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Delivering the transformation

NICE National Institute for
Health and Care Excellence



Problem to solve

- We produce a series of one-off, stand-alone publications that are designed to be read from start to finish.
- The specific items of content our users need, be they a **recommendation**, a **definition**, an **evidence table**, or **meta-analysis** are undifferentiated and un-referenceable passages of text within a much larger volume of text.
- Stand-alone publications fail to capture the relationships between their components and those of related documents.

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Context is important to meaning

If we look for the word “**cold**” it is used to mean different things across multiple recommendations in different guidelines.

Semantics is not just about

vocabulary it's about how meaning emerges from structure, context, and shared knowledge.

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'Cold' example'

Excess winter deaths and illness and the health risks associated with **cold homes**.

NICE guideline: NG6 **Published:** 5 March 2015

Machine perfusion systems and **cold static storage** of kidneys from deceased donors.

Technology appraisal guidance

Reference number: TA165 **Published:** 28 January 2009

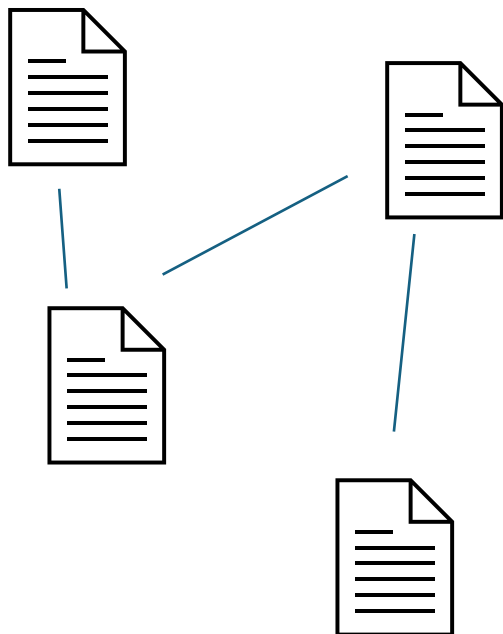
Cough (acute): antimicrobial prescribing

NICE guideline: NG120 **Published:** 7 February 2019

Radiofrequency **cold ablation** for respiratory papillomatosis.

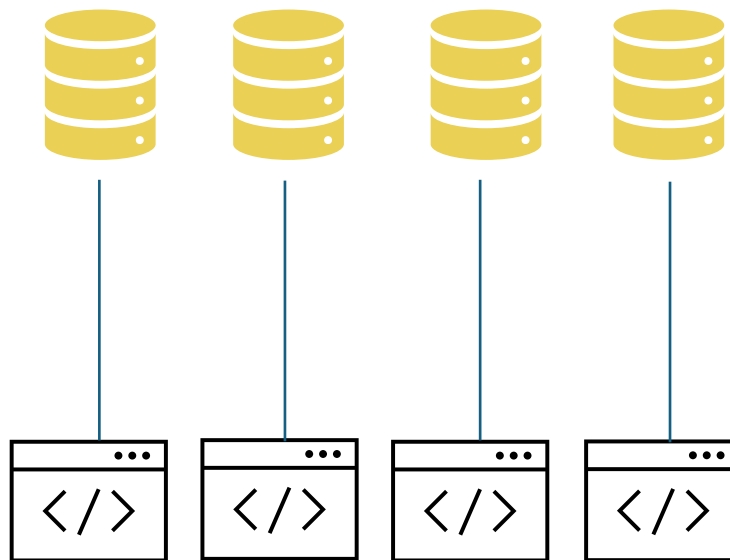
Interventional procedures guidance: IPG434 **Published:** 27 November 2012

The evolution of semantic data and the web

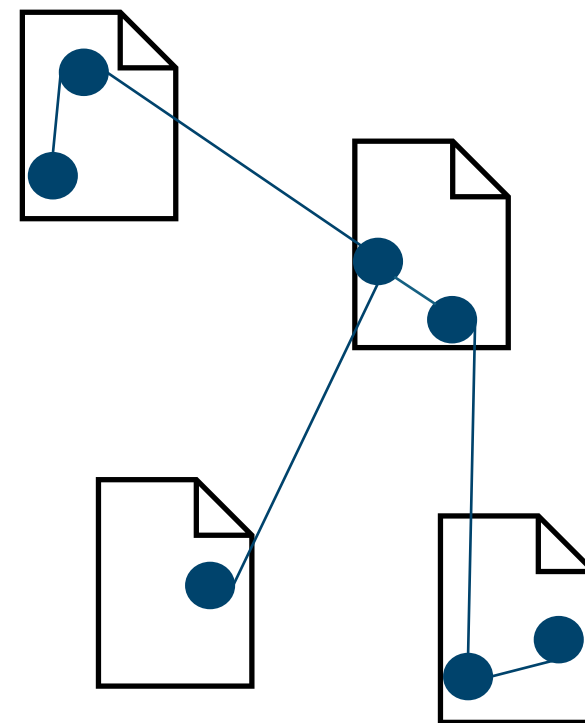


Hyperlinks between documents
(web 1.0)

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Siloed data and applications
(web 2.0)



Semantic relationships between
data within the content
(web 3.0...../ 2.5)

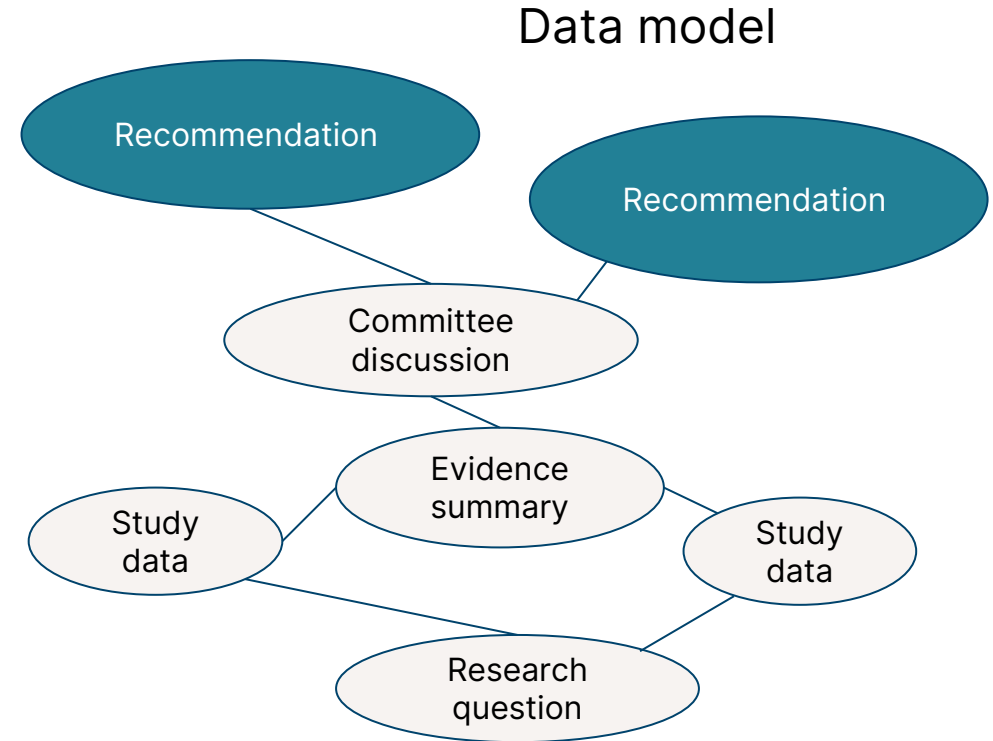
A NICE slice

Our work in progress

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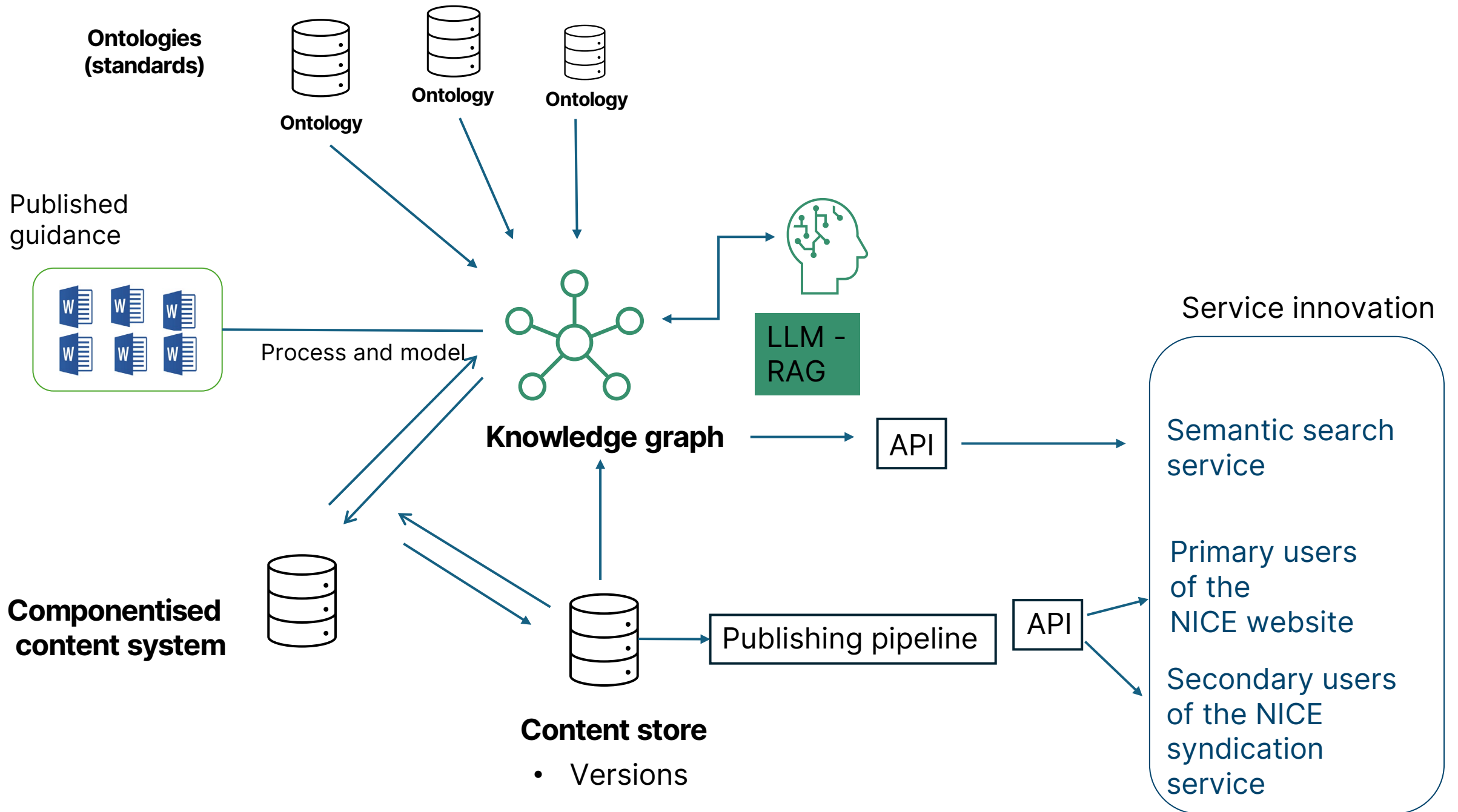


From documents to structured content

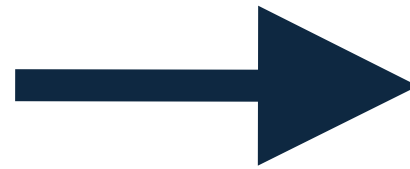
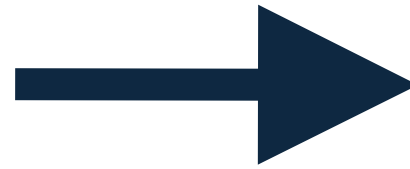
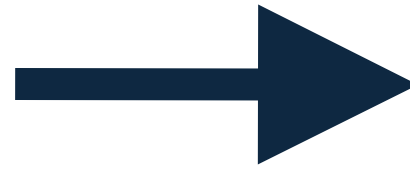


Components are captured separately as specific 'things' e.g. 'recommendation'.

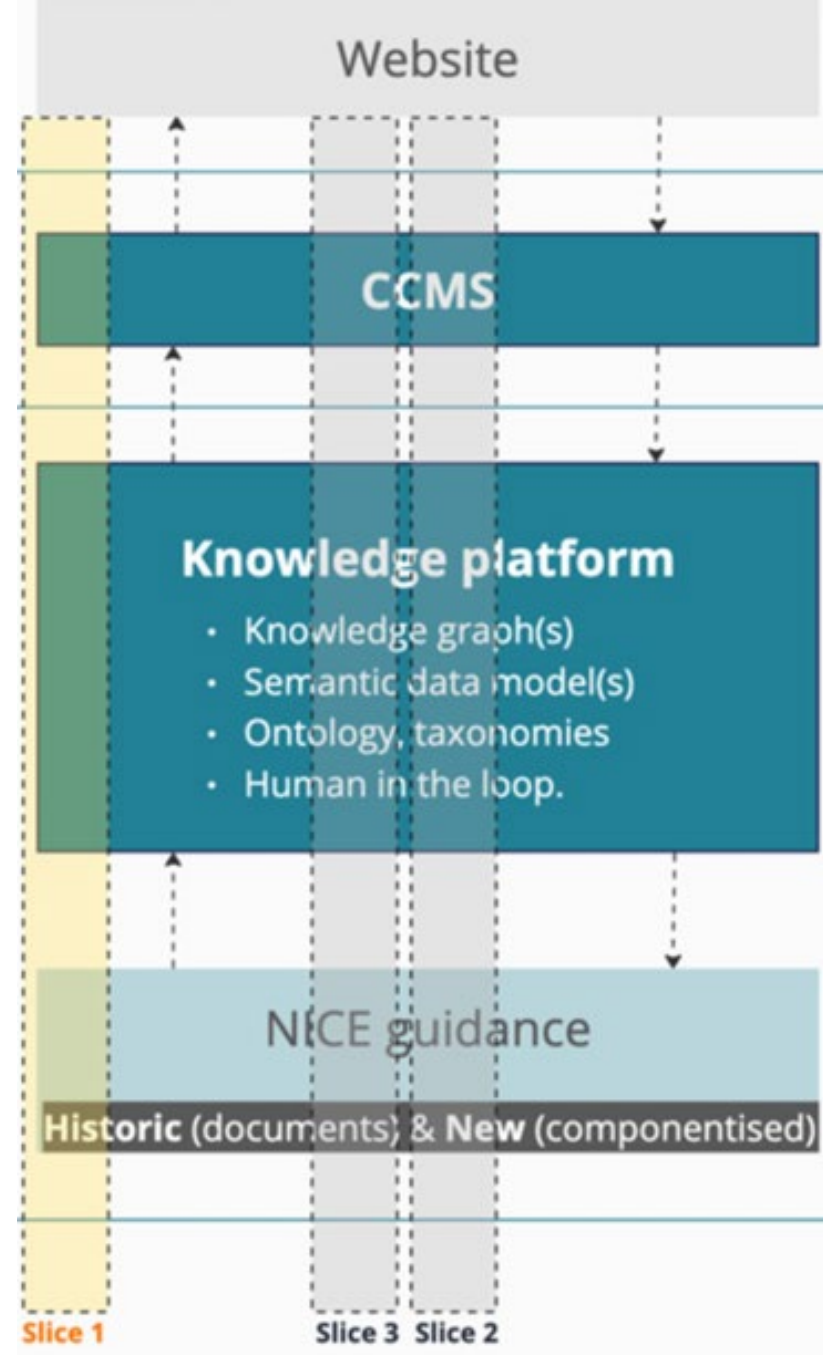
The **relationships** between 'components' are defined in a data model and can be understood by machines.



We have started here



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Thank you

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