10. Dissemination and implementation plan

For a clinical practice guideline (CPG) to be applied and adopted by health care professionals, three indispensable sequential key steps should be addressed: dissemination, implementation, and evaluation. The dissemination of a CPG (through medical and scientific publications, mailing, workshops, symposia and computer-based tools via Internet) will not be effective if it is not accompanied by a proper implementation.\textsuperscript{686-688}

Recent asthma CPGs, however, do not seem to meet this requirement. A study designed to evaluate the quality of these CPGs using the AGREE II instrument found that none of the guidelines achieved a score greater than 60\% (minimum recommended level) in the evaluation of their respective implementation plans (AGREE domain 5: applicability [or implementation]).\textsuperscript{1}

For the correct application and implementation of a CPG, Graham proposes a series of structured and stepwise planning in order to transfer knowledge into action ("knowledge-to-action")\textsuperscript{689}. The Dissemination and Implementation plan of GEMA 4.0 is based on such principles and includes the following eight actions:

1. **Specific Health care Area.** For plan implementation a specific health care territorial area will be defined in order to assign a selected zone to a reference hospital and the various primary care teams conforming it.

2. **Analysis of needs and local deficiencies.** An audit will be performed in order to detect weak points and deficiencies in disease management within that territory.

3. **Executive Committee.** A multidisciplinary group of experts in asthma pertaining to the implementation area will be set up. The committee will comprise expert physicians (pneumologists, allergologists, primary care physicians and pediatricians) as well as influential representatives from the local nursing and pharmacy areas.

4. **Drawing up a functional document based on GEMA 4.0.** The executive committee will adapt the evidence and recommendations from GEMA 4.0 to the local health care reality according to the resources assigned to the area, the type of professionals and their training level.

5. **Material resources.** A minimal amount of material resources should be available in the area in order to ensure the application of the guideline. Specific resources will include: spirometries (of good quality throughout the area) in each center; electronic medical history shared by specialists and general practitioners; standardized asthma symptom questionnaires (ACT, ACQ); placebo-containing inhalation devices to be used in education programs to instruct patients in the inhalation technique; an accredited specialized hospital Asthma Unit, fitted with a complete technical equipment (bronchoprovocation tests, FE\textsubscript{exp}, allergy skin tests, CT).

6. **Education plan.** Educational interventions on asthma (and use of spirometry) will be performed among both medical and nursing professionals in the area.

7. **Professional motivation plan.** Administrative authorities will be engaged in promoting adherence of professionals involved in the Implementation Plan by setting up appropriate motivational interventions.

8. **Evaluation and follow-up plan.** To determine the impact of the Implementation Plan a set of indicators of “health outcomes” will be used in an attempt to determine whether proposed objectives have been achieved or, alternatively, introduce the necessary adjustments. At the time of presentation of this guideline, a group of authors together with experts in methodology are working on a proposal of some indicators that will be published later (GEMA 4.0 Health Care Quality Indicators in Asthma project).

---

**RECOMMENDATIONS**

10.1. It is recommended to include a dissemination and implementation plan of this guideline to achieve the objectives of improving the education level of the health care professional.

10.2. The GEMA4.0 implementation plan proposes: implementation of actions in a local specific health area; identification of local opinion leaders and engage them in this endeavor; adaptation of GEMA4.0 to the health care reality of the area; arrangement of an education plan for the professionals involved; and adjustment of actions according to whether objectives assessed by health outcomes have been attained.
Acknowledgment

The authors thank Marta Pulido, MD, PhD, for the English translation of the Spanish document and Lorena Soto MD, the final revision of the manuscript.

Disclosure of conflicts of interests

The authors of this guideline declare that, over the past five years, they have received honoraria for participating in meetings, congresses and research studies organized by the following pharmaceutical companies: ALK-Abelló, Almirall, AstraZeneca, Boheringer-Ingelheim, Chiesi, GlaxoSmithKline, Laboratorios Dr. Esteve, Leti, MSD, Menarini, Mundipharma, Novartis, Orion, Pfizer, Stallergens, Teva.

Conclusions, findings and comments reflected in this guideline are exclusively attributable to the authors and are therefore their own responsibility. Some therapeutic options mentioned in this document may include indications, dosages and/or administration forms of drugs that are currently not authorized in Spain. It must be remembered that any drugs mentioned in this guideline must be used in accordance with their summary of product characteristics in force in Spain.