new referrals, and medical staff are a scarce resource, the clinic is overbooked by 15% to account for the DNAs, otherwise medical staff will be under-utilised. This means that there are now 35 patients booked into 30 slots for the afternoon.

WHAT EFFECT DOES THIS OVERBOOKING HAVE ON THE SMOOTH RUNNING OF THE CLINIC?
Firstly, although on average there are 15% DNAs, crucially there is no way to know which patients these are. A worst case for the clinic would be for several patients to DNA their appointment at the start of the clinic and all the ‘overbooked’ patients to be booked at the end of the clinic. This would mean that the consultant time would be wasted and staff would have to stay late.

To counteract this, extra patients are booked at the start of the clinic to ensure that there is always a steady supply of patients waiting to see the consultant. This makes sense from the point of view of protecting a scarce resource, but it leads to overcrowding in waiting rooms and long waits, because it is a rare event that the DNAs are all the first patients booked.

Of course, it is a rare event that the DNA rate for a clinic is 15%; this figure is an average and averages can be dangerous.

What is the effect of overbooking by average amounts?
Some clinics will be overbooked by 15% and have 15% DNAs. In theory the right number of patients will attend but NOT at the right times. However, in the worst case scenario from the staff’s perspective, some days there will be no DNAs and they will be faced with an afternoon of full waiting rooms, long waits and finishing late. This could be counter balanced by changing the hours that some staff work but is this the answer to this problem? There will still be complaints from patients and clerks will be blamed for overbooking clinics.

Surely this will be balanced by the good days; if the average DNA is six patients and sometimes it is none, then surely there are days when twelve patients don’t attend the clinic? But the chance that all twelve DNAs will be at the end of the clinic is as rare as the chance that all will be at the beginning and because these are unannounced non-attendances, even if they were all at the end, you would not know until after the clinic should have concluded. So everyone stays until the end after all. The overrun days cannot be balanced out by days when the clinic finishes early; there are no good days to balance the bad.
An example...
This is illustrated in figure 1.2 (below). The data here comes from an ENT Consultant and represents 50 consecutive outpatient clinics. The clinics are all for new patients. The average DNA rate for the 50 clinics used in this example is 14.5%. 19 of the 50 clinics have DNA rates of less than 10%, so with an overbooking rate of 15%, these 19 clinics were overbooked by at least 5% and up to 15%. Another 16 clinics had DNA rates of 10% to 20%, giving slight overbooking or underbooking and 15 clinics had DNA rates above 20%. In these cases the clinic was substantially underutilised, because the ‘average’ overbooking of 15% was not sufficient to compensate for the DNAs in that clinic. In the worst case, half the patients for one particular clinic do not attend!

Figure 1.2
Variation in DNA rates

What are some other consequences?
Patient surveys have shown that waits in clinic are a major concern. Fortunately patients are no longer asked to all come at 2pm for the clinic, but sometimes it still seems that way. Faced with long waits, ‘experienced’ patients may try to arrive early, to beat the queue, adding to the front-loading problem. Health boards should avoid reinforcing this behaviour by seeing patients at their appointment time rather than arrival time.

Overall, the negative effect of a poorly designed clinic system is most seen in people’s attitudes. Patients get disgruntled, staff become demoralised.

CLINIC FLOW RATES
In a perfect world there would be no waits in clinic – this could be achieved if the flow of patients arriving for an appointment was synchronised to the flow of patients leaving following their appointment.

It is important to understand how an overbooked clinic runs under various situations and compare these to how a clinic would run if there were no DNAs. To illustrate this, five clinic scenarios are presented as a series of work flow charts, figures 1.3 to 1.5. Before explaining the figures, it is important to understand the assumptions that they are based on.

The clinic described in these figures is three hours long (2pm until 5pm) with each patient taking approximately 10 minutes with the sole Clinician. For each patient, an ‘actual time’ of between 5 minutes and 15 minutes has been randomly allocated. These average out to 9 minutes, well within the ten minutes the appointment slots allow.
No patient is late or early for their appointment. There are no breaks in the clinic and under each scenario, it is assumed that the clinician does not go faster or slower to cope with the changed workload (which is what normally happens). This scenario presents a simplified view of clinic structure to make the interpretation of the effect (overbooking) easier to observe.

It is also assumed that on average the clinic has a DNA rate of 20%. In a clinic of 18 patients, five extra have been added to compensate for these DNAs. As already discussed, there is no advantage to these additional patients arriving later than a patient who DNAs, so in work-flow graphs figures 1.3 to 1.5 the extra five patients are booked early in the clinic; two at 2pm, one each at 2:10pm, 2:20pm and 2:30pm.

On the work-flow graphs, each patient is represented by a horizontal bar. The start of the bar (a black line) represents the patient appointment time. A pink bar represents a patient wait and the purple portion represents the time that the patient spends with the Clinician. If a bar shows only the black portion, the patient at that time was a DNA.

Figure 1.3 (left) represents a normal clinic. The clinic is 20% overbooked, but five patients DNA, so the number in the clinic is the correct number for the total time available. There are several lengthy waits early in the clinic, but these reduce over time and the clinic finishes a fraction over time, at 5:03pm. The average wait for all patients is only 7 minutes and the longest wait for a patient is 21 minutes.
**CHAPTER ONE: INTRODUCTION**

**Why patients wait 1.5**

**Figure 1.4** (below left) represents one of those ‘good’ days. Although five extra patients are booked, ten do not turn up. The DNAs are randomly allocated through the clinic.

What impact do these five extra DNAs have? The average wait is reduced slightly, from 7 minutes to 5 minutes. The longest wait for a patient is reduced from 21 minutes to 15 minutes. The major effect is that the clinician has 42 minutes unoccupied. The clinic finishes at the same time!

What happens, if instead of five fewer patients, five extra turn up and there are no DNAs. **Figure 1.5** shows the impact.

Average patient waiting goes from 7 minutes to 38 and 17 patients wait half an hour (two others wait 29 minutes). The longest wait goes from 21 minutes to 52, but most dramatically, the total time spent by patients in the waiting room goes from 2 hours 16 minutes up to 14 hours 38 minutes!

Crowding also increases. In **Figure 1.3** (p.15), the maximum number of patients in the waiting room shortly after 2pm was four, but this dropped rapidly. In **Figure 1.5** (below right) this remains at six for most of the afternoon. The clinic finishes 43 minutes late.
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Why patients wait 1.5

What happens if the clinic is booked with slightly shorter appointment times, staggering the additional patients rather than front loading them? This would spread the increasing waits through the clinic, catching up each time there is a DNA. But as figure 1.6 (below left) shows, when there are no DNAs the waits get steadily longer throughout the afternoon. This scenario also doesn’t cope well if there are several DNAs early in the clinic.

The final clinic presented here is figure 1.7 (below right). This clinic has 18 patients (the optimum amount). It allows 10 minutes per patient as do figures 1.3 to 1.5. However, the average wait is only 3 minutes. The longest wait is 8 minutes and the total patient waiting time is 54 minutes. No DNAs have been planned for. It has been assumed that every patient will attend and patients have been booked accordingly. There is no front loading of the clinic to compensate, no shortening of appointment slots to allow for the extra patients.

Figure 1.6
Clinic flows, 20% overbooking with staggered appointments and no DNAs

Figure 1.7
(far right)
Clinic flows, no overbooking, no DNAs
Why patients wait 1.5

**Figure 1.8** (below) summarises the statistics for these five examples. **Figures 1.9 and 1.10** (both below) show the relationship between DNAs and time waited with increased or decreased numbers of attenders in an overbooked clinic.

**Figure 1.8** Summary of the five clinic scenarios

<table>
<thead>
<tr>
<th>Number of patients seen</th>
<th>Total patient/clinician contact time</th>
<th>Total clinician wait time</th>
<th>Average patient wait</th>
<th>Maximum patient wait</th>
<th>Total patient wait time (all patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% overbooked 20% DNAs</td>
<td>18</td>
<td>2hr 57min</td>
<td>6min</td>
<td>7min</td>
<td>21min 2hr 16min</td>
</tr>
<tr>
<td>20% overbooked 40% DNA</td>
<td>13</td>
<td>2hr 1min</td>
<td>6min</td>
<td>6min</td>
<td>9min 1hr 1min</td>
</tr>
<tr>
<td>20% overbooked No DNAs</td>
<td>23</td>
<td>3hr 43min</td>
<td>nil</td>
<td>38min</td>
<td>52min 14hr 28min</td>
</tr>
<tr>
<td>20% overbooked staggered, no DNAs</td>
<td>23</td>
<td>3hr 43min</td>
<td>nil</td>
<td>19min</td>
<td>37min 7hr 4min</td>
</tr>
<tr>
<td>No overbooking No DNAs</td>
<td>18</td>
<td>2hr 59min</td>
<td>3min</td>
<td>3min</td>
<td>8min 54min</td>
</tr>
</tbody>
</table>

**Figure 1.9** shows that as the number of DNAs goes down, the total amount of patient wait time increases exponentially.

**Figure 1.10** shows that the effect is similar but less pronounced for average and maximum patient waits.

**Figure 1.9** Impact of varying DNAs on total waiting time for clinics with 20% overbooking and 18 patient slots

**Figure 1.10** Impact of varying DNAs on average and maximum waits and utilisation of consultant time
It is clear from these examples that the NHS has historically taken a mistaken approach to the problem of DNAs. The NHS has accepted DNAs as a normal fact of hospital life, and has worked out strategies to accommodate them. The approach has dealt with the symptom of the problem, rather than dealing with the root cause. What must be addressed is the reason for DNAs. DNAs should be avoided. Only then will the NHS get out of the morass that DNAs and strategies to ‘fix’ them have created.

The Rules for Managing Referral to Treatment Waiting Times sets out the requirements for managing DNAs.

The Rules state ‘If the patient does not attend (DNA) an agreed appointment without giving notice, the patient should be removed from the waiting list and responsibility for ongoing care returns to the referrer. Appropriate notification of removal must be given to the patient and the referrer. If the consultant responsible for the patient considers that they should not, for clinical reasons, be removed from the pathway following a DNA, they remain on the pathway.’ Systems should be in place to enable clinicians to make effective and efficient decisions about the clinical need for a follow-up appointment, rather than all patients who DNA being given another appointment. This will help to reduce pressure on the system and reduce wait times.

Reliable system design is needed to provide appointments that meet patients clinical needs, and give confidence to clinicians and managers. This will help to facilitate a proactive approach to avoiding DNAs. Patients should have clear unambiguous information about the consequences of not attending their appointment for them individually and for the service. In Aneurin Bevan University Health Board ‘text and remind’ is used to improve productivity of appointment slots by reducing DNAs from 9.2% to 7.2%. Read the case study.

The DNA rate is often higher for follow-up appointments than new appointments. Patient involvement in the discussion about follow-up is essential in avoiding appointments that the patient does not value or could be provided in an alternative way, such as by receiving results of an investigation by letter or phone when appropriate.