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2 9 OCT 2018

David Lawson fyi-request-8805-e9b674a3@requests.fyi.org.nz

Ref: H201806719

Dear Mr Lawson

Response to your request for official information

I refer to your email of 28 September 2018 to the Ministry of Health (the Ministry) requesting under the Official Information Act 1982 (the Act):

"Official Information Request 1:

I welcome the provision by the Corporation of all information associated with the New Zealand Health Strategy referred to in the Ministry of Healths communications referred to and quoted above, together with all official information that details the "value and high performance and smart system objectives of the New Zealand Health Strategy

Official Information Request 2:

I welcome the provision by the Ministry of Health confirmation of the information classes/classification's and types in which the Ministry of Health claims that SNOWMED provides;

- (i) more detail (i.e. what is the extra detail that SNOWMED provides),
- (ii) actionable and useful information about health and disability status (please specify what the actionable and useful information classes are),
- (iii) impact on life (what categories/impacts are classified and how are they classified)
- (iv) interventions and outcomes (how are the interventions and outcomes registered and classified)

Official Information Request 3:

Please confirm how "SNOMED will enable new levels of care coordination and clinical decision support, enabling the value and high performance and smart system objectives of the New Zealand Health Strategy", by confirming what SNOMED's expectations and performance measures are in relation to the "new levels of care coordination and clinical decision support" that is being promoted by the Ministry of Health in its referred communication"

The Ministry is developing a New Zealand Digital Health Strategy to guide the use of digital technologies in New Zealand's health system. More information about this work can be found at:

www.digital.health.nz/content/digital-health/en/home/digital-strategy.html

Official Information Request 1:

As part of this strategy, representatives from the Ministry, the Ministry of Social Development and the Accident Compensation Corporation have formed a cross-agency group for migrating to the SNOMED CT standard for clinical terminology. Attached as Appendix One is an excerpt from the SNOMED Implementation fact sheet produced by the Ministry. The value and high performance themes in the media release that you have provided are outlined in the New Zealand Health Strategy which can be found here:

www.health.govt.nz/publication/new-zealand-health-strategy-2016

You can find out more about the Ministry's eHealth initiatives and work programme at this

www.health.govt.nz/our-work/ehealth

Official Information Request 2:

SNOMED CT is a health and disability sector standard in New Zealand. Represented by the Ministry of Health. New Zealand is one of 35 member countries of SNOMED International.

SNOMED CT is endorsed by the Health Information Standards Organisation (HISO) as a sector standard².

SNOMED CT is an evolving terminology that currently contains more than 340,000 clinical concepts and covers a broad scope of content for capturing clinical information in a health record. Concepts are organised under a number of main hierarchies, including body structures, clinical findings, disorders, procedures, events, products, substances, social context, observable entities and organisms. SNOMED CT is already the basis for the New Zealand Medicines Terminology, National Patient Flow reference sets, emergency department reference sets, and a number of other initiatives in addition to migrating from Read Codes.

The number and variety of concepts within these hierarchies support the capturing of actionable and useful information, impact on life, interventions and outcomes.

The SNOMED International Browser provides further definitions for clinical terms: http://browser.ihtsdotools.org/index-ie.html

Official Information Request 3:

The Ministry has not specifically documented how SNOMED CT is expected to enable new levels of care coordination and clinical decision support. Work on SNOMED implementation is still underway. The Ministry's Health Sector Architects Group and Health Information Standards Organisation (HISO) joint technical working groups are currently updating and developing the reference architectures and information standards that enable a digital health ecosystem. You can find the draft Interoperability Roadmap on the Ministry's website at this link:

www.health.govt.nz/our-work/ehealth/digital-health-sector-architecture-standards-and-governance/architecture-and-standards-working-groups

I trust this information fulfils your request.

¹ www.snomed.org

² https://www.health.govt.nz/our-work/ehealth/digital-health-sector-architecture-standards-and-governance/health-information-standards/approved-standards/hiso-10033-snomed-ct

Please note that the Ministry may publish this response and attachment, with your personal details removed, on the Ministry's website.

Yours sincerely

Ann-Marie Cavanagh

Acting Deputy Director-General

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Data and Digital

SNOMED implementation fact sheet (excerpt)

This fact sheet provides an overview of the SNOMED CT implementation programme in New Zealand and answers frequently asked questions.

Last updated 10 July 2017.

What is SNOMED CT?

SNOMED CT is described as the global language of health care, a comprehensive system of clinical terminology used to capture precise, structured and actionable information about a person's health status and the care they receive. SNOMED makes capturing and reusing quality personal health information at point of contact a natural part of clinical workflow and case management.

SNOMED's 300,000 plus concepts include signs and symptoms, medical disorders, functional problems, disabilities, observations, medicines, medical devices, procedures and care plans, above a deeper framework of supporting concepts such as substances, body sites and so forth. SNOMED concepts and terms are designed to be used in electronic health records and clinical documentation of all kinds, including referrals, assessments, event summaries, diagnostics, operation notes and shared care records, to name a few. SNOMED's scope extends to social care.

SNOMED is built for frontline use in clinical information systems, patient management systems, health and social service case management systems, patient portals and personal health apps.

SNOMED is complementary to the ICD-10 classification system. ICD-10 Australian Modification (ICD-10-AM) and the related Australian Classification of Health Interventions (ACHI) are respectively the statistical disease and procedure classification systems used in New Zealand to code hospital discharge information for activity based funding and in reporting to the World Health Organisation.

A simple example of using SNOMED

SNOMED includes over one million clinical terms and concepts, each of which has an English name and a unique number. Clinical terms in SNOMED are interlinked and this gives them their meaning. For example, the medical condition 'atrial flutter' is linked to and known as a special type of 'atrial arrhythmia'. Atrial flutter is recorded in the patient's electronic health record, which also uses SNOMED terms to name the medicines taken for the condition and any adverse reactions the patient has had. A health practitioner prescribing a new medicine will be able to use the New Zealand Formulary to find the medicines that are indicated for atrial flutter and to learn any contraindications. Information provided to the patient will also use SNOMED terms to identify the right resources.

Relationship with SNOMED International

SNOMED is owned and maintained by not-for-profit standards development organisation SNOMED International. New Zealand is a founder member of SNOMED International, which now has 31 member countries, including four of the Digital 5 nations.

The Ministry of Health has the formal relationship with SNOMED International for the New Zealand Government and pays the annual membership fee. Ministry of Health employees have representative positions on the SNOMED International general assembly and member forum. A number of New Zealand volunteers participate in SNOMED International advisory and project groups.

The Ministry of Health distributes SNOMED in New Zealand. Registered health providers and software vendors can use SNOMED without licence cost in New Zealand and in other member countries.

Benefits of SNOMED

SNOMED enables precise and actionable health and social information to be recorded about individuals for better care and outcomes.

SNOMED supports the care closer to home, value and high performance and smart system themes of the New Zealand Health Strategy. It is an enabling technology for improved clinical documentation, care coordination, clinical decision support and population health management.

SNOMED will be also important as a common standard for sharing information across organisation and system boundaries as we move to more connected health and social services.

In this way, SNOMED is a key information standard for digital government and better public services.

Further reasons for adopting SNOMED in health and social services include:

- Health providers who are adopting SNOMED wish to be able to use it end to end in their interactions with ACC and MSD
- SNOMED allows more descriptive information to be captured about a person's health and disability status, needs and care
- SNOMED is a dynamic terminology that will keep pace with new health and social care technology
- SNOMED terms are more precise and have less ambiguity than Read Codes
- SNOMED content is a living product that is continually maintained and released by SNOMED International, whereas Read Codes are no longer maintained and have become seriously out of date
- Many specialist areas, such as radiology, are more extensively covered in SNOMED than by Read Codes
- SNOMED is attractive as a modern technology to software vendors, who have a ready market in SNOMED International's 31 member countries, including Australia, UK, USA and India
- SNOMED enables clinical decision support and analytics
- SNOMED underpins our national medicines terminology and future medical devices terminology
- SNOMED is a key standard for quality information in the future national electronic health record system.

SNOMED implementation in New Zealand

SNOMED is endorsed and promoted by the Ministry of Health as one of the key information standards for the health and disability sector. SNOMED adoption directly supports roadmap actions of the New Zealand Health Strategy.

SNOMED has been endorsed in New Zealand as a HISO standard since 2008.

Projects around the country are showing the benefits to care coordination, clinical decision support and interoperability that SNOMED makes possible:

- New Zealand Universal List of Medicines
- Midlands Health Network's new patient management system
- St John's electronic patient report form (ePRF) application used in 600 vehicles around the country
- Nelson-Marlborough DHB's has ED at a Glance information system
- National Patient Flow data collection and electronic referral and outpatient information systems
- Primary health organisations implementing new patient management systems
- New Zealand Health Partnerships' national finance, procurement and supply chain system.

District health boards are now required to implement SNOMED with all new investment in clinical information systems. Primary health organisations are also seeing the benefits and implementing SNOMED in new and upgraded information systems. SNOMED will be the key information standard for the future single electronic health record system to represent medications, health issues, allergies and adverse reactions, test results and care plans as core personal health information.

SNOMED is an emerging standard for laboratory and radiology orders and results, referrals and clinical assessments. SNOMED resources are being developed for the many health specialties within the scope of the National Patient Flow project, which is about tracking the patient journey. For example, a strategic principle of the New Zealand Cancer Health Information Strategy is to use SNOMED to capture better information about the patient and their treatment.

Migrating from Read Codes to SNOMED

The Ministry of Health, Ministry of Social Development and Accident Compensation Corporation are working together to drive SNOMED's adoption across the health and social sector as an information standard for care coordination, decision support and social investment.

Read Codes are presently widely used in the New Zealand primary care sector and by ACC for personal injury claims and the Ministry of Social Development for medical certificates.

Read Codes have been used in New Zealand since the 1990s:

- ACC uses Read Codes to denote medical conditions in personal injury claims.
- Read Codes are used in general practice patient information systems to code medical conditions in the patient's problem list and in completing injury claims using the ACC45 form.

 The Ministry of Social Development uses Read Codes in medical certificates used to assess work capacity.

Read Codes version 2 is the version used in New Zealand.

The Read Codes system is both antecedent to SNOMED and subsumed by SNOMED. It is a natural upgrade path to migrate from Read Codes to SNOMED. The pressure to migrate arises from the fact that Read Codes are no longer supported by the UK Government who owns the system, the content is out-of-date and becoming unsafe, and the system does not meet social sector requirements for clinical and case management documentation, care coordination and decision support.

The Ministry of Health, ACC and MSD are working together to enable DHBs and primary care networks who are investing in their information systems to use SNOMED with personal injury claims and work capacity medical certificates. Using SNOMED terms to describe medical conditions, functional problems and impact on life is an important enabler for connected health and social services.

Agencies are planning to adapt their information systems to a timetable that will allow health providers to submit SNOMED based forms from October 2017. Support for Read Codes will continue for a period until being phased out in New Zealand, as in the UK. Agencies will agree their customers the dates defining the transition window.

Read Codes are being withdrawn in the UK

The National Health Service has a timetable for withdrawing Read Codes from the health system in the United Kingdom. The NHS National Information Board publication 'Personalised Health and Care 2020' states:

- 'The National Information Board endorses the move to adopt a single clinical terminology
 – SNOMED to support direct management of care, and will actively collaborate to
 ensure that all primary care systems adopt SNOMED by the end of December 2018; the
 entire health system should adopt SNOMED by April 2020. During this time, we must
 also work with local authorities to understand and address the implications of this for
 social care.'
 - [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384650/NIB_Report.pdf].
- Read Codes v2 will no longer be updated from April 2018 and will be completely withdrawn April 2020.

No other country uses Read Codes to the same extent as the UK and New Zealand.

Mappings between Read Codes and SNOMED

The UK Terminology Centre within NHS Digital provides maps between Read Codes and SNOMED. The Ministry of Health licences these maps under an Open Government Licence and publishes an adapted version for the New Zealand health and disability sector.

These resources satisfy most of our mapping needs, while our primary care networks are developing supplementary mappings in a small number of areas where health providers have extended the Read Codes system for local purposes.

Fully implementing SNOMED will eventually mean that agencies build SNOMED into their own systems, replacing the use of Read Codes. However, as an interim measure, the recommended approach that ACC and MSD propose to take is mapping data from SNOMED to Read Codes at their interface with health providers who have implemented SNOMED.

Appendix One

That is, the agencies make it possible for health providers who are among the early adopters to use SNOMED natively in submitting forms and claims on behalf of clients. This is a workable approach that promises to be readily implementable in a reasonable timeframe.

The source mapping table we derive our mappings from is called 'rctsctmap' in the UKTC data migration release:

https://isd.hscic.gov.uk/trud3/user/guest/group/0/pack/9/subpack/9/releases.

Practical steps for migrating from Read Codes to SNOMED

- Register with the SNOMED National Release Centre operated by the Ministry of Health
- Download the latest six monthly SNOMED International Release from the SNOMED Member Licensing and Distribution Service
- Load the 'snapshot' files from the distribution into a SQL database (scripts available on Github)
- The data you receive includes the SNOMED numeric concept identifier (a numeric string of up to 18 digits) and this is the primary key to the SNOMED concept table in your database
- The concept table should also include the fully specified name for the concept, the preferred term (using the UK English spelling) and the effective date and whether the concept is active - there are over 300,000 active concepts in total
- You should also maintain a searchable table of synonyms per concept, with both UK English and US English spellings
- The distribution is data only and there is no application software to install; you can use any SQL database management system
- Download the latest Read Codes v2 to SNOMED and SNOMED to Read Codes v2 maps from the SNOMED Member Licensing and Distribution Service
- You may need to create your own mappings where you have used locally defined codes in place of Read Codes.