





# About me...

- GP in Lanarkshire, Scotland, UK
- Clinical Senior Lecturer in General Practice, University of Glasgow
- Co-lead, Primary Care Research Network, Scotland
- Research interests: Primary care depression, cardiovascular diseases, cancer and multimorbidity



# About this talk

- Developed a template for COVID-19 consultations in primary care
- Used SNOMED CT terms



Research

Recording COVID-19 consultations: review of symptoms, risk factors, and proposed SNOMED CT terms

Bhautesh Dinesh Jani, Jill P Pell, Dylan McGagh, Harshana Liyanage, Dave Kelly, Simon de Lusignan, Christopher J Weatherburn, Ronnie Burns, Frank M Sullivan and Frances S Mair

BJGP Open 2020; 4 (4): bjgpopen20X101125. **DOI:** https://doi.org/10.3399/bjgpopen20X101125



The Context....

FEB/MARCH 2020



# COVID Outbreak in UK



#### UK warns against mass panic as race to halt outbreak intensifies

Fears of surge in cases of virus prompt rollout of new testing procedures

Simon Murphy

Samaritans

complaints

plan of as those in all 2 journers or who signed inon-disclosure agreements(NDAs) during his tenuare these. Jeremy Hughes will no longer be taking the helm at the suicide prevention charity following whistleblosser allegations that he duplayed bullying

toxic culture at the dementia charin The decision comes after two e

ditch new **CEO** after

All all growing contents are world about the speed with which the up precautions in case a similar scenario appears in Britain.

The hoghtened preparations in the

would act to Launch a mass public information campaign, giving advice on how to react to suspected cases and cases being officially reported outside cases being officially reported outside the country for the first time, with the WHO chief, Tedros Adhanom Ghecastinoide against "overreaction" out with Cinet, Tedros Admaiston Goe-acknowledged that the government did expect more cases in the UK.

The rapid expansion of cases in Italy - a popular destination for British hol-

idaymakers - has caused concern in virus so far, with no deaths. But in Italy

It's as much about vinning the battle

■ The total number of infections in hally represented a rise of 45% in 24 hours. Halian prosecutors opened an investigation into hospital procedures amid claims that an investigation of a so-called "susper-spreader" was initially delayed.
■ Asserta, Creatis, and Soutraceland

Austria, Croatia and Switzerland outbreak in Italy. France recorded its second death. The first case was

reported in South America.

Live event organisers co their plans as Italy's rugby antch against Ireland in





Alarm as flood defences breached in Shropshire

Residents and business owners in Shropshire were forced to flee their properties yesterday as the River Severn rose to near record levels and marwhalmed flood defences News Process





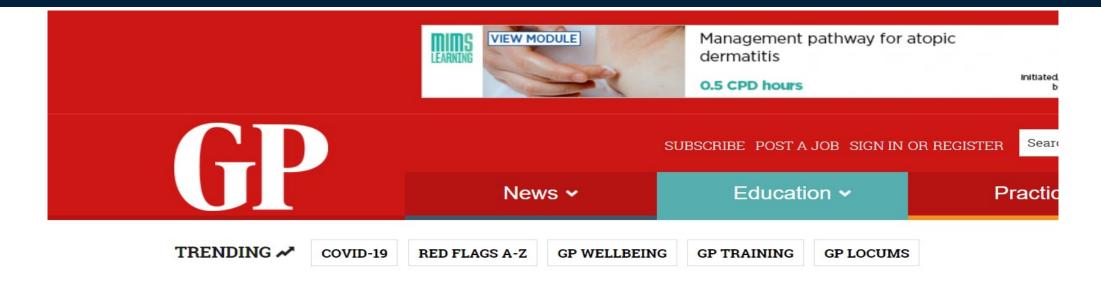
### Virus now growing faster outside China



- » Every continent apart from Antarctica hit by coronavirus, with 38 countries affected and total number of cases above 80,000
- » Frustration grows in UK over the lack of government advice for those most at risk, such as elderly and those with health conditions
  - » Minister says not everyone affected will get a hospital bed
  - »Six Nations rugby match between Ireland and Italy called off



# COVID Outbreak in UK



#### COVID-19 red flags for telephone triage

By Dr Toni Hazell on the 31 March 2020

Dr Toni Hazell provides tips on how to triage patients with symptoms of possible COVID-19 during phone or video consultations.





# COVID-19 Remote consultation: Challenges

- Much was unknown about symptoms and signs of COVID-19
- How to do risk assessment for patient with COVID-19 in community?
- Need for better quality data for COVID-19 consultations
- How do we improve standardisation and quality in record keeping for COVID-19 consultations



# The answer was to create a consultation template!!

# Why SNOMED CT

 3 different settings: General practice clinics, COVID assessment hubs and Secondary care



# Study Objectives

- To collate a list of relevant symptoms, assessment items, demographics, and lifestyle and health conditions associated with COVID-19 from literature search
- To match these data items with corresponding SNOMED CT clinical terms
- To support the development and implementation of consultation templates.

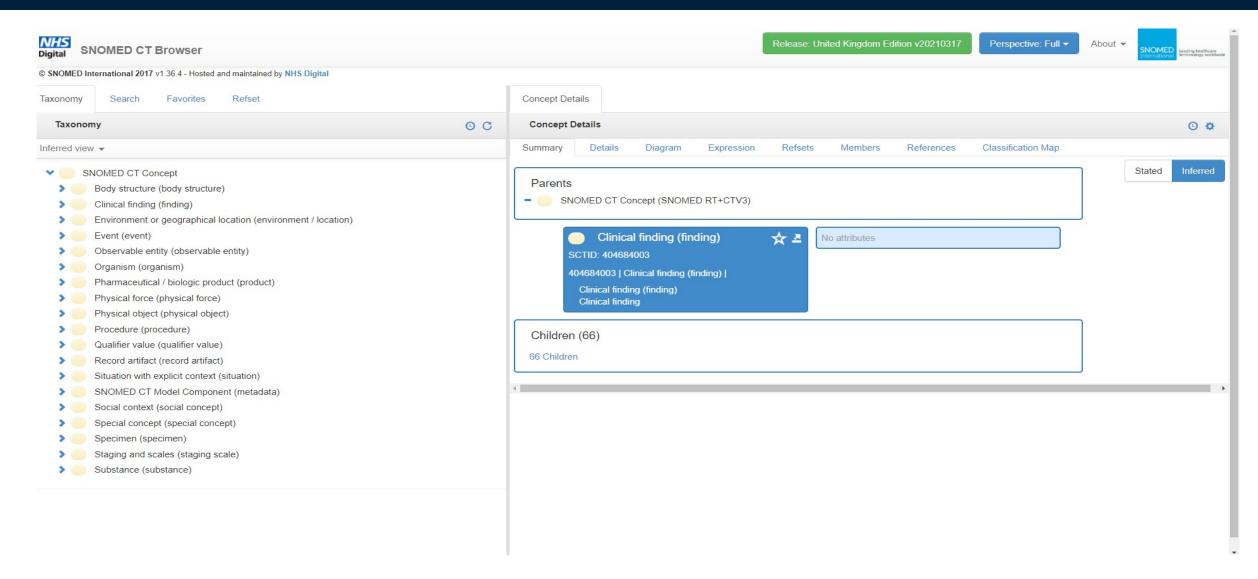


# Literature Search

- Pubmed: 963; medRxiv: 548 (May 2020); excluded studies related to blood tests and imaging
- N=21 published systematic reviews; N=24 pre-print systematic reviews; N=16 guidelines
- N=61 documents included



# Code Search using SNOMED Browser





# **RESULTS**

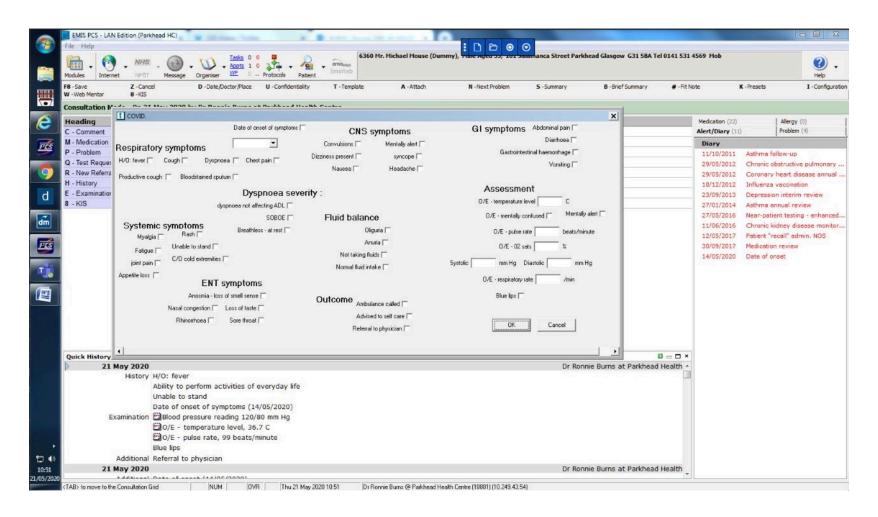


### List of Clinical Items

- 32 symptoms
- 20 assessment items
- 8 demographic and lifestyle features
- 25 health conditions

Corresponding SNOMED CT terms and READ codes

### A consultation template prototype in EMIS with symptoms and assessment items for recording COVID-19 consultations in primary care



Bhautesh Dinesh Jani et al. BJGP Open 2020;4:bjgpopen20X101125





# Barriers and Facilitators (Normalisation Process Theory)

- Awareness and rationale
- User friendly and ease of use
- 'Buy in' by clinical leadership
- Consensus on terms to be included
- Feedback loop



# Limitations

- Limited Search Strategy
- Evolving nature of evidence
- Inclusion of pre-print evidence
- Proof of concept, needs work for operationalisation



# Road to Recovery





### Future Role

- COVID-19 presentations part of 'routine care'
- Recording of COVID-19 consultations has to be normalised in primary care
- Assessment of COVID-19 in community: "Research Gap"
- Good quality standardised data needed to address the research gap
- COVID-19 consultation template may have a role!



