



Health & Social Care  
Information Centre

# Search Show & Tell

Technical Enablement – Iteration 1, May 2015

presented by Rob Sinclair, Lauren Lukasiewicz & Steve Moody



# Technical Enablement Mission

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Support NHS Choices Transformation through the investigation of technology options and standards, to enable sustained and continuous delivery of value to users, throughout Alpha, Beta and Live.

# Search Alpha Vision

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The new choices alpha search

Is a throw away proof of technology

For technical teams within NHS Choices, NHS Choices users and stakeholders i.e. NHS England

Who want to remove silos of data and content and add context to results

Unlike the existing search

# Search Alpha Team

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Role	Who
Product Owner	Rob Sinclair
Business Analyst	Steve Moody
Delivery Manager	Joanne Blake
Architect	Russell Fella
Researcher	Lauren Lukasiewicz
UX Architect	Marcus Maher
Developer	Yiew Lau
Developer	Nigel Attwell
Developer	Mohan Jambunathan
Developer	Daniel Cockerham
Ops Specialist	Tom Barrett
Search Product Owner	Matt George

# Search Hypothesis

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*“Many applications use search as the primary interaction pattern for their users. When it comes to search, user expectations are high. Users expect great relevance, suggestions, and solid linguistics that effortlessly handle spelling mistakes, near-instantaneous responses, multiple language, faceting, and more.”*

# Search Hypothesis

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By undertaking this work the following points will be answered:

- A way of bringing content together from the existing site and new nhs.uk is achievable using search
- A search solution where indexes are populated through a data stream is effective
- A search experience more Google than Google can be achieved with the outputs from Information Seeking or other Transformation streams
- The solution is extensible for the inclusion of Ontologies or Graph solutions

This will be measured through:

- Ability to search for content and have results returned from MVS and Transformation
- Effectiveness of the search results as compared against existing GSA Solution
- User Testing of resulting experience
- Proposals for the extension of the solution and identification of next steps

# Discovery / Research

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1. **What do users want & hope to “see” when they search (vary by type of search/info requirement/device)?**
2. **What does a “good” onsite search mean to them (look & feel like? is it about process? outcomes? (Vary by type of search?))**
3. **Perceptions and experiences of existing NHS Choices search process and outcomes?**
  - >>> User strengths, weaknesses?**
  - >>> Site opportunities, threats?**
  - >>> Improvement areas?**
4. **Perceptions and experiences of potential [Google style] NHS Choices search pages and outcomes?**
5. **Are we going in the right strategic direction (towards curated, semantic content) to meet existing & emerging user needs?**

# Discovery / Research

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*. They sort it all out for you  
and make everything easy.  
Most of the time you find  
what you need on that Google  
page.*

*The best thing about Google  
is that they do it for you. You  
tell them what you're  
interested in and they do all  
the work for you.*

*It's just so straightforward,  
you'd never want to go  
anywhere else. You asked me  
to look at Bing and Yahoo  
before I came and I hated  
them.. It's just lists, there  
isn't any sense to it at all*



Google: does it for you



# Discovery / Research

The screenshot shows the NHS Choices website with a search bar at the top right containing the text 'asthma'. Below the search bar is a navigation bar with links: 'Health A-Z', 'Live Well', 'Care and support', 'Health news', and 'Services near you'. The main heading is 'Search results for 'Asthma'' with a subtext '95 search results found'. The results list includes several items, each followed by a red 'X' mark. The items are: 'Asthma - NHS Choices - Health A-Z', 'Asthma in children - NHS Choices - Health A-Z', 'NHS VIDEOS | Asthma: an animation - Health videos - NHS ... - Video', 'Asthma in pregnancy - Pregnancy and baby guide - NHS ... - Health A-Z', 'Asthma in children - Tashaun's story - NHS Choices - Health A-Z', 'Asthma - Community - NHS Choices - Health A-Z', 'Asthma in children - living with asthma - NHS Choices - Health A-Z', and 'Asthma in children - causes - NHS Choices - Health A-Z'. On the right side, there is a 'Health explorer' sidebar with a search icon and the text 'Use the Health Explorer to find out more about:' followed by a link to 'Asthma'.

**NHS choices** Your health, your choices

Search **asthma**

Health A-Z Live Well Care and support Health news Services near you

## Search results for 'Asthma'

95 search results found

**Asthma - NHS Choices - Health A-Z** X  
Asthma is a long-term condition that can cause a cough, wheezing and breathlessness. ... British Lung Foundation, Asthma and pregnancy. ...

- Overview
- Symptoms
- Causes
- Diagnosis
- Treatment
- Living with

**Asthma in children - NHS Choices - Health A-Z**  
Asthma is a common long-term condition that can be well controlled in most children. ... Childhood asthma: Jordan's story. ...

**NHS VIDEOS | Asthma: an animation - Health videos - NHS ... - Video**  
Asthma is a chronic condition affecting the lungs which can be managed but not cured. This ... asthma. Living with asthma. ...

**Asthma in pregnancy - Pregnancy and baby guide - NHS ... - Health A-Z** X  
Find out how pregnancy affects asthma and how you can manage your asthma when you're pregnant, including treatment. ... Asthma and pregnancy. ...

**Asthma in children - Tashaun's story - NHS Choices - Health A-Z** X  
Watch a video about asthma in children. Tashaun, his mum and his nurse talk about living with child asthma. Useful links. NHS Choices links. ...

**Asthma - Community - NHS Choices - Health A-Z**  
HealthUnlocked asthma community in association with the British Lung Foundation.

**Asthma in children - living with asthma - NHS Choices - Health A-Z**  
Find out how to help your child live with asthma, including knowing their triggers, stopping smoking and having regular reviews, as well as tips on ...

**Asthma in children - causes - NHS Choices - Health A-Z**  
There is no single known cause of asthma. However, certain things may increase the likelihood of your child developing asthma. Useful links. ...

**Health explorer**  
Use the Health Explorer to find out more about:  
• Asthma

# Discovery / Research

The screenshot shows the NHS Choices website with a search bar at the top containing the word 'asthma'. Below the search bar, there are navigation tabs: 'Health A-Z', 'Live Well', 'Care and support', 'Health news', and 'Services near you'. The main heading is 'Search results for 'Asthma'' with a subtext '95 search results found'. Below this, there are two tabs: 'Information' and 'Services'. The 'Information' tab is selected and highlighted with a red oval. The 'Services' tab is also highlighted with a red oval. The 'Information' section contains several links and a list of related topics: Overview, Symptoms, Causes, Diagnosis, Treatment, and Living with. There are also sections for 'News', 'Asthma in children', 'NHS VIDEOS', 'Asthma in pregnancy', 'Asthma in children - Tashaun's story', 'Asthma - Medicines and drugs', and 'Asthma - Community'. On the right side, there is a sidebar with a red circle around it. The sidebar contains a section titled 'Asthma' with a description of the condition, a 'Related' section with links to Hayfever, Stop smoking, Winter health, Emphysema, and Ventolin, a 'People also search for' section with links to COPD, Respiration, Wheezing, and Allergies, and a 'Related videos' section with a grid of video thumbnails and a 'More videos' link.

**NHS choices** Your health, your choices

Search  Search

Health A-Z Live Well Care and support Health news Services near you

## Search results for 'Asthma'

95 search results found

**Information** **Services**

**Asthma - NHS Choices - Health A-Z**  
Asthma is a long-term condition that can cause a cough, wheezing and breathlessness. pregnancy ...

- Overview
- Symptoms
- Causes
- Diagnosis
- Treatment
- Living with

**News**  
**Vitamin D may help treat severe asthma - Health News**  
"Sunshine vitamin 'may treat asthma'", BBC News informs us

**Asthma in children - NHS Choices - Health A-Z**  
Asthma is a common long-term condition that can be well controlled in most children.

**NHS VIDEOS | Asthma: an animation - Health videos - NHS ... - Video**  
Asthma is a chronic condition affecting the lungs which can be managed but not cured.

**Asthma in pregnancy - Pregnancy and baby guide - NHS ... - Health A-Z**  
Find out how pregnancy affects asthma and how you can manage your asthma when you're pregnant, including treatment.

**Asthma in children - Tashaun's story - NHS Choices - Health A-Z**  
Watch a video about asthma in children. Tashaun, his mum and his nurse talk about living with child asthma.

**Asthma - Medicines and drugs - NHS Choices - Health A-Z**

**Asthma - Community - NHS Choices - Health A-Z**  
HealthUnlocked asthma community in association with the British Lung Foundation.

**Asthma**  
Condition  
Asthma is a common long-term condition that can cause a cough, wheezing, and breathlessness. The severity of the symptoms varies from person to person. Asthma can be controlled well in most people most of the time.

**Related**  
Hayfever  
Stop smoking  
Winter health  
Emphysema  
Ventolin

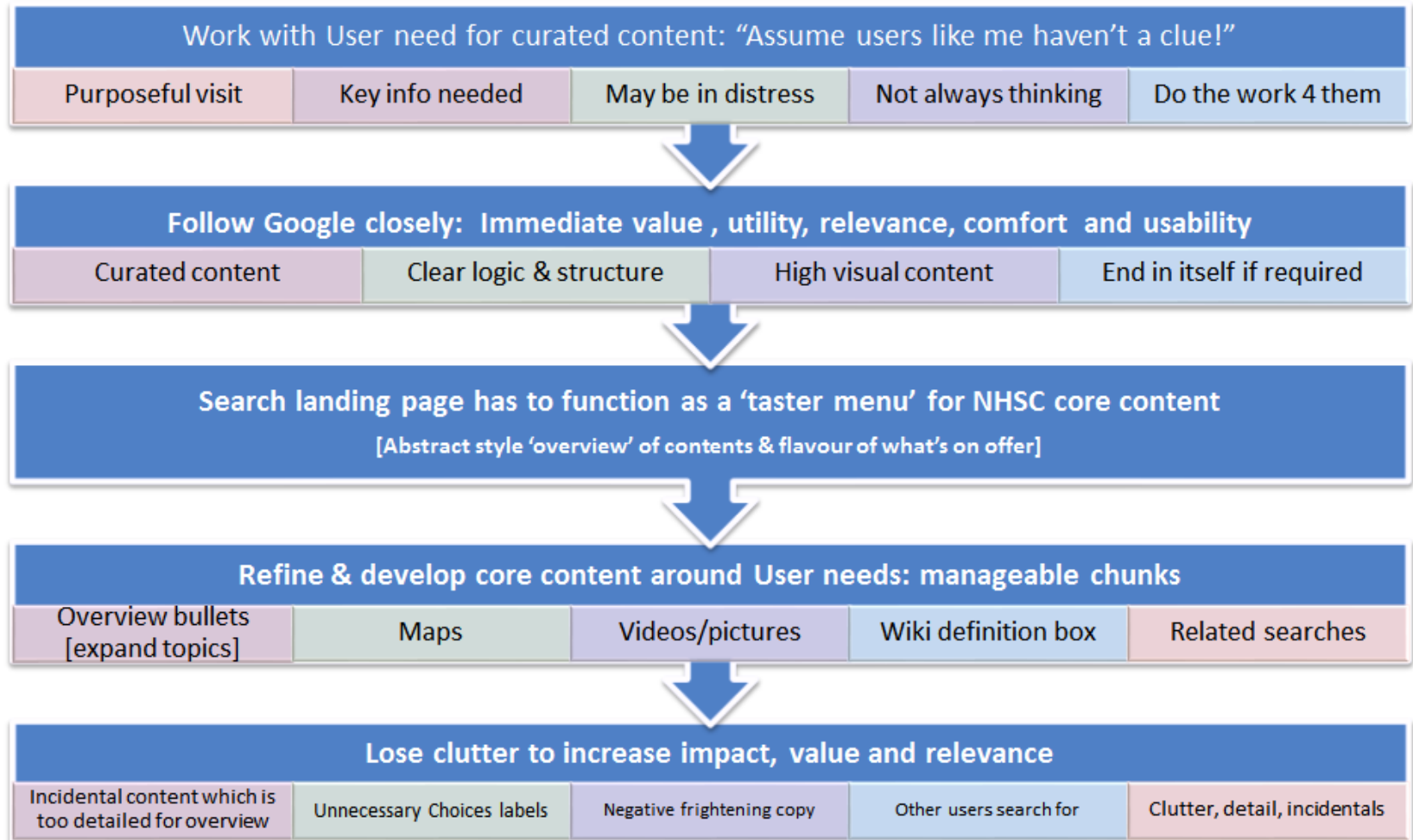
**People also search for**  
COPD  
Respiration  
Wheezing  
Allergies

**Related videos**

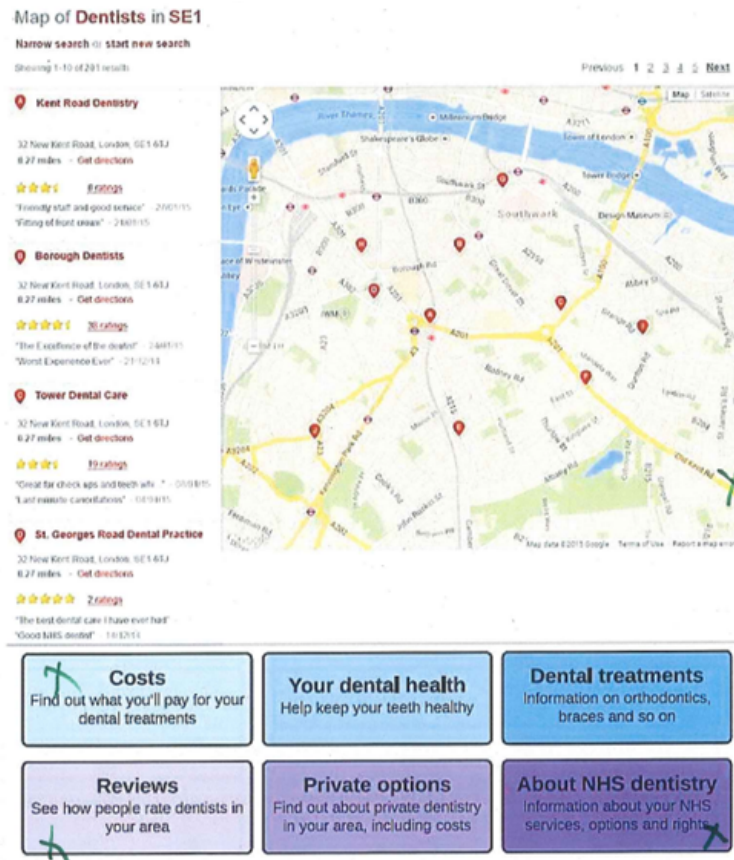
More videos

# Discovery / Research

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# Search in other discoveries and alphas



Users want the dentists search results to be ordered according to who is closest to them

Users want a map of where the nearest dentists are

The search results should indicate whether the dentist is taking on NHS patients

Wording used to describe the other types of patients that dentists are accepting needs to be clearer

Users want ratings derived from numerous, recent reviews

ACCEPTING  
NHS

# Search in other discoveries and alphas

- Users of Choices
- Google subject and go into Choices that way
  - “If I don’t find it straightaway I just go back out to google and search again”

The screenshot shows the NHS Choices website interface. At the top, there is a navigation bar with links: Home, About, Contact, Tools, Video, Choose and Book, Communities, and IPS. On the right of this bar are links for Translate, Log in, and create an account. Below the navigation bar is the NHS Choices logo with the tagline 'Your health, your choices'. To the right of the logo is a search bar containing the text 'thrush' and a magnifying glass icon. Below the search bar is a row of five blue buttons: Health A-Z, Live Well, Care and support, Health news, and Services near you. The main content area displays the search results for 'Thrush'. It starts with the heading 'Search results for 'Thrush'' followed by '89 search results found'. The first result is 'Thrush - Medicines and drugs - NHS Choices - Health A-Z', which includes a list of links: Overview, Symptoms, Causes, Diagnosis, Treatment, and Complications, and Prevention. The second result is 'Oral thrush in babies - NHS Choices - Health A-Z', which includes a description of the condition and a link to 'External links. ...'. The third result is 'Oral-thrush---adults - Medicines and drugs - NHS Choices - Health A-Z'. The fourth result is 'Thrush in men - NHS Choices - Health A-Z', which includes a description of the condition and a link to 'External links. ...'. The fifth result is 'Antifungal Medicines - NHS Choices - Health A-Z', which includes a description of the condition and a link to 'External links. ...'.

Home | About | Contact | Tools | Video | Choose and Book | Communities | IPS

Translate Log in or create an account

**NHS choices** Your health, your choices

thrush

Health A-Z Live Well Care and support Health news Services near you

## Search results for 'Thrush'

89 search results found

**Thrush - Medicines and drugs - NHS Choices - Health A-Z**

- Overview
- Symptoms
- Causes
- Diagnosis
- Treatment
- Complications
- Prevention

**Oral thrush in babies - NHS Choices - Health A-Z**

NHS Choices links. Common breastfeeding problems; Can my baby's oral thrush affect me if I'm breastfeeding? Oral thrush in adults. External links. ...

**Oral-thrush---adults - Medicines and drugs - NHS Choices - Health A-Z**

**Thrush in men - NHS Choices - Health A-Z**

Useful links. NHS Choices links. Balanitis; Oral thrush; Men 18-39; Sexual health; Why is my penis smelly and sore. External links. ...

**Antifungal Medicines - NHS Choices - Health A-Z**

... Pityriasis versicolor; Ringworm; Vaginal thrush. External links. Yellow Card Scheme. Making sense of your medicines. Find ...

# Search in other discoveries and alphas

Home | About | Contact | Tools | Video | Choose and Book | Communities | IPS Translate Log in or create an account

**NHS choices** Your health, your choices

thrush

Health A-Z | Live Well | Care and support | Health news | Services near you

## Search results for 'Thrush'

89 search results found

### Thrush - Medicines and drugs - NHS Choices - Health A-Z

- Overview
- Symptoms
- Causes
- Diagnosis
- Treatment
- Complications
- Prevention

### Oral thrush in babies - NHS Choices - Health A-Z

NHS Choices links. Common breastfeeding problems; Can my baby's oral thrush affect me if I'm breastfeeding? External links. ...

### Oral-thrush---adults - Medicines and drugs - NHS Choices - Health A-Z

### Thrush in men - NHS Choices - Health A-Z

Useful links. NHS Choices links. Balanitis; Oral thrush; Men 18-39; Sexual health; Why is my penis smelly? External links. ...

### Antifungal Medicines - NHS Choices - Health A-Z

... Pityriasis versicolor; Ringworm; Vaginal thrush. External links. Yellow Card Scheme. Making sense of ...

## Vaginal thrush

Share: Save: Print:

### Overview

### Medicines info

### Clinical trials

#### Medicines info

## Medicines for Vaginal thrush

**OTC** Over-the-counter medicine. Medicine with this icon can be bought without a prescription.

### C

Canesten  
(a brand of Clotrimazole)

Clindamycin phosphate  
Clotrimazole

### D

Dalacin  
(a brand of Clindamycin Phosphate)

Diflucan  
(a brand of Fluconazole)

Fluconazole

### G

Gyno-Daktarin  
Gyno-Pevaryl  
Gynoxin

### I

Itraconazole  
(a generic version of Sporanox)

### M

Miconazole nitrate

### Useful links

NHS Choices links

[Sexual health](#)

[Thrush medicines](#)

[Oral thrush](#)

[Thrush in men](#)

External links

[FPA: thrush](#)

[Brook: advice for under 25s](#)

[Women's Health Concern: thrush factsheet](#)

[Embarrassing Problems: thrush advice](#)

# Iteration 1&2 - What did we plan to deliver?

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CI Pipeline

Search Index  
for Information

Search for  
Information

Azure  
setup

Search Index  
for  
Organisations

Source  
Control  
Setup

Front-end  
framework

MVC  
framework

App to  
populate  
Indexes

Scoring &  
Relevance

Org  
Telephone  
Numbers

Faceted  
Organisation  
Results

Initial Styling

Organisation  
Summary  
Text

Information  
Seeking  
integration

Map Results

Geo-Location  
Search

Postcode  
Search

PlaceName  
Search

Opening  
Times

# What did we deliver and what's left?

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CI Pipeline ✓	Search Index for Information ✓	Search for Information ✓	Azure setup ✓	Search Index for Organisations ✓
Source Control Setup ✓	Front-end framework ✓	MVC framework ✓	App to populate Indexes ✓	Scoring & Relevance ✗
Org Telephone Numbers ✓	Faceted Organisation Results ✓	Initial Styling ✓	Organisation Summary Text ✓	Information Seeking integration ✗
Map Results ✓	Geo-Location Search ✓	Postcode Search ✓	PlaceName Search ✓	Opening Times ✓



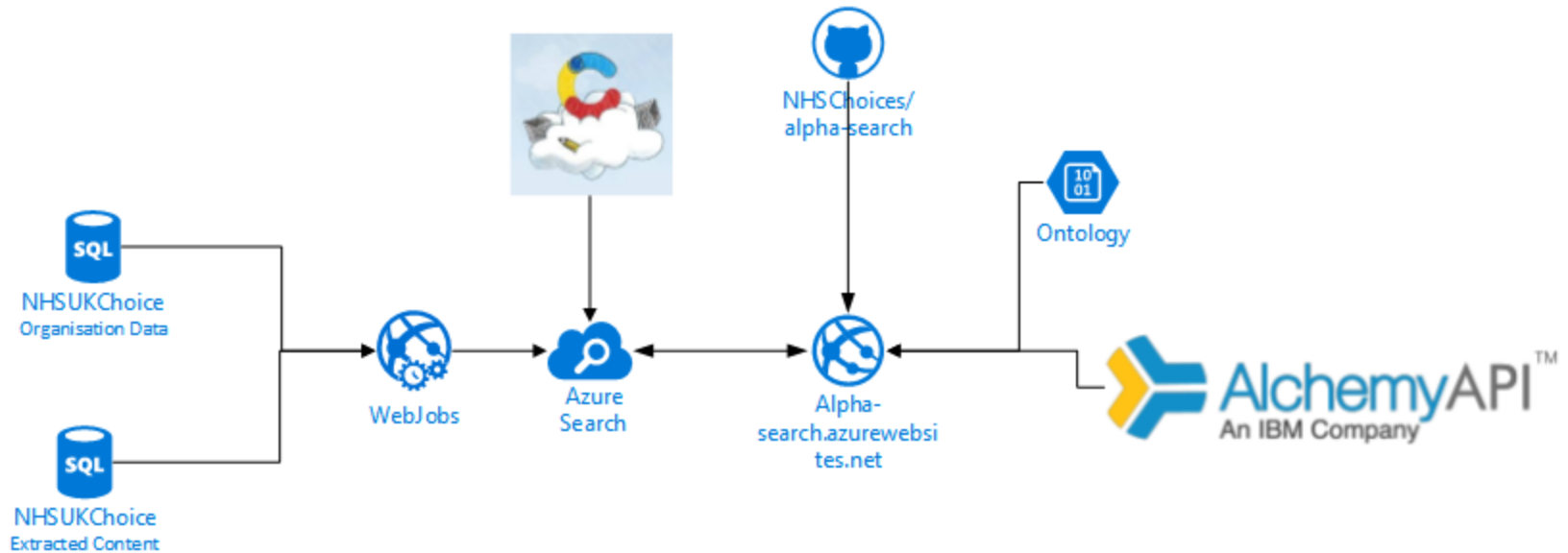
# Demo

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<http://alpha-Search.azurewebsites.net/>

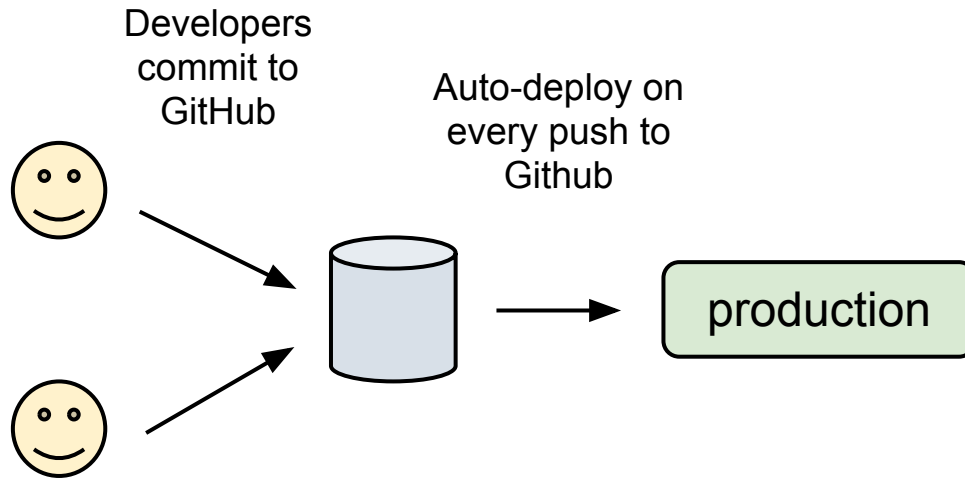
# Technical Architecture

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# Deployment Pipeline

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# Iteration 3 & 4 - Plan

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Create a  
crawler to  
extract  
content

Services -  
scoring and  
relevance

Spike -  
Common  
ontology to rtn  
org's & content

Content  
scoring and  
relevance

Services - load  
indexes for org'  
s and  
treatments

Information -  
arrange  
based on user  
needs

Services -  
Arrange results  
based on user  
needs

Filter 'real  
life stories'

Services -  
add miles  
away for user

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QUESTIONS?

**Please come and  
talk to us**

An overview of our initial work looking at the NHS referral process.

@ 11am Tuesday 12th May