



BEST PRACTICES & SUCCESS STRATEGIES, (LEADING TO THE FINAL RECOMMENDATIONS)

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OUR FOCUS

To learn about experiences of large scale terminology system adoption, towards enhancing the level of semantic interoperability

Prioritised drivers for adoption

Key features of the adoption strategy

Most significant costs

Key features of the deployment strategy

Challenges and issues

Success strategies



SUPPORT THE DECISION MAKERS

- Target the knowledge gaps that Member States have, and the kinds of evidence and information that would be most helpful to assist them in coming to an adoption decision and strategy
- Find out what the implications would be for:
 - choosing to adopt SCT at a European strategic level
 - choosing an alternative strategy at a European level
 - abstain from taking any new proactive action on terminology system adoption at a European level

ADOPT

ALTERNATIVE

ABSTAIN

DRIVERS FOR INVESTMENTS IN SEMANTIC INTEROPERABILITY



1. Better quality and safety of care to individual patients
2. Enriched EHR data exchange for continuity of care
3. Cost reduction
4. Optimising reimbursement
5. Analysis (secondary) uses
6. Cross-border information and knowledge sharing

DRIVERS FOR INVESTMENTS IN SEMANTIC INTEROPERABILITY



1. Better quality and safety of care to individual patients

- More complete coded documentation
- Better overview of each patient's information
- Better records to enable decision support
- Support the adoption of point of care evidence based clinical guidelines
- Improved patient safety

2. Enriched EHR data exchange for continuity of care

- Better multi-professional collaboration
- Sharing EHRs with patients

3. Cost reduction

- Reduce duplicate data capture through better interoperability
- Capture reporting and reimbursement codes at source
- Consolidate from multiple existing terminologies including local ones

4. Optimising reimbursement

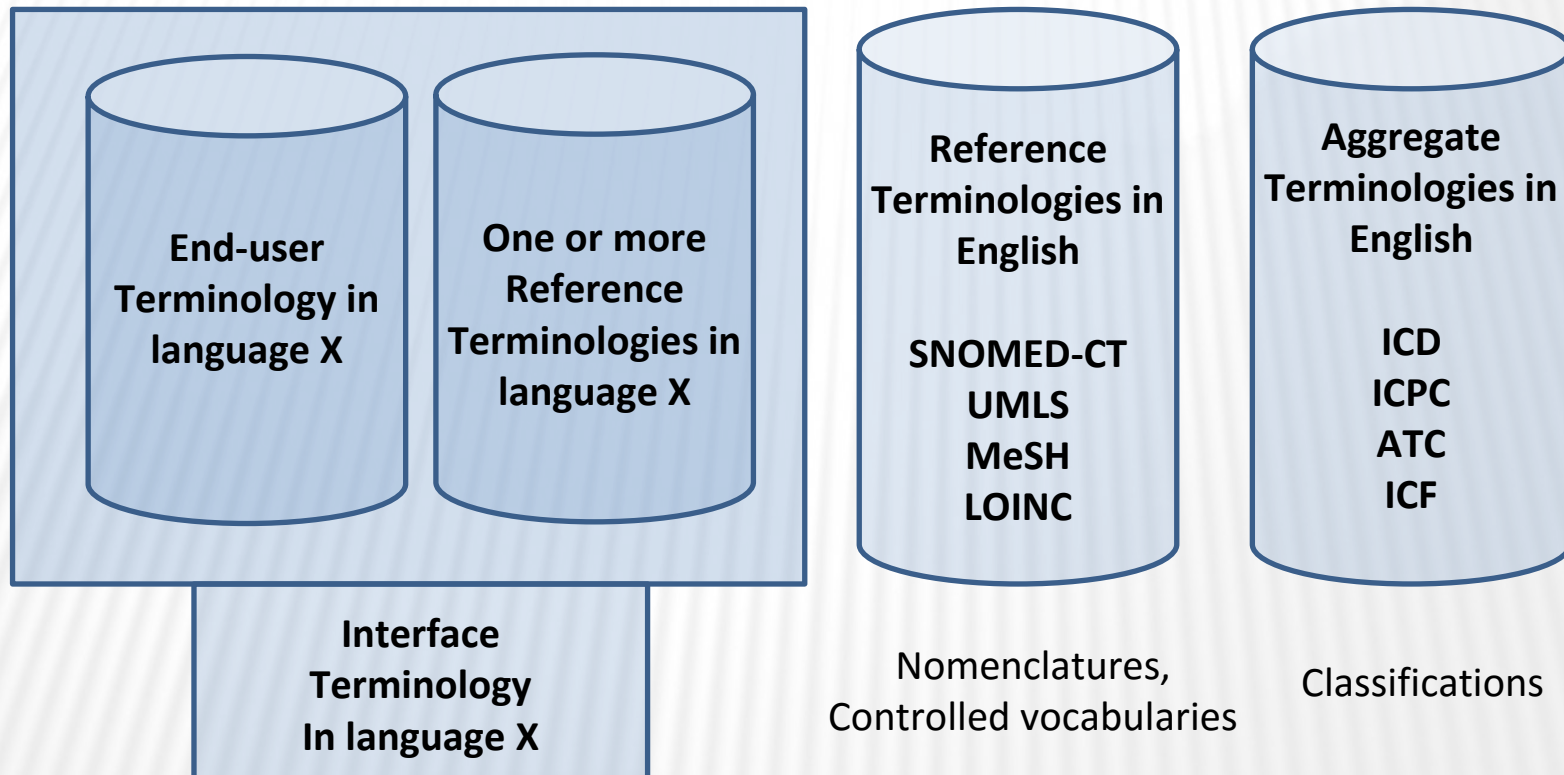
5. Analysis (secondary) uses

- Benchmarking, service planning, commissioning
- Evidence based decision making and planning
- Outcome optimisation, improve efficiency
- Public health, surveillance, screening, prevention
- Populating and maintaining registries
- Comparative effectiveness and outcomes research
- Pharmacovigilance (federated solutions)

6. Cross-border information and knowledge sharing

- Cross-border patient care (unplanned, planned)
- Cross-border research collaboration
- Patient safety intelligence
- Cross-border comparisons of quality metrics

ROLES OF A TERMINOLOGY / CLASSIFICATION





COMPONENTS OF AN ADOPTION STRATEGY

- Terminology choices for different functions (end-user, reference...)
- The complementary requirements and choices for information models
- Clinical model development/adoption, identifying iso-semantic representations
- Approach to the extent of post-co-ordination to be supported
- Developing extensions, RefSets, value sets and binding to clinical models
- Language translation and quality assurance
- Defining and maintaining cross-mappings to existing and legacy terminologies in use, legacy data conversion strategy
- Licensing terms and license costs
- Terminology version management and distribution



COMPONENTS OF A DEPLOYMENT STRATEGY

- **EHR system adaptation**
 - Terminology management and mappings, database and EHR repository, UI and applications
 - Handing of post-coordination
 - Legacy data migration
 - Software and interoperability testing
- **Other legacy system adaptations**
 - Disease and procedure registries
 - Central (e.g. national) health activity reporting and reimbursement systems, and international reporting
 - Population health screening and surveillance systems (e.g. infection control, pharmacovigilance)
- **Developing expertise**
 - Terminologists, computational linguists, clinical modellers etc.
 - Clinical end user training, coding staff and data analyst training
- **Evaluations and research**
 - Research gaps ,funding and support
 - Co-ordination of investigations and pooling of the learning, international collaboration



SOME SUCCESS FACTORS

- Sell and deliver SNOMED-CT as a smart terminology that can help to produce reliable and high quality data for clinicians - who normally are not keen on entering structured data
 - improve data quality directly during data entry
 - provide guidance for clinicians to choose the correct clinical terms for their context
 - invest in developing user interface terms which are the synonyms that are really used by clinicians
 - incentivise more fine-grained EHR data, to enable complete and accurate decision support, better care pathway guidance and adherence
- Counter the perverse incentives such as reimbursement schemes that discourage accurate and faithful clinical documentation



SOME SUCCESS FACTORS

- The sheer size and complexity of SCT is an important issue
- Clinical models provide an important relevance context for terms, and reduce the complexity for the end user
 - their development has to be multi-professional, patient-centred, yet standardised
 - they must be agreed by clinicians, having good coverage of high-priority clinical areas for shared care
 - a patient-centred, patient-oriented, and patient-understandable approach is important
- There is a need for tools, education and awareness of the use and value of semantically interoperable records



SOME SUCCESS FACTORS

- It is difficult to successfully implement and derive benefit from using only a small amount of SNOMED CT
- The high quality of products is challenged by the inherent complexity of such terminologies
 - provide free and easy access to pilot and test versions of the terminology
 - resolve the licensing costs issue in non-SNOMED-CT countries
 - create confidence in the market for semantically interoperable products
- Incentives and organisational support are needed
 - a significant challenge will be the handling of legacy data, and having enough terminological expertise within each organisation to manage this
 - cost may also be a significant issue, as is the risk of losing historic data and losing continuity during the early stages of transition to new terminology system



THE VALUE OF MEMBER STATE CO-OPERATION

- Sharing costs, e.g.
 - clinical model development
 - term translations
 - RefSet and value set development
 - to take advantage of internationally agreed definitions of concepts
- Pooling of resources, e.g.
 - developing expertise and educational materials
 - sharing best practices and quality assurance processes
 - terminology hosting and processing services
 - version management and distribution