# Outpatients Learning Improvement Network:

# Reducing DNAs Toolkit for London

Created for the Outpatients' London Innovation Network by the Reducing DNAs Task to Finish Group

# Contents



*Please follow the accompanying links to specific case studies and other resources.

# Foreword

At the time of writing this toolkit, August 2025, (Did Not attends – DNAs or Was Not Brought WNBs in paediatrics) rate for London's secondary care trusts sat at 9.5% - that's a total of 106,356 missed appointments in one month, at the cost of around £120 per DNA (nearly £13 million a month). A decrease in DNA rates of just 1% could create over 1000 additional active appointments a month. In London alone, there were over 2 million missed outpatient appointments between August 2024 and August 2025 (Source: Model Health System, September 2025).

Reducing DNAs is a strategic priority across NHS services because missed appointments have wide-reaching consequences for patients, staff, and system efficiency. The rationale is grounded in four key areas:

1. Improving Patient Access and Experience: DNAs directly limit access to care for other patients. When appointments go unused, they represent lost opportunities to treat individuals who may be waiting for urgent or routine care. Reducing DNAs helps:
- Free up appointment slots for long-waiting patients.
- Improve equity by ensuring underserved groups aren't disproportionately affected.
- Enhance patient engagement through better communication and flexibility.

2. Reducing Operational and Financial Waste: Each missed appointment costs the NHS approximately £100–£120, with London losses estimated at nearly £1 billion. these costs include:
- Wasted clinician time.
- Increased pressure on scheduling and administrative teams.
- Longer waiting lists and reduced throughput.

3. Tackling Health Inequalities: DNAs are not evenly distributed. Patients from deprived areas, younger age groups, and those with language or digital access barriers are more likely to miss appointments. The NHS aims to:
- Identify and address barriers to attendance.
- Tailored interventions such as flexible scheduling, multilingual reminders, and digital tools and PIFU (Patient Initiated Follow-Up)
- Ensure that DNA reduction strategies do not inadvertently worsen inequalities
- Minimise safeguarding concerns

4. Supporting elective recovery and system efficiency: DNAs is a fast-impact measure that supports broader NHS goals, including:
- Elective care backlog recovery
- Meeting national planning guidance targets.
- Enhancing productivity and sustainability.

This toolkit brings together evidence, research and practical tools and techniques to support your trust to understand the reasons for DNAs, as well as the actions trusts can take to implement new strategies for DNA reduction, with some attempt at including details of impact.

# The role of deprivation in creating barriers to accessing healthcare:

**Deprivation**

Understanding deprivation is essential because it directly influences patients' ability to access and engage with healthcare services. Around half of London acute trusts are located in some of the most deprived areas in the country (IMD scores taken from the Office for Health Improvement and Disparities). Hardship has a profound impact on patients' mental, physical and dental health, it is vital that we work to understand how to support patients experiencing the greatest deprivation to fully utilise primary and secondary care appointments, especially considering the direct correlation which has been found in hospital data between higher levels of deprivation and higher levels of emergency admissions. Furthermore, between 2017/18 and 2022/23 the average length of stay for critical care patients living in the most deprived areas increased by 27%, yet for patients living in the least deprived areas the increase was just 13% (Joseph Rowntree Foundation, 2024).

DNAs are not just operational inefficiencies—they reflect deeper systemic barriers that disproportionately affect deprived communities. Patients from more deprived backgrounds often have higher DNA rates. This can be due to:

- **Financial constraints** (e.g. travel costs, inability to take time off work).
- **Housing instability** (poor housing quality (i.e. cold and damp), missed letters or reminders, needing to prioritise housing over health).
- **Digital exclusion** (limited access to devices, online booking or reminders).
- **Structural barriers** (Experiences of racism, language barriers, poor communication from healthcare providers to help patients understand the benefits and reasons for the appointment (health literacy). and less social support to engage with healthcare systems).
- **Increased poor mental health and safeguarding** (hardship has been associated with an increased risk of developing depression, anxiety and post traumatic stress disorder).

**Communication:** We know there is link between **poor provider communication**, **health literacy** and **underutilised appointments** - a national effort, in early 2023, to identify the reasons for missed appointments and to enhance two-way communication between hospitals and patients reduced missed appointments by 0.6% in participating trusts. NHS England recommends that as a minimum, all providers should use appointment reminders (e.g. via SMS) and offer patients an easy option to cancel and rearrange appointments if they need to. Reducing booking ranges to 6 weeks (not booking so far in advance) has also been found to support patients experiencing the most deprivation to identify and agree appointment times with services. Please see the Communication section for more information.

# Deprivation data sources and measures:

| Trust Name | Admission Type | Catchment Year | IMD Score | National Rank (1 is most deprived, 122 is least deprived) | % DNA rate August 2025 |
|---|---|---|---|---|---|
| Homerton University Hospital NHS Foundation Trust | Elective | 2020 | 28.76 | 19 | 10.1 |
| Barts Health NHS Trust | Elective | 2020 | 24.44 | 37 | 10.8 |
| Lewisham And Greenwich NHS Trust | Elective | 2020 | 23.81 | 40 | 9.7 |
| Whittington Health NHS Trust | Elective | 2020 | 23.43 | 43 | 12.0 |
| Croydon Health Services NHS Trust | Elective | 2020 | 22.70 | 48 | 8.7 |
| Barking, Havering And Redbridge University Hospitals NHS Trust | Elective | 2020 | 22.48 | 51 | 10.3 |
| Imperial College Healthcare NHS Trust | Elective | 2020 | 21.71 | 59 | 9.6 |
| London North West University Healthcare NHS Trust | Elective | 2020 | 21.66 | 60 | 9.8 |
| King's College Hospital NHS Foundation Trust | Elective | 2020 | 19.92 | 68 | 9.7 |
| Royal Free London NHS Foundation Trust | Elective | 2020 | 19.88 | 69 | 9.8 |
| The Hillingdon Hospitals NHS Foundation Trust | Elective | 2020 | 19.19 | 74 | 6.9 |
| University College London Hospitals NHS Foundation Trust | Elective | 2020 | 18.98 | 78 | 8.4 |
| Guy's And St Thomas' NHS Foundation Trust | Elective | 2020 | 17.38 | 90 | 10.3 |
| Chelsea And Westminster Hospital NHS Foundation Trust | Elective | 2020 | 16.36 | 96 | 8.9 |
| St George's University Hospitals NHS Foundation Trust | Elective | 2020 | 14.39 | 104 | 10.2 |
| Epsom And St Helier University Hospitals NHS Trust | Elective | 2020 | 12.87 | 112 | 7.9 |
| Kingston Hospital NHS Foundation Trust | Elective | 2020 | 10.62 | 121 | 8.0 |

Taken from the Office for Health Improvement and Disparities
NHS Acute (Hospital) Trust Catchment Populations
https://app.powerbi.com/view?r=eyJrIjoiODZmNGQ0YzItZDAwZi00MzFiLWE4NzAtMzVmNTUwMThmMTVlIiwidCI6ImVlNGUxNDk5LTRhMzUtNGIyZS1hZDQ3LTVmM2NmOWRlODY2NiIsImMiOjh9

This table captures 2 measures of deprivation from 2020, and snapshot data of Did Not Attend rates for London Trusts in August 2025 taken from SUS Activity data.

The IMD score is taken from ONS data, the higher the score the greater the level of deprivation within the Trust's patient population.

Using a National Rank of deprivation allows us to compare across Trusts. Here, lower ranks capture Trusts who have a patient population experiencing greater deprivation.

Both measures of deprivation are from 2020, and it is safe to assume this picture may look different now. The drivers of non utilised appointments are complex, but gaining insights into your patient population sociodemographic characteristics will help you to design and operationalise DNA management interventions.

# Why do we need to collect equalities data?

# Why we need to collect equalities data… A quick reference guide for staff (NHS Scotland and Public Health Scotland, 2024)

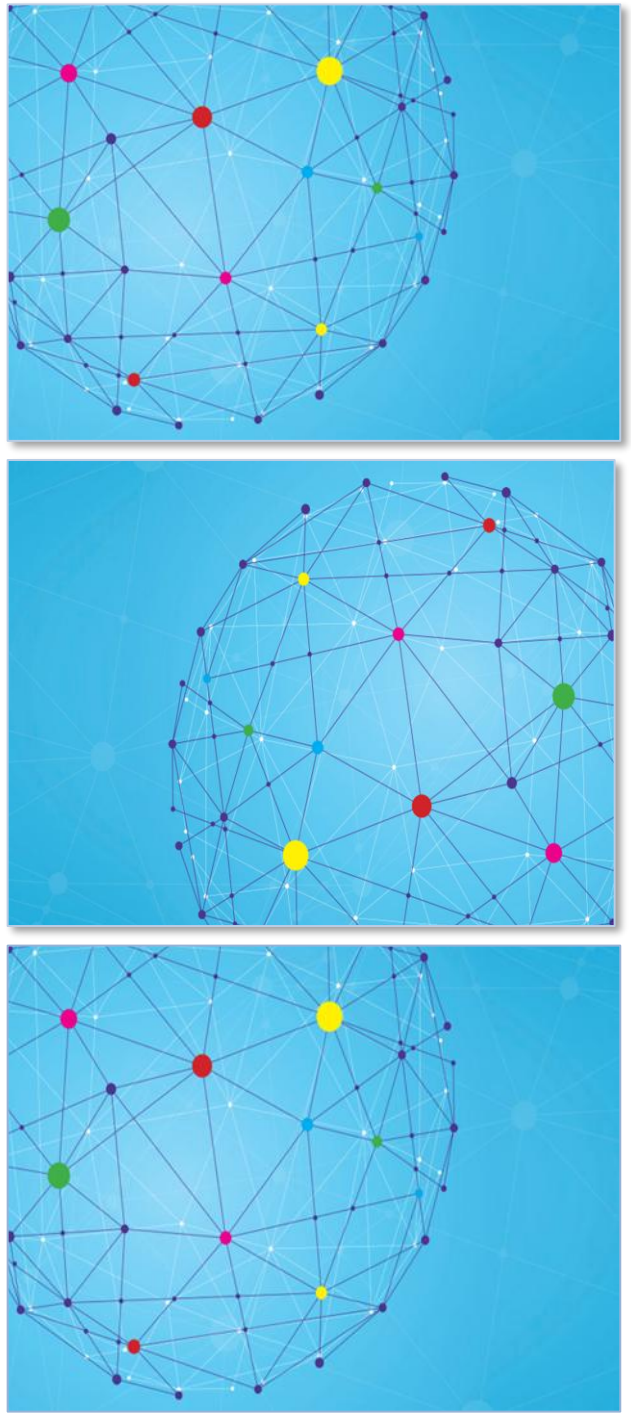
| Protected Characteristic | Importance for recording and patient care |
|---|---|
| Age | This refers to a person's age at their last birthday, calculated from their date of birth.<br><br>We ask about age to support service planning for different age groups and the transitions between services. |
| Assigned Sex at Birth | This refers to the biological characteristics that define humans as female, male or intersex. Within health services, people are routinely asked about their biological sex, rather than their gender.<br><br>There are sex-specific treatment pathways, screening choices and risk factors that need consideration. For example, cervical screening or prostate checks. |
| Race and Ethnicity | Race is a social construct and categorises people mainly by physical traits. Ethnicity is based on a combination of factors. These can include someone's country of birth, migrant status, nationality, language, skin colour, genetic ancestry and religion.<br><br>Good quality information can help identify who is experiencing poorer health outcomes and address some of the underlying causes. These may include differences in service uptake, communication and language requirements, culture and attitudes, socio-economic factors, differences in disease prevalence, experiences of racism, and levels of trust. |
| Disability | A person has a disability if they have a physical or mental impairment that has a 'substantial and long-term' (more than 12 months) negative effect on their ability to do daily activities and interactions.<br><br>Not all people with a 'disability' would describe themselves as disabled, this is why it is important to discuss if there are any adjustments that need to be made, to ensure equal access to our services. |

Services can support staff and patients to record equalities data by providing confidential, safe spaces, where questions can be asked with sensitivity.

Equalities data collection – Professional leaflet

# Why we need to collect equalities data… A quick reference guide for staff (NHS Scotland and Public Health Scotland, 2024)

| Protected Characteristic | Importance for recording and patient care |
|---|---|
| Gender Identity | Gender refers to our internal sense of who we are and how we see and describe ourselves in relation to societal norms, roles, and relationships, as well as to laws, processes and policies that are based on labels of masculinity and femininity. Someone may see themselves as a man, as a woman or as having a non-binary gender.<br><br>Understanding someone's gender identity may also be important in some circumstances, such as admitting a patient to a single-sex ward. |
| Sexual Orientation | Sexual orientation refers to a person's sexual attraction. It may be towards their own sex, the opposite sex, both sexes or none.<br><br>Sometimes gay, lesbian and bisexual people have worse experiences of using NHS services and worse health outcomes. This can be related to experiences of stigma and discrimination. |
| Marriage and Civil Partnership | Marriage is a legal relationship between two people that involves a number of rights and obligations with regards to children, property and money. Civil partnership is a legal relationship between two people that gives them the same rights as people who are married.<br><br>Asking for a patient's relationship status can help you to understand the support they may have and can help plan future care. |
| Pregnancy and Maternity | Certain medications should not be taken if the patient is pregnant or breastfeeding as they can have a negative impact on the health of the patient and the baby.<br><br>Discussing pregnancy can be an emotional or triggering time for some people, who may have experienced infertility, miscarriage, stillbirth or trauma during childbirth. Therefore, sensitivity, confidentiality and a safe space should be provided |



# Approaches to improving communication and health literacy

## THE CONDITION AND BEHAVIOURAL FACTORS

- Individual psychological and behavioural factors, which impact on the individual's perceived opportunities, capabilities and motivation to utilise their hospital appointments, can present as challenges and barriers.
- Furthermore, One of the key findings from the National Voices report, *The NHS at 75*, was that the NHS needs to improve how it communicates with patients concerning access and treatment options.
- Health literacy and communication techniques have been shown to help to mitigate some of these psychological and behavioural factors and reduce the number of DNAs.
- 43% of UK adults struggle to understand health materials containing text and will struggle to understand leaflets and appointment letters (Rowlands et al, 2015).
- They may also be in too much pain or feel too anxious to ask you to clarify information, or they may feel too ashamed, or too embarrassed.

## Key touch points with patients where you could consider adopting health literacy and communication tools and techniques

**Email Appointment Letter**

This example uses behavioural insights to help you structure your letter.

please see examples on the next slides for all three types of communication.

**Telephone Call**

Telephone calls have been found to be more effective in reducing DNAs for some cohorts of patients. The examples here provides health literacy tools to help you maximize the impact of your targeted telephone calls.

**Text Messages**

The examples here draw from behavioral insights to help you maximize impact.

**Email appointment Letter - EXAMPLE OF BEHVAIOURAL INSIGHTS**

**Ref: Patient's NHS Number**

Patient's Name
Address

Name of Team/Department
Email address to team/admin
Address

Including direct telephone and email contact details will make it easier for the patient to cancel or reschedule.

This implies a social norm, please use accurate ratios

Dear [patient name],

We look forward to seeing you at [clinic] on [date] at [time]. 9 out of 10 people attend. Please call 02077673200 if you need to cancel or rearrange.

**Appointment type: In person appointment**

This is referred to as positive framing

Here insert a short, easy to read description of why attending the appointment is beneficial to the patient (an example would be: Attending in person appointments helps the NHS to find and treat health issues sooner)

**Email Appointment Letter Continued:**

Loss aversion: People are more motivated to avoid a loss. It is important to make them aware of the current waiting list and accessibility of next appt.

**Location: [provide full address including postcode and map]**

Please come to [add detail of where to report to] on arrival. [Consider adding detail on directions to the appointment and information about where to park]

We will call or text you two days [edit as appropriate] before your appointment to remind you.

Please contact us to reschedule your appointment. If we do not hear from you, it could take up to X months to reschedule your appointment. This is because we have a long waiting list. **Please also contact us if you no longer need this appointment**

**On the day of your appointment**

You might find it helpful to prepare some questions or write down a list of things you'd like to discuss during your appointment. Please also let us know if we need to make reasonable adjustments to help you on the day. [Space to include any information about what to bring to the appointment, how to prepare or whether the patient needs to arrive early.

**Some patients are eligible to claim back the cost of travel to specialist NHS care through the Healthcare Travel Costs Scheme (HTCS). You can find out more on the NHS website or ask us for advice [provide relevant phone number if available].**

**Email Appointment Letter continued:**

Please let me know if you have any additional questions.

Kind Regards

(name of admin person)

A named individual creates the sense that there's a real person on the other side, increasing social accountability.

- The NHS Medical Document Readability Tool can provide helpful feedback but has limitations.

References:


- BehaviouralInsightsInHealthCare.pdf
- Tom Huang, UCLH - ASM Paediatric and Adolescent Diabetes Department.


| Behavioural Science Concepts (Communication Tools) | |
|---|---|
| Salience and Priming | Use bracket and bold to highlight the response needed |
| Commitment and consistency bias | Asking for an explicit confirmation or response makes commitment much more likely. |
| Social Norm | This uses social comparisons (comparing ourselves to what others do) to influence behaviour. |
| Messenger - a specific admin | A named individual creates the sense that there's a real person on the other side, increasing social accountability — ignoring the email feels like letting a specific person down, not the organization. |
| Positive or Negative Framing of Risk | Messages used in health communication can use framing to support motivation and intention. Framing imparts information about the consequences of a specific action or behaviour:<br><br>Attribute framing, which provides positive (framing as a gain) or negative (framing as a loss) versions of an equivalent message. For example, 'the chance of survival with cancer is 2/3' versus 'the chance of mortality with cancer is 1/3'. |

# How to improve health literacy and communication

George Bernard Shaw, **"*The single biggest problem in communication is the illusion that it has taken place*"**

Research has found that often people will not say if they do not understand information or have forgotten it. Health literacy tools and techniques can support improved communication which better supports patients to reflect on what they have heard and understood.

## General Tips

- Avoid jargon and acronyms
- Use consistent terms to increase clarity.
- Use short sentences (15 - 20 words).
- Stick to concrete ideas
- Use active verbs - *Your test results have been looked at.*

## Check and Chunk

Check and Chunk compliments the Teach-Back method, it involves providing information in smaller chunks and checking back with the patient that this makes sense to them.

## Teach-Back

Teach-Back is an approach where you ask someone to repeat back to you what you have just told them in their own words. It is important to not sound like you are 'testing the patient' or being patronising. Examples include:

"To make sure the instructions I've given you make sense, could you tell me how you are going to…?"

- Telephone calls can be particularly helpful to patients who experience the greatest barriers to attending. They provide the opportunity to remind the patient, but also to clarify information and to problem solve - asking "is there anything which makes attending more difficult for you? " could open the conversation up and make it easier to find the information/appointment time to support utilization

**References:**

The NHS Health Literacy Toolkit

# Text message suggested wording

**Figure 11: Wording of reminder messages used.**

| Message | Wording |
|---|---|
| **Control** 02 | Appt at [clinic] on [date] at [time]. To cancel or rearrange call the number on your appointment letter. 04 05 |
| **Easy call** | Appt at [clinic] on [date] at [time]. To cancel or rearrange call 02077673200. |
| **Social norms** | We are expecting you at [clinic] on [date] at [time]. 9 out of 10 people attend. Call 02077673200 if you need to cancel or rearrange. |

**https://www.health.org.uk/reports-and-analysis/reports/behavioural-insights-in-health-care**

# Understanding the role of primary care

# Understanding the Role of Primary Care

**Collaboration with Primary Care**

Each inappropriate DNA-discharge starts a chain of events which further add to the waiting list burden. Patients will book into another GP appointment to be referred again and placed on a waiting list. This will usually be for a new (likely longer) appointment than possibly a follow-up.

Long delays between referral and first patient contact can lead to multiple requests for updates to the GP and hospital services.

**Primary care can play a major role in reducing hospital outpatient DNAs (Did Not Attends) by highlighting barriers early and improving patient engagement:**

- Flexible Scheduling: GPs can flag patient constraints (work hours, childcare) so hospitals offer suitable slots - many DNAs occur because hospital appointment times are inconvenient.
- Provide up-to-date patient information, including current telephone numbers and email addresses
- Identify patients with travel difficulties and link them to hospital transport schemes or community support
- Data Sharing: Regular reports from hospitals to GP practices on their patients' DNA rates can help target interventions.
- Community Engagement: Practices in high-DNA areas can work with local hospitals to co-design solutions (e.g. culturally tailored reminders).
- Primary care can promote portal use during referrals – keeping them 'waiting well' and updating patients about their appointments.
- Education Campaigns: Primary care teams can explain the impact of missed appointments on waiting lists and patient outcomes during consultations or via practice newsletters

# DNAs – The Evidence Base

# The Evidence Base- System/Provider NHS Level Factors

### Lacking up to date, correct patient level contact details

Holding inaccurate, not up to date, patient contact details: phone numbers, addresses, emails. A recent Healthwatch (2025) survey found a quarter of respondents reported inaccuracies in their personal details.

### Incomplete, unclear communication

Not confirming with the patient, the best method of written communication, and preferred language.
The information in the letter, text or email is unclear, hard to understand and/or incorrect.

### Not making reasonable appointment offers

Not agreeing the appointment (face to face/remote, date and time, and reason for appointment) with patient at the outset.

### Not providing multiple reminders

The evidence base supports that providing multiple text reminders is more effective in reducing DNAs, as is the functionality for Patients to contact the service directly, communication is 'two way'

### Not recording DNA's accurately and the reason for the DNA.

Not recording DNA's accurately, missing when patients have tried to cancel their appointment.
Not recording the reasons for patients DNA'ing and missing key local information.

### Not using data insights into your patient group to match DNA interventions.

Not all interventions to reduce DNAs will work with all patient groups, understanding your patient group more will help to guide you in choosing interventions

# The Evidence Base- Patient/Community Level Factors

### Access to devices and data

Patients may have to share devices or have limited access to data: 31% of UK adults do not access health services online.

### Socioeconomic status

Nearly 1 in 5 people in the UK is living in poverty (2.3m in London). Poverty places patients under additional stress creating both psychological and logistical hurdles to navigating healthcare

### Lack of flexibility within the hours of the 'working day'

Patients may be unable to take time off work and lack workplace support for health issues or have caring responsibilities.

### Barriers to travel

Patients may not be able to afford travel costs.
Their health condition may make travelling more challenging.
Free travel passes are only accepted at certain times in the day (after 9am for instance)

### Forgetting the appointment, or not understanding the benefits of attending

Patients may forget the appointment, especially older patients.

### Co-morbidity and having mutliple apppointments scheduled

The patient has been given multiple, or conflicting appointment times and is struggling to juggle these: 46% of patients who missed two or more appointments in a year had one or more chronic conditions, and 17% had four or more.

# How to Use this Toolkit

# How to use this toolkit

As part of the LIN outpatient programme of work to support trusts to decrease their non-utilised outpatient appointments, a practical, clinically led, evidence-based toolkit has been produced, including best practice principles, examples and implementation tips.

**To ensure you can get the most out of this toolkit, make sure you understand your local patient population data before reading, this will help you align any gaps you find in your approach to reducing DNAs with the evidence base.***

1. **Use the Self -Assessment Tool in this toolkit to assess your current delivery of interventions to address DNAs.**

2. **Where you find gaps, consult the DNA Domains Framework for suggested intervention focus. The drivers of DNAs are often a mix of provider process and patient level factors. The DNA Domains Framework will help you to think holistically about these.**

3. **Go to the tables corresponding to the the DNA Domains Framework for a list of interventions, these are grouped to make it easier for you identify provider level and patient level interventions.**

4. **Follow links to case studies and references for more information on how an intervention has been delivered and for which communities. Interventions have been graded for possible resource implications.**

5. **Reach out to Trusts who have delivered these interventions to find out more and feedback to us on the impact of your DNA management to further inform the evidence included in this toolkit.**

**As a live document the evidence base will also be continuously reviewed.*

## DNA Domains Framework:

The reasons behind missed appointments are often complex and intersect, the framework below provides a conceptual guide to help you address the reasons for DNAs within your patient population holistically. You may need to combine interventions from different domains to achieve the most impact. Interventions are grouped under these domains on the following slides.

The domains concerning the condition(s) itself and behavioural level factors which may make utilising hospital appointments more challenging, focuses on how to incorporate health literacy and communication tools and techniques to overcome these challenges.

### Provider Processes:

- Quality of communication
- Flexibility of scheduling, use of reminders, ease of cancellation.
- Availability of appointments (evenings and weekends)
- Access policy application
- Pathway design to optimise appointment and awareness of DNA 'hotspots' within pathway

### Structural Barriers:

- Experiences of structural inequalities such as racism and socioeconomic status
- Lack of flexibility with employment or caring responsibilities
- Geospatial barriers (travel/ or not being in the country)
- Lacking the resources (mental, physical, social and economic) to engage with healthcare and treatment

### The condition itself:

- The subjective experience of pain or discomfort which impacts on the patient being able to travel.
- Does the patient have one condition or multiple conditions.
- Is the condition well understood or is it something which is not spoken about (stigmatised or embarrassing).
- Is the condition long term?
- The patient's perceived severity of illness.

### Behavioural:

- Perceived susceptibility to illness
- Perceived benefits/barriers to accessing healthcare.
- Health Literacy (being able to find, understand and act on health-related information)
- Cost of behaviour change (psychological, social and financial)
- Self-efficacy (the belief that ‘I’ can make change happen)
- Impact on quality of life and sense of self (such as loss of dignity, or loss of independence, which may impact motivation).

# Interventions and Resources

# Impact

Improving the utilisation of appointments and reducing DNAs requires interventions which address and respond to the mix of salient provider and patient level factors for each primary and secondary care provider. This can make generalising the measure of impact more challenging. There is unlikely to be a 'one size fits all approach' for all providers to utilise. At service level, a reduction of 0.5%, or 1% in DNAs is a notable level of impact, please continue to share the impact of your work to reduce DNAs with LIN.

## Text Messages

Robotham D, Satkunanathan S, Reynolds J, et al, 2016: A meta analysis of studies examining the impact of text messages on pre-scheduled appointment attendances. Patients who recieved a text reminder were 23% more likely to attend their appointment than those who did not. Patients who did not recieve a text message were 25% more likely to DNA. Results were similar for risk bias, region and publication year. Multiple text messages were found to be significantly more effective than single text messages, and voice messages were found to be more effective again.

Jayne A. Orr & Robert J. King (2015): This meta-analysis used a random-effects model to synthesise 38 randomised controlled trials that investigated the efficacy of SMS messages to enhance healthy behaviour. A small, but significant effect was found (g = 0.291) across studies which involved diverse samples of participants from developed and developing countries, ages, ethnicities and socioeconomic backgrounds. Hence, the effect was found regardless of population characteristics. This suggests that text messages as a standard offer to all patients has benefits.

# Impact

**Phone calls - and DNA Predictor Tool**

D. Fernandes et al, (2025). A study to determine if a pre-appointment telephone call targeted at endoscopy patients identified as 'high risk' of non-attendance using a DNA predictor tool, will reduce DNA's and inequities of access for patients experiencing the greatest deprivation. For those patients successfully contacted pre-appointment the DNA rate was 4.7% (against a 4-month average of 24.4% for the 'high risk' group pre intervention). For those patients living in the 20% most deprived areas the DNA rate was 6.2%, down from a pre-intervention average of 14.3%, this reduction being statistically significant (p=0.00001).

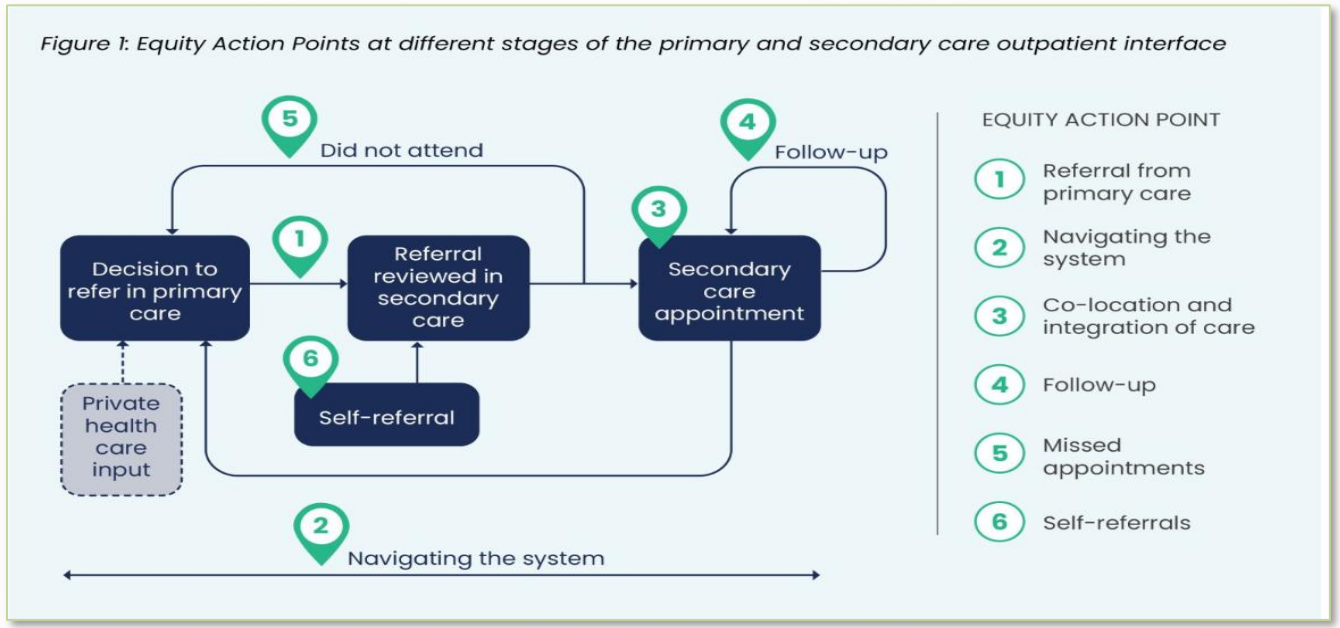
**Phone calls - and opportunity to discuss barriers to attending (problem solving and health literacy)**

Nicolson, S. L., et al, (2024). A study using targeted telephone calls to women who have never attended a breast screening appointment, with women from the most deprived areas most likely to experience barriers to attending. Telephone calls identified barriers to attending and provided a supportive problem- solving approach to help patients find a way to mitigate barriers. Of those contacted, 483 (71.2%) attended their appointment, 122 (18%) cancelled and 73 (10.8%) did not attend (DNA), versus 344 (46.2%) attending, 34 (4.6%) cancelling and 367 (49.3%) not attending among those who were not contactable.

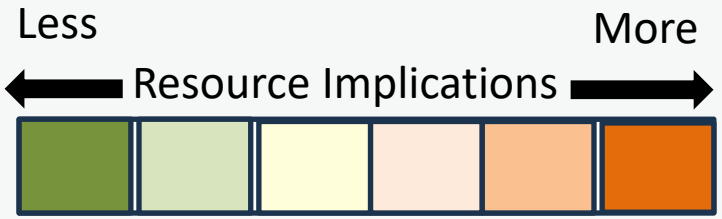
# Impact

**2- way texting and direct contact with the clinic/service to cancel**
Overall increasing the ease with which patients can cancel appointments can reduce DNA rates by as much as 80% (NHS England » Reducing did not attends (DNAs) in outpatient services)

**Improving the interface and pathways between primary, secondary and community healthcare providers**, this work is likely to also involve referral management, decision support tools, and the use of advice and guidance. The evidence base is not conclusive concerning a 'what works best', especially to reduce DNAs for patients experiencing the greatest barriers to healthcare, however recommendations for local systems includes systems being designed to be flexible, intersectional, and community centred: What works: Addressing inequalities in the primary and secondary outpatient interface - Health Equity Evidence Centre

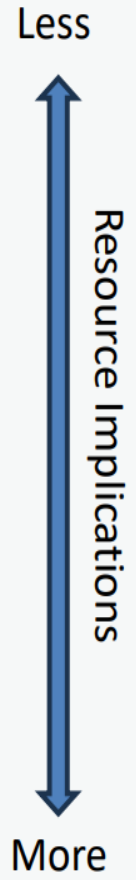


# Provider Processes – Operational and administrative

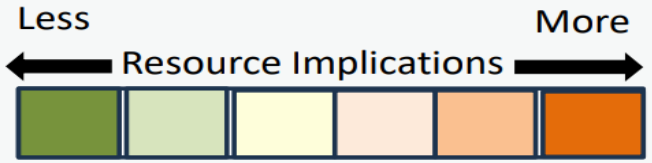



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Complete a DNA reduction checklist | Barts DNA checklist<br>NHS England DNA checklist |
| Ensure DNA management is built into clinical pathways and supports patient choice and greater flexibility. | Imperial STT pathway |
| Ensure an access policy is in place and fully understood by staff - there should be a clear process to follow when a patient does not attend and cannot be contacted, to decide on next steps | St George's Access Policy |
| Ensure regular validation of your patient tracking list | |
| Implement a patient-centred booking process such as the 8-6-4-2 model | Imperial 8-6-4-2 booking process - change adoption pack |

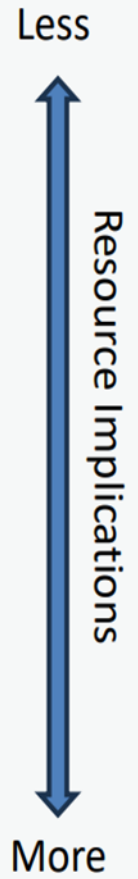


# Provider Processes – Reminders: Text Messages

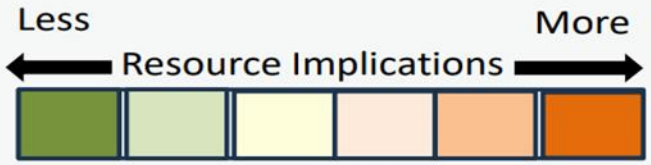



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Multiple text messages: by Admin staff and automated | Imperial DNA improvement & impact |
| Edit text to be specialty specific and tailored to patient population (see guide to check effectiveness of communication) | Communication Guide |
| Send text reminders at 14 and 4 days, this has been found to be impactful in both reminding patients and helping them to remove barriers to attendance, but also in providing the service with enough time to rebook a cancellation. | University College London Case Study |
| Develop SOP and Bookers Guide. | LNWH Booking Strategy |
| Make communications available in alternative languages to English; ensure preferred language is used. | Healthwatch, *Lost for Words*, 2022 |
| Use 2-way texting or allow patients to respond directly to the service | Royal Free London Case Study |

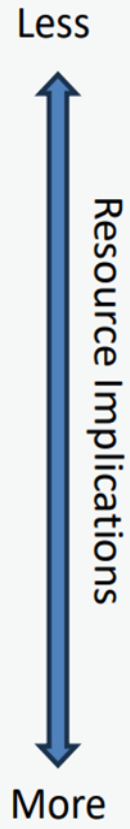


# Provider Processes – Email letters and Push Notifications

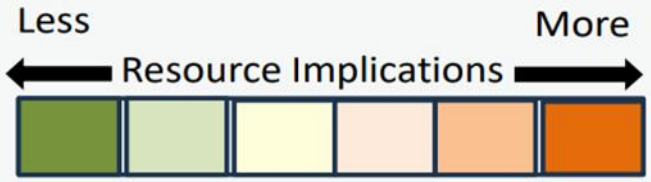



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Use communication guide to check effectiveness of communication. | Communication Guide |
| Consider behavioural science techniques to shape language and messaging. | UCLH Was Not Brought project<br><br>BehaviouralInsightsInHealthCare.pdf |
| Provide in preferred language | Healthwatch, Lost for Words, 2022 |
| If a patient is receiving more than one letter for other appointments, send together. This is especially helpful for patients with multiple conditions. | |
| Where possible/appropriate upload to a Patient Portal (MyChart). Using push notifications and email alerts to notify patients of changes to their appointments | Patient Care Aggregator - NHS England Digital |

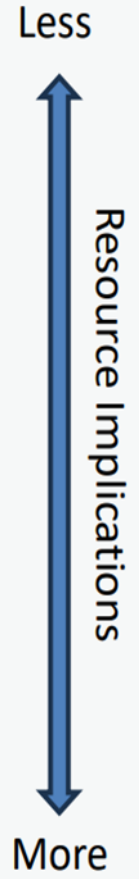


# Provider Processes – Reminders: Phone calls

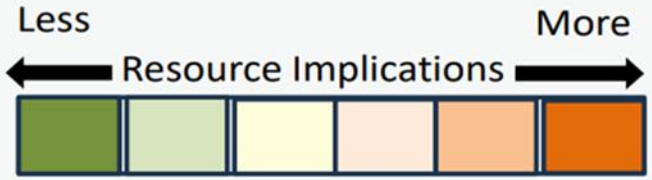



Interventions are graded by resource implication

| Interventions | References |
|---|---|
| Phone calls appear to help reduce DNAs more than text messaging alone. | Imperial College London Case Study |
| Utilise interpreters where most needed | Healthwatch, Lost to Words, 2022 |
| Some Trusts have used volunteers, or Health Navigators to make calls in advance of appointments. Third sector partnerships maybe able to mitigate capacity challenges. | Royal Free London Case Study |
| DNA Predictor Tools can support you to identify those patients at a higher risk of not attending. Phone calls enable patients to clarify information, ask questions and cancel and reschedule.<br>If the reminder phone call is at 4 days prior to the appointment there is time to utilise and book a cancelled appointment. | GSTT DNA Predictor Tool |

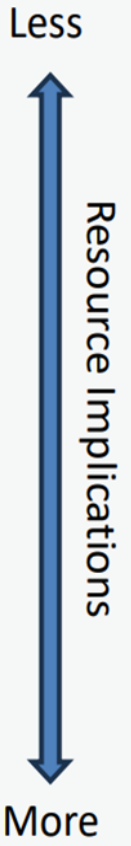


# Provider Processes – Data Quality

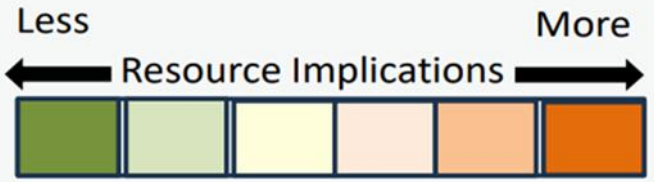



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Ensure patient contact details are up to date and accurate | National Voices, The NHS at 75 |
| Upskill your services to collect a wider range of protected characteristics (see guide) | Equalities Data Collection |
| Embed booking practices which ensure access policies are followed and patients are made reasonable, flexible offers for appointments | LNWH Booking Strategy |
| Record DNAs or Was Not Brought accurately, including the reason for the DNA and WNB. This information can provide helpful local intelligence. | NHS Reducing DNAs in Outpatient Services |

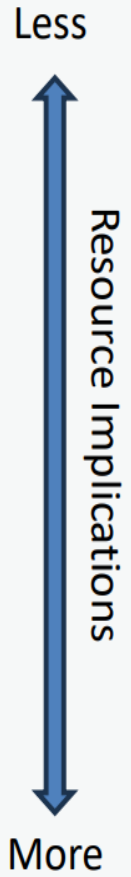


# Provider Processes– analytics and insights

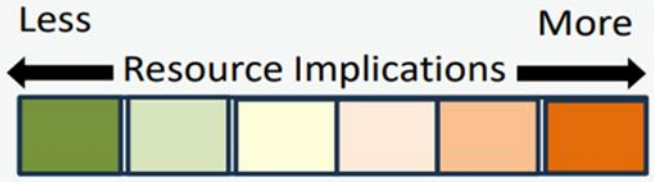



Interventions are graded by resource implication

| Analytics and Insights | Resources |
|---|---|
| Triangulate patient sociodemographic data (protected characteristics), and link to the Index of Multiple Deprivation. | Trust Catchment Map IMD tool |
| Use this data to drive insights into which communities have the highest DNA rates. Visualize this data with patient level data - clinic codes and DNA reasons, this can drive pathway improvements. | |
| Using either linked datasets with primary care data, and statistical modelling such as the London North West Health Equity Index, develop models which identify inequity of access to healthcare. These models provide insights which can drive partnership work - such as pathway redesigns, opportunities for sharing expertise, and improving health literacy. | London North West Equity Index |
| Develop a DNA Predictor Tool to assist you in identifying which patients have the greater risk of not attending (face the biggest challenges), to help you tailor resources to this group. | GSTT DNA Predictor Tool |

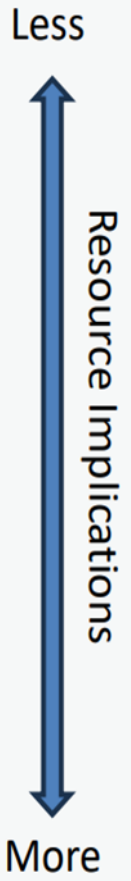


# Provider Processes - Deepen stakeholder relationships to improve pathways and communication

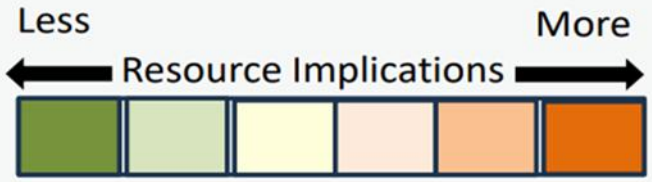



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Through system collaboration and data insights pathways can be improved to reduce the touchpoints where patients are more likely to DNA. | Imperial College London |
| For both Secondary and Primary Care deepening relationships with local VCSE organizations can harness essential information concerning the challenges different communities face in accessing healthcare. Local VCSE can also support with the shaping of health literacy messaging and the delivery of this through their networks | Improving Health Literacy in the NHS |
| Run regular Patient Surveys to ask patients for their views on ease of scheduling and attending appointments | London North West NHS Foundation Trust<br>Royal Free NHS Foundation Trust |

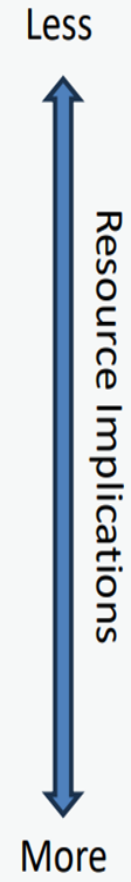


# Structural Barriers – Tackling socioeconomic barriers

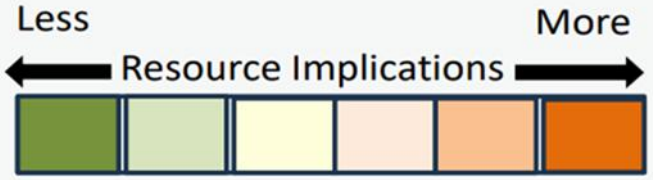



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Foster improved Patient engagement and Primary, Secondary Care, and VCSE collaboration for richer insights into the unique set of challenges being experienced by local communities in accessing healthcare. | Royal Free London – reasons for DNAs<br><br>UCLH Was Not Brought Project |
| Track attendance figures by IMD, age and ethnicity by point of delivery, especially for UEC, monitor for over representation of some patient groups | ONS Inequalities in Accident and Emergency Attendances |
| Explore if clinics can be co-delivered with other specialties and community services to improve access and develop trust. | Improving Clinical Coordination for People with Multiple Long- Term Conditions. King's Fund, 2025 |
| Ensure all staff (Admin, Operational and Clinical staff) have attended Cultural Competence and Cultural Safety training (where possible offer in person training to allow for greater reflection and learning) | |
| Explore health literacy needs and co-produce materials with patients and local organisations | Health Literacy Guide |

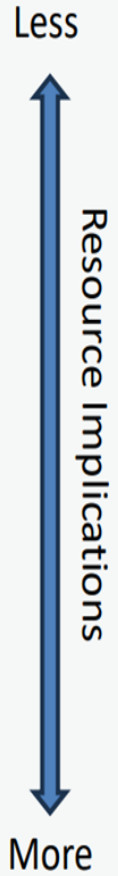


# Structural Barriers - Tackling ethnic health inequalities

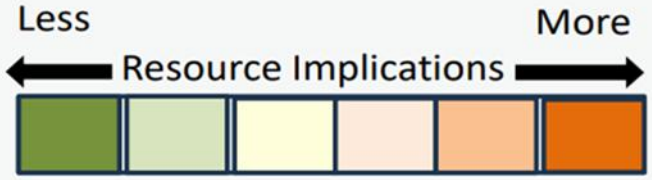



Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Black and minority ethnic groups often experience a range of inequalities, these are complex and overlapping, such as being disproportionately affected by socioeconomic deprivation. There can be variation across different ethnic groups and between different health conditions. Hence, it is important to ensure good quality data capture of ethnicity recording and avoid using the category of 'other'. | Ethnic Health Inequalities and the NHS, Race and Health Observatory, 2021 |
| Ensure your ethnicity data is disaggregated to capture communities within in your local population, to help you identify inequalities. | MFI-AR_Guidance-Document-November-2025.pdf |
| Ensure all staff (Admin, Operational and Clinical staff) have attended Cultural Competence and Cultural Safety training (where possible offer in person training to allow for greater reflection and learning). | |
| Review and improve access to interpreters | Improvement framework - Community language and translation services |
| Offer longer appointment slots where language or cultural needs may indicate this could be helpful, to ensure the patient feels listened to and respected. | |

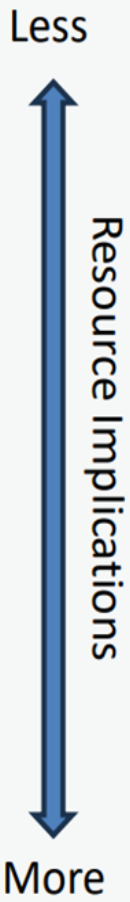


# Structural Barriers - Tackling barriers relating to travel and employment




Interventions are graded by resource implication

| Interventions | Resources |
|---|---|
| Call patients to book appointments and to understand the challenges they may experience due to travel or employment (please see communication tips). For patients with free travel passes ensure appointments coincide with then their travel pass is eligible for travel. | Communication Guide |
| Where possible and practical offer a remote consultation | |
| Use your sociodemographic patient data to determine the ages of your patient group: For working age patients' groups can you offer more evening and weekend appointments? | |
| Where possible group multiple appointments or take a 'One-Stop Shop' approach or explore where clinics can be co-delivered. | Improving Clinical Coordination for People with Multiple Long- Term Conditions. King's Fund, 2025 |



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