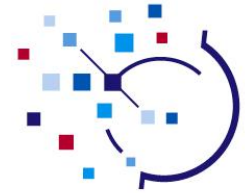


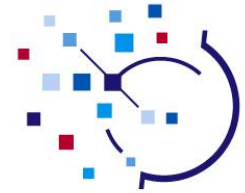
IHTSDO Quality Framework

Sharing practice across the community



Purpose of session

- Click to add text



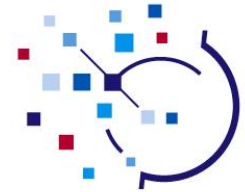
In the beginning . . . Brisbane 2007





In the beginning . . . Brisbane 2007

- First meeting of the quality assurance committee
- Discussion on the approach the IHTSDO should take to ensure quality and to provide assurance
- Decision to adopt a quality framework approach
- Quality Assurance framework - structured inventory of roles, rules, procedures and supporting infrastructure (the 'components') that the Quality Assurance committee would wish to see in place, along with quality criteria for each.



Articles of Association

- 9.8.1 There will be a Quality Assurance Committee, with members who meet the Association standard for an acceptable level of expertise and experience in **the risk management** area.
- 9.8.2 With a view towards **managing and lowering the risks** of the Association, the Quality Assurance Committee shall have responsibility for the development and quality assurance of SNOMED CT and its related standards and the Association's other Terminology Products in harmony with proper respect to external standards.



IHTSDO Purposes and objectives

(a) acquire, own and administer the rights to SNOMED CT, other health terminologies and/or related standards, and other relevant assets (collectively, the "Terminology Products");
 (b) develop, maintain, promote and enable the uptake and correct use of its Terminology Products in health systems, services and products around the world; and
 (c) undertake any or all activities incidental and conducive to achieving the Purpose of the Association

(b) contribute to improved delivery of care by clinical and social care professions;
 (c) facilitate the accurate sharing of clinical and related health information, and the semantic interoperability of health records;
 (d) encourage global collaboration and cooperation with respect to the ongoing improvement of the Terminology Products; and
 (e) provide the foregoing on a globally co-ordinated basis, thereby enabling the Members and the related organisations within their Territories to pool resources and share benefits relating to the development and maintenance of, and their utilisation of and reliance upon, the Terminology Products.

Support IHTSDO Governance and Advisory Structures

Support IHTSDO Governance bodies
 Support IHTSDO Working Groups

Corporate Management

Human Resource Management
 Strategic Planning

Tooling and Technology

Architecture and RoadMap
 Distributed Editing Platform

Standards Development Program

IHTSDO Standards: Definition and guidelines for Development
 Content inclusion/exclusion algorithms

Policy/Regulation Development

Implement and Evaluate Request Submission Policy
 Allocation of Namespace Policy

Improving SNOMED CT Quality

Quality framework
 Quality metrics

Develop, Maintain and Distribute SNOMED CT

Develop, Maintain
 Manage SNOMED CT Licensing

Manage SNOMED CT Licensing

Promote new licensing model
 Collection of licensing charges

Develop New SNOMED CT Content

Content development policies
 Error prevention processes

Content development policies

Dimensions/characteristics

Usability

Description: ...
 Target: 100% in 6 months

Metrics

% policy clauses conforming to agreed presentation format at end of 6 month period

Reliability

Description: ...
 Target: ...

Metrics

% change requests not covered by explicit guidance

Accuracy

...

Metrics

% guidance-conformant change requests acceptable by requester

Harmonisation

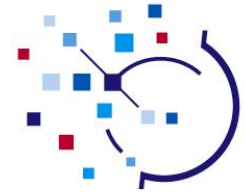
Laboratory tests...
 ICD

Communications

Comms strategy
 Public website

and Special Interest Groups

Concept model PG
 Nursing SIG

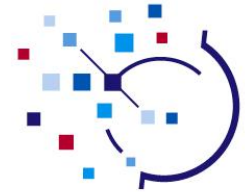


Why the quality framework ?

- To embed quality and assurance in all activities undertaken on behalf of the IHTSDO
- To enable a structured approach to be taken when considering quality matters
- To provide assurance by the production of metrics when activities are undertaken
- To use metrics to provide evidence and assurance of quality improvement



DETAIL OF THE QUALITY ASSURANCE FRAMEWORK



Quality assurance framework

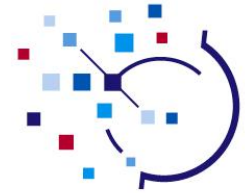
- IHTSDO Quality Assurance Framework
 - Version 1.2
 - Date: December 12, 2008
 - Editor: Ed Cheetham



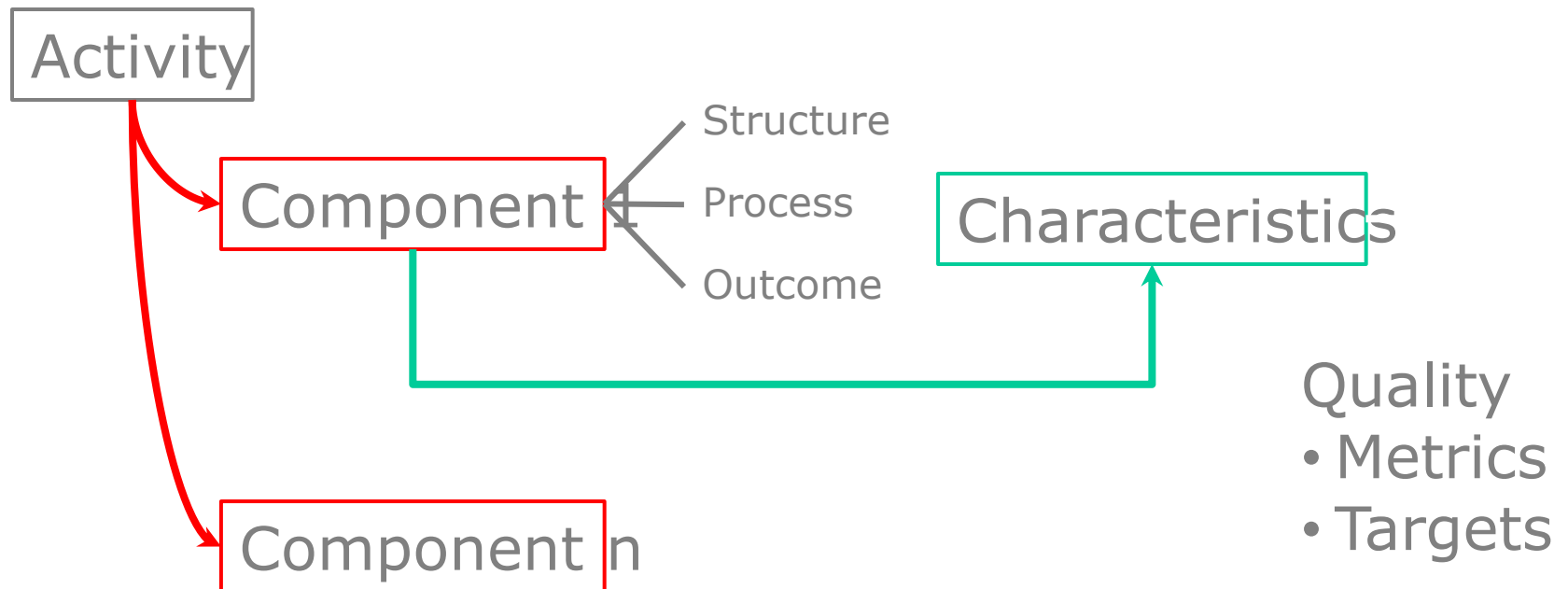
IHTSDO Quality Assurance Framework

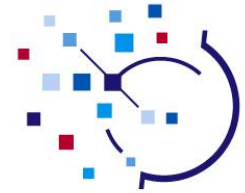
Discussion document for quality assurance framework

Date 20081209
Version 1.2

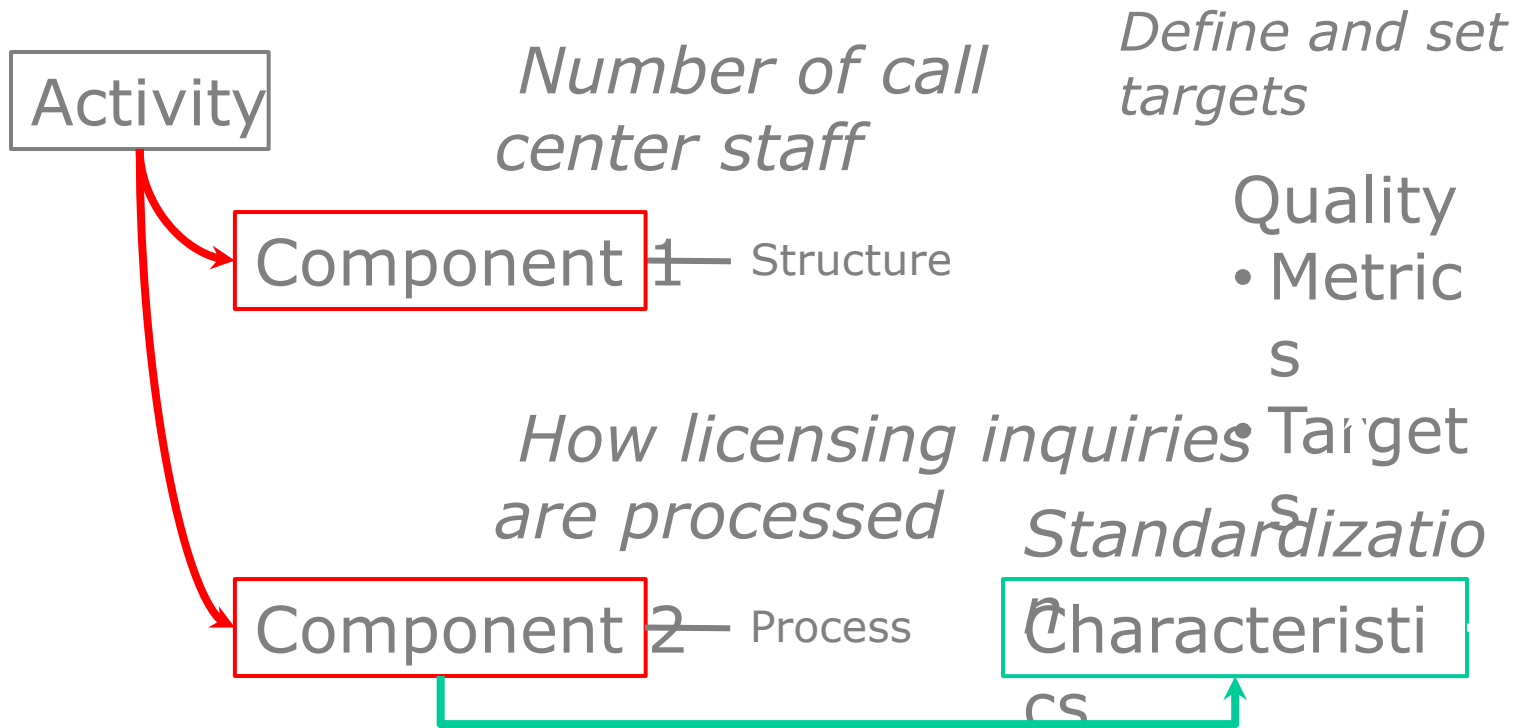


General quality assurance framework for integration into IHTSDO activities



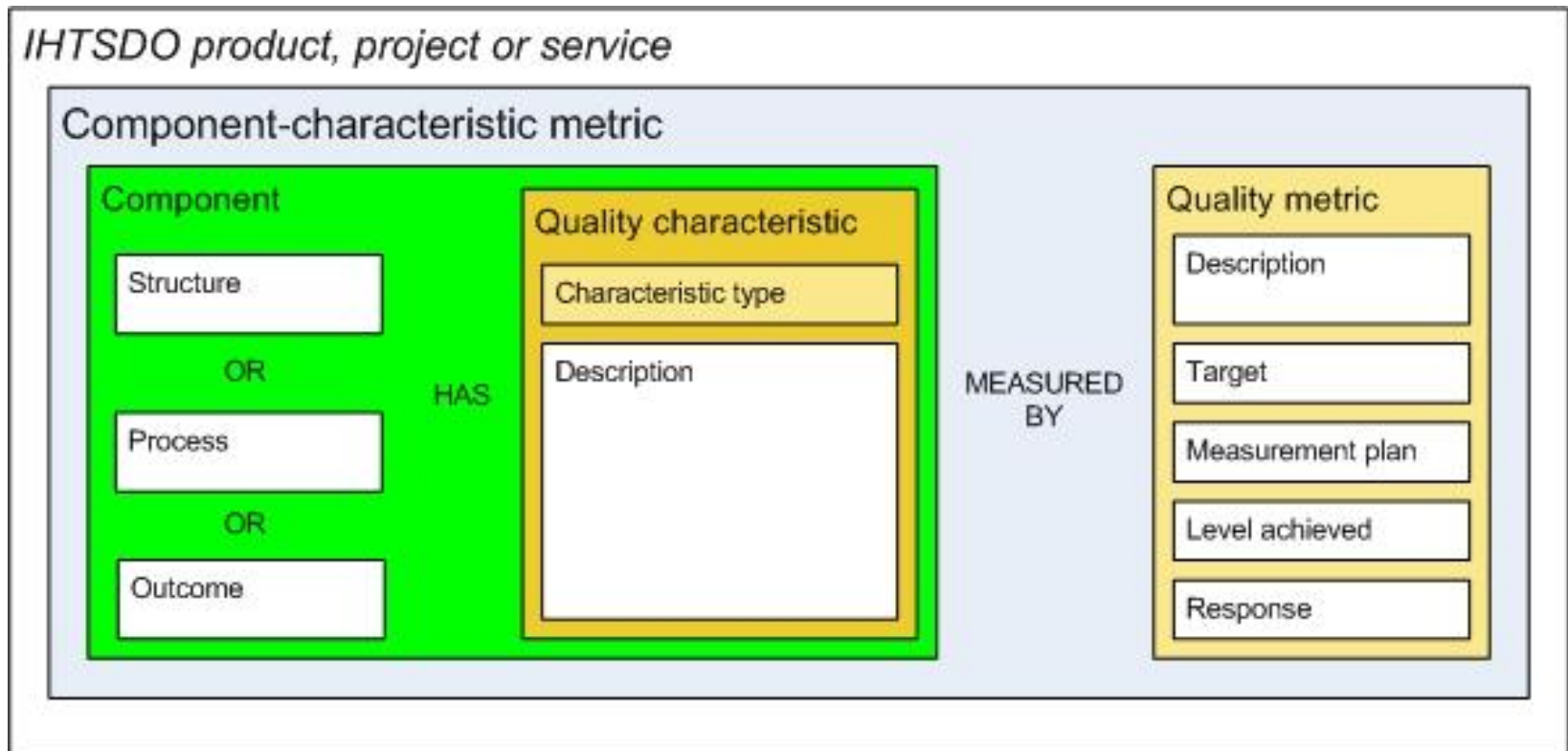


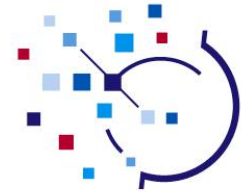
Call center services to manage customer inquiries





Quality assurance framework at a glance

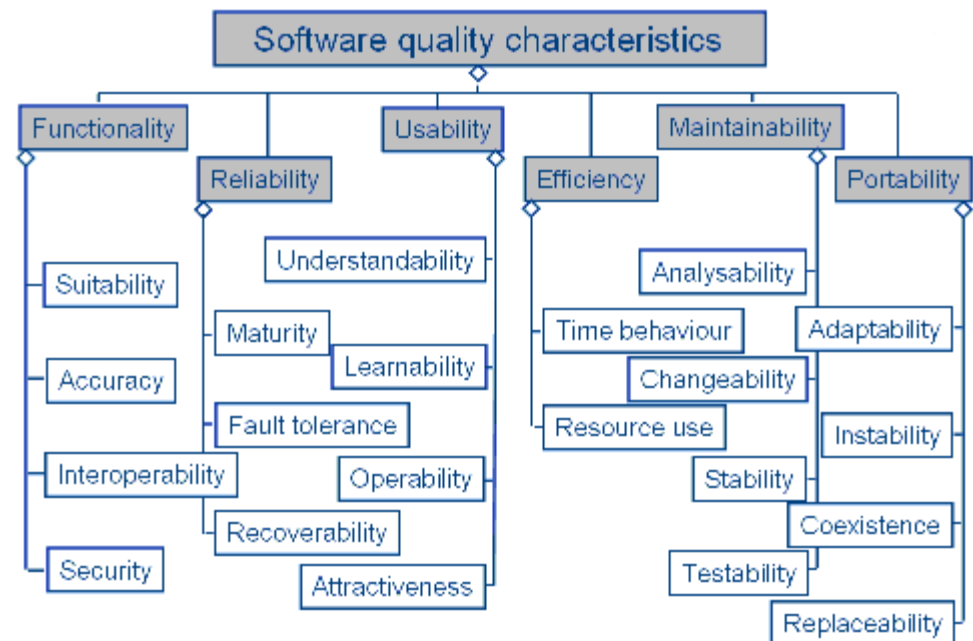




Origins of the quality framework

- IEEE software definitions
- ISO terminology definitions

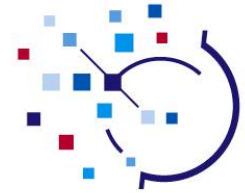
ISO/IEC 9126
software quality
characteristics





(A few) Definitions

- **IHTSDO Quality**
 - *The degree to which the IHTSDO meets its specified objectives, in terms of its organisational and product development processes, as well as the services and products it provides.*
- **IHTSDO Quality Assurance**
 - *A planned and systematic pattern of actions necessary to provide adequate confidence that the IHTSDO meets its specified objectives, in terms of its organisational and product development processes, as well as the services and products it provides.*



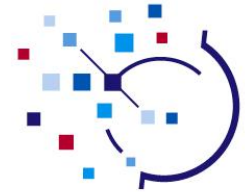
Definitions (cont.)

- Quality Metrics
 - *Agreed methods and means for measuring the Quality Characteristics of Components*
- Quality Targets
 - *Agreed levels of achievement, performance or conformance of a Component for any given Quality Characteristic*



Scope of the quality framework

- All (any) identifiable aspects of IHTSDO activity
- Standing committees, Special Interest Groups (SIG's), Project Groups, Central functions
 - Organisational processes and support
 - Data products (terminology reference data, mappings, translations, subsets)
 - Documentation
 - IHTSDO-responsible services and tooling provision



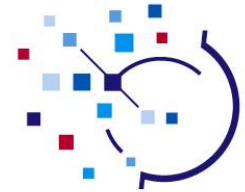
Framework overview

- IHTSDO stated objectives and purposes are the motivating principles for IHTSDO activities (**Why we are here**)
- IHTSDO activities act as the organising principle for quality framework components (**Gives structure to being here**)
- IHTSDO activities should be shown to be effective to support openness and transparency (**What we do when we are here, and how we can show we are being effective**)



Introduction to implementation of the framework

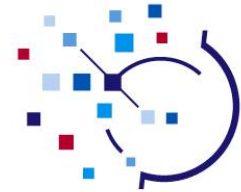
- Where is the framework applied
 - Anywhere where you are undertaking a project or specific work item, particularly where you will be required to show the outcome of that piece of work
- How is the framework applied
 - Quality Assurance Framework, Framework Toolkit, Framework template
- Results of implementation
 - Quality Assurance Committee



Applying the quality framework

- General quality assurance requirement
 - Set targets and demonstrate quality standards for all IHTSDO projects and services

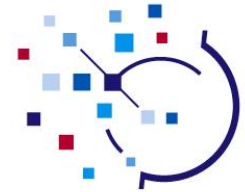
- The IHTSDO quality framework
 - Does not say what these standards are . . .
 - . . . but . . .
 - Provides a consistent mechanism and framework for identifying project or service components
 - Specifies the quality characteristics/attributes of each component
 - Sets standards or targets for each characteristic
 - Identifies a realistic mechanism for measuring (and demonstrating) whether such standards are achieved



Framework Detailed example

- Tooling and Technology
 - Request Submission Technical Solution

Component	Characteristic and Description		Example target	Metric
Technical solution function/structure	Char:	Reliability	99.99%	Request submission availability using standard system availability measures
	Descr:	Request submission system availability time		
Technical solution process	Char:	Efficient	*	Probably a simple 'does/doesn't' against stated requirement, but may be possible to identify the proportion of requests that cannot be coerced into standard workflow.
	Descr:	System able to support editor workflow practices		



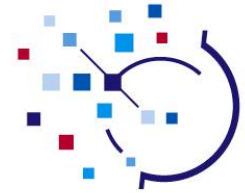
Metrics

- Agreed methods and means for measuring the agreed levels of achievement, performance or conformance of a component-characteristic
 - **Description:** What is to be measured and how this is believed to demonstrate the quality of the associated component-characteristic
 - **Target:** Agreed levels of achievement, performance or conformance of a component-characteristic that would be felt to demonstrate adequate quality
 - **Plan:** Description of how measurement is to be carried out
 - **Level achieved:** Agreed reporting format for the metric once measured (units, timescale)
 - **Response:** Agreed response steps to follow when this metric is reported (in particular if targets are not achieved) or when a target is revised



Example of metrics

- Data production and publication
 - Schema and relational integrity conformance tests
 - Conformance metrics
- Change request management
 - Infrastructure and procedure for responding to change request
 - Change request response time metrics
- Editorial rule adherence
 - Editorial rules and their implementation
 - Degree of compliance with the editorial rules



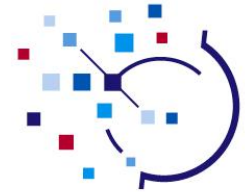
Framework application 3 stages

- Design and development stages
- Conduct stages - measurement
- Post-measurement stages



Framework application Design

- Design and development stages
 - What needs to be done ?
 - Who needs to do it ?
 - How is it to be done ?
 - Specific
 - Meaningful
 - Achievable
 - Realistic
 - Timely



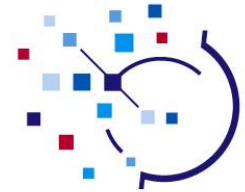
Framework application Measurement

- Conduct stages - measurement
 - What needs to be done
 - How do we measure success
 - What measurements are proof of success
 - Who needs to do it ?
 - Central / local
 - How is it to be done ?
 - manual / automated



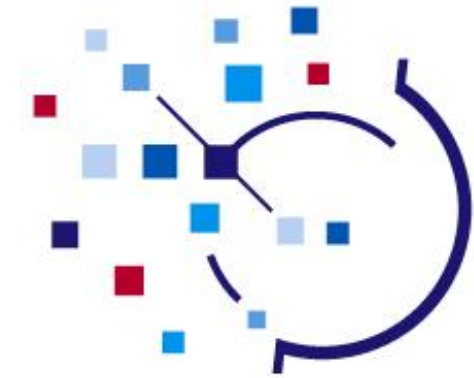
Framework application **After**

- Post-measurement stages
 - **What needs to be done**
 - Existing measures
 - Archive (if targets met)
 - Modify (if targets not met)
 - New measures identified in the course of the investigation
 - **Who needs to do it ?**
 - **How is it to be done ?**
 - Modify structure/process as necessary
 - Develop new measures if necessary

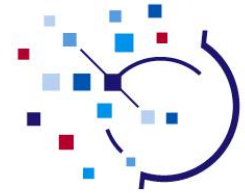


Component/ Characteristic - Metric template

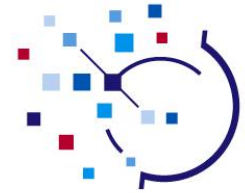
- ***Project, product or service name** – this will allow cross-referencing to identify
- ***Responsible owner** – this is the name of the project, product or service lead
- ***Component name** – this may be the whole name of the project, product or service, or may be a component/part of the
 - **Component type** – structure, process or outcome
- ***Quality characteristic name** – short working name for the thing being measured (probably most easily framed as “characteristic” of “component” (such as “accuracy of SCT-ICD-10 cross maps”)
 - **Quality characteristic type** – the characteristic category from the Quality Framework
 - **Quality characteristic description** – a description and justification for the characteristic
- ***Quality metric name** – short working name for the metric (there may be several metrics for each quality characteristic, so these will need to be distinguished)
 - ***Date of agreement**
 - ***Description** – a description and justification for the metric
 - ***Target** – the target to be achieved.
 - ***Measurement plan** – a description of
 - how the metric will be generated and collected
 - by whom
 - timing in relation to project/service
 - publication schedule
 - review timetable
 - ***Planned response if target not achieved**
- Outcomes would not routinely form part of a metric register, but fields to collect would be:
- ***Outcome**
 - ***Date of measure**
 - ***Level achieved** – the measure achieved
 - ***Remedial/additional steps taken** - if required



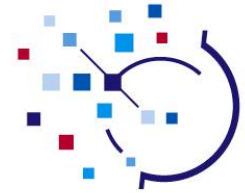
Examples of Quality work based on IHTSDO Framework



Translation Quality Assessment



IHTSDO Corporate Metrics



Development of corporate metrics

Quality

- Product
- Tools
- Processes

Customer Satisfaction

- Customer Survey
- Requests for Change
- Communications

HR/Stakeholders

- Employees Performance
- Conferences Participation
- Committee Effectiveness

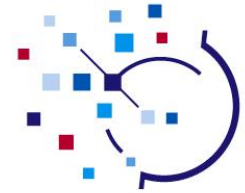
Finance

- GA to determine
- GA to determine
- GA to determine



SNOMED CT related quality

- Penni Hernandez, IHTSDO Senior Terminologist



Establishing a 'Quality Framework User Group'
