SNOMED AS AN EDUCATIONAL TOOL

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SNOMED is well known as a nomenclature for medical terminology and concepts. There have been very few applications in medical education.

Based on its characteristics SNOMED has the potential to be a very useful tool in clinical e-learning. One of the first applications is to fill the void of standard to classify and share clinical reusable learning objects that may come from an EHR, PACS, … To our knowledge, no known standard has addressed this problem. With the availability of these systems, there is more and more clinical resources that are in an electronic format and can be re-used for clinical teaching/learning purpose: simulations, clinical reasoning sessions, problem based learning,… and SNOMED seems to us ideal for this task.

Medical texts still represent a high percentage of highly valuable medical information. With the advent of SNOMED encoder and explorer tools, it is now possible to encode large amount of medical text and retrieve information efficiently. Based on pedagogical objectives, we can retrieve specific medical information from Clinical data repositories to create Educational Data warehouse and this material can be re-used in simulations for problem based learning scenarios,... The free text coding feature can also be used in advanced intelligent tutoring systems to evaluate student’s clinical reasoning skills and give more appropriate instant feedback. SNOMED also gives us the possibility to compare students written reports (like in radiology, pathology,… ) with ones that have been produced by a panel of experts.

In conclusion, SNOMED’s enormous potential in clinical education is just being discovered and can also be very helpful in the IAIMS approach. Considering the various needs of education in healthcare, SNOMED has the necessary structure to support the more clinical aspects of the curriculum and potentially integrate them like linking material to pedagogical objectives and evaluation.

The target audience is people interested in e-learning standards, evaluation, intelligent tutoring system, expert system, simulations, problem based learning. The innovation is in the use of SNOMED and encoder/explorer tools for educational/pedagogical purposes.