Applying behavioural insights to improve public services

Felicity Algate, Director, BIT: North

THE BEHAVIOURAL INSIGHTS TEAM

In partnership with

Cabinet Office

Getting the neurons firing

Take a moment to write down the words you remember

Did you remember…?

Snore

Wake

Blanket

Nap

Sleep

No sleep here

Bed	Wake	Snore
Rest	Snooze	Nap
Awake	Blanket	Peace
Tired	Doze	Yawn
Dream	Slumber	Drowsy

If you put your hand up, you're in good company

40 – 55% of people falsely recall "sleep"

Memory can be influenced by context

Source: Roediger, H. & McDermott, K., (1995), 'Creating False Memories: Remembering Words Not Presented in Lists', *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 21, No. 4, pp. 803-814.

A bit of background on BIT

THE
BEHAVIOURAL
INSIGHTS
TEAM

We started life inside Cabinet Office, before “spinning out”

Our mission has not changed: **to help people make the choices that improve their lives and society**.

- Spreading and applying behavioural science throughout the civil service
- Making public services more cost-effective and easier for citizens to use

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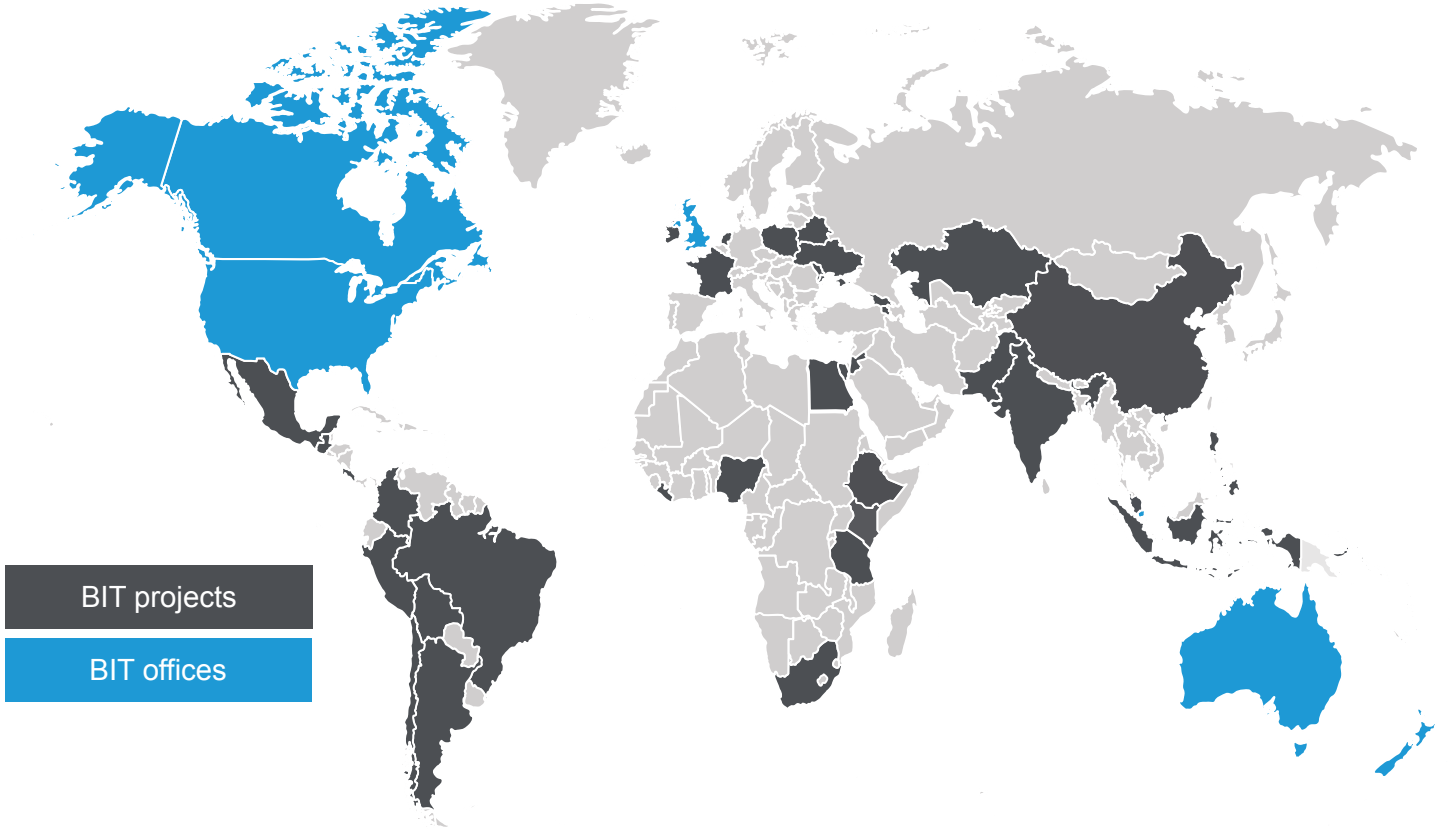
Where we work now



Behavioural insights

THE
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Human cognition: a tale of two systems

System 1: Fast

Automatic intuitive, effortless

2x2

Driving

Daniel Kahneman, Nobel Laureate

System 2: Slow

Reflective deliberate, analytic

24x17

Learning to drive

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System one’s rules of thumb

If it easily comes to mind, it must be more likely

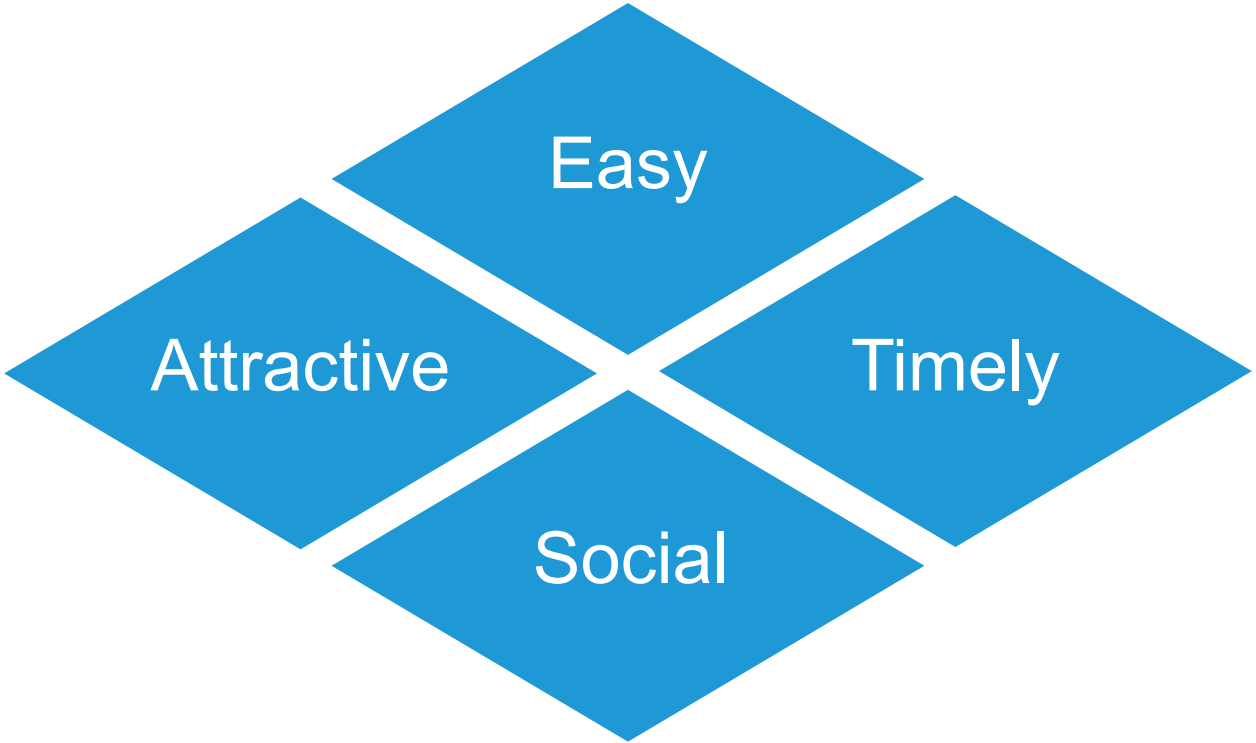
Follow the crowd whenever possible

Pay more attention to things that seem unusual

Take the path of least resistance

Trust people who are likeable

If you want someone to do something, make it…



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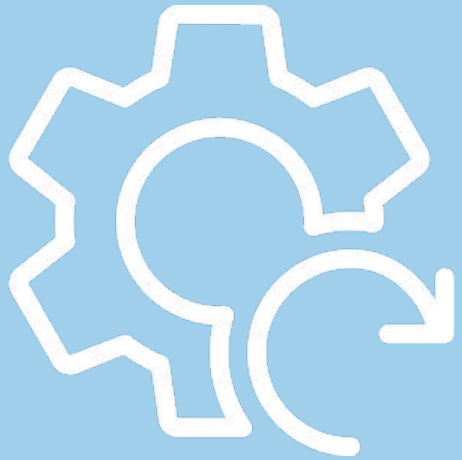
Make it easy

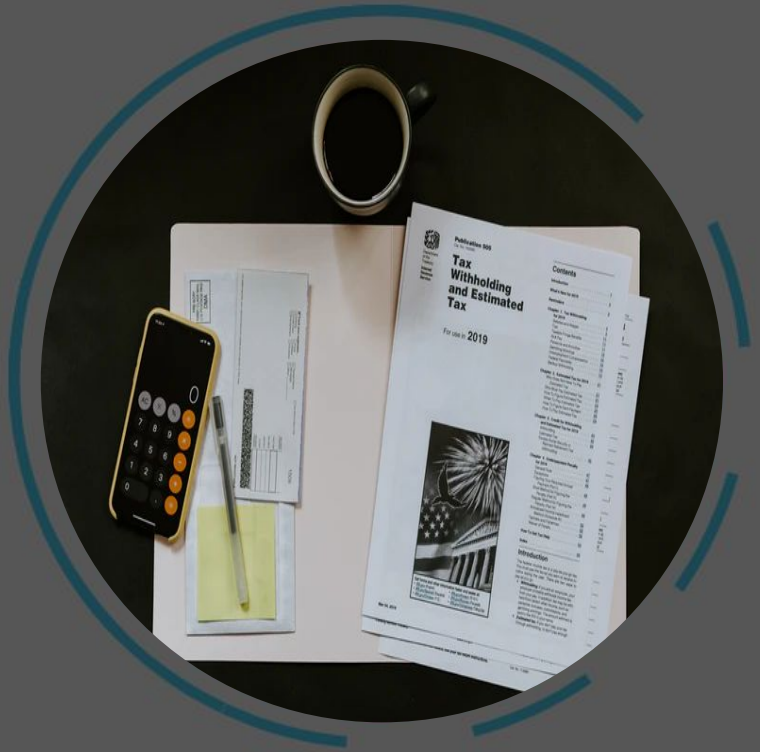


Set intelligent defaults

Reduce the hassle

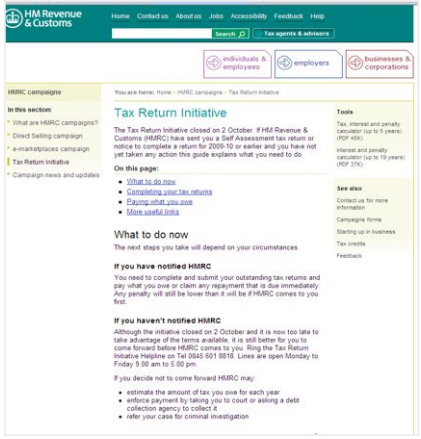
Simplify

How would you encourage people to pay overdue taxes?



How to increase tax payment rates?

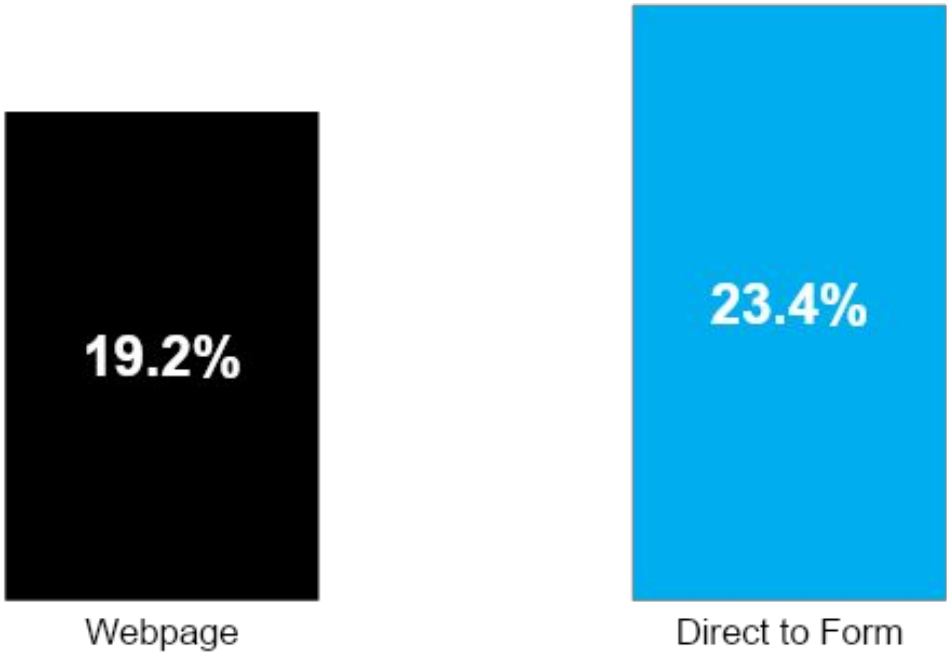
Webpage



Form

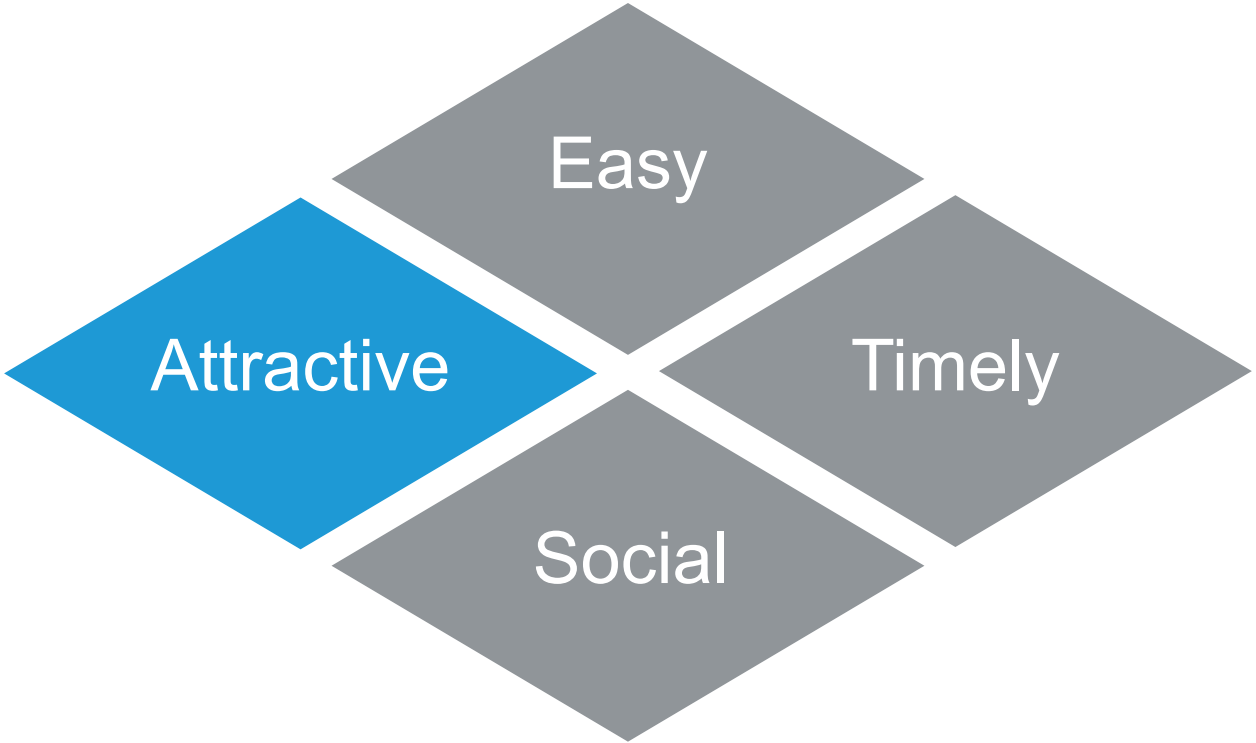
Direct to form

Removing small frictions make a disproportionate impact



This change brought forward an additional £1.1m of government revenue

If you want someone to do something, make it…



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Make it attractive

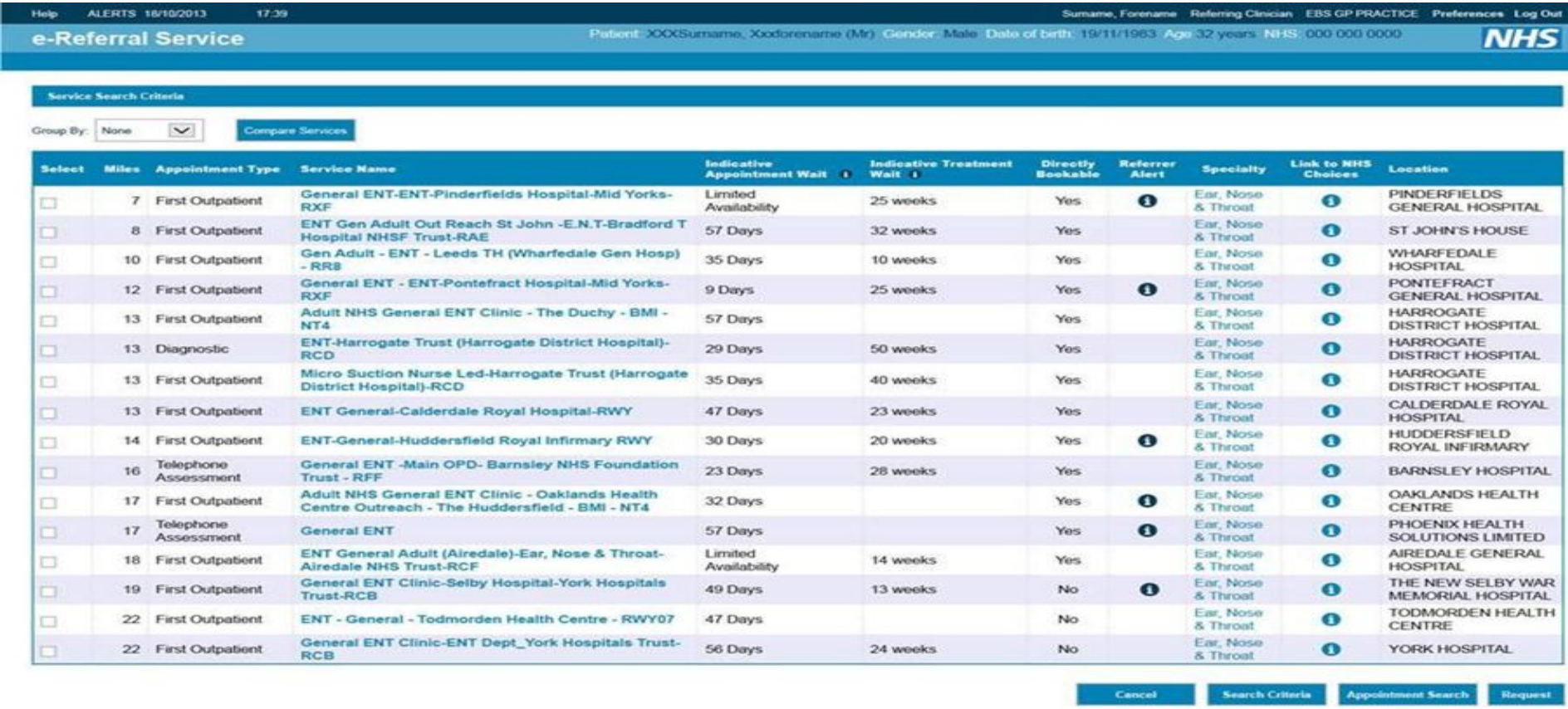
Attract attention

Personalise experience

Provide incentives

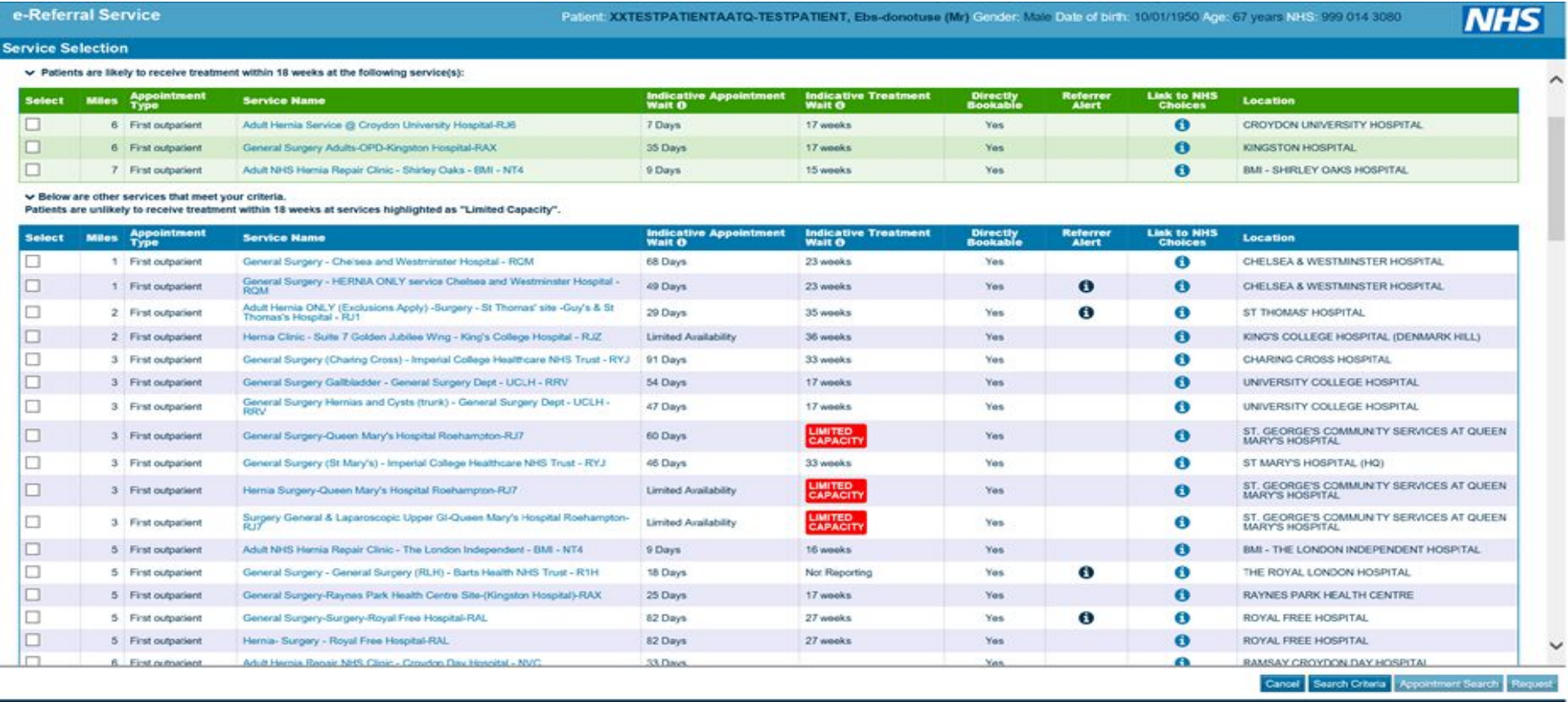
How can colour cut pain?

Reducing Waiting Times



Select	Miles	Appointment Type	Service Name	Indicative Appointment Wait	Indicative Treatment Wait	Directly Bookable	Referrer Alert	Specialty	Link to NHS Choices	Location
☐	7	First Outpatient	General ENT-ENT-Pinderfields Hospital-Mid Yorks-RXF	Limited Availability	25 weeks	Yes	ℹ	Ear, Nose & Throat	ℹ	PINDERFIELDS GENERAL HOSPITAL
☐	8	First Outpatient	ENT Gen Adult Out Reach St John -E.N.T-Bradford T Hospital NHSF Trust-RAE	57 Days	32 weeks	Yes		Ear, Nose & Throat	ℹ	ST JOHN'S HOUSE
☐	10	First Outpatient	Gen Adult - ENT - Leeds TH (Wharfedale Gen Hosp) - RR8	35 Days	10 weeks	Yes		Ear, Nose & Throat	ℹ	WHARFEDALE HOSPITAL
☐	12	First Outpatient	General ENT - ENT-Pontefract Hospital-Mid Yorks-RXF	9 Days	25 weeks	Yes	ℹ	Ear, Nose & Throat	ℹ	PONTEFRACT GENERAL HOSPITAL
☐	13	First Outpatient	Adult NHS General ENT Clinic - The Duchy - BMI - NT4	57 Days		Yes		Ear, Nose & Throat	ℹ	HARROGATE DISTRICT HOSPITAL
☐	13	Diagnostic	ENT-Harrogate Trust (Harrogate District Hospital)-RCD	29 Days	50 weeks	Yes		Ear, Nose & Throat	ℹ	HARROGATE DISTRICT HOSPITAL
☐	13	First Outpatient	Micro Suction Nurse Led-Harrogate Trust (Harrogate District Hospital)-RCD	35 Days	40 weeks	Yes		Ear, Nose & Throat	ℹ	HARROGATE DISTRICT HOSPITAL
☐	13	First Outpatient	ENT General-Calderdale Royal Hospital-RWY	47 Days	23 weeks	Yes		Ear, Nose & Throat	ℹ	CALDERDALE ROYAL HOSPITAL
☐	14	First Outpatient	ENT-General-Huddersfield Royal Infirmary RWY	30 Days	20 weeks	Yes	ℹ	Ear, Nose & Throat	ℹ	HUDDERSFIELD ROYAL INFIRMARY
☐	16	Telephone Assessment	General ENT -Main OPD- Barnsley NHS Foundation Trust - RFF	23 Days	28 weeks	Yes		Ear, Nose & Throat	ℹ	BARNSLEY HOSPITAL
☐	17	First Outpatient	Adult NHS General ENT Clinic - Oaklands Health Centre Outreach - The Huddersfield - BMI - NT4	32 Days		Yes	ℹ	Ear, Nose & Throat	ℹ	OAKLANDS HEALTH CENTRE
☐	17	Telephone Assessment	General ENT	57 Days		Yes	ℹ	Ear, Nose & Throat	ℹ	PHOENIX HEALTH SOLUTIONS LIMITED
☐	18	First Outpatient	ENT General Adult (Airedale)-Ear, Nose & Throat-Airedale NHS Trust-RCF	Limited Availability	14 weeks	Yes		Ear, Nose & Throat	ℹ	AIREDALE GENERAL HOSPITAL
☐	19	First Outpatient	General ENT Clinic-Selby Hospital-York Hospitals Trust-RCB	49 Days	13 weeks	No	ℹ	Ear, Nose & Throat	ℹ	THE NEW SELBY WAR MEMORIAL HOSPITAL
☐	22	First Outpatient	ENT - General - Todmorden Health Centre - RWY07	47 Days		No		Ear, Nose & Throat	ℹ	TODMORDEN HEALTH CENTRE
☐	22	First Outpatient	General ENT Clinic-ENT Dept_York Hospitals Trust-RCB	56 Days	24 weeks	No		Ear, Nose & Throat	ℹ	YORK HOSPITAL

Reducing Waiting Times



e-Referral Service

Patient: XXTESTPATIENTAATQ-TESTPATIENT, Ebs-donotuse (Mr) Gender: Male Date of birth: 10/01/1950 Age: 67 years NHS: 999 014 3080

NHS

Service Selection

Patients are likely to receive treatment within 18 weeks at the following service(s):

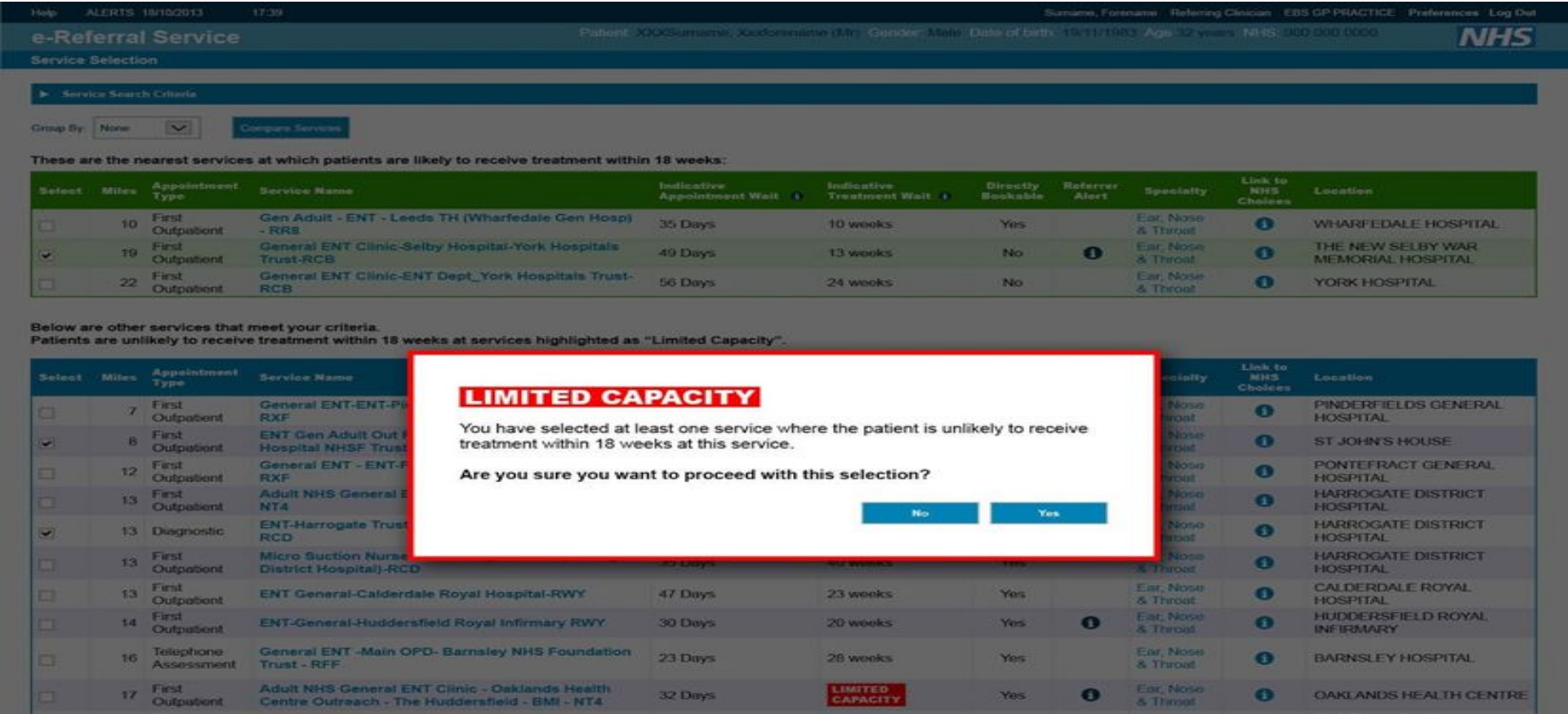
Select	Miles	Appointment Type	Service Name	Indicative Appointment Wait	Indicative Treatment Wait	Directly Bookable	Referrer Alert	Link to NHS Choices	Location
☐	6	First outpatient	Adult Hernia Service @ Croydon University Hospital-RJ6	7 Days	17 weeks	Yes		ⓘ	CROYDON UNIVERSITY HOSPITAL
☐	6	First outpatient	General Surgery Adults-OPD-Kingston Hospital-RAX	35 Days	17 weeks	Yes		ⓘ	KINGSTON HOSPITAL
☐	7	First outpatient	Adult NHS Hernia Repair Clinic - Shirley Oaks - BMI - NT4	9 Days	15 weeks	Yes		ⓘ	BMI - SHIRLEY OAKS HOSPITAL

Below are other services that meet your criteria.
Patients are unlikely to receive treatment within 18 weeks at services highlighted as "Limited Capacity".

Select	Miles	Appointment Type	Service Name	Indicative Appointment Wait	Indicative Treatment Wait	Directly Bookable	Referrer Alert	Link to NHS Choices	Location
☐	1	First outpatient	General Surgery - Chelsea and Westminster Hospital - RQM	68 Days	23 weeks	Yes		ⓘ	CHELSEA & WESTMINSTER HOSPITAL
☐	1	First outpatient	General Surgery - HERNIA ONLY service Chelsea and Westminster Hospital - RQM	49 Days	23 weeks	Yes	ⓘ	ⓘ	CHELSEA & WESTMINSTER HOSPITAL
☐	2	First outpatient	Adult Hernia ONLY (Exclusions Apply) -Surgery - St Thomas' site -Guy's & St Thomas's Hospital - RJ1	29 Days	35 weeks	Yes	ⓘ	ⓘ	ST THOMAS' HOSPITAL
☐	2	First outpatient	Hernia Clinic - Suite 7 Golden Jubilee Wing - King's College Hospital - RJZ	Limited Availability	36 weeks	Yes		ⓘ	KING'S COLLEGE HOSPITAL (DENMARK HILL)
☐	3	First outpatient	General Surgery (Charing Cross) - Imperial College Healthcare NHS Trust - RYJ	91 Days	33 weeks	Yes		ⓘ	CHARING CROSS HOSPITAL
☐	3	First outpatient	General Surgery Gallbladder - General Surgery Dept - UCLH - RRV	54 Days	17 weeks	Yes		ⓘ	UNIVERSITY COLLEGE HOSPITAL
☐	3	First outpatient	General Surgery Hernias and Cysts (trunk) - General Surgery Dept - UCLH - RRV	47 Days	17 weeks	Yes		ⓘ	UNIVERSITY COLLEGE HOSPITAL
☐	3	First outpatient	General Surgery-Queen Mary's Hospital Roehampton-RJ7	60 Days	LIMITED CAPACITY	Yes		ⓘ	ST. GEORGE'S COMMUNITY SERVICES AT QUEEN MARY'S HOSPITAL
☐	3	First outpatient	General Surgery (St Mary's) - Imperial College Healthcare NHS Trust - RYJ	46 Days	33 weeks	Yes		ⓘ	ST MARY'S HOSPITAL (HQ)
☐	3	First outpatient	Hernia Surgery-Queen Mary's Hospital Roehampton-RJ7	Limited Availability	LIMITED CAPACITY	Yes		ⓘ	ST. GEORGE'S COMMUNITY SERVICES AT QUEEN MARY'S HOSPITAL
☐	3	First outpatient	Surgery General & Laparoscopic Upper GI-Queen Mary's Hospital Roehampton-RJ7	Limited Availability	LIMITED CAPACITY	Yes		ⓘ	ST. GEORGE'S COMMUNITY SERVICES AT QUEEN MARY'S HOSPITAL
☐	5	First outpatient	Adult NHS Hernia Repair Clinic - The London Independent - BMI - NT4	9 Days	16 weeks	Yes		ⓘ	BMI - THE LONDON INDEPENDENT HOSPITAL
☐	5	First outpatient	General Surgery - General Surgery (RLH) - Barts Health NHS Trust - R1H	18 Days	Not Reporting	Yes	ⓘ	ⓘ	THE ROYAL LONDON HOSPITAL
☐	5	First outpatient	General Surgery-Raynes Park Health Centre Site-(Kingston Hospital)-RAX	25 Days	17 weeks	Yes		ⓘ	RAYNES PARK HEALTH CENTRE
☐	5	First outpatient	General Surgery-Surgery-Royal Free Hospital-RAL	82 Days	27 weeks	Yes	ⓘ	ⓘ	ROYAL FREE HOSPITAL
☐	5	First outpatient	Hernia- Surgery - Royal Free Hospital-RAL	82 Days	27 weeks	Yes		ⓘ	ROYAL FREE HOSPITAL
☐	6	First outpatient	Adult Hernia Repair NHS Clinic - Croydon Day Hospital - NVC	33 Days		Yes		ⓘ	RAMSAY CROYDON DAY HOSPITAL

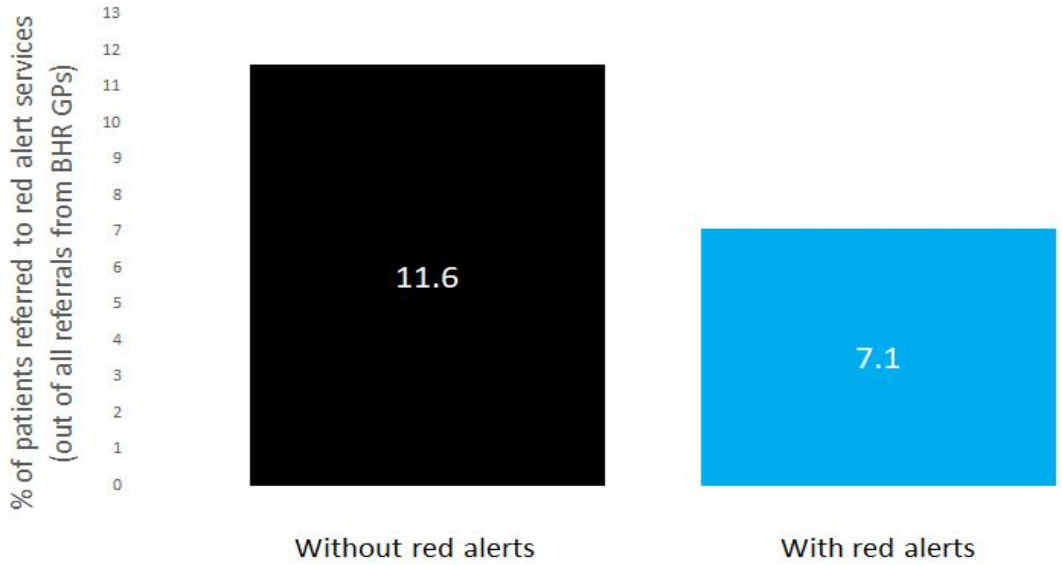
Cancel | Search Criteria | Appointment Search | Request

Reducing Waiting Time

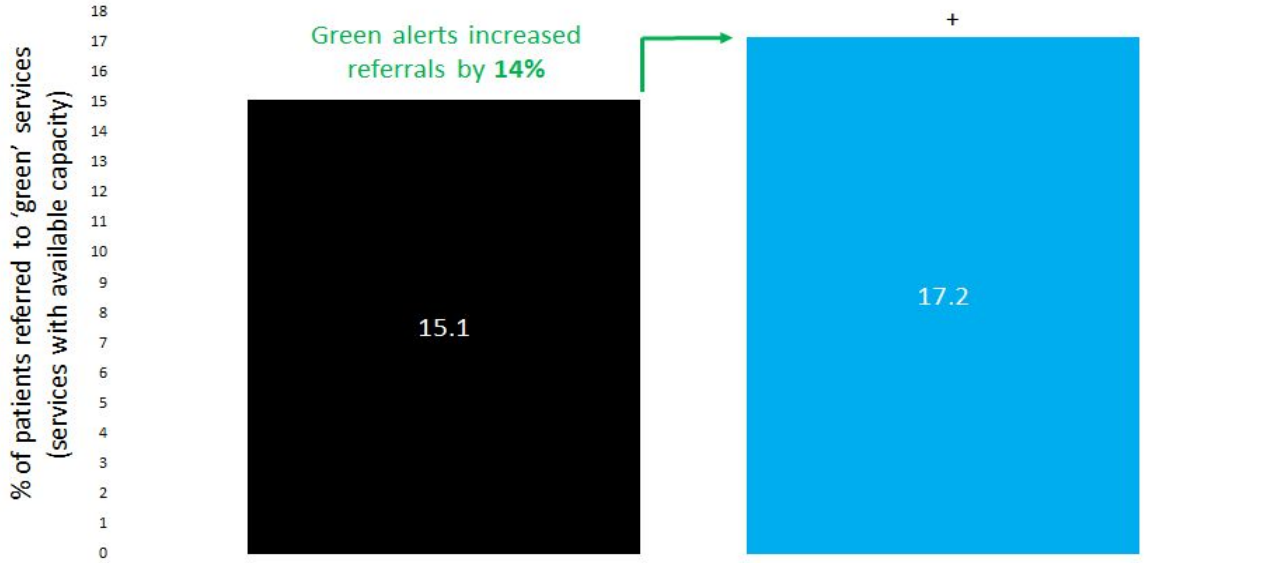


Reducing Waiting Times

Phase I Trial (2016):
Barking, Dagenham, Havering & Redbridge,



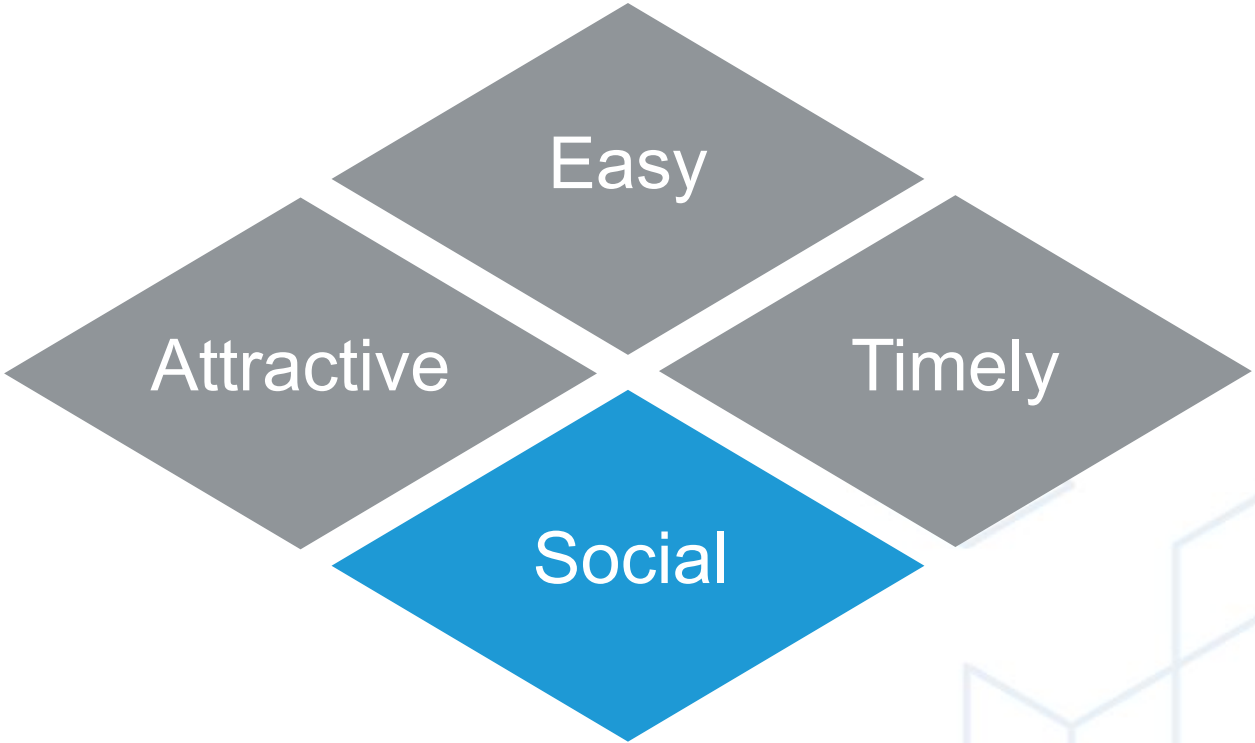
Reducing Waiting Times



Phase II Trial (2017):
South West London

NHS England is now rolling out the alerts system nationally as a tool for regional teams to quickly address capacity problems in their local health systems

If you want someone to do something, make it…



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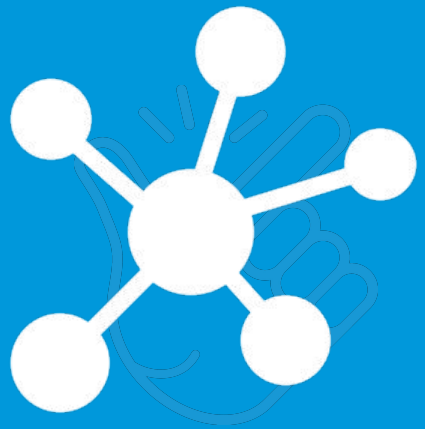
Make it social

Highlight helpful social norms



Leverage networks

Use reciprocity effects

Food recycling in Wigan

Solution overview

Component	Description
Bin hangers	Tagged all black bins on a round with a bin hanger. Hanger had a message prompting people to request a new food caddy if they don't have one.
Caddy info pack	If people ordered a caddy, they got an information leaflet and caddy sticker to tackle key information gaps.
Email reminders	If people ordered a caddy, they are prompted to sign up for email reminders for a limited time after the caddy is delivered to encourage people to start recycling.

Bin hangers

We want your food waste even if you only recycle a small amount

Join the thousands of people in Wigan who already recycle their food waste

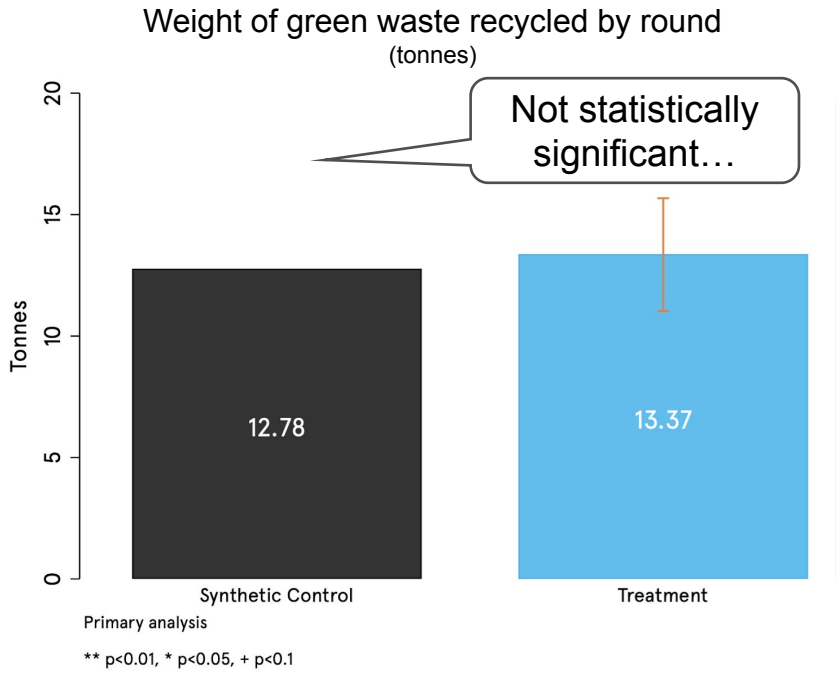
Food recycling is easier than you think.

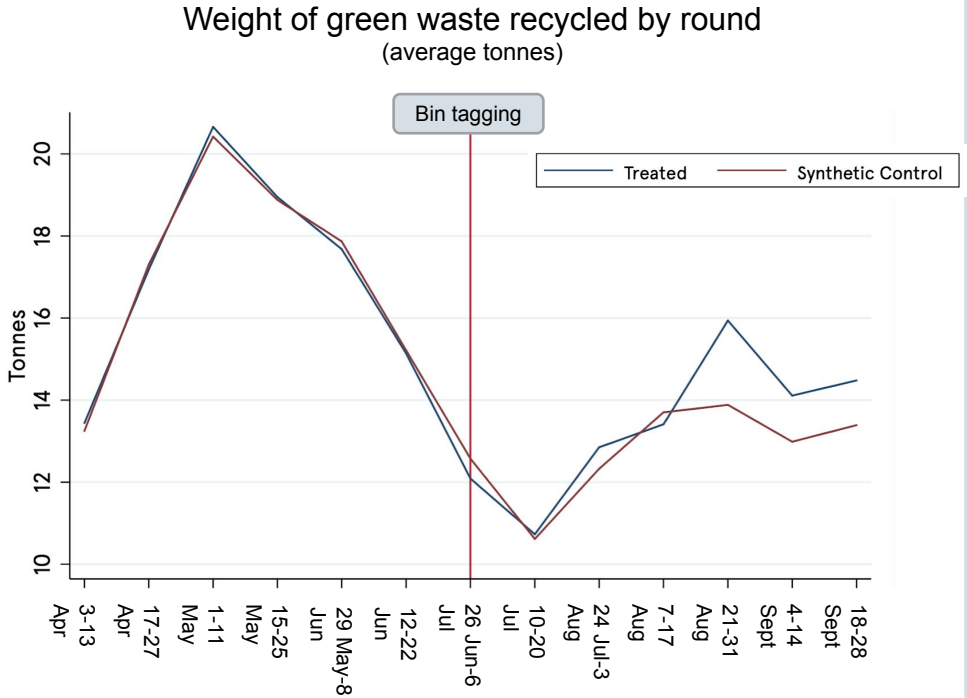
We can help you get started.

© Behavioural Insights ltd

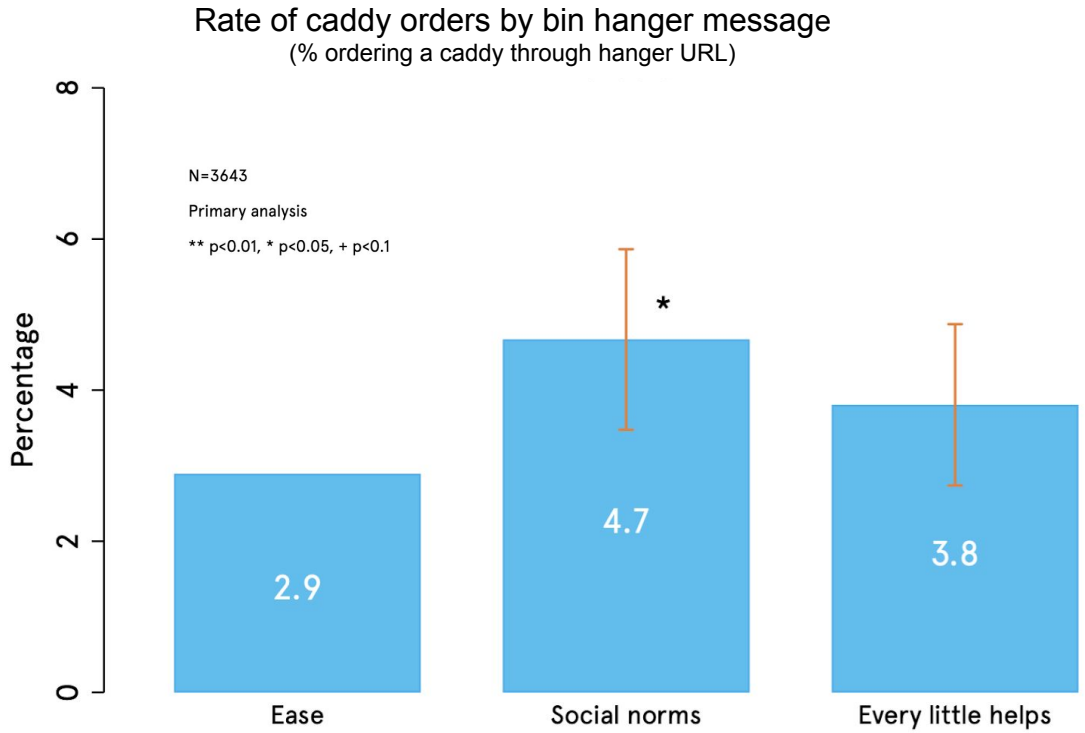
Bin hangers in action

Did we improve recycling rates?





Which hanger message was most effective?



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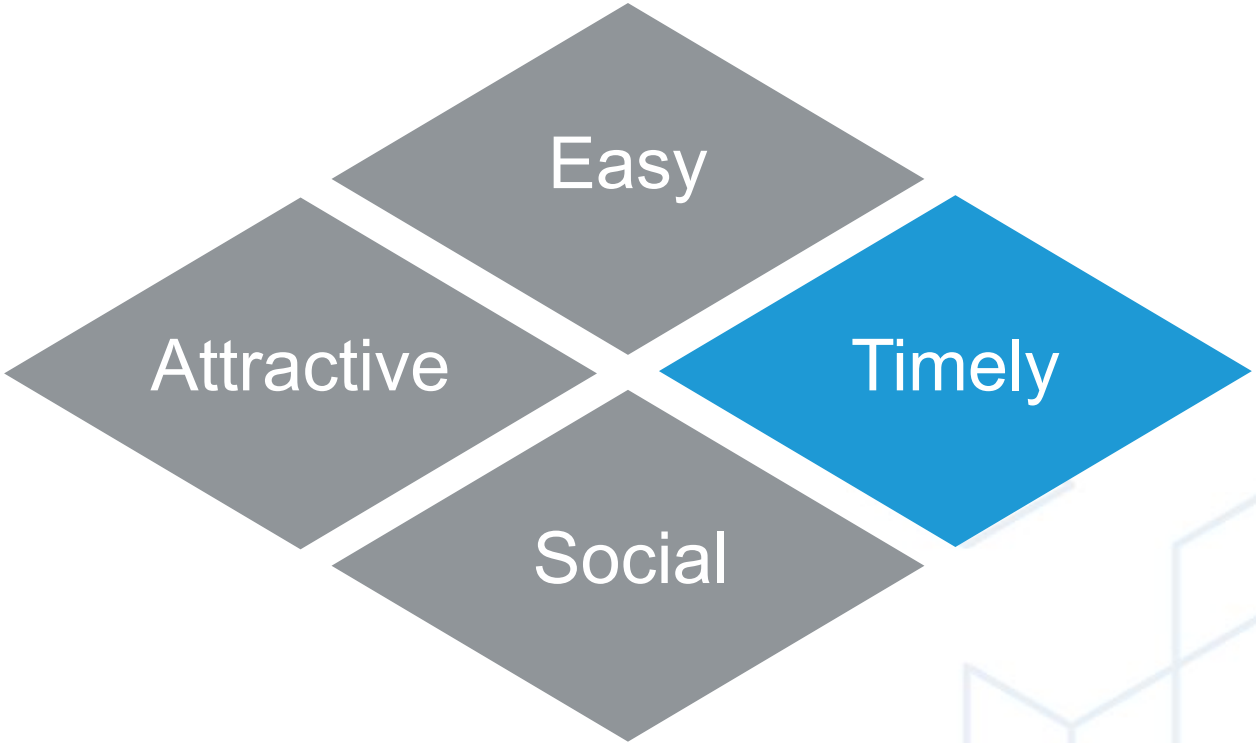

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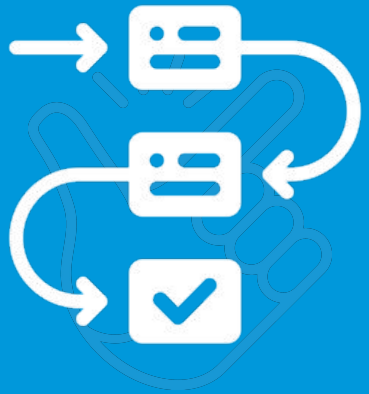
Make it timely

Consider the immediate costs and benefits



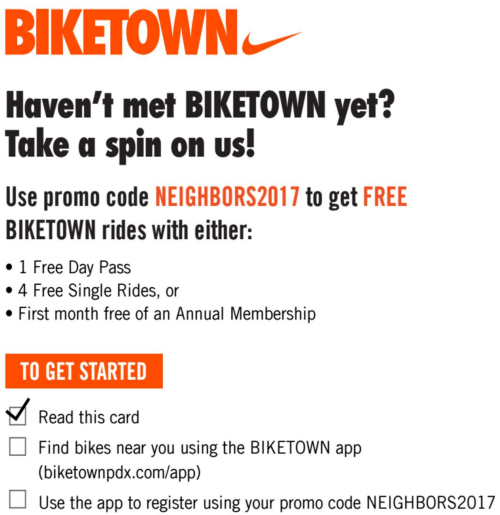
Help people plan their responses to events

Prompt people when they are most likely to be receptive

How can we encourage people to sign up to bike sharing?

Pick a time when people are more receptive

Do people respond differently to a free transport voucher if they just moved house?



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Pick a time when people are more receptive

Do people respond differently to a free transport voucher if they just moved house?

Yes! New movers were nearly four times more likely to sign up than those who lived near a new station, regardless of the message.

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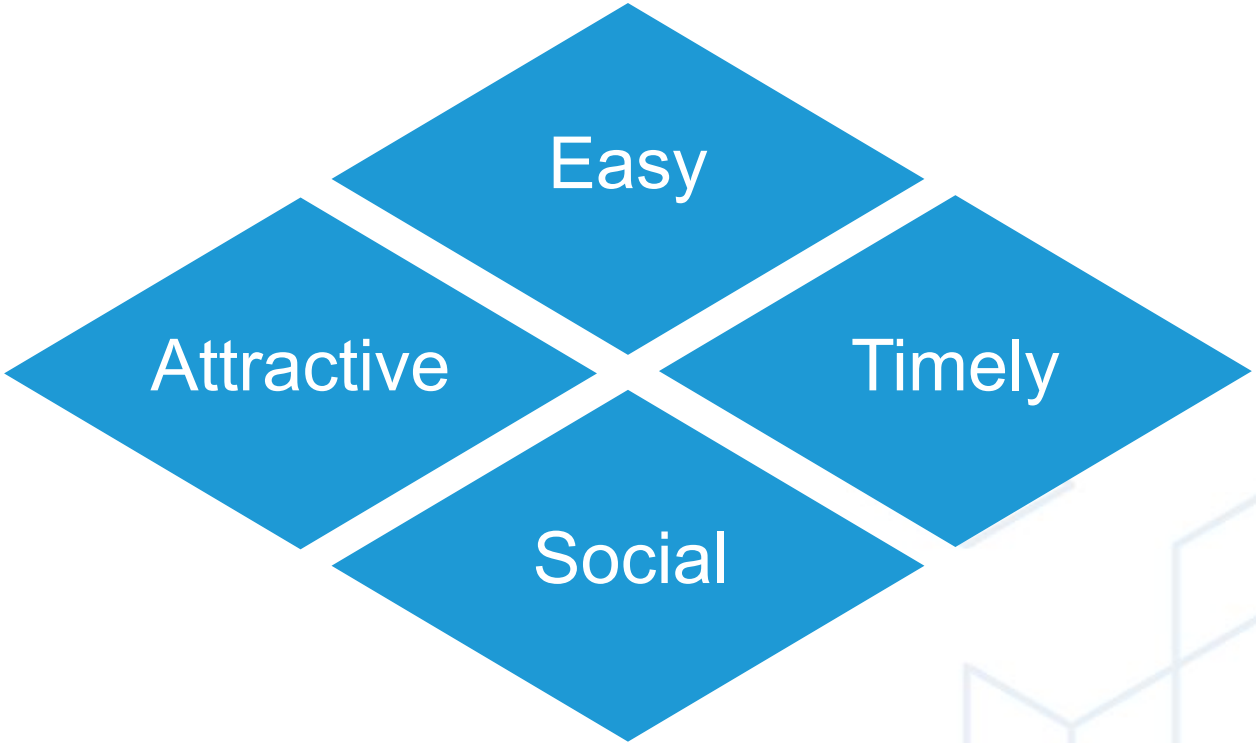
If you want someone to do something, make it…



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Our approach to solving a problem

THE
BEHAVIOURAL
INSIGHTS
TEAM

The TESTS Methodology

Target

Narrow the focus to a specific behaviour that you want to change

Set specific behavioural goals

Explore

Understand the system in which existing interventions are delivered

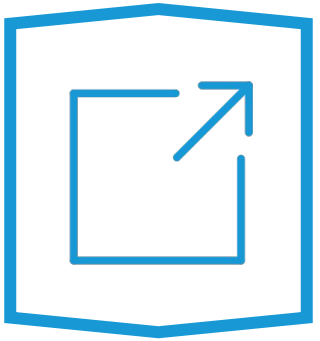
Understand the perspectives of the end-users

Solution

Draw from the insights gained in the explore phase and behavioural insights to deliver policy solutions that encourage the target behaviour

Trial

Use robust scientific designs and statistical methods to investigate whether, and by how much, the policy encourages target behaviours



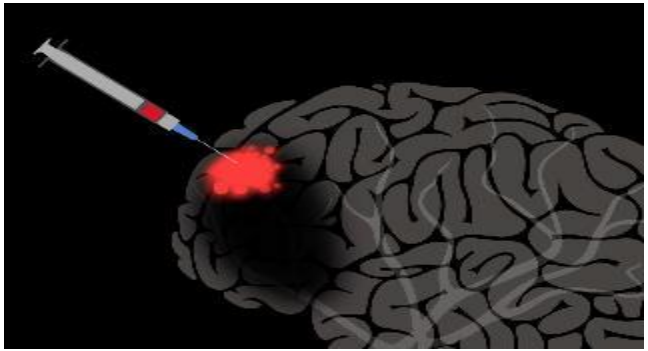
Scale

Scale up policies and interventions that have proven to effectively promote the target behaviour

Judging evidence

‘What works’ is not always intuitive

Steroids



- Used routinely for decades to reduce swelling with head traumas.
- Nobody ran an RCT until 2005

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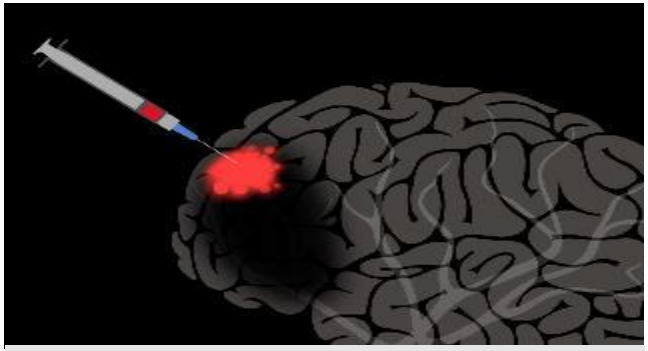
Consensus and common sense can be wrong!

Steroids



An RCT (n=10,000) found:

With steroids:
risk death = **26%**
or severe disability = **38%**

Without steroids:
risk death = **22%**
or severe disability = **36%**

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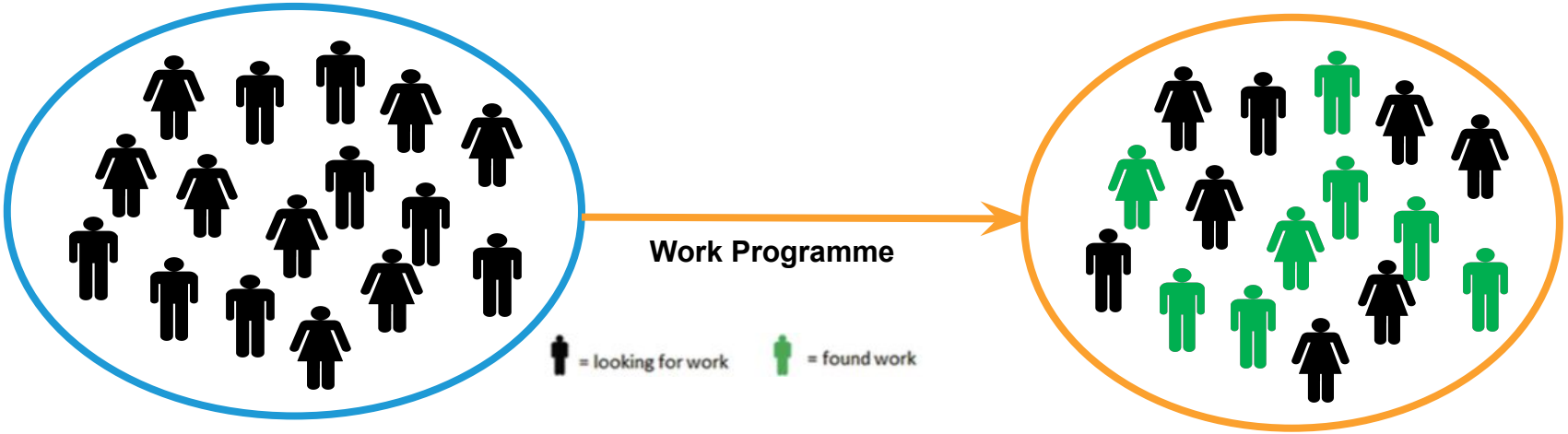
How can we find out what works?

… we could measure before and after our intervention?



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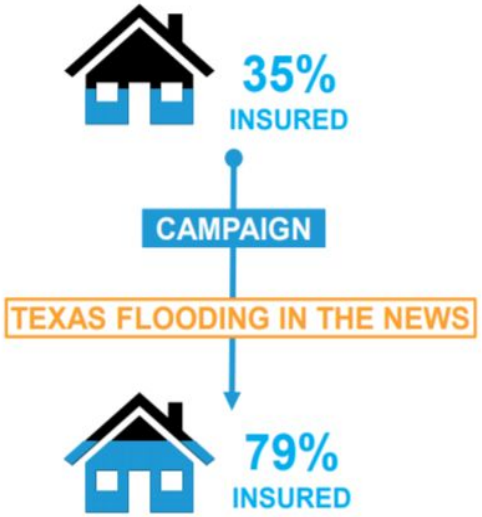
The Importance of Trialling - Before / After

You want **more homeowners to purchase flood insurance.** You run a campaign, **compare rates before and after,** and find a large difference...Success? Perhaps.

But what if **something else happened** in between? Was the increase due to your campaign, or would it have happened anyway? **You don't know!**



How much of this increase was due to the intervention?

How much was due to more people being more aware of the dangers of flooding since its been in the news?

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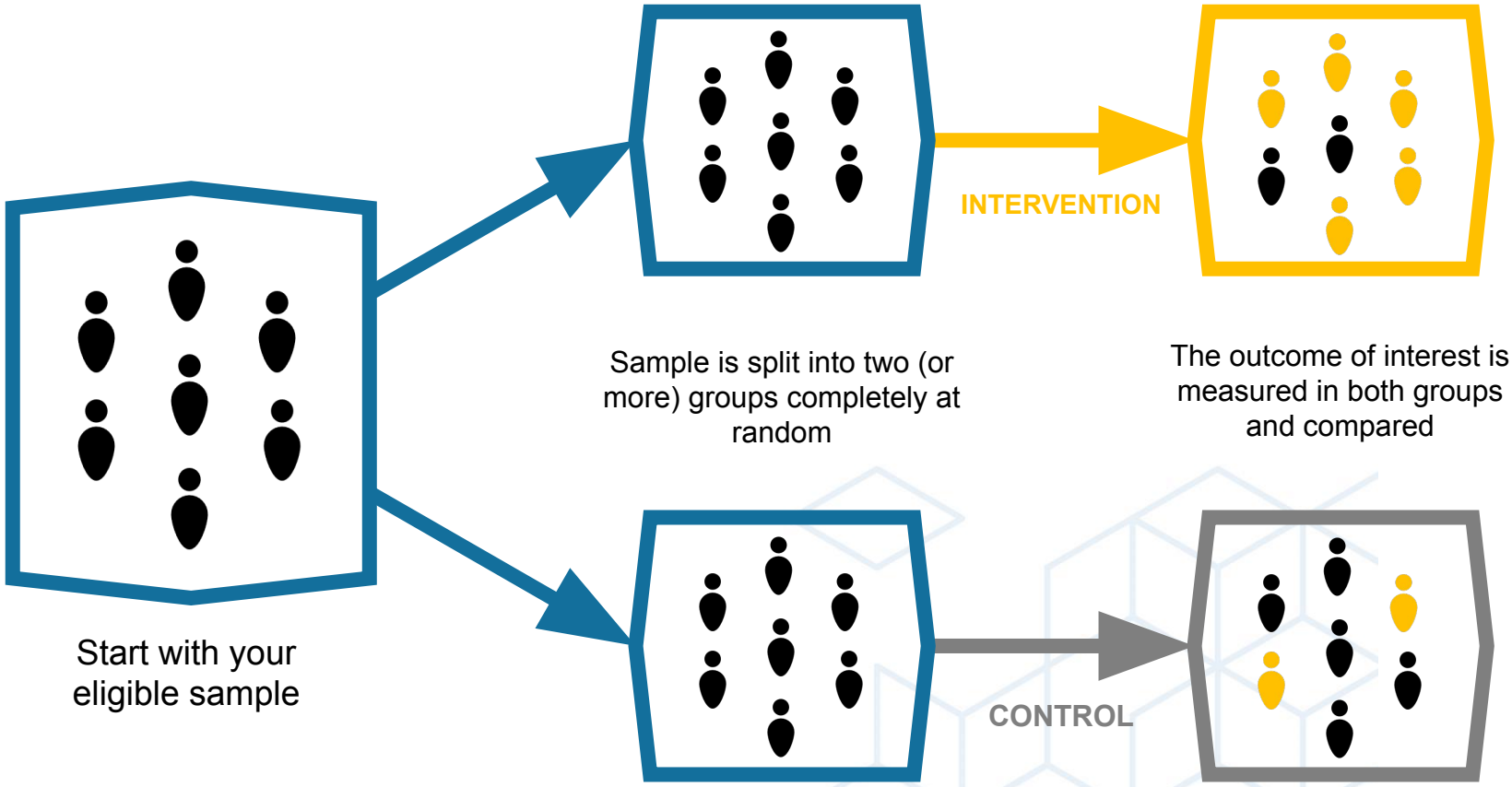
Randomised Controlled Trials



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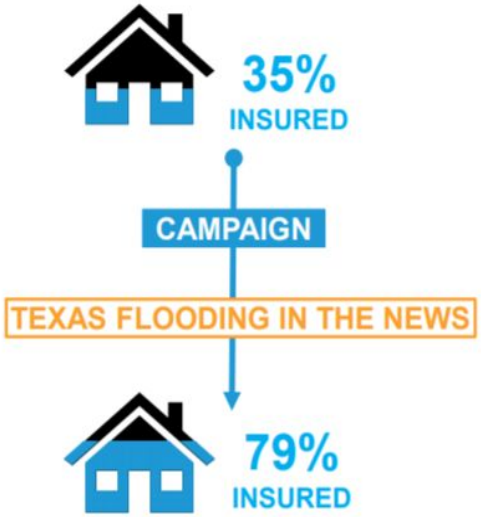
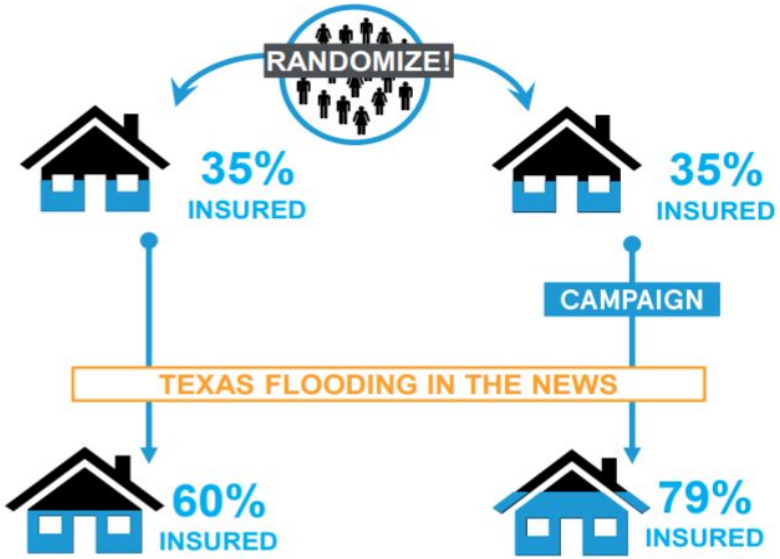


Randomisation can tell you! Both groups **start out the same**, and **both are exposed to the same events**, so the difference between groups is likely due to the campaign.



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Rules of thumb for assessing evidence

1. **What would have happened if we hadn't intervened**?
   Do I have a control group?
2. **Is the control group similar to the group receiving the new approach**?
   Remember that this is not just about demographics. Geography, timing or environment could all have an impact on results.
3. **Am I sure the change is not just due to chance, or other natural fluctuations in the data**?
   How many people have been through the new approach?
   Remember that small samples are more likely to produce extreme results
4. **Does the result look realistic?**
5. **Can I explain why I am having an impact?**
   What is the crucial ingredient and is it something which I can scale?
   You may think your pilot is working because of a new working model. However, if staff had to volunteer to take part it perhaps you just have more enthusiastic people involved
6. **Has anything else changed which could have affected the outcome**?
   For example, if I am trying to help people back into work, how is the economy doing more generally?
7. **Have I changed behaviour or beliefs/attitudes**?
   Remember, beliefs or attitudes don't necessarily translate into action

Thanks for your time!

Any questions?

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