# **Citation Metadata Specification**

#### What is included in each citation:

- Reference information
- Target population
- Age group(s)
- Disease class: ICD-9CM and ICD-10
- Experimental intervention
- Intervention category
- Primary health outcome(s)
- Analytic technique: CEA, CUA, CMA, CBA
- Health state utility weight(s)
- Utility weight source
- Keywords

### Reference information

All PEDE citations are cross-referenced with an Endnote library that contains detailed information on all accepted publications. This includes author(s) names, article title, journal name, volume, and issue, page numbers, and publication date.

### Target population

This describes the study population that the intervention(s) are being directed towards. Examples include: universal (everyone), pregnant women, children with neutropenia, neonates with respiratory infection, etc. There may be more than one target population per citation.

# Age group(s)

Age categories are used to describe the target population(s) for each citation. These include:

- Perinates: antenatal period of the fetus or premature newborn, up to 7 days of life
- Neonates: newborns, until the first month of age
- Infants: 1 month to 1 year of age

• Children: 1 to 12 years of age

• Adolescents: 13 to 18 years of age

There may be more than one age group per citation.

#### Disease class

ICD-9-CM (up to 2003)

ICD-10 (2004 and later)

The ICD-9-CM classifies all disease according to major organ systems, including:

- Infectious and Parasitic Disease
- Neoplasms
- Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders
- Diseases of the Blood and Blood-Forming Organs
- Mental Disorders
- Diseases of the Nervous System and Sense Organs
- Diseases of the Circulatory System
- Diseases of the Respiratory System
- Diseases of the Digestive System
- Diseases of the Genitourinary System
- Complications of Pregnancy, Childbirth, and the Puerperium
- Diseases of the Musculoskeletal System and Connective Tissue
- Congenital Anomalies
- Certain Conditions Originating in the Perinatal Period
- Symptoms, Signs and Ill-defined Conditions
- Injury and Poisoning

The ICD-10 classifies all disease according to major organ systems, including:

- Certain infectious and parasitic diseases
- Neoplasms
- Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- Endocrine, nutritional and metabolic diseases
- Mental and behavioural disorders
- Diseases of the nervous system
- Diseases of the eye and adnexa
- Diseases of the ear and mastoid process
- Diseases of the circulatory system
- Diseases of the respiratory system
- Diseases of the digestive system
- Diseases of the skin and subcutaneous tissue
- Diseases of the musculoskeletal system and connective tissue

- Diseases of the genitourinary system
- Pregnancy, childbirth and the puerperium
- Certain conditions originating in the perinatal period
- Congenital malformations, deformations and chromosomal abnormalities
- Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
- Injury, poisoning and certain other consequences of external causes
- External causes of morbidity and mortality
- Factors influencing health status and contact with health services
- Codes for special purposes

With regard to antenatal care or family planning interventions, pregnancy is not considered a state of ill health. Non-disease categories labeled "General Health" and "Dental Health" were created for these and other interventions related to basic health services.

# **Experimental intervention**

This describes the intervention that is being directed at the paediatric population. Examples include: vaccination against influenza A, after school obesity prevention program, infliximab treatment (5 mg/kg), bilateral cochlear implantation, etc. There may be more than one intervention per citation, in which case the interventions are listed in order of decreasing importance in the study.

# **Intervention category**

Categories were created to reflect the types of interventions encountered and include:

- Prevention (specified as Health or Dental): An intervention for the prevention of illness or disease. There was no distinction made between primary, secondary, or tertiary prevention.
- Treatment (specified as Health or Dental): An intervention administered directly to the patient for the cure or amelioration of a disease or condition.
- Program (specified as Health or Dental): An organization or organizational unit, clinic, department, or health system.
- Surgical: Operative procedures used to correct deformities and defects, repair injuries, diagnose, or cure certain diseases.
- Educational: An educational process or program designed for the improvement and maintenance of health.
- Delivery (specified as Health or Dental): A process, service, tool, test or treatment pathway.
- Detection/Screening: Tests used to screen for disease or the potential of developing disease.
- Diagnosis: The use of clinical tests to confirm the cause of illness.

# Primary health outcome(s)

This describes the outcome used to define the consequence(s) of the health intervention targeted at the paediatric population. In many cases, multiple outcomes are listed in which case the first mentioned, the most clinically relevant, or the outcome most closely linked to the analytic technique (e.g. QALY for a cost-utility analysis) is considered the primary outcome. Examples include: cases of caries, life years gained, cases of hepatitis B, DALYs, etc. All outcomes are listed in order of decreasing importance in the study.

# **Analytic techniques**

An analytic technique is assigned to each citation. The assignment is based on a careful reading of the methods, rather than the author's designation. Options include:

- Cost-utility analysis (CUA)
- Cost-benefit analysis (CBA)
- Cost-effectiveness analysis (CEA)
- Cost-minimization analysis (CMA)

In cases where multiple techniques are used in the analysis and the primary analysis is not clear, the following hierarchy is used: CUA > CEA & CBA>CEA.

# **Health state utility weight(s)**

This describes a set of data unique to cost-utility analyses. All cost-utility analyses that adjust survival by a utility or disability weight to measure quality-adjusted life years or disability-adjusted life years, respectively, and report the weights in the citation, are described in table format. Tables include detailed information about the condition (if applicable), the health state, and the utility or disutility weight associated with that health state, as reported in the citation. Utility weights fall between 0 and 1 (with 0 representing death and 1 representing perfect health). In some cases, negative weights representing states worse than death are reported. There may be multiple health state utility weights reported per cost-utility citation and more than one utility weight provided per health state.

### **Utility** weight source

This describes how and or where the utility weight was derived by the citation authors. Options include:

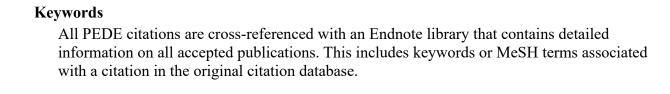
1) Literature. There are three types of sources from which a utility may be derived in the literature: (i) sources with one or more DOIs, (ii) sources without DOIs, and (iii) grey or white literature.

- (i) If a utility is derived from a single source with a DOI, use the format: Literature (doi). If multiple DOIs are referenced, separate them with a semicolon.
  - e.g., Literature (10.1177/0272989X0202200412)
  - e.g., Literature (10.1177/0272989X0202200412; 10.1186/s13023-019-1127-0)
- (ii) If the source does not have a DOI (i.e., old publications), then list first author's last name, date of publication and abbreviated journal title. If multiple sources are referenced, separate them with a semicolon.
  - e.g., Literature (Kuppermann M, 2000, Obstet Gynecol)
  - e.g., Literature (Kuppermann M, 2000, Obstet Gynecol; Chung A, 2001, Obstet Gynecol) (iii) If the source is grey/white literature such a HTA report, then list first author's last name or organization name, date of publication and name of the report. Use semicolons to separate multiple sources.
  - e.g., Literature (Stephens K, 2004, Sheffield Health Economics Group Discussion Paper No. 04/08)
- 2) Measured. Refers to the method used to elicit preferences within the published study, for example:
  - o time trade-off (TTO)
  - o standard gamble (SG)
  - o Visual Analogue Scale (VAS)
  - o HUI2/3
  - o EQ-5D
  - o EQ-5D-Y
  - o CHU-9D
  - o SF-6D
  - o AQOL
  - o 15D
  - o 16D

Use the using following format:

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e.g., Measured (HUI3)
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- 3) Author assumption. Author assigned a utility based on a similar condition, based on level of severity or based on disease characteristics. Use "Author assumption."
- 4) Not reported. If source was not provided, state "Not reported" as the source of the utility weight.
- 5) Other. If a utility weight was based on expert opinion without justification for the value, use "Other (expert opinion)."



# For more information please contact:

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