NHS

Has there been adequate staff and capacity in the networks?

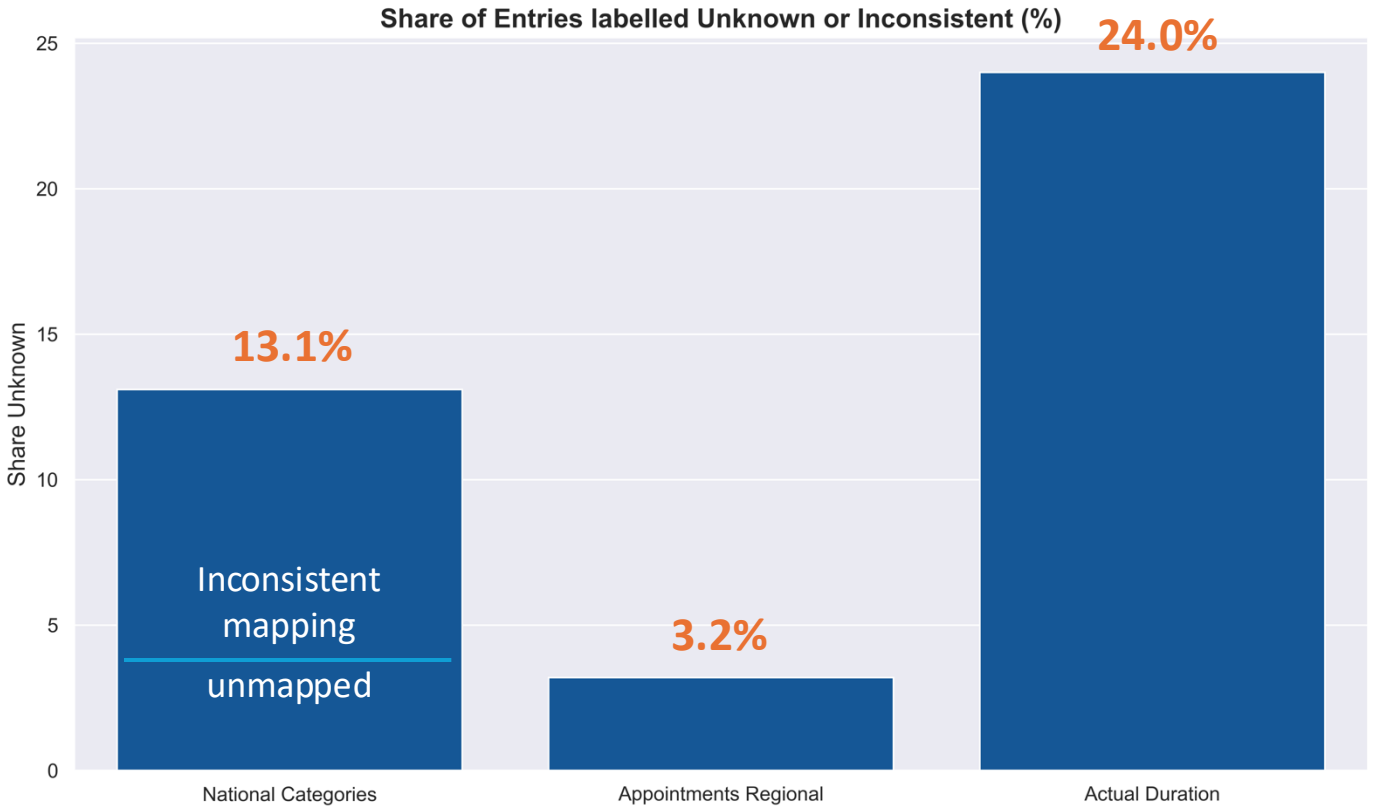
Approach

- Data Import
- Data Preparation
- Exploratory Analysis
- Recommendations

1. How good is the data quality?
2. What trends does the data reveal?
3. What are current utilisation rates?
4. How large is the impact of DNA*?

* “Did not Attend”

How good is the Data Quality?



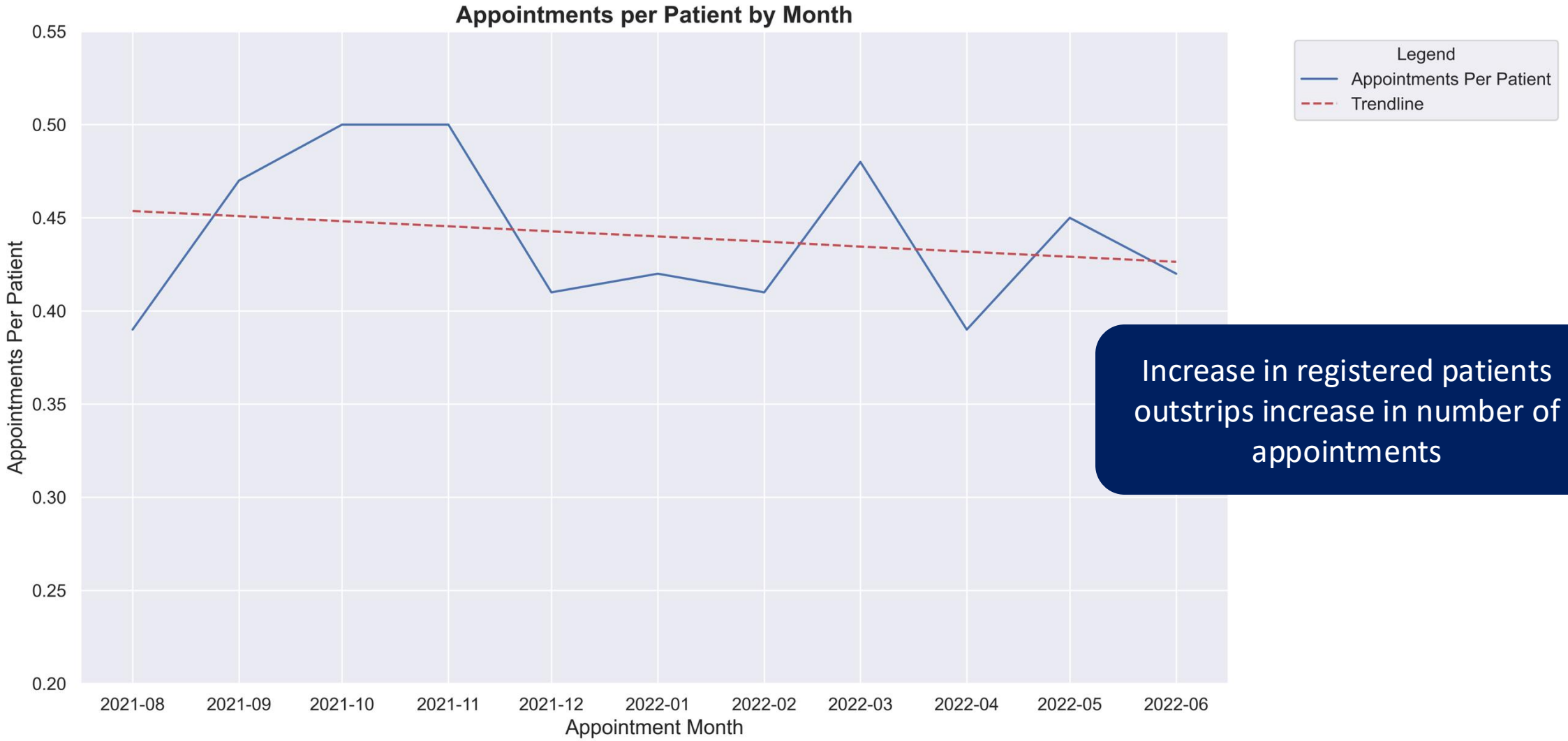
Variations

- different practices ➔ different ways
- manual classification
- different IT system suppliers

number of appointments ≠ number of patient contacts

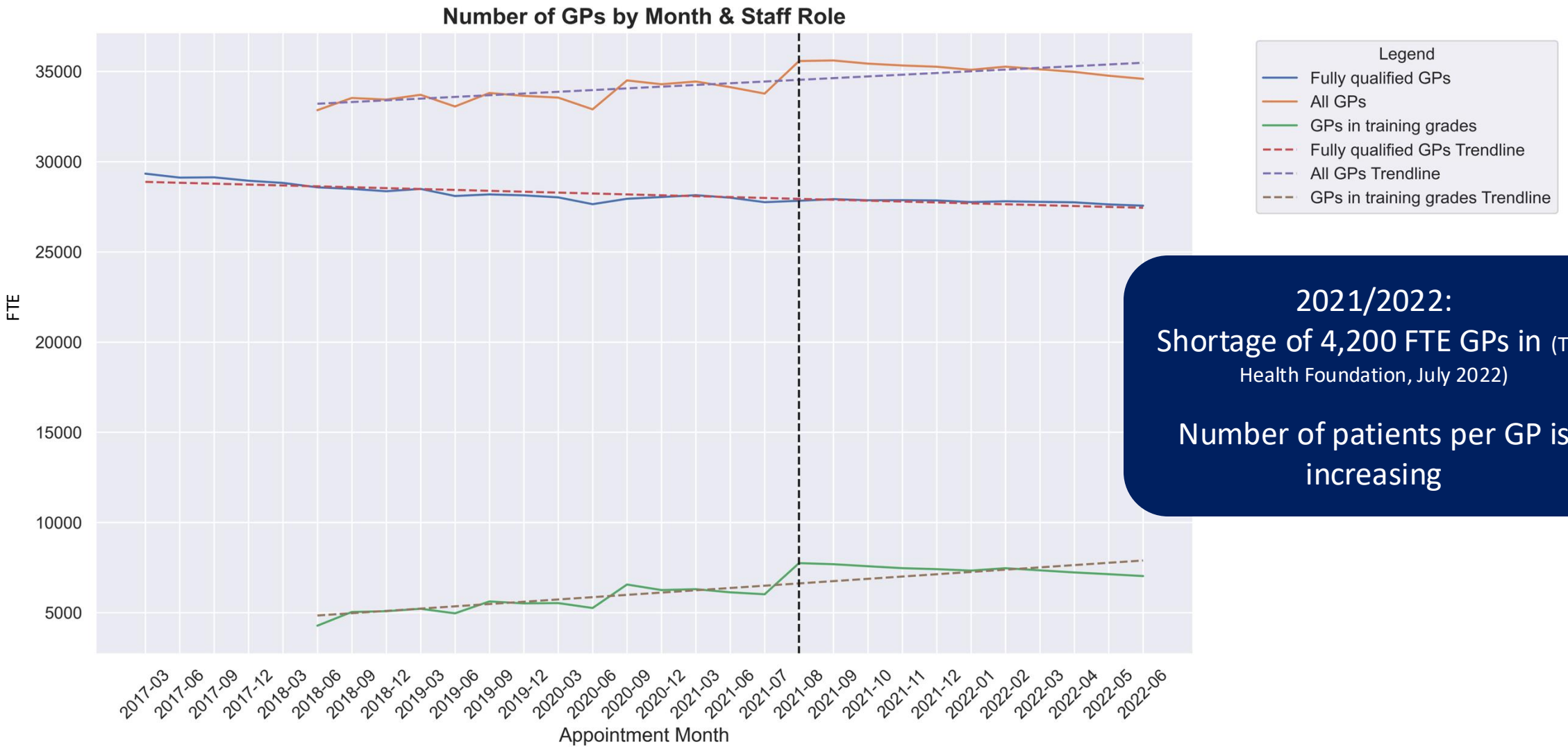
What trends does the data reveal?

Supply not keeping up with Demand



Increase in registered patients outstrips increase in number of appointments

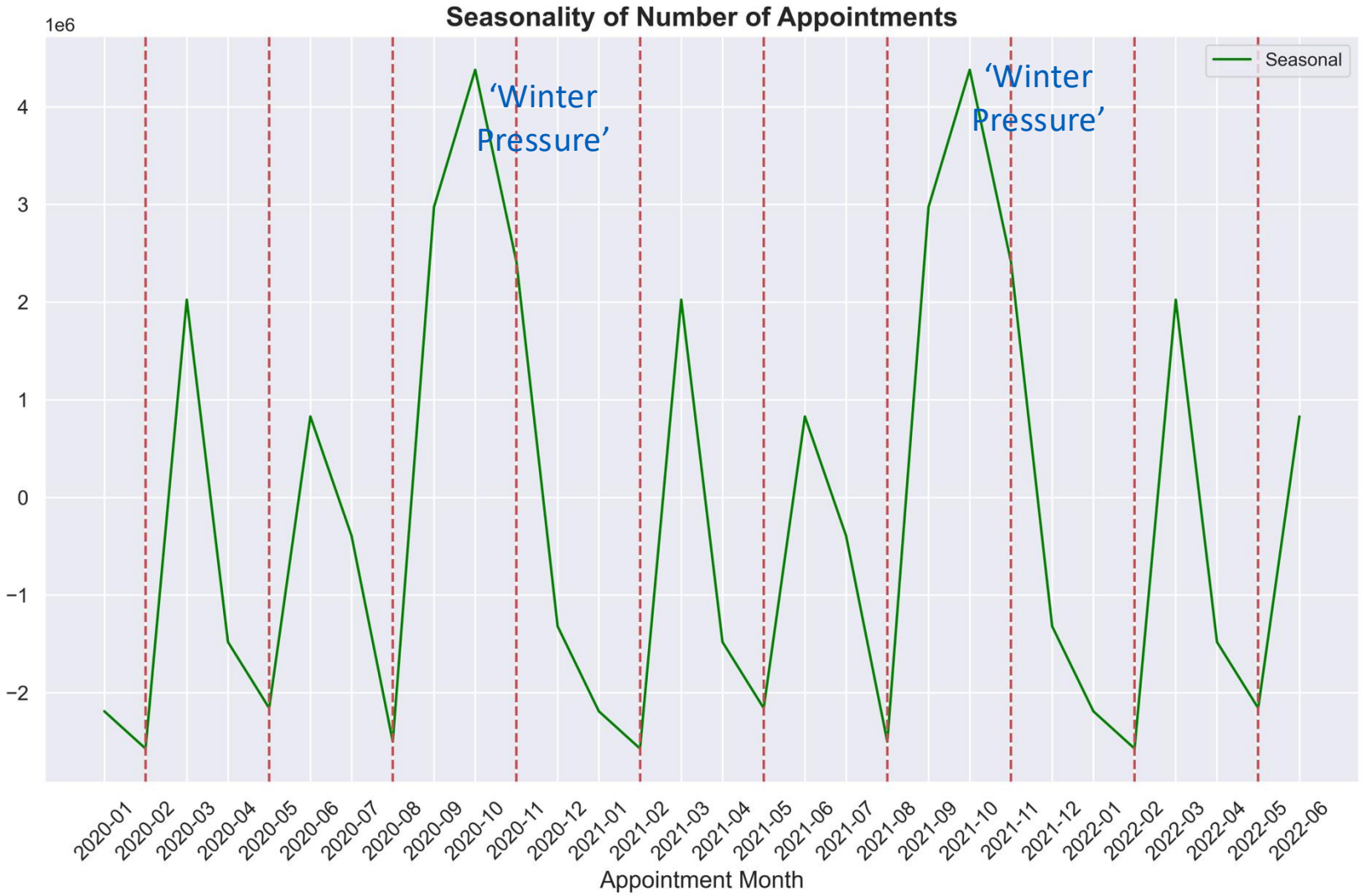
Increasing GP Shortages



2021/2022:
Shortage of 4,200 FTE GPs in (The Health Foundation, July 2022)

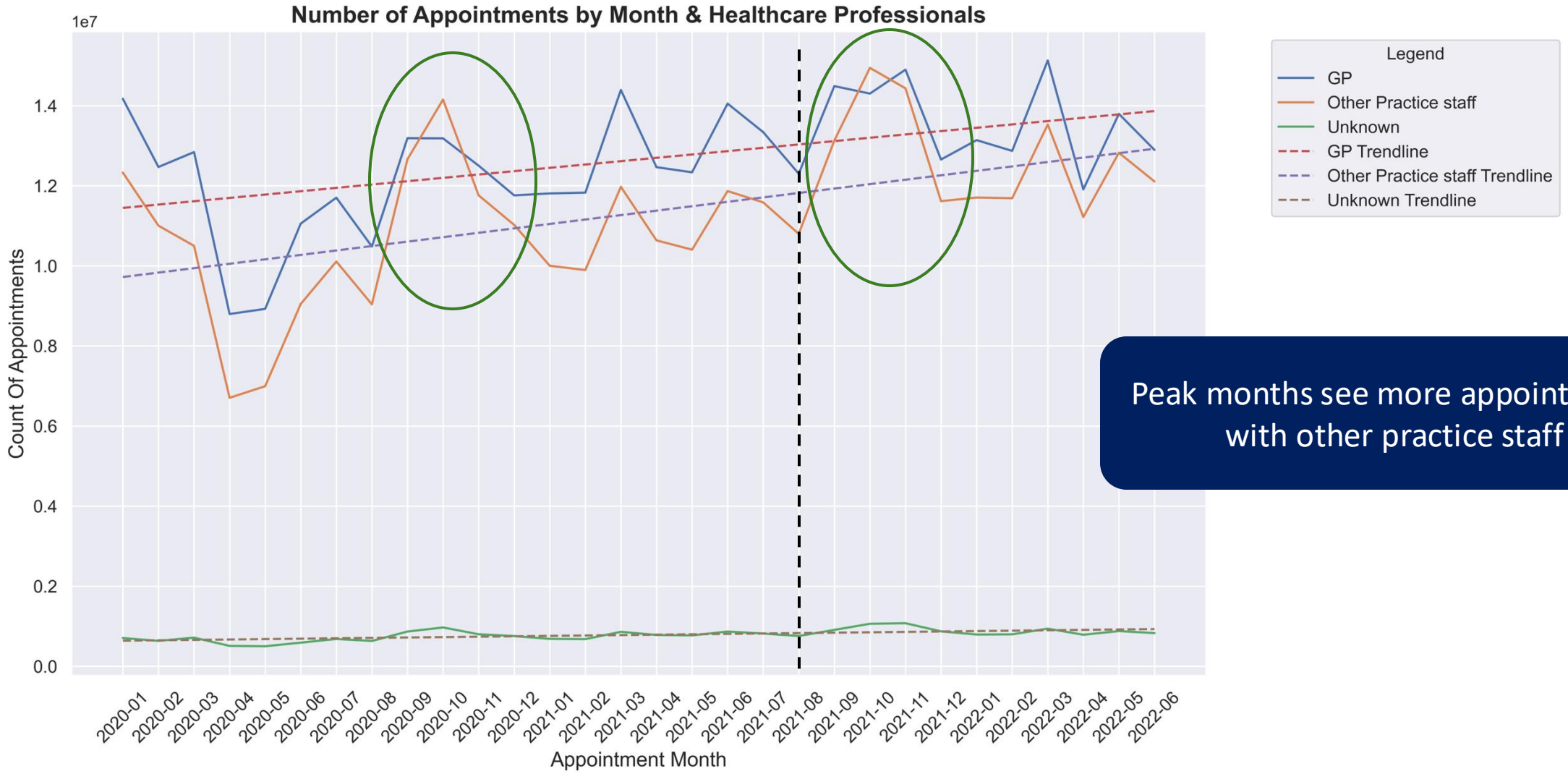
Number of patients per GP is increasing

Increasing Pressure



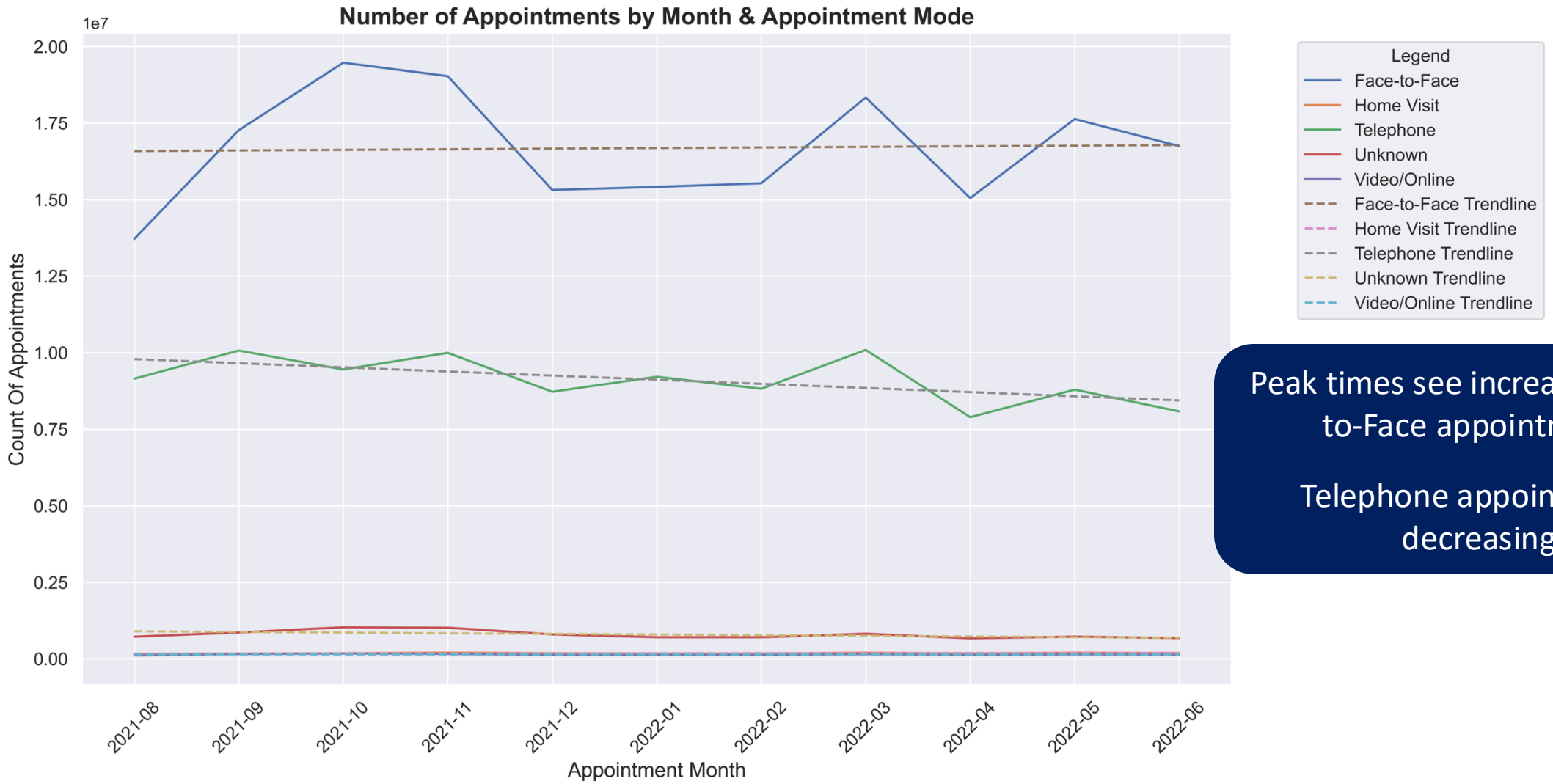
"...pressure has been building not just at winter but throughout the year."
(NHS Providers)

Other Practice Staff cover Peaks



Peak months see more appointments with other practice staff

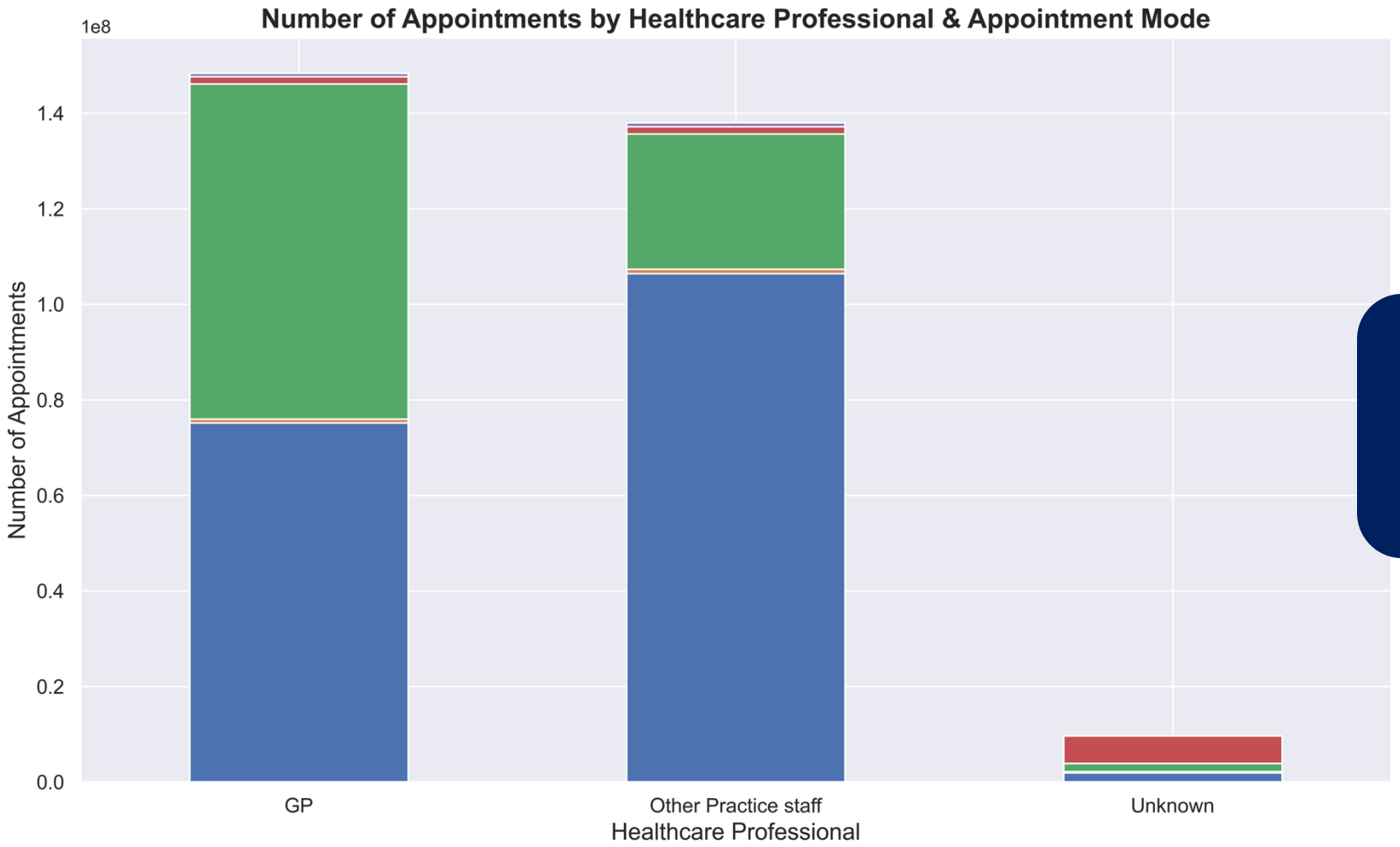
Changing Appointment Modes



Peak times see increase in Face-to-Face appointments

Telephone appointments decreasing

Role of Other Practice Staff



Other Practice Staff take higher share Face-to-Face

GPs take more telephone appointments than other staff

What is the current Utilisation Rate?

Utilisation Rate

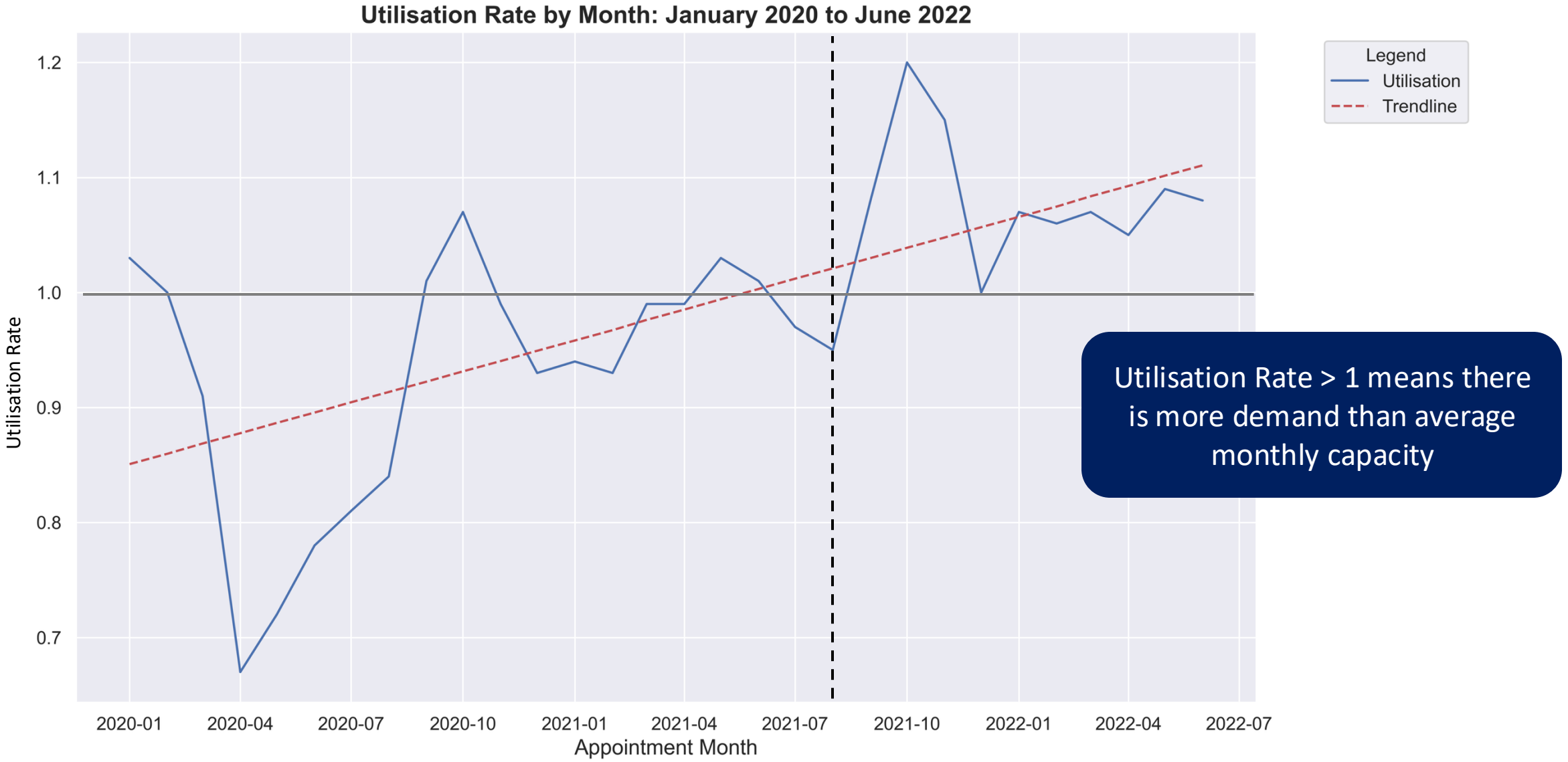
$$\text{Utilisation Rate} = \frac{\text{\# Appointments / Workday}}{\text{\# Average Capacity / Workday}}$$

Example June 2022

$$\text{Utilisation Rate} = \frac{1{,}291{,}404}{1{,}200{,}000} = 1.08$$

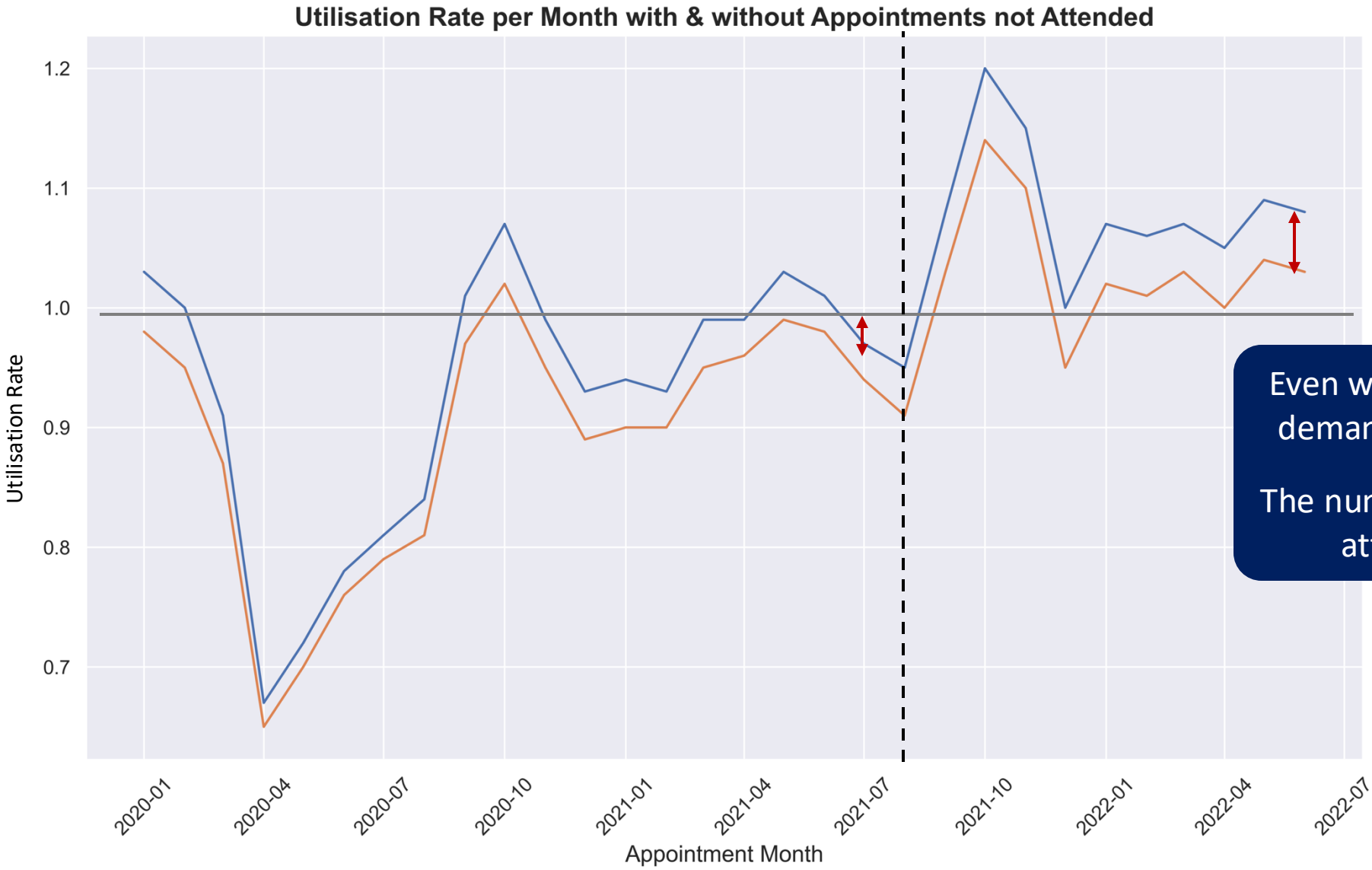
Note: Workdays vary between 19 to 23 days per month
NHS: average of 1.2m appointments per day as available capacity

Upward Trend in Utilisation Rate



Utilisation Rate > 1 means there is more demand than average monthly capacity

Impact of DNA on Utilisation

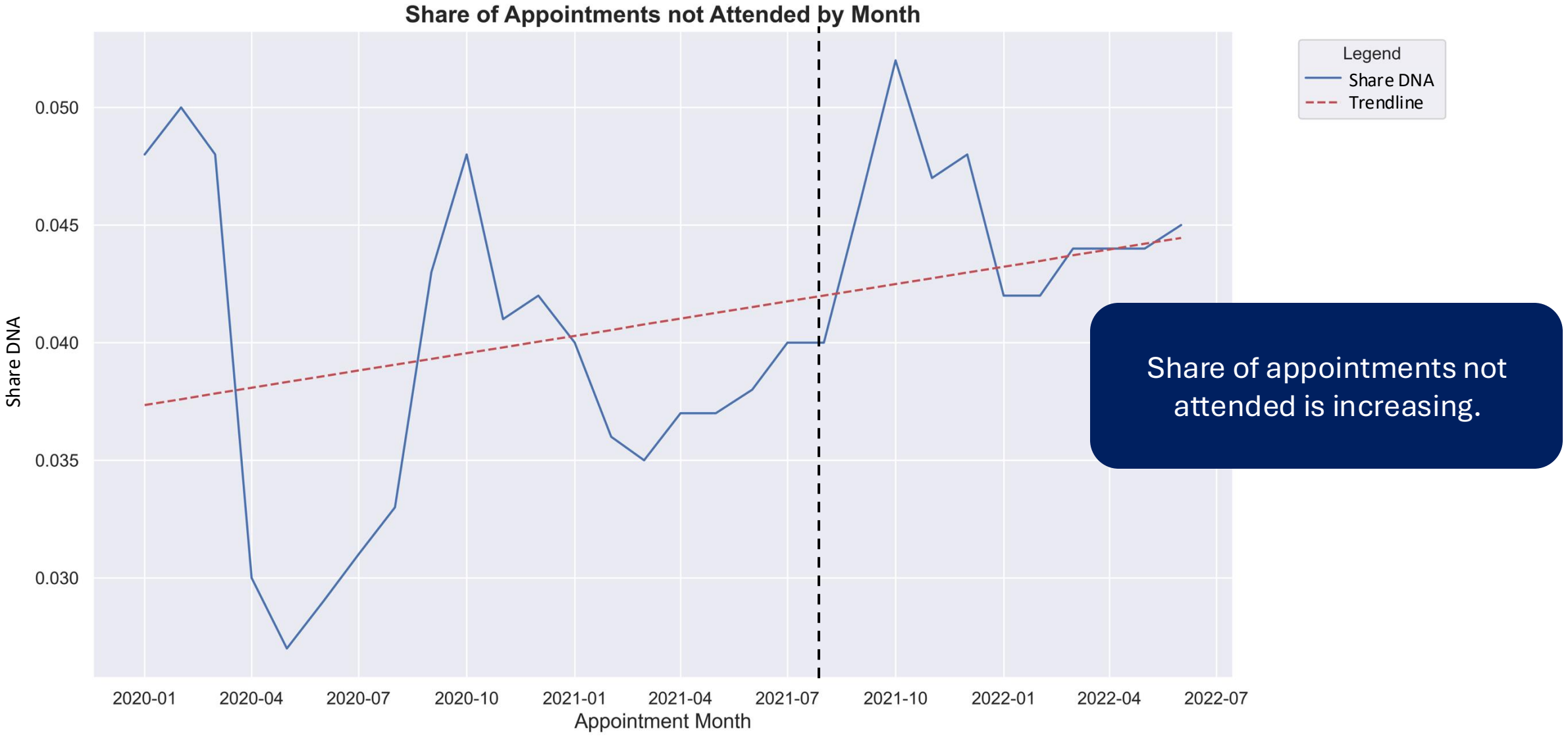


Even without DNA there is more demand than average capacity.

The number of appointments not attended is increasing.

“Did not Attend”
(DNA)

Upward Trend in Appointments not Attended



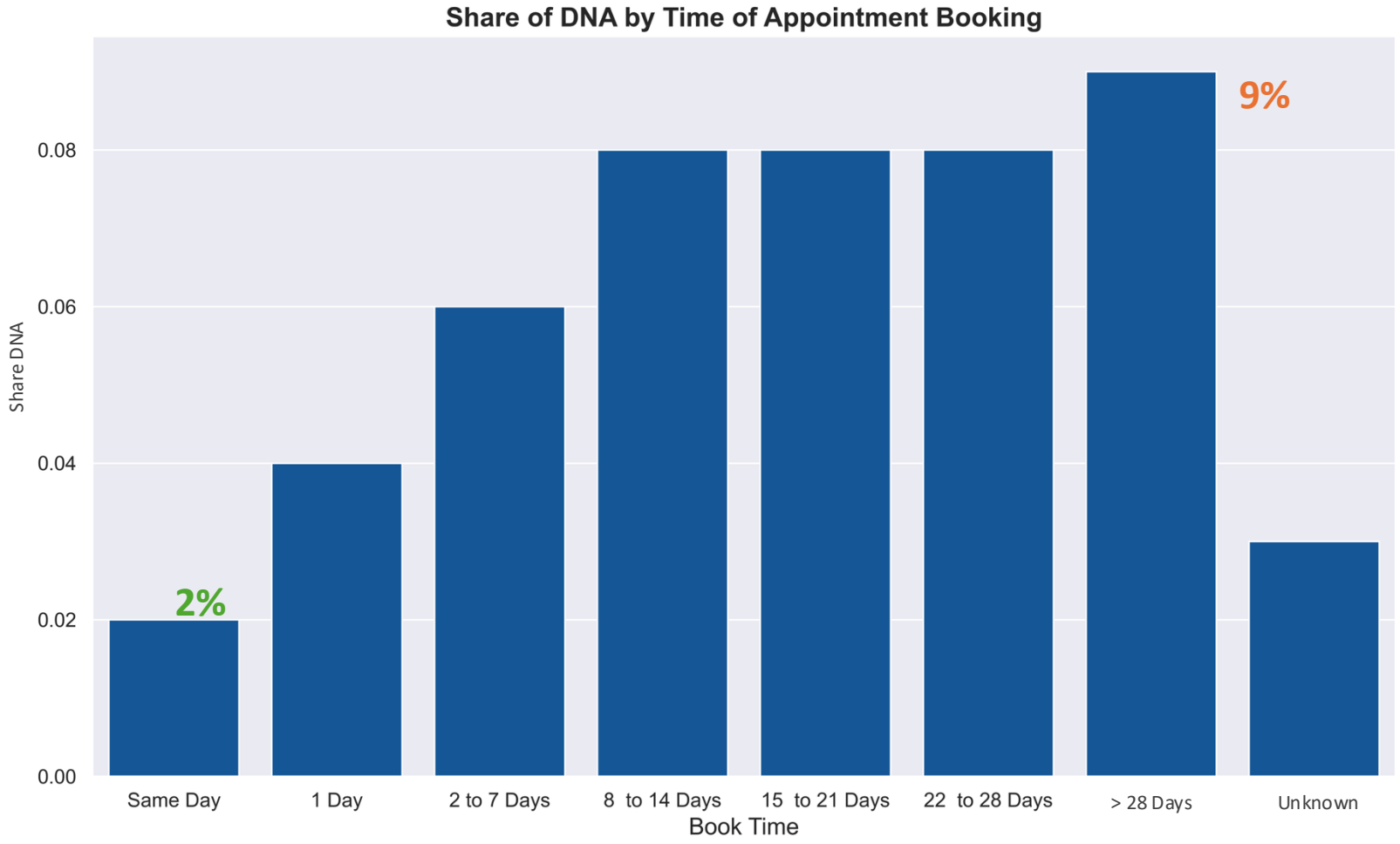
Share of appointments not attended is increasing.

Reasons for Missing Appointments

- forgetting appointments
- being too ill to attend
- feeling better
- work & family commitments
- transport problems
- appointment not with a preferred GP
- difficulty cancelling appointments

Reasons for Missing Appointments

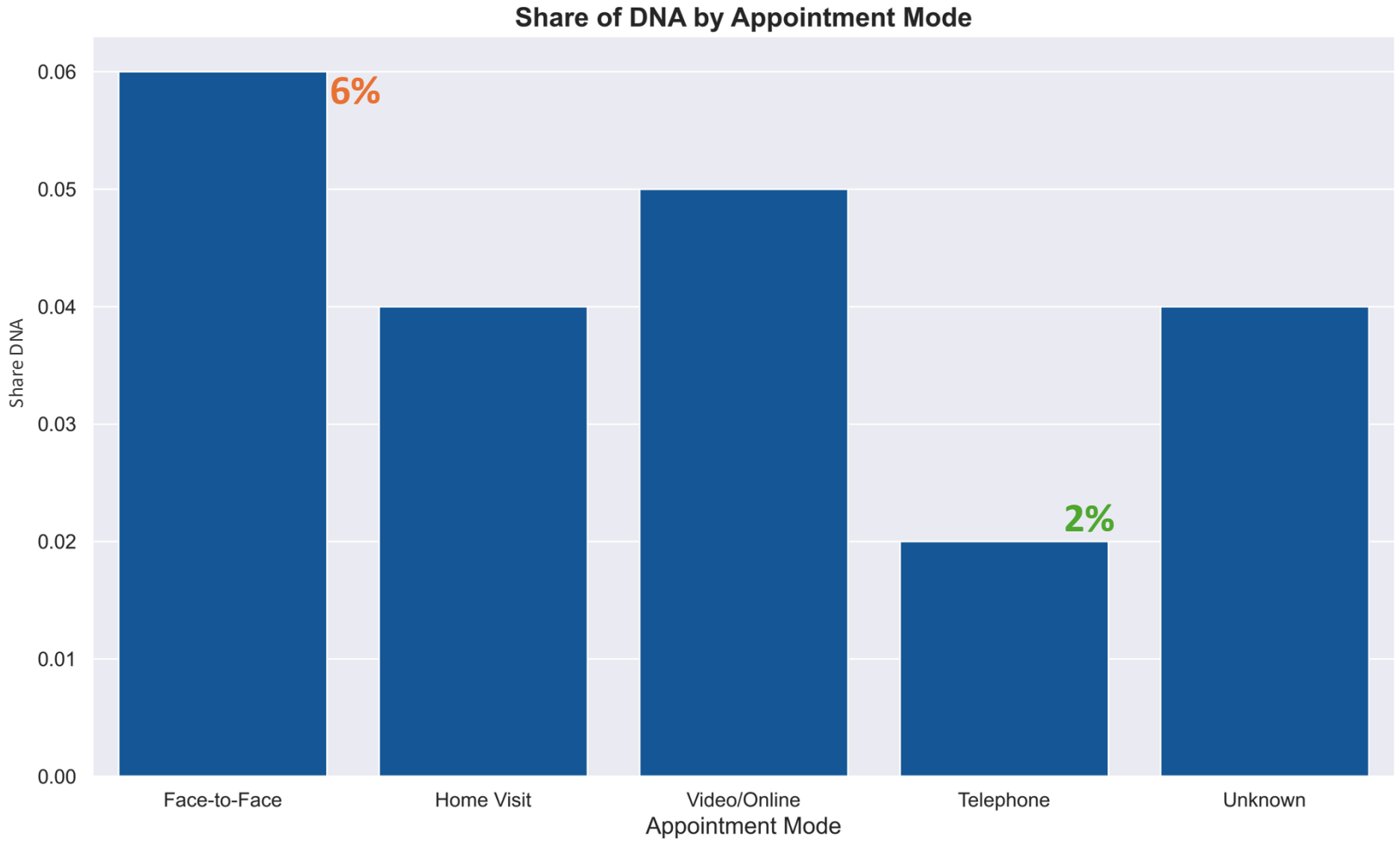
➔ Booking further in advance



- **forgetting appointments**
- being too ill to attend
- **feeling better**
- work & family commitments
- transport problems
- not with a preferred GP
- difficulty cancelling

Reasons for Missing Appointments

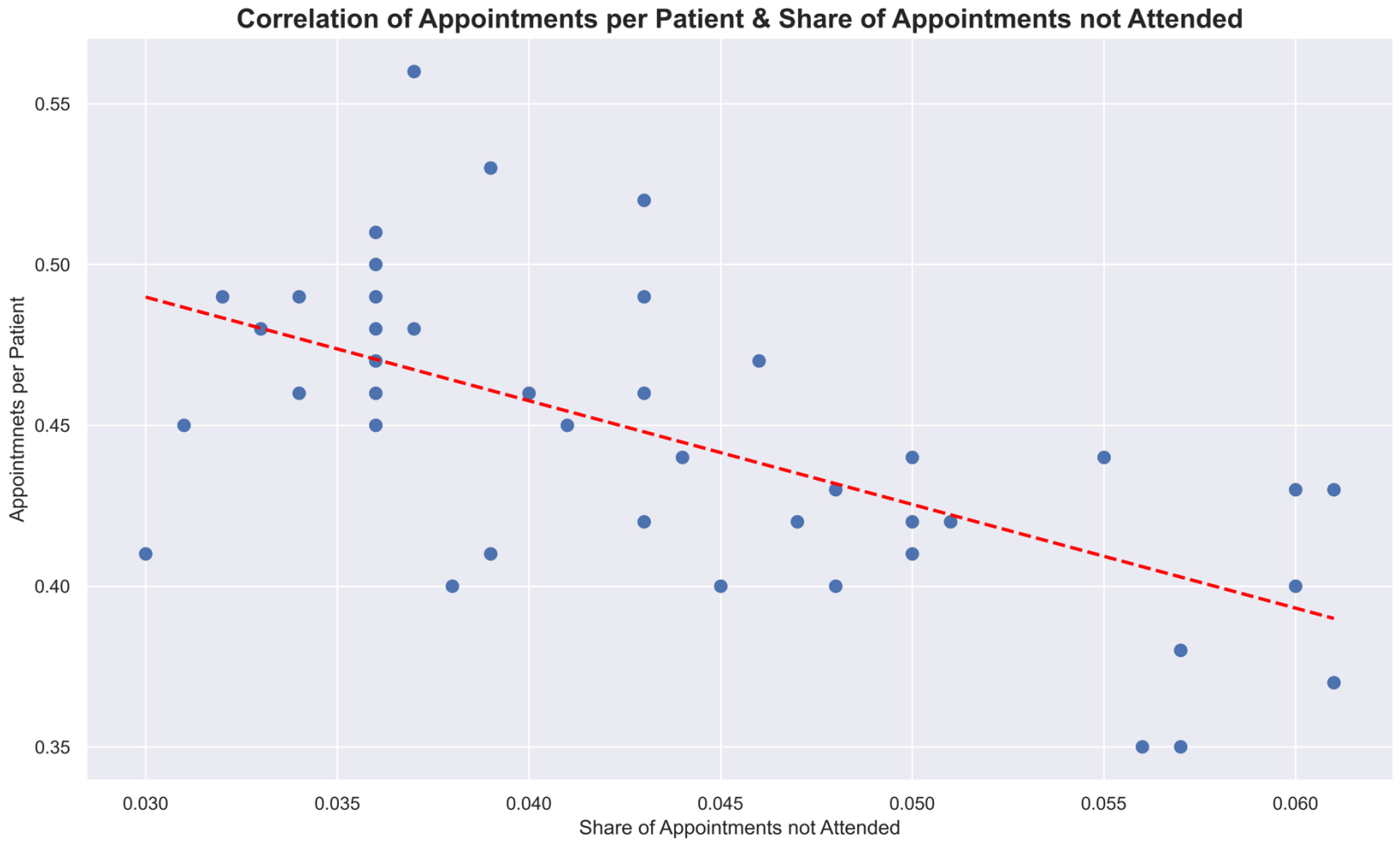
➔ Fewer telephone appointments not attended



- forgetting appointments
- **being too ill to attend**
- feeling better
- work & family commitments
- transport problems
- not with a preferred GP
- difficulty cancelling

Reasons for Missing Appointments

➔ Fewer appointments per patient



- forgetting appointments
- being too ill to attend
- feeling better
- work & family commitments
- transport problems
- **not with a preferred GP**
- difficulty cancelling

The Cost of Appointments not Attended

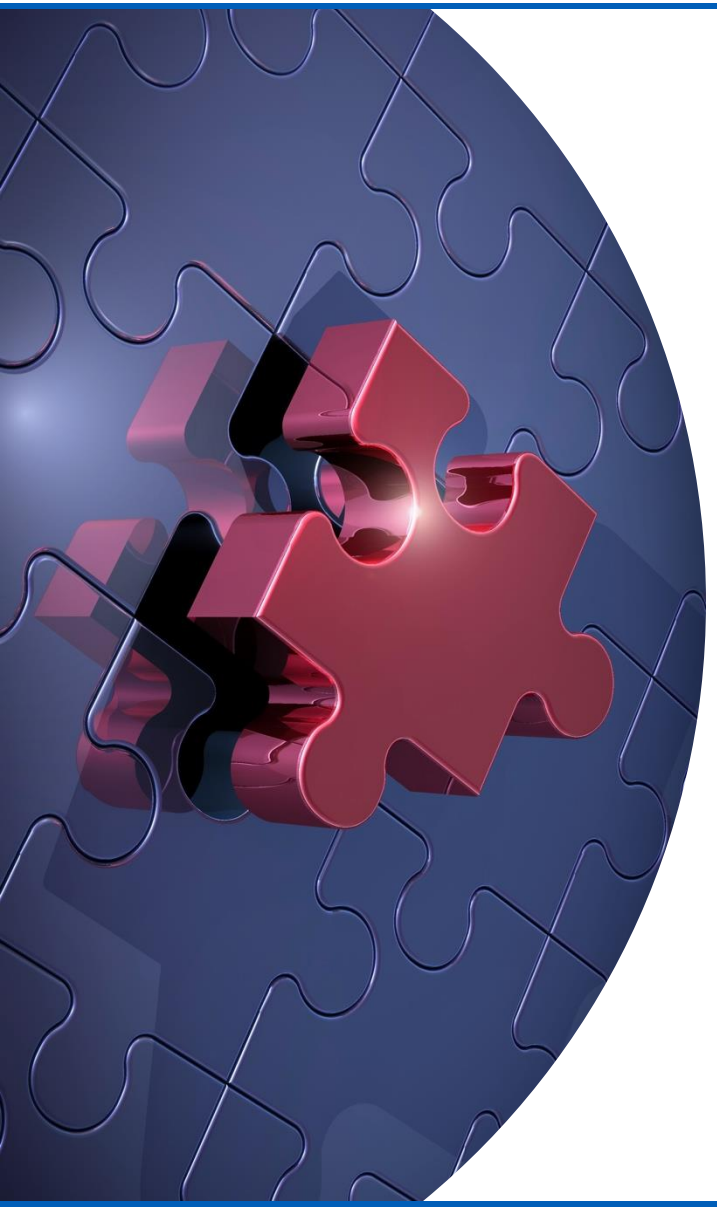
13,318,384 appointments
were not attended in 11 months

equivalent to **11** more workdays

or at least **£115m**

From August 2021 to June 2022
Assuming appointment cost with GP of £30 for 3.8m appointments

Conclusion



GP shortages

Increase in Registered Patients

Increase in Utilisation Rate

➔ demand for more capacity

Recommendations

Improving Data Quality

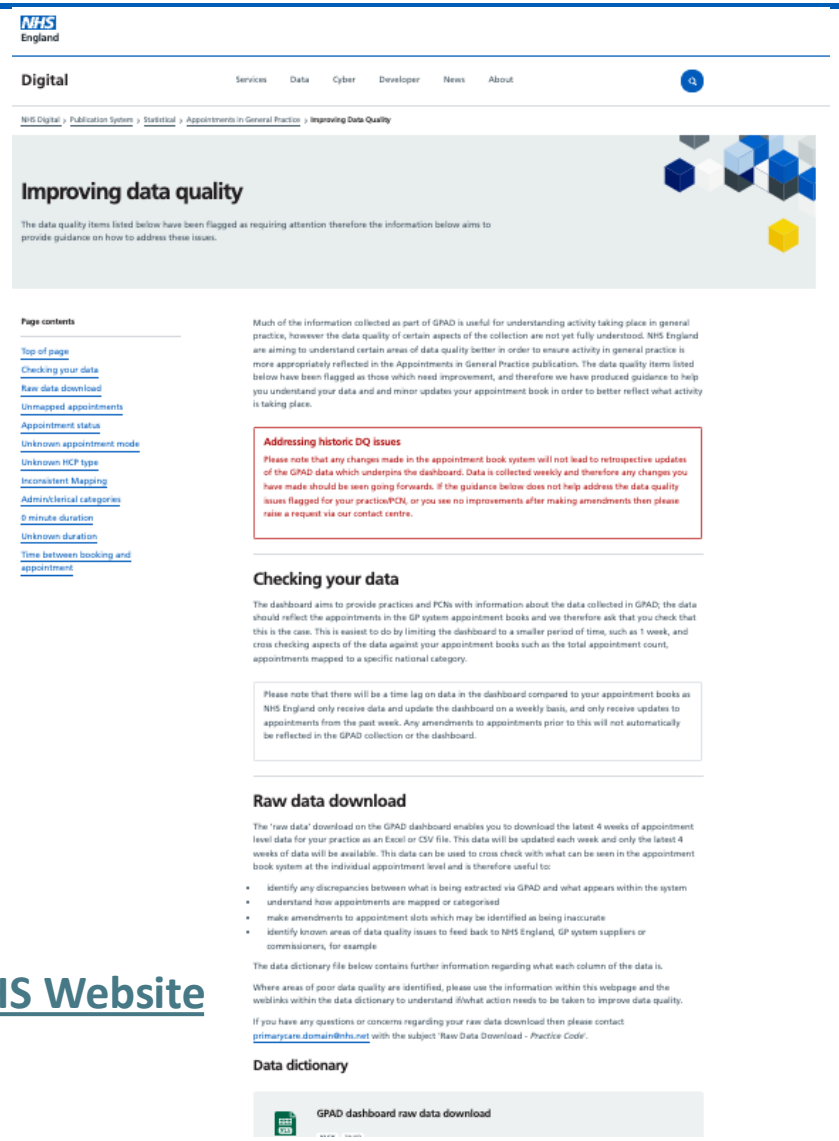
Better Data = Better Decisions

Improving Data Quality

Access to training & support for digital tools

- Target Audience: GPs & Practice Teams
- Resource: NHS Website & Training Teams

Introduce National Standards for Data Entry



[NHS Website]

Improving Data Quality

Start with Sub-ICBs with most quality issues

- Area: Actual appointment duration
- Who: 20 of 106 Sub-ICBs
- Issue: Share of Unknown / Data Quality Issues > 30%

	actual_duration	1-5 Minutes	6-10 Minutes	11-15 Minutes	16-20 Minutes	21-30 Minutes	31-60 Minutes	Unknown / Data Quality	total_appointments	Unknown per Total Appointments
sub_icb_location_ons_code	sub_icb_location_name									
E38000226	NHS Lancashire and South Cumbria ICB - 02M	56820	80817	65894	42762	39821	21930	268055	576099	0.465
E38000163	NHS North East and North Cumbria ICB - 00N	44112	60721	47809	29315	24935	12799	174922	394613	0.443
E38000068	NHS Cheshire and Merseyside ICB - 01F	42523	51667	39640	24997	23460	14875	151234	348396	0.434
E38000091	NHS Cheshire and Merseyside ICB - 01J	65936	70902	53685	34319	34106	22364	174257	455569	0.383
E38000172	NHS Cheshire and Merseyside ICB - 01X	61600	71021	58325	38848	39421	26515	182788	478518	0.382
E38000240	NHS North Central London ICB - 93C	479241	554789	483885	331829	327070	225123	1393313	3795250	0.367
E38000187	NHS Greater Manchester ICB - 02A	56631	77742	61859	41345	38144	22476	167594	465791	0.360
E38000205	NHS Greater	103319	123342	96383	63624	62767	39561	268433	757429	0.354

Incomplete Data Extract

Increasing Resources & Capacity

Increase availability of appointments

Use available resources more effectively

Increasing Capacity

Implement Government Mandate

Department of Health & Social Care

The Government's revised 2021-22 mandate to NHS England and NHS Improvement

Published 31 March 2022

ensuring that patients who need an appointment get one within 2 weeks

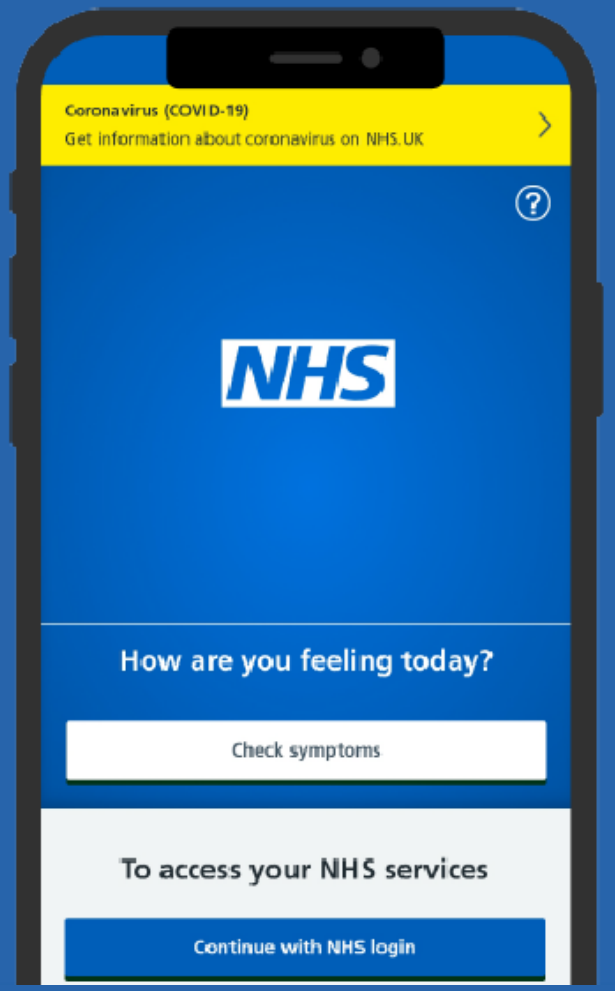
Increase appointments carried out by Other Practice Staff

Healthcare Professional Type	Healthcare Professional
GP	GP Registrar
GP	Locum GP
GP	Principal GP
Other Practice staff	Acupuncturist
Other Practice staff	Chiropodist
Other Practice staff	Community Psychiatric Nurse
Other Practice staff	Counsellor
Other Practice staff	Dispenser
Other Practice staff	District Nurse
Other Practice staff	Health Visitor
Other Practice staff	Interpreter/Link Worker
Other Practice staff	Osteopath
Other Practice staff	Other Practice Staff
Other Practice staff	Physiotherapist
Other Practice staff	Practice Nurse

Reducing Appointments not Attended

Expand the use of the NHS App

Encourage use of NHS 111
or use the NHS App



The NHS App

Simple and secure access to a range of healthcare services

Raising Awareness with Social Media

Top 18 trending hashtags around healthcare

Next Steps

Set Target:
additional 7.2m appointments

equivalent to
6 more workdays/ year

Next Steps

Formulate KPIs

- Data Quality
- App Users
- Role Other Practice Staff
- Reduction in DNA

NHS