

# Open analytics at the Health Foundation

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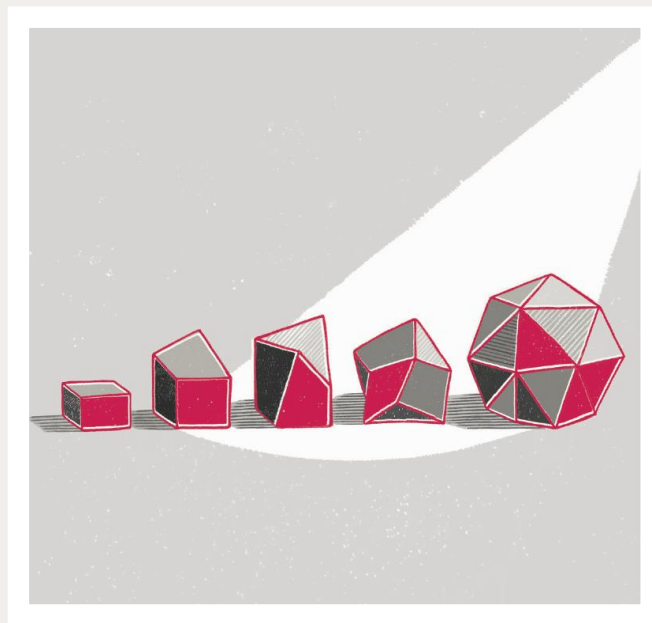
February 2020



# About us

The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

We connect what works on the ground with effective policymaking and vice versa.



We shine a light on  
how to make successful  
change happen

Challenges for health and health care

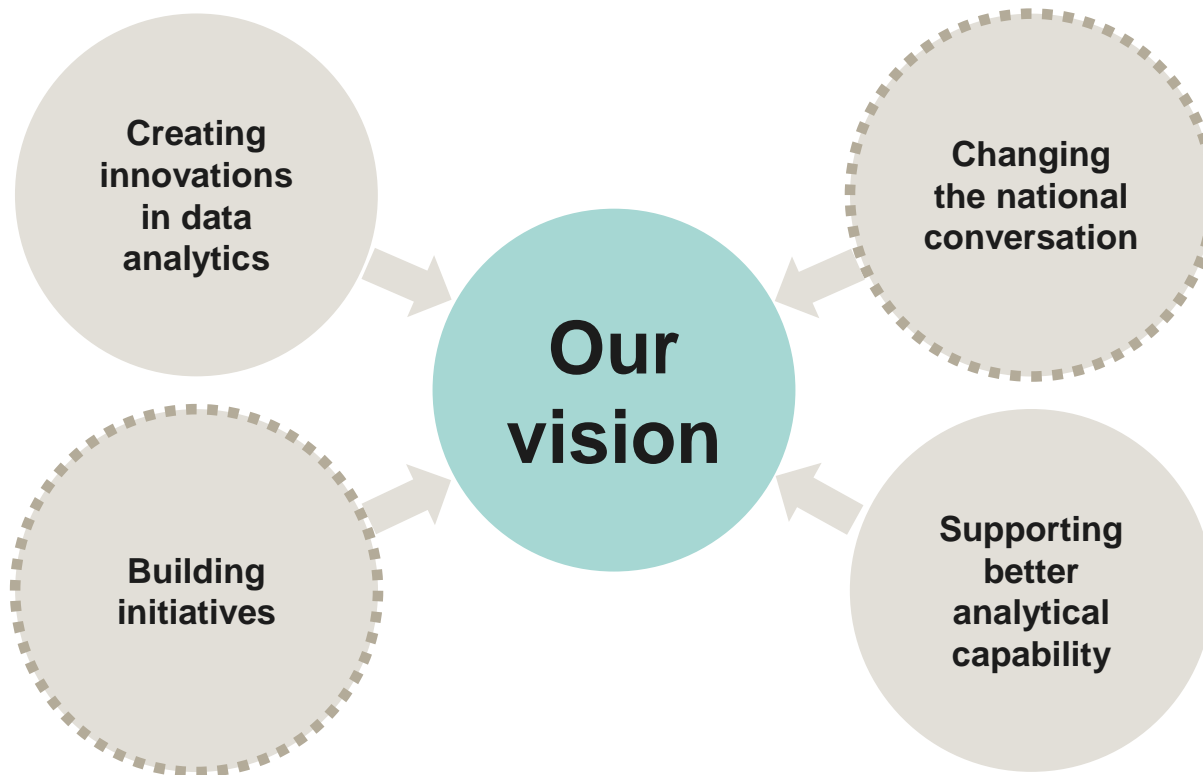


Ensuring everyone's health and care benefits  
from analytics and data-driven technology



Developments in analytics and data driven technology

# Making it happen



# How do we work?

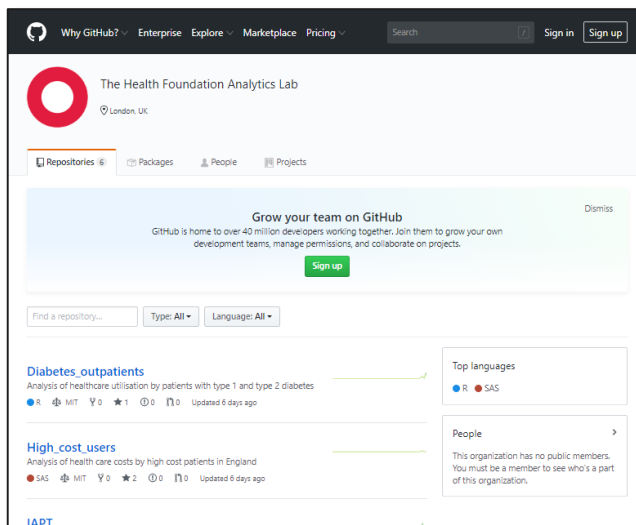
**Collaborative** Our problems are big and complex (as are the datasets), isolated analytical teams, working in one geographical area, on one part of the system, are limited in their impact.

**Legitimate** We need buy in and input from policy makers, clinicians, patients and the public. Need to work together to determine the limits of analytical linkage and methods, inform the questions we ask, and interpret results.

**Open** We are open with our methods, and share them to spread learning via GitHub etc. We need to be subject to scrutiny and allow others to reproduce our results.

# Where are we now?

## Publishing our code



<https://hfanalyticslab.github.io/>

## Sharing our learning

### Towards open health analytics: our guide to sharing code safely on GitHub



Fiona Grimm  
Jan 26 · 9 min read



Photo by [Finn Hackshaw](#) on Unsplash

# Benefits of working openly

- Reducing 'analytical waste' by reusing and adapting code and processes developed by other
- Sharing work internally, keeping up with and celebrating each other's progress
- Crediting contributions, internally and from collaborators
- Permanent record of analyses for better reproducibility
- Scientific integrity and credibility



What are the barriers for others?

How can we encourage open working?

Developing our open working standard

# Supporting best practice in health data analytics

 **NHS BNSSG CCG Analytics**  
@BNSSGAnalytics

Thrilled to announce the launch of [#PathSimR](#) at the [#NHSRconf2019](#) - a [@HealthFdn](#) sponsored R program for pathway capacity and flow modelling freely available to NHS organisations and beyond!

Find it at [github.com/nhs-bnssg-anal...](https://github.com/nhs-bnssg-anal...)

[@ido\\_bath](#) [@ProfChristosV](#)



10:44 AM · Nov 5, 2019 · Twitter Web App



Support the learning and application of R in the NHS.

Workshops, video tutorials and a platform for discussion and sharing of best practice solutions to NHS problems.



# Collaborative analytics across the UK

## Networked Data Lab

25 applications across all four UK nations



# Open coding capability in the system

Sharing code locally  
~80%

Sharing code externally  
~50%

GitHub presence  
~25%



# What can data producers and owners do?



Chris Beeley  
@ChrisBeeley

Totally 100% on board with this, and so are colleagues at Nottinghamshire Healthcare and [@NHSrCommunity](#)

Consider me and them part of the open army 🦊

I hope you'll be seeing more of all of us doing the right thing in the coming months

 ben goldacre ✓ @bengoldacre · Nov 21, 2019

Now. Just doing the right thing is not enough. You must ADVOCATE to get others to change. And you must TEACH and SHARE to help others who want to change.

On advocacy, we have been sharing our open methods, informally, through blogs...

[ebmdatalab.net/openness-and-t...](#)

[Show this thread](#)

5:03 PM · Nov 29, 2019 · [Twitter for Android](#)

2 Retweets 10 Likes

Calls for action from the analyst community.

Data controllers could help to **speed up the spread of open working**

- By modelling best practice (publishing code, reference and metadata)
- By setting the same standards for users of their data
- By signposting to existing code to lower the barriers for new users and accelerate work on experimental datasets

***Vision:***  
**Everyone's health and care benefits  
from analytics and data-driven  
technology**

*Areas important to realisation of vision*

**A data and  
technology  
ecosystem that  
innovates in  
response to UK  
health and care  
priorities**

**Analytics and  
data-driven  
technology are  
used to help  
reduce health  
inequalities**

**Effective  
monitoring of  
the impact of  
analytics and  
data-driven  
technology on  
health, and the  
right regulation**

**The potential  
value of data  
for health and  
care is realised**

**A flourishing,  
and  
responsible,  
innovation  
ecosystem**

# Thank you

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