

**SNOMED**  
International

Delivering  
**SNOMED CT**

# 2020-2025 Strategy & Progress Update

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# Our Achievements 2020

Throughout the course of 2020, the organization has successfully delivered against a new strategy, executing set priorities and focusing in on new opportunities.

## Organization & Product

1. New Members
2. Genomics, vaccines, traditional medicine, COVID-19 Content & Coding Guide
3. Global Patient Set
4. ICN and AMA Collaborations
5. Value of SNOMED CT
6. Education Delivery Growth

## Governance & Advisory

1. Measuring the success of the organization
2. General Assembly & Member Forum engagement
3. Management Board composition & recruitment

## Strategy

1. Actioning 2020 strategic deliverables
2. Measuring success: Framing key performance indicators
3. Looking to 2021





Represented by the Ministry  
of Health and Welfare,  
SNOMED International  
welcomes the Republic of  
Korea as the newest Member  
to the organization.



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**39 Members**

5  
Americas

24  
Europe, Middle East and Africa

10  
Asia Pacific

# Prevalence of suspected COVID-19 infection in patients from ethnic minority populations:

a cross-sectional study in primary care

## Abstract

### Background

The first wave of the London COVID-19 epidemic peaked in April 2020. Attention initially focused on severe presentations, intensive care capacity, and the timely supply of equipment. While general practice has seen a rapid uptake of technology to allow for virtual consultations, little is known about the pattern of suspected COVID-19 presentations in primary care.

### Aim

To quantify the prevalence and time course of clinically suspected COVID-19 presenting to general practices, to report the risk of suspected COVID-19 by ethnic group, and to identify whether differences by ethnicity can be explained by clinical data in the GP record.

### Design and setting

Cross-sectional study using anonymised data from the primary care records of approximately 1.2 million adults registered with 157 practices in four adjacent east London clinical commissioning groups. The study population includes 55% of people from ethnic minorities and is in the top decile of social deprivation in England.

### Method

Suspected COVID-19 cases were identified clinically and recorded using SNOMED codes. Explanatory variables included age, sex, self-reported ethnicity, and measures of social deprivation. Clinical factors included data on 14 long-term conditions, body mass index, and smoking status.

### Results

GPs recorded 8985 suspected COVID-19 cases between 10 February and 30 April 2020. Univariate analysis showed a two-fold increase in the odds of suspected COVID-19 for South Asian and black adults compared with white adults. In a fully adjusted analysis that included clinical factors, South Asian patients had nearly twice the odds of suspected infection (odds ratio [OR] = 1.93, 95% confidence interval [CI] = 1.80 to 2.06). The OR for black patients was 1.47 (95% CI = 1.38 to 1.57).

### Conclusion

Using data from GP records, black and South Asian ethnicity remain as predictors of suspected COVID-19, with levels of risk similar to hospital admission reports. Further understanding of ethnic differences in suspected COVID-19 presentations is needed.

## INTRODUCTION

The rapid worldwide spread of COVID-19 in early 2020, from its origin in Wuhan, China,<sup>1</sup> led the World Health Organization to declare a pandemic on 11 March 2020.<sup>2</sup>

In the UK, early attention focused on hospital presentations and intensive care capacity, the timely supply of equipment, and, latterly, the increasing death rate in care home settings.<sup>3-5</sup>

Community testing, which forms part of standard public health test and quarantine policy, ceased in England on 12 March 2020,<sup>6</sup> hence the extent of asymptomatic and milder symptomatic cases in community settings remains unknown. Early evidence from testing among passengers on cruise ships suggested that 18% of infected people were asymptomatic.<sup>7</sup> The figures are likely to be higher in populations with a younger demographic profile.

Up to mid-April 2020, London had the highest age-standardised mortality rate for deaths in the UK reported as coronavirus, with 85.7 deaths per 100 000 population (compared with 36.6 deaths per 100 000 in England).<sup>8</sup> Three of the four east London localities in this study had death rates in the top five for London boroughs (Newham = 164.3, City and Hackney = 127.4, and Tower Hamlets = 122.9 per 100 000 population).<sup>8</sup> Data from the Office for National Statistics (ONS)<sup>9</sup> and the OpenSAFELY<sup>10</sup> study indicate that mortality

rates in the most deprived areas of England were almost twice as high as those in the least deprived areas, and that males had higher death rates than females.

From an early stage in the UK epidemic, people with symptoms suggestive of COVID-19 were advised not to attend their general practice in person, and to use online or phone contact with NHS 111.<sup>10</sup> Throughout general practice there was rapid uptake of technological solutions to facilitate a shift to telephone and video consultations, which enabled GPs to manage community cases, despite the national failure to share COVID-19 test results due to drive-through or home-based testing services.<sup>11,12</sup> Practices worked collectively to provide separate locations for the necessary physical examinations of people with suspected COVID-19 cases and for those with other medical problems.<sup>13</sup>

Concern has been raised about the higher fatality rate of black, Asian, and minority ethnic (BAME) patients in intensive care units, and the disproportionate numbers of deaths of health and social care workers from these groups.<sup>14</sup> Potential explanations for this greater risk include higher rates of long-term conditions such as diabetes and ischaemic heart disease among these populations, as well as housing and occupational hazards.<sup>15</sup> The population of east London includes 55% of people from minority ethnic backgrounds.<sup>15</sup> Hence this geographical

TOGETHER WE CAN

“The COVID-19 Healthcare Coalition is a private-sector-led research organizations, technology firms, nonprofits, academia, and start-up system and help protect U.S. populations. Together, we’re working insights that improve outcomes.”

We have a long way to go before this crisis is over. Together, we will make a difference in this fight.”

DR. JOHN HALLAMKA, President of Mayo Clinic Platform  
DR. JAY SCHNITZER, Chief Medical and Technology Officer at MITI

# COVID-19 report

## SNOMED CT

Content included in the Jan 31 SNOMED CT International Edition.

Interim version of the SNOMED CT Intl Edition released March 9.

Content included in the GPS and an updated SNOMED CT to ICD-10 map.

## ALLIANCES

SNOMED CT representation within the [COVID-19 Interoperability Alliance](#) and the [COVID-19 Healthcare Coalition](#) to offer clinical, demographic, and administrative resources.

## MEMBER ENGAGEMENT

Release of the [COVID-19 data coding guide using SNOMED CT](#).

The Organization also extended flexibility in paying Member fees as well as waiving interest.

## IN ACTION

*“Prevalence of suspected COVID-19 infection in patients from ethnic minority populations”*

Suspected COVID-19 cases identified using SNOMED CT codes.

Outcomes showed a two-fold increase in the odds of suspected COVID-19 for South Asian and black adults compared with white adults.

# Germany

## A research footprint

Established  
March 2020

- The Federal Ministry of Research has extended Medical Informatics Initiative participants nationwide a license to use SNOMED CT.
- With SNOMED CT, clinical data from different countries will be compared and used for research purposes. This creates prerequisites for treating diseases more effectively in the future and recognizing them faster, supporting prevention.



Building a foundation for wider  
use of SNOMED CT within  
Germany



# Education

## A Growing Network of Delivery Partners

3 education  
delivery  
partners

Laying the groundwork for SNOMED CT education in non-English markets, the organization continues to broaden its education delivery network to expand knowledge and use of SNOMED CT.

- **AMERICAS:** Hospital Italiano
- **EMEA:** University of Eastern Finland
- **ASIA PAC:** Digital China Health



UNIVERSITY OF  
EASTERN FINLAND





# Strategy

## 2020-2025



## STRATEGIC PROGRESS at a Glance

1. 5 Year Strategy
2. Strategic Directions & Progress
3. Tracking Completion  
& Measuring Success
4. 2020 Ongoing Operations
5. Next Steps

# A 5 Year Strategy The Direction

Throughout 2020 and amid activities supporting COVID-19, SNOMED International has been actively delivering against the 2020-2025 organization strategy, laying the foundation for imperative product enhancements and innovations.



**3 Strategic Directions**  
**6 Priorities**  
**Measurable Value**



The logo for SNOMED International, consisting of the text "SNOMED" above "International" in white, set against a blue square background.








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International

The title "2020 Strategy Roadmap" in white, sans-serif font, positioned to the right of a vertical blue line. The background features a blue-tinted image of a globe made of puzzle pieces on a laptop keyboard.

# 2020 Strategy Roadmap



# 2020 Strategy Roadmap

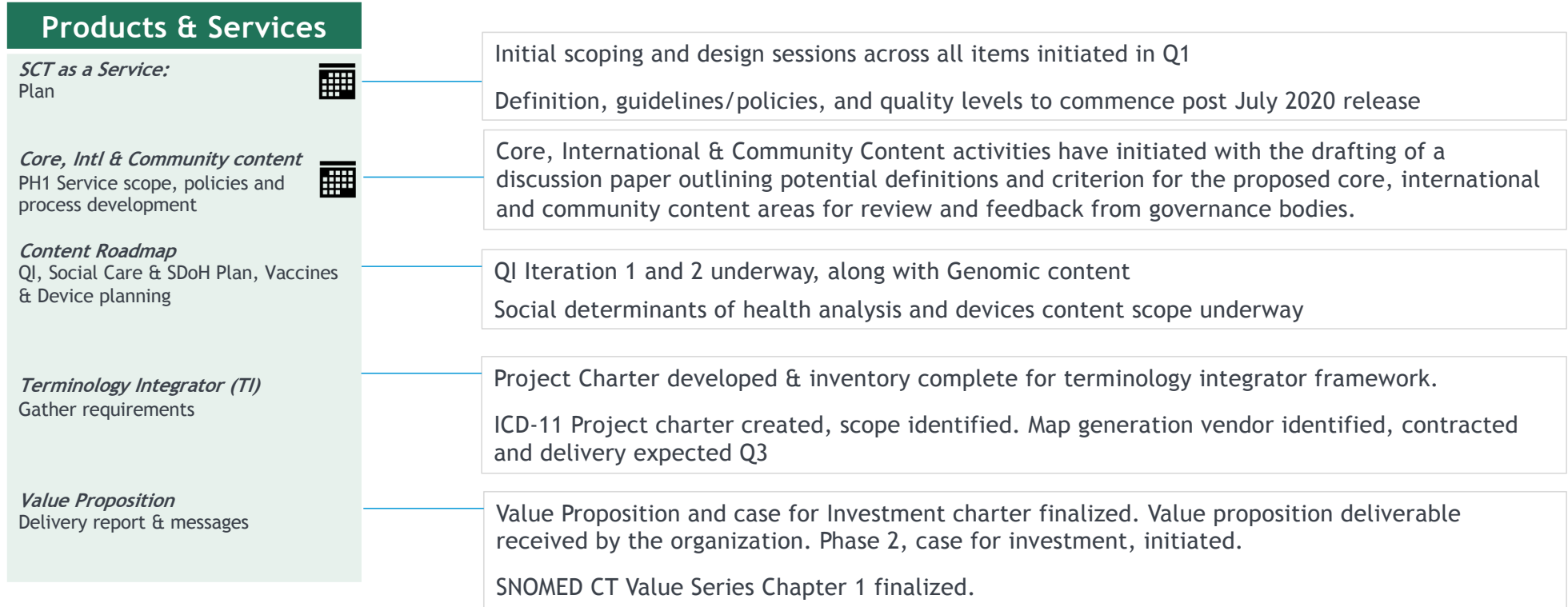
Products & Services	Adoption & Consumption		Innovation
<p><i>SCT as a Service:</i> Plan </p> <p><i>Core, Intl &amp; Community content</i> PH1 Service scope, policies and process development </p> <p><i>Content Roadmap</i> QJ, Social Care &amp; SDoH Plan, Vaccines &amp; Device planning</p> <p><i>Terminology Integrator (TI)</i> Gather requirements</p> <p><i>Value Proposition</i> Delivery report &amp; messages</p>	<p><i>Adoption &amp; Consumption</i> Channel strategies </p> <p>Define digital maturity model </p> <p>Augment value prop and comms plan w/ channel strategies </p> <p>Identify education partners</p> <p>Gather onboard vendor reqt's</p> <p>Evolve and deploy Member onboarding artefacts </p> <p>Author analytics papers, Participate in research Join relevant orgs Pitch vendors</p>	<p><i>Implementation Support</i></p> <p>Education Identify delivery partners</p> <p>Global Patient Set Develop and refine artefacts to evolve GPS</p> <p>Refset/Subset Management Stakeholder reqts analysis Define profess and comms for central management</p> <p>Translation &amp; Member Collaboration Feasibility for medical translation tool via partnerships  Refresh translation white paper Process for joint translations</p> <p>Royalty Based Partnerships</p>	<p><i>Artificial Intelligence</i> ID and engage pilots and partners</p> <p><i>Skills Development</i> Skills assessment reqts Define resource plan</p> <p><i>Emerging Technology for Stakeholder Needs</i> Environmental scan Feasibility Study Stakeholder Engagement</p> <p><i>R&amp;D Activities</i> Back mapping feasibility Proof of concept</p>



# Products & Services

*Products & Services activities have focused on furthering completion of the Quality Initiative and content development roadmap in the areas of social determinants of health and devices. The ICD-11 project continues to progress with content, mapping and communications activities.*

# 2020 Strategy Roadmap





# Adoption

*Adoption activities have focused on progressing education and onboarding deliverables in addition to developing vendor relationships supporting SNOMED International analytics priorities.*



# 2020 Strategy Roadmap

## Adoption & Consumption

*Adoption & Consumption*  
Channel strategies



Channel strategies linked to value proposition deliverable commencing in Q2

Define digital maturity model



Augment value prop and comms plan w/ channel strategies



Identify education partners

Gather onboard vendor reqt's

Evolve and deploy Member onboarding artefacts



Initiated and in progress

Author analytics papers, Participate in research  
Join relevant orgs, Pitch vendors

First vendor-issued blog by Nuance featuring SNOMED CT as foundation element for AI  
Discussions underway to formalize participation in translational research project  
Steps initiated to align SNOMED International with Align CRO



# 2020 Strategy Roadmap

## Adoption & Consumption

### *Implementation Support*

#### Education

Identify delivery partners

Priority languages identified necessary for identifying potential education delivery partners

#### Global Patient Set


Develop and refine artefacts to evolve GPS

The GPS updated for COVID-19 and ongoing marketing of GPS via industry publications (2)

#### Refset/Subset Management

Stakeholder reqts analysis  
Define profess and comms for central management

#### Translation & Member Collaboration

Feasibility for medical translation tool via partnerships   
Refresh translation white paper  
Process for joint translations

Portuguese translation of SNOMED CT Foundation Course received

#### Royalty Based Partnerships



The logo for SNOMED International, consisting of the word "SNOMED" in a bold, white, sans-serif font above the word "International" in a smaller, white, sans-serif font, both contained within a blue square.

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# Innovation

*Innovation activities have focused on establishing relationships with prospective partners to further our strategic progress.*

# 2020 Strategy Roadmap

**Innovation**

*Artificial Intelligence*  
ID and engage pilots and partners

*Skills Development*  
Skills assessment reqts  
Define resource plan

*Emerging Technology for Stakeholder Needs*  
Environmental scan  
Feasibility Study  
Stakeholder Engagement

*R&D Activities*  
Back mapping feasibility  
Proof of concept

Identification of pilots & partners and engagement with partners initiated

Development of approach to support environmental scan initiated

Started design & development of the second iteration of the analytics tool targeting user scalability.

Successful application for collaborative work with the University of Manchester to develop software to build sub-ontologies. Project commencing in July 2020.

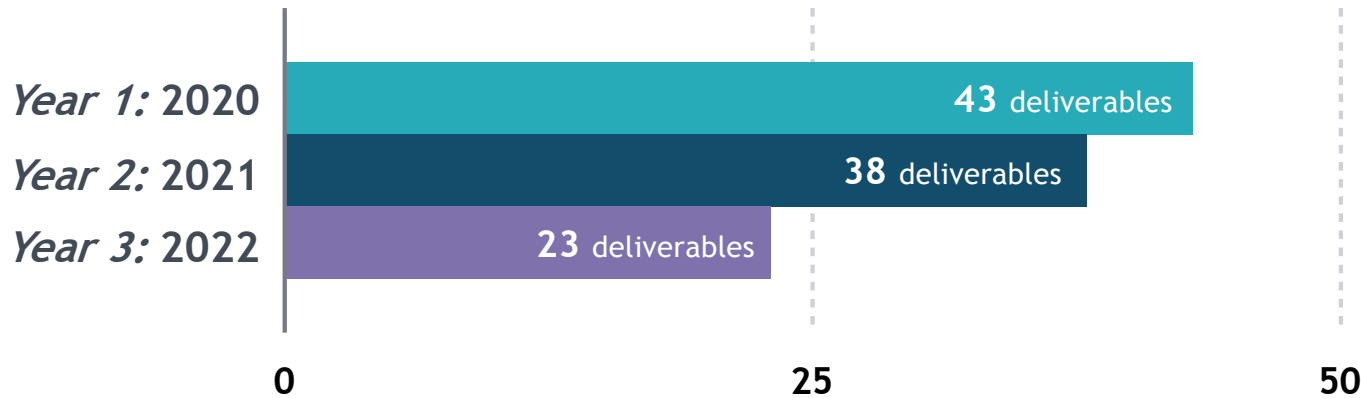
Ongoing discussion with Discovery East London to collaborate on the use of post-coordinated expressions to represent existing SNOMED CT coded data for analytics.

Ongoing investigation of techniques to use to create a map from SNOMED CT to ICD-11 and the map creation itself.



# Tracking Completion

## A 3 Year Look



**43** deliverables

At the completion of 2020, the organization will have delivered 26% of the total items comprising the 2020-2025 Strategy.

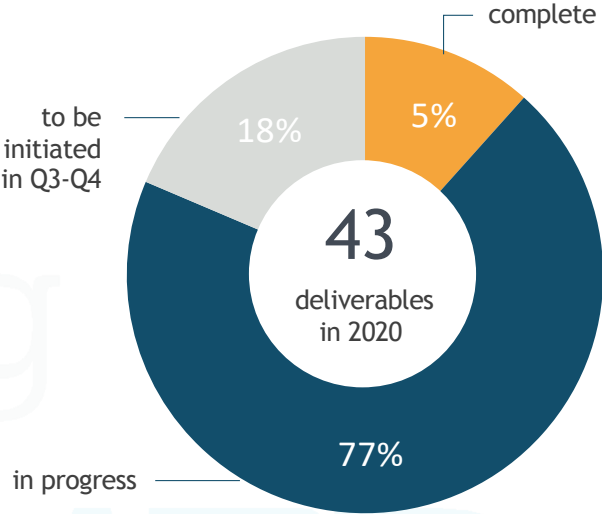
# Tracking Completion

## 2020 Progress

*As at September 2020...*

→ **5%** of 2020 deliverables have been completed

→ **77%** of 2020 deliverables are in progress



### Achievement against Target

The organization is on target to achieve **~90%** of its forecasted 2020 target.

Development genomics content has been **fast tracked** for delivery ahead of the 2021 & 2022 forecast.

**COVID-19** has impacted delivery of conference and speaking engagement deliverables.

# Thank You.

# SNOMED CT

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