European Reference Networks | ERN GUIDELINES

European Reference Network: Clinical Practice Guidelines And Clinical Decision Support Tools

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Methodological Handbooks & Toolkit for Clinical Practice Guidelines and Clinical Decision Support Tools for Rare or Low Prevalence and Complex Diseases

Introductory Document

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LEGAL NOTICE

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ABBREVIATIONS

AETSA	Andalusian Health Technology Assessment Department
AGREE II	Appraisal of Guidelines for Research & Evaluation II
CDSTs	Clinical Decision Support Tools
CPGs	Clinical Practice Guidelines
ERN	European Reference Network
EU	European Union
FPS	Fundación Pública Andaluza Progreso y Salud
G-I-N	Guidelines International Network
GRADE	Grading of Recommendations Assessment, Development and Evaluation

01.

BACKGROUND

There are a number of challenges surrounding the development of CPG and CDST for rare diseases. One of the most relevant barriers is the lack of high-quality evidence, which cutting-edge methodological frameworks like GRADE [1] rely on.

Therefore, there is a need for specific methodological approaches that can provide reliable and useful Clinical Practice Guidelines (CPGs) and Clinical Decision Support Tools (CDSTs) for rare diseases. The project also aims to provide a common methodology, in order to harmonise the process for developing CDSTs and CPGs .

02.

SCOPE

2.1 | Aim of the Toolkit

This toolkit aims to provide methodological guidance and foster skills development for the prioritisation, appraisal, adaptation, adoption, development and implementation of CPGs and CDSTs for rare diseases in the context of ERNs. Within the scope of these Methodological Handbooks & Toolkit, "rare diseases" are used to refer to the care context of ERNs, which includes rare or low-prevalence and complex rare diseases.

2.1.1 | What this Toolkit is

This toolkit is a practical set of methodological handbooks and tools for the prioritisation, appraisal, adaptation, development and implementation of CPGs and CDSTs for rare diseases developed for ERNs and based on relevant existing methodologies applicable to rare diseases, as well as general methodological approaches with broad international consensus.

2.1.2 | What this Toolkit is not

This toolkit is not a methodological approach developed de novo for the prioritisation, appraisal, adaptation, development and implementation of CPGs and CDSTs for rare diseases.

2.2 | Who the Toolkit is for

This toolkit is targeted at ERNs but it may also be useful for professionals working in the field of rare diseases who would like to develop new or use existing evidence-based CPGs or CDST.

2.3 | Clinical Practice Guidelines (CPGs) and Clinical Decision Support Tools (CDSTs) covered in this Toolkit

This toolkit provides the methodology for the appraisal, adaptation, adoption, development and implementation of the CPGs and CDSTs defined in a previous TENDER *Taxonomy and templates for the European Reference Networks documents* (SANTE/2017/B3/083). These CPGs and CDSTs are the following:

Clinical Practice Guidelines

Clinical practice guidelines (CPGs) are systematically developed statements that include recommendations, intended to optimise patient care, that are informed by a systematic review of evidence and an assessment of the benefit and harms of alternative care options [2]. The level of evidence needs to be stated.

Clinical Consensus Statements

Clinical consensus statements reflect opinions drafted by subject matter experts for which consensus is sought using explicit methodology to identify areas of agreement and disagreement. In contrast to clinical practice guidelines, which are based primarily on high-level evidence, clinical consensus statements are more applicable to situations where evidence is limited or lacking, yet there are still opportunities to reduce uncertainty and improve quality of care [3, 4]. They provide specific recommendations on a topic but not specific algorithms.

Evidence Reports

Evidence reports are systematic reviews that summarises the best available evidence on a topic. Evidence reports are generally used by clinical professional organisations to support the development of clinical practice guidelines or by policy makers to inform their programme planning and research priorities [5].

Diagnostic, Monitoring and Therapeutic Pathways

Diagnostic, monitoring and therapeutic pathways are multidisciplinary management tools that describe the procedure for the care and treatment of a disease, condition or complex procedure. Their aim is to improve patient care and management, while enhancing the coordination of healthcare around the patient. They include “red flags” that may lead to suspicion of the disease, condition or complex procedure, recommendations on how to reach a definite diagnosis, management and follow-up, establishing the sequences for each action and defining the responsibilities of the different professionals who will intervene in the diagnostic, monitoring and therapeutic pathway [6].

Evidence-based Protocols

Evidence-based protocols are an agreed detailed framework chronologically outlining the care procedures to be performed in a designated area of practice. Evidence-based protocols state what should be done, and how it should be done. They are adapted to the health care environment and the available resources [7]. In order to facilitate their use, evidence-based protocols usually include a flowchart clearly illustrating the steps to be taken and the agents involved in the evidence-based protocol workflow.

Do’s and Don’ts Factsheets for Diseases

Do’s and Don’ts Factsheets are tools that provide advice that needs to be considered when assisting patients with specific rare diseases, conditions or in need of complex procedures. These documents aim to assist patients, caregivers and the medical community in knowing the basic do’s and don’ts of common and emergency situations (e.g. delivery, physical activity, anaesthesia, stroke, surgery) [8]. Do’s and don’ts factsheets can be based on existing CPG or CDST recommendations (i.e. one or more documents), or they may consist of a stand-alone product developed from scratch by a panel of experts making recommendations by consensus (e.g. specialists on rare diseases who collect established and well-known clinical practice information about patient management, as a guide to other specialists involved in the treatment of people living with a rare disease).

Quality Measures

Quality measures are tools that quantify healthcare processes, outcomes, patient perceptions, and organizational structure and/or systems. These instruments provide healthcare professionals and policy makers with information associated with healthcare performance and the extent to which high quality health care is being provided. There are three types of quality measures/indicators - structure, process, and outcome - , as framed in the Donabedian model [9, 10].

There are different frameworks for classifying quality measures. The main models structure measurements based on six aims for healthcare systems [11], namely effective, safe, efficient, patient-centred, equitable, and timely care according to the Institute of Medicine [12] approach.

Patient Information Booklets

These are documents that provide condition-specific information in lay language to inform patients on best medical practice in an informative and accessible way [13, 14]. Patient information booklets can be based on a CPG, a CDST or consist of a stand-alone product providing general information for the patient.

03.

OVERVIEW OF THE METHODS OF THE HANDBOOKS AND TOOLS

The work covered in these Methodological Handbooks and Toolkit was performed during the first six months of 2020, from January to June. It started with an in-depth analysis of the state-of-the-art on CPG and CDST methodologies for rare diseases, which was reviewed by experts from the ERNs and institutions with methodological expertise. This analysis was conducted from January to March 2020 and summarised in a Report on the Literature Review and Expert Consultation. These findings were included in the development of these Methodological Handbooks and Toolkit, which were developed from March to June 2020.

In addition to the specific methodologies for rare diseases identified in the Report on the Literature Review and Expert Consultation, other methodological approaches with broad international consensus have been considered and used for the development of these Methodological Handbooks and Toolkit. These include, for example, the Guidelines International Network (G-I-N) standards for guideline development [15], the Appraisal of Guidelines for Research & Evaluation II (AGREE II) [16], Grading of Recommendations Assessment, Development and Evaluation (GRADE) [1] and the ADAPTE methodology for guideline adaptation [17, 18]

ERNs and institutions with methodological expertise also participated in an online surveys about the prioritisation of conditions that require CPGs and CDSTs and the appraisal of CPGs and CDSTs for rare diseases.

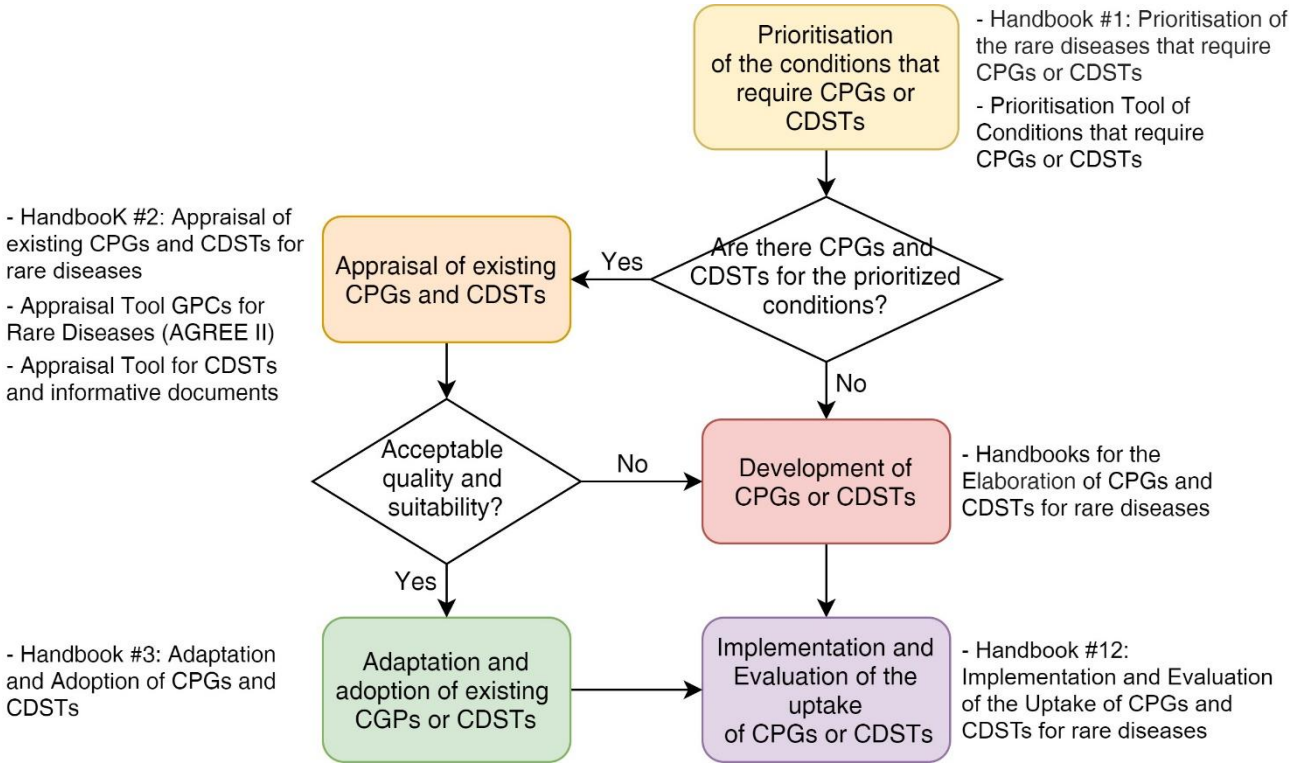
More detailed information on the development of each handbook and tool can be found in the respective documents.

04.

STRUCTURE OF THE TOOLKIT

The structure of the toolkit follows the milestones indicated below for the use of CPGs and CDSTs, based on the prioritisation of conditions that require CPGs or CDSTs for the implementation of CPGs or CDSTs. Figure 1 shows the main milestones of this process.

Figure 1. Milestones for the use of CPGs and CDSTs.



05.

CONTENT OF THE TOOLKIT: HANDBOOKS, TOOLS AND OTHER RESOURCES

5.1 | Prioritisation

Handbook #1: Prioritisation of Rare Diseases that Require CPGs or CDSTs

This handbook includes a detailed explanation of the prioritisation criteria and process, including the use of the prioritisation tool.

Tool #1: Prioritisation Tool for Conditions that Require CPGs or CDSTs

This tool provides a prioritised list of conditions and a heat map resulting from the assessment of the relevance of a pre-defined list of conditions for the development of CPGs or CDSTs.

5.2 | Appraisal

Handbook #2: Appraisal of Existing CPGs and CDSTs for Rare Diseases

This handbook includes a pragmatic process for evaluating the methodological quality of CPGs, CDSTs and informative documents for rare diseases, including the use of CPG and CDST appraisal tools.

Tool #2.1: Appraisal Tool for CPGs (AGREE II)

The tool for the quality assessment of CPGs has been developed based on AGREE II instrument. It includes a set of templates aimed at facilitating the quality appraisal of CPGs and subsequent discussion within the working group.

Tool #2.2: Appraisal Tool for CDSTs and Informative Documents

This tool presents the appraisal criteria for CDSTs and informative documents in a template that must be completed, and which helps to assess whether they meet the minimum quality requirements for their use.

5.3 | Adoption and Adaptation

Handbook #3: Adaptation and Adoption of CPGs and CDSTs

This handbook describes the elements that should be addressed in order to decide on whether a CPG or a CDST for rare diseases can be adopted or adapted and indicates the actions that must be followed to adopt and adapt a CPG and a CDST for rare diseases.

5.4 | Development

Handbooks #4 – 11: Handbooks for the Development of CPGs and CDSTs for Rare Diseases

These handbooks explain the steps for developing CPGs or CDSTs for rare diseases, including the definition of their scope and purpose, the formulation of clinical questions and the search, selection, appraisal and synthesis of scientific evidence, among other aspects. There is a development handbook for CPGs and each CDSTs covered in this toolkit.

- ✓ Handbook #4: Methodology for the Development of CPGs for Rare Diseases
- ✓ Handbook #5: Methodology for the Development of Clinical Consensus Statements for Rare Diseases
- ✓ Handbook #6: Methodology for the Development of Evidence Reports for Rare Diseases
- ✓ Handbook #7: Methodology for the Development of Diagnostic, Monitoring and Therapeutic Pathways for Rare Diseases
- ✓ Handbook #8: Methodology for the Development of Evidence-ased Protocols for Rare Diseases
- ✓ Handbook #9: Methodology for the Development of Do's and Don't's Factsheets for Diseases for Rare Diseases
- ✓ Handbook #10: Methodology for the Development of Quality Measures for Rare Diseases
- ✓ Handbook #11: Methodology for the Development of Patient Information Booklets for Rare Diseases

5.5 | Implementation

Handbook #12: Implementation and Evaluation of the Uptake of CPGs and CDSTs for Rare Diseases

This handbook provides the steps necessary to implement CPGs or CDSTs for rare diseases, including the selection of the specific CPG or CDST to be implemented, implementation planning, context analysis, design of the interventions and methods to carry out the evaluation of the implementation and uptake of the CPG or CDST, development of the implementation roadmap and design of the continuous improvement mechanism.

06.

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