GLOBAL INITIATIVE FOR ASTHMA

POCKET GUIDE FOR IMPLEMENTING ASTHMA MANAGEMENT STRATEGIES INTO HEALTH CARE SYSTEMS 2018
GINA Board of Directors (2017)
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GINA Science Committee (2017)
Names of Science Committee members are listed on page 14

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The GINA Assembly includes members from 45 countries. Their names are listed on the GINA website, www.ginasthma.org.

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PREFACE

Asthma is a major public health problem worldwide. The Global Initiative for Asthma (GINA) was created to globally increase awareness about asthma among health professionals, public health authorities and the community, and by doing so, to contribute to its prevention and management. GINA prepares scientific reports on asthma, encourages dissemination and implementation of the recommendations, and promotes international collaboration on asthma research.

The Global Strategy for Asthma Management and Prevention was extensively revised in 2014 to provide a comprehensive and integrated approach to asthma management that can be adapted for local conditions and for individual patients. It focuses not only on the existing strong evidence base, but also on clarity of language and on providing tools for feasible implementation in clinical practice.

Why has GINA published an implementation guide?

In order to improve the care of patients and reduce the societal burden of asthma, the GINA recommendations require implementation in clinical practice. This involves not only raising awareness about the GINA recommendations and helping clinicians to become familiar with their content, but also contributing to the development and implementation of specific interventions tailored to the local health care system and available resources.

The purpose of this guide is to provide an outline of the steps involved in the implementation of clinical recommendations such as those in the GINA Strategy Report. It is based on a large body of evidence about effective implementation strategies, and on clinical experience gained by members of GINA Committees in different practice settings, drawing on both successes and failures. It is presented as an aid for those who are considering implementing guideline-based improvements in their institution, region or country.

This summary is deliberately synoptic, aiming to include the many factors that should be considered and the several steps that must be taken in program implementation.

Further information is available in Boulet LP et al, A guide to the translation of the Global Initiative for Asthma (GINA) strategy into improved care. Eur Respir J. 2012;39:1220-9, and from the Suggested Reading list on page 12.

The GINA 2017 report and other GINA publications (listed on page 14) can be obtained from www.ginasthma.org.
IMPLEMENTATION STRATEGIES FOR ASTHMA

In order to improve asthma care and patient outcomes, evidence-based recommendations must not only be developed and regularly updated, but also disseminated and implemented at a national and local level, and integrated into clinical practice.

Implementation requires an evidence-based strategy involving relevant professional groups and stakeholders. Recommendations for implementing asthma care strategies are based on many successful programs worldwide.

Recommendations should be implemented locally according to the health system and available resources, taking into account the socio-economic and cultural environment (Box 1).

Local adaptation and implementation of asthma care strategies is aided by the use of tools developed for this purpose.

Box 1. Approach to implementation of the Global Strategy for Asthma Management and Prevention
STEPS FOR SUCCESSFUL IMPLEMENTATION

Implementation involves a series of steps, that are summarized below.

1. **Identify stakeholders and form a working group**

   *Choice of stakeholders.* At the national or local level bring together relevant stakeholders. Ideally, these should include public health authorities, government representatives, non-government organizations (NGOs), respiratory societies, and clinicians including both physicians and allied health professionals. Involvement of patients is also strongly encouraged.

   *Consider the stakeholder perspective.* Consider the reasons or motivations for each participant's involvement, and ensure that these, as well as any concerns, are addressed. Consider strategies to motivate partners to become involved in the initiative.

   *Set up a working group.* Develop a working group under the auspices or in collaboration with a national or international group such as the Global Alliance against Chronic Respiratory Diseases (GARD), a Scientific Society or a group devoted to respiratory care. Ideally include implementation and communications specialists in addition to specialists and opinion leaders in the field of asthma, other health professionals (general practitioners, nurses, pharmacists, other health educators), and people with asthma.

   Enduring and productive collaborations are more likely when potential partners are involved from the start, than when they are invited later.

2. **Assess the local needs and environment**

   *Current asthma status.* View current local statistics on asthma morbidity, mortality and health care use (including hospital admissions) in the target country or region.

   *Care gaps and current needs.* Assess current local asthma care and the need for guideline implementation.

   *Resources.* Evaluate available resources and the current healthcare environment in which the guideline will be implemented.
3. Evaluate and prioritize implementation strategies

*What implementation initiatives have worked here before?* Examine current implementation initiatives in your area for other medical conditions – their success, or any obstacles to success.

*Evaluate implementation options.* Assess proposals or strategies for implementing the guideline and tools/models that have been used in similar practice settings. Consult the GINA resources for examples of successful programs.

*Identify key components for implementation.* Agree on the key components of the asthma program that the group considers are priorities. This is based on an analysis of the main barriers to improving asthma care in your institution, region or country (Box 2).

**Box 2. Examples of barriers to implementation**

<table>
<thead>
<tr>
<th>Health care providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Insufficient knowledge of recommendations</td>
</tr>
<tr>
<td>• Lack of agreement with or confidence in recommendations</td>
</tr>
<tr>
<td>• Resistance to change</td>
</tr>
<tr>
<td>• External barriers (organizational, policies, cost)</td>
</tr>
<tr>
<td>• Lack of time and resources</td>
</tr>
<tr>
<td>• Medico-legal issues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People with asthma</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low health literacy</td>
</tr>
<tr>
<td>• Insufficient understanding of asthma and its management</td>
</tr>
<tr>
<td>• Lack of agreement with recommendations</td>
</tr>
<tr>
<td>• Cultural and economic barriers</td>
</tr>
<tr>
<td>• Peer influence</td>
</tr>
<tr>
<td>• Attitudes, beliefs, preferences, fears and misconceptions</td>
</tr>
</tbody>
</table>

Remember: Quality of care improvements are generally made in small steps that address critical barriers rather than broad-ranging changes. For example, is the main problem in your area access to controller drugs such as inhaled corticosteroids, need for spirometry, failure to diagnose asthma, absence of written action plans, inappropriate prescribing, or availability of asthma educators? Examples of barriers and strategies are provided in Box 3.
<table>
<thead>
<tr>
<th>Care gap</th>
<th>Potential strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over- or under-diagnosis</td>
<td>Increased use of pulmonary function and bronchoprovocation testing</td>
</tr>
<tr>
<td></td>
<td>Increase awareness of differential diagnoses for respiratory symptoms</td>
</tr>
<tr>
<td>Inadequate assessment of asthma control</td>
<td>Promote GINA control criteria for symptom control and risk factors</td>
</tr>
<tr>
<td>Insufficient or inappropriate advice about environmental control</td>
<td>Identify individual risk factors</td>
</tr>
<tr>
<td></td>
<td>Refer to asthma educator</td>
</tr>
<tr>
<td>Lack of patient education</td>
<td>Refer to asthma educators</td>
</tr>
<tr>
<td></td>
<td>Ensure asthma educators are trained appropriately in current guidelines</td>
</tr>
<tr>
<td>Inadequate pharmacological treatment</td>
<td>Lobby government/policy makers for access to ICS</td>
</tr>
<tr>
<td></td>
<td>Increase awareness of GINA figures and tables</td>
</tr>
<tr>
<td></td>
<td>Remind clinicians to assess asthma control at every opportunity</td>
</tr>
<tr>
<td>Lack of written asthma action plan</td>
<td>Disseminate action plan templates</td>
</tr>
<tr>
<td></td>
<td>Increase awareness of medication options for action plans</td>
</tr>
<tr>
<td></td>
<td>Refer to asthma educator</td>
</tr>
<tr>
<td>Incorrect inhaler technique</td>
<td>Train health professionals in correct technique; provide checklists and videos for all inhalers</td>
</tr>
<tr>
<td></td>
<td>Check technique at every opportunity</td>
</tr>
<tr>
<td></td>
<td>Refer to asthma educator</td>
</tr>
<tr>
<td>Poor adherence to therapy and other instructions</td>
<td>Assess adherence at every visit, using empathic non-judgemental questions (see GINA report for details)</td>
</tr>
<tr>
<td></td>
<td>Identify and explore patient fears and misconceptions</td>
</tr>
<tr>
<td>Lack of routine follow-up</td>
<td>Schedule follow-up visits</td>
</tr>
<tr>
<td>Insufficient access to care</td>
<td>Lobby government/policy-makers to increase resources/availability of care</td>
</tr>
<tr>
<td></td>
<td>Provide training for allied health professionals and lay educators to provide asthma care</td>
</tr>
</tbody>
</table>
The key components of an implementation strategy may be broadly grouped under the following headings:

- appropriate asthma diagnosis and assessment of control
- environmental and preventative measures
- individualized pharmacotherapy
- education and guided asthma self-management

*Select key messages appropriate for each target audience.* Select no more than five or six key messages for each audience. For nurses and doctors, examples are "A child who coughs at night in the absence of a ‘cold’ may have asthma", and "Inhaled corticosteroids are the treatment of choice for people with persistent asthma symptoms". For patients or parents, examples are "Asthma flare-ups (attacks) do not require antibiotics" and “Ask a health professional to check that you are using your inhaler correctly”.

4. **Develop specific indicators and targets for the initiative**

Select the *primary goal and secondary objectives* for the implementation program, being as realistic as possible.

Establish *process measures* to assess the extent to which the strategies were implemented. Discuss *outcomes* to be measured, including patient-related outcome measures (PROMs), and consider what level of change should be achieved (deliverables).

Select *milestones* for the interval evaluation of the intervention, and plan the action will be taken if these are not met (or are exceeded).

5. **Assess available resources**

Identify *funding and resources* that are currently available to support the initiative.

*Apply for funding from several potential sources,* e.g. national funds, funding agencies for implementation research, regional health authorities and medical or scientific societies.
6. Produce a step-by-step implementation plan

Identify the initial target population, such as at-risk or high morbidity populations, or populations to which access is already available. Begin on a small scale with a limited number of people.

Define the content of the initial intervention, and how to assess its effects. Select an initial intervention that has a good chance of success (Box 4), as this can help to motivate the group.

Check for existing implementation tools and identify those needed for development.

Distribute tasks to members of the working group based on the detailed strategy and milestones, and provide specific deadlines. Build upon existing structures and groups.

Identify or hire a project coordinator with suitable expertise to supervise aspects of this initiative.

Develop a realistic timeline for implementation and evaluation. Initially, choose a medium-range time schedule (e.g. 3 months) to obtain rapid results.

Box 4. Tips for optimizing the integration of management strategies into clinical care

- Measure the baseline situation before implementing the strategy
- Keep interventions simple and targeted
- Include assessment of their effects
- Tailor interventions to the goals and environment
- Assess barriers and facilitators to change
- Motivate participants and publicize successful interventions
- Identify and create practice tools to support medical practice
- Identify or create incentives to guidelines implementation
- Foster multidisciplinary work and effective communications
7. **Review the project and modify as needed**

Review pilot projects and other information gathered, to determine if and how the strategy should be continued or improved.

Analyze data for process measures and outcome measures such as patient-related outcomes and health care utilization, to identify and address barriers and facilitators, and cost-benefit of the program.

*Revise and refine* long-term goals and strategies.

*Publicize* the successes of the program.

8. **Long-term planning**

*Plan continuation or expansion* of the initiative and its long-term evaluation.

*Identify resources* for sustaining the intervention and decide who will be in charge of its continuation.

Regularly *communicate* the project results and impact on current care to participants in the project, especially to policy makers and managers responsible for allocation of resources.
SUGGESTED READING


9. Pearson MG. How can the implementation of guidelines be improved? Chest 2000;117(2 Suppl):38S-41S.


Acknowledgements

The activities of the Global Initiative of Asthma are supported by the sale of GINA materials and the work of members of the GINA Board of Directors and Committees (listed below). The members of the GINA committees are solely responsible for the statements and recommendations presented in this and other GINA publications.

GINA Board of Directors (2017)
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GINA PUBLICATIONS

- **Global Strategy for Asthma Management and Prevention** (2017). This report provides an integrated approach to asthma that can be adapted for a wide range of health systems. The report has a user-friendly format with practical summary tables and flow-charts for use in clinical practice.

- **GINA Online Appendix.** Detailed background information to support the main report. Chapter 7 of the Online Appendix provides additional detail about implementation strategies.

- **Pocket Guide for asthma management and prevention for adults and children older than 5 years** (2017). Summary for primary health care providers, to be used in conjunction with the main GINA report.

- **Pocket guide for asthma management and prevention in children 5 years and younger** (2017). A summary of patient care information about pre-schoolers with asthma or wheeze, to be used in conjunction with the main GINA 2014 report.

- **Diagnosis and initial treatment of asthma, COPD and asthma-COPD overlap** (2017). This is a stand-alone copy of the corresponding chapter in the main GINA report. It is co-published by GINA and GOLD (the Global Initiative for Chronic Obstructive Lung Disease, [www.goldcopd.org](http://www.goldcopd.org)).

- **GINA Teaching Slides** are available on the GINA website.

- **Clinical practice aids and implementation tools** are available on the GINA website.

GINA publications and other resources are available from [www.ginasthma.org](http://www.ginasthma.org)