Integration of GARD Turkey national program with other non-communicable diseases plans in Turkey

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ÖZET

GARD Türkiye ulusal kontrol programının diğer bulaşıcı olmayan hastalıklar programlarıyla entegrasyonu

Bulaşıcı olmayan hastalıkların önlenmesi ve kontrolü için, Dünya Sağlık Örgütü (DSÖ) tarafından bu hastalıklara ve risk faktörlerine yönelik koordin sistem, kapsamlı ve kanıt dayalı ve stratejilerin desteklenmesi amacıyla bir eylem planı hazırlanmıştır. “Global Alliance against Chronic Respiratory Diseases (GARD)” etkinlikleri de 40 ülkede sürmektedir. GARD Türkiye projesinde de T.C. Sağlık Bakanlığı kronik hava yolu hastalıklarını önleme ve kontrol programını diğer bulaşıcı olmayan hastalıkların kontrol programlarıyla entegrasyonu etmeye çalışmaktadır. Bu yazida GARD Türkiye projesinin diğer ulusal kontrol programlarıyla entegrasyonu özetlenmiştir.

Anahtar Kelimeler: DSÖ, GARD, kronik solunum hastalıklarına karşı karevel bireşim, GARD Türkiye, bulaşıcı olmayan hastalıklar, kronik hava yolu hastalığı, astım, KOAH, entegrasyon.

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In order to prevent and control non-communicable diseases (NCDs), the 61st World Health Assembly (WHA) has endorsed the Action Plan (2008-2013) of the Global Strategy for Prevention and Control of NCD (WHA Resolution 61.14). This plan is intended to support coordinated, comprehensive and integrated implementation of strategies and evidence-based interventions across individual diseases and risk factors, especially at the national and regional levels by World Health Organization (WHO). The Global Alliance against Chronic Respiratory Diseases (GARD) is making every attempt to align with WHO’s non-communicable diseases action plan. GARD activities have been commenced in over 40 countries and in 11 countries an integrated NCD action plan is being prepared or has already been initiated. This integrated approach of GARD has also targeted to GARD Turkey project. The Turkish Ministry of Health has decided to apply this national control program in conformity with other NCD action plans. This article is intended to summarize these integration efforts of GARD Turkey (the National Control Program on Chronic Airway Diseases) with other NCD national programs.

Key Words: WHO, GARD, Global Alliance against Chronic Respiratory Diseases, GARD Turkey, non-communicable diseases, chronic airway disease, asthma, COPD, integration.

In order to prevent and control non-communicable diseases (NCDs), the 61st World Health Assembly (WHA) has endorsed the Action Plan (2008-2013) of the Global Strategy for Prevention and Control of NCD (WHA Resolution 61.14). This plan is intended to support coordinated, comprehensive and integrated implementation of strategies and evidence-based interventions across individual diseases and risk factors, especially at the national and regional levels (1). Concomitantly, the Global Alliance against Chronic Respiratory Diseases (GARD) has published its action plan, aiming to support the Global Strategy against NCDs (2). Subsequently, a package for essential NCDs interventions including chronic respiratory diseases (CRDs) has been proposed by the World Health Organization (WHO).
The six objectives of the NCD action plan approved by the WHA are (1):

1. To raise the priority accorded to noncommunicable disease in development work at global and national levels, and to integrate prevention and control of such diseases into policies across all government departments;

2. To establish and strengthen national policies and plans for the prevention and control of NCDs,

3. To promote interventions to reduce the main shared modifiable risk factors for NCDs: tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol,

4. To promote research for the prevention and control of NCDs;

5. Promote partnerships for the prevention and control of NCDs,

6. Monitor NCDs and their determinants and evaluate progress at the national, regional and global level.

Combining the abilities of the partners active in cardiovascular diseases, cancers, diabetes and chronic respiratory diseases with the networks dedicated to fostering tobacco control, healthy diets, physical activity and the reduction of the harmful use of alcohol, including patients organizations, member states and stakeholders outside the health arena creates a synergistic effect on the efforts to raise awareness for the increasing magnitude of the public health and socio-economic problems posed by NCDs (5).

The Global Alliance against Chronic Respiratory Diseases (GARD) approach has been developed in a stepwise approach with short-term, medium-term and long-term objectives (6,7). GARD Action Plan 2008-2013 defines strategic objectives, measurable targets and deliverables (2).

GARD is making every possible attempt to align with WHO’s NCD action plan and contribute to its implementation. GARD activities have been commenced in over 40 countries, and in 11 countries an integrated NCD action plan is being prepared or has already been initiated by their ministries of health (6,7).

In the distribution of deaths by disease groups in Turkey, 79% of all deaths are caused by the NCDs. COPD and perinatal causes occupy the third rank with 5.8% among the ten leading causes of death Turkey in 2004. Respiratory diseases cause 6.3% of the deaths, and rank sixth in total DALYs by Major Disease Groups (8).

GARD Turkey Project is “Chronic Respiratory Diseases Prevention and Control Program and National Action Plan”. This process is the first of this nature involving the Ministry of Health (MoH) and non-governmental organization (NGO), the Turkish Thoracic Society (TTS) in joint management of a major national program on NCD (9,10).

The goals of the project are in line with the GARD action plan to prevent and control chronic respiratory diseases, to reduce their mortality and morbidity, and to reduce the social and economical burden of these diseases.

This integrated approach proposed by GARD has also been adopted in GARD Turkey Project. The Turkish MoH has decided to apply the national program for control of CRD in harmony and integration with other NCD action plans. Some of them have been finalized such as cardiovascular diseases, obesity and tobacco control programs. All these programs are trying to become integrated with each other in terms of planning and implementation (9,10).

OTHER NCD PROGRAMS of TURKISH MINISTRY of HEALTH

In the light of the existing circumstances in Turkey showing parallelism with the world, by evaluation of the programs carried out and proposed in the world, particularly WHO, a series of works mentioned below have been done by MoH within the context of chronic diseases control program:

MoH has been restructured. Besides the Department of Tobacco and Addictive Substances Prevention which has been established previously in the General Directorate of Primary Health Care and has worked with three units (Non-Alcohol Materials Prevention Unit, Tobacco and Tobacco Products Prevention Unit and Control, Alcohol Prevention and Control Unit) Department of Nutrition and Physical Activities (Nutrition-Rela-
The Ministry of Health Strategic and Action Plan 2010-2014 has been prepared. In the plan, the implementation of the action plans prepared has been planned. The objectives mentioned below are identified.

**Strategic Objectives 1**

Protection of society against health-related risks

SH 1.1. To provide promotion (development) of health and ensure that the programs related with healthy life can get accessed by the whole society.

SH 1.5. To decrease the frequency of the non-communicable diseases as well as the death rate arising from this kind of diseases.

SH 1.6. To increase the rate of people over the age of fifteen who do not smoke to 80% until 2014, to start the implementation of the alcohol control program and decrease the addiction rates.

SH 1.7. To provide support in order to increase the number of people who can live in a healthy and secure physical environment.

It is declared that “Republic of Turkey, Prevention and Control Program for Cardiovascular Diseases: Strategic Plan and Action Plan for the Risk Factors” European Hearth Health Charter has been signed by a ceremony with the participation of MoH and in cooperation of Turkish Heart Foundation on 25 December 2007.

As being main risk factors for cardiovascular diseases in Turkey, the scope of this plan is developed within the framework of:

- Decreasing of the use of cigarette and other tobacco products,
- Preventing the unhealthy diet habits and obesity,
- Overcoming of physical inactivity.

Also, other approaches devoted to secondary and tertiary prevention of the cardiovascular diseases (including manpower, technology, medicine, finance) have been developed, and they have been combined with the previously mentioned plan.

In this action plan, some parts related to following issues such as Education, Communication, Training and Public Awareness, Smoking Cessation, Prevention of Passive Smoking and Reducing Youth Access to Tobacco Products have taken place.

The “WHO-Framework Convention on Tobacco Control (FCTC)” has been ratified by Turkey by being approved by the Grand National Assembly of Turkey in 25 November 2004. The “National Tobacco Control Program”, prepared by the Ministry of Health within the collaboration of related public and civil organisations for the years 2008-2012 came into force in October 2006 and “The Law on Preventing the Harms of Tobacco Products” came into force in 3 January 2008.

In 15-17 November 2006 in Istanbul, WHO/Europe organized “the Ministerial Conference on Counteracting Obesity” in collaboration with the European Commission, hosted by the Turkish Government. The conference aimed to take high level measures against this increasing global threat, namely obesity. Moreover, the “European Charter on Counteracting Obesity” was signed in the conference. Thanks to the acceleration of actions to counteract obesity, the issue is put under commitment to be placed high on the public health and political agendas of the Member States. In addition to the National Action Plan on Counteracting Obesity 2010-2014, the Mental Health Action Plan of Turkey has been prepared.

Considering the WHO CINDI PROGRAM (CINDI-Countrywide Integrated Non-Communicable Diseases Intervention), the preparatory studies necessary for our country to participate in the aid program have been started.

The books on 2008-2013 action plan for the Global Strategy for Prevention and Control of Non-Communicable Diseases and European Strategy for Prevention and Control of Non-Communicable Diseases have been translated to the Turkish language and published.

The action plans for cancer prevention and diabetes prevention and control program have also been prepared.

All of the concerned public institutions, universities, and non-governmental organizations have participated in the preparation of the above mentioned all plans. In these plans, some refe-
rences have been made for the necessary topics, and overlaps have been avoided as well as double activities. In the implementation, the activities have been updated or monitored by following the other related plan activities.

Special importance has been given to the monitoring and evaluation of the plans. In this context, GARD practices have been served as an example for some other programs.

INTEGRATION of GARD TURKEY NATIONAL CONTROL PROGRAM in CHRONIC AIRWAY DISEASE WITH OTHER NCD PROGRAM

Among the goals and strategies of Turkish national control program and action plan against chronic airway diseases which are classified as C1-6 (6,7), C3 (preventing the development of disease), C4 (early detection of diseases and prevention of progress) and C5 (effective treatment of the diseases and prevention of complication development) are the ones mostly integrated with the other NCD plans (Table 1). The risk factors are common; the efforts for early detection, prevention and management are quite similar in these NCDs.

GARD Turkey executive committee has representatives from all related departments to be integrated with other NCDs as shown in Table 2. Among the action plans of the working groups; short (0-1 y), medium (2-3), long (> 4 y) term activities have been chosen by the executive committee. The action plans are composed of strategies, responsible parties for planning, app-

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<tr>
<th>Table 1. Goals and strategies of C3, C4 and C5 groups.</th>
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<td><strong>C.3. Preventing the development of disease</strong></td>
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<tr>
<td>C.3.1. Reducing smoking</td>
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<td>C.3.2. Reducing environmental tobacco smoke</td>
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<td>C.3.3. Reducing indoor air pollution</td>
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<td>C.3.4. Reducing outdoor air pollution</td>
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<td>C.3.5. Reducing occupational risk factors</td>
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<td>C.3.6. Reducing allergen exposure</td>
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<td>C.3.7. Prevention and management of childhood lower respiratory tract infections</td>
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<td>C.3.8. Generalizing physical activities and healthy nutrition</td>
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<tr>
<th><strong>C.4. Early detection of diseases and prevention of progress</strong></th>
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<tr>
<td>C.4.1. Increasing awareness of early detection among public and health professionals</td>
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<tr>
<td>C.4.2. Supplying and expanding the usage of spirometry</td>
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<td>C.4.3. Easy access to healthcare services</td>
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<td>C.4.4. Eliminating the risk factors (smoking, infection, occupational)</td>
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<td>C.4.5. Easy access to medicine and treatment equipment</td>
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<tr>
<td>C.4.6. Proper recording and monitoring</td>
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<td>C.4.7. Decreasing allergen burden</td>
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<tr>
<th><strong>C.5. Effective treatment of the diseases and prevention of complication development</strong></th>
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<tr>
<td>C.5.1. Education of patients and healthcare professionals about appropriate treatment</td>
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<tr>
<td>C.5.2 Expanding home care services</td>
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<tr>
<td>C.5.3. Expanding pulmonary rehabilitation services</td>
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<tr>
<td>C.5.4. Easy access to medicine and treatment equipment</td>
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<tr>
<td>C.5.5. Proper recording and monitoring</td>
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lication and monitoring of each strategy. Activities for each strategy as well as performance criteria, monitoring and evaluation and the deadlines have been planned for each activity. The other NCD action plans are referred in these tables (Table 3-5).

The national control programs integrated with GARD Turkey C3 Group are listed in Table 6.

C6 is the responsible group for monitoring the program as well as the diseases. The goals and strategies shown in Table 7 are also integrated with other NCDs in respect of obtaining epidemiological data.

On a country level, the routine improvement works in the data system related to the chronic diseases have continued. Within the framework of the Transformation Program in Health carried out since 2003, the restructuring studies for the provision and finance of health care have continued and, in this context, the works of E health have been carried out. Moreover, a fieldwork has been planned for 2010 for the main diseases and risk factors leading to a countrywide disease burden.

C2 is the advocacy group. Its goals and strategies shown, in Table 8 are also integrated with other NDCs by the common campaigns.

In all plans, the awareness campaigns taking place within the context of health promotion works are carried out by the department of health promotion of Turkish MoH.

Contacts have been created and information has started to be shared in a continuous manner with other national control programs (obesity, tobacco, cardiovascular diseases indoor and outdoor pollution, occupational risk factors etc.) Periodical official information has started to being shared by all parties in order to prevent duplicative efforts. This sharing of information has also been experienced to have a motivational effect on each group.

Provincial health directors in 81 cities have been invited to Ankara for a meeting and been informed about GARD and Turkey National Control Program. City councils have been established and by laws have been prepared.
### Table 3. Integration of C3 (preventing the development of disease).

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Responsible parties</th>
<th>Activities</th>
<th>Performance criteria</th>
<th>Monitoring</th>
<th>Dead lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.3.3. Reducing indoor air pollution</td>
<td>MoH, TTS, MoEF, MoNE, universities</td>
<td>Cooperation and orientations with legislative organizations and regulations: cooperation with ME White Flag Healthy Schools Program An expert report need recognized and a commission was established</td>
<td>Report of partner organizations</td>
<td>Report of partner organizations</td>
<td>Continuously</td>
</tr>
<tr>
<td>C.3.4. Reducing outdoor air pollution</td>
<td>MoEF, TTS, MoH, MoIC, MoIA, MoIC, Universities</td>
<td>Cooperation and orientations with present legislative organizations and regulations</td>
<td>Report of partner organization, Accordance with EU directives</td>
<td>Report of partner organizations</td>
<td>Continuously</td>
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</tbody>
</table>
Table 3. Integration of C3 (preventing the development of disease) (continued).

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<tr>
<th>Strategy</th>
<th>Responsible parties</th>
<th>Activities</th>
<th>Performance criteria</th>
<th>Monitoring</th>
<th>Dead lines</th>
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</thead>
<tbody>
<tr>
<td>Expecting additional strategies for adaptation and control of climate change and global warming</td>
<td>An expert report need recognized for additional activities and a commission was established</td>
<td>Improvement and active usage of national air quality monitoring network</td>
<td>Reports and web based statistics</td>
<td>Improving air quality measurements and indexes</td>
<td>Some goals have already achieved</td>
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<td></td>
<td></td>
<td>Control of emissions from transportation</td>
<td>Report of partner organizations</td>
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<td>An expert report need recognized for additional activities and a commission was established</td>
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<tr>
<td>C.3.5. Reducing occupational risk factors</td>
<td>MoLSS, MoH, TMA</td>
<td>National pneumoconiosis control program and</td>
<td>National pneumoconiosis control program</td>
<td>National pneumoconiosis control program</td>
<td>Yearly</td>
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<td></td>
<td>MoA</td>
<td>Additional educational and awareness activities prevention of occupational hazards from agriculture</td>
<td>Knowledge level of health workers and level of consciousness of workers associations</td>
<td>Reported educational activities like congress from TMA</td>
<td></td>
</tr>
<tr>
<td>C.3.6. Reducing allergen exposure</td>
<td>Based on report from TSNACI: and expected action plans from new air-quality report</td>
<td>Improvement of knowledge level and consciousness of allergens and prevention of them in healthy and sick population</td>
<td>Completion of TSNACI: report and detection of level of consciousness of allergens them in healthy and sick population</td>
<td>Reported educational activities and performance criteria in TSNACI: report</td>
<td>2009-2012</td>
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</tbody>
</table>
Table 3. Integration of C3 (preventing the development of disease) (continued).

<table>
<thead>
<tr>
<th>Strategy</th>
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<th>Activities</th>
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<th>Monitoring</th>
<th>Dead lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.3.7.</td>
<td>MoH, MoNE</td>
<td>National Tuberculosis Control Program of TTS, TPA</td>
<td>Results of National Tuberculosis Control Program</td>
<td>As described in National Tuberculosis Control Program</td>
<td>2009-2012</td>
</tr>
<tr>
<td>Prevention and management of lower respiratory tract childhood infections</td>
<td>MO Prevention and control of childhood infection programs</td>
<td>The programme on educational activity of MoNE in primary level of national education</td>
<td>Results of programme on educational activity of MoNE</td>
<td></td>
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<tr>
<td></td>
<td>Project on frequency of wheezing and lower respiratory tract infection in preschool children</td>
<td>Rate of wheezing and lower respiratory tract infection in preschool children</td>
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<tr>
<td>C.3.8.</td>
<td>National Control Program of Cardiovascular Diseases</td>
<td>National Control Program of Cardiovascular Diseases</td>
<td>National Control Program of Cardiovascular Diseases</td>
<td>National Control Program of Cardiovascular Diseases</td>
<td>National Control</td>
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<tr>
<td>Generalizing physical activities and healthy nutrition</td>
<td>National Control Program of Obesity and physical activity</td>
<td>National Control Program of Obesity and physical activity</td>
<td>National Control Program of Obesity and physical activity</td>
<td>National Control Program of Obesity and physical activity</td>
<td>National Control</td>
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</table>
### Table 4. Integration of C4 (early detection of diseases and prevention of progress).

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<thead>
<tr>
<th>Strategy</th>
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<th>Performance criteria</th>
<th>Monitoring</th>
<th>Dead lines</th>
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</thead>
<tbody>
<tr>
<td>C.4.1. Increasing awareness of early detection among public and health professionals</td>
<td>MoH, Non-governmental organizations</td>
<td>1. To update and disseminate the current guidelines 2. Postgraduate training of the health professionals including primary care practitioners 3. To increase the awareness of public with the cooperation of media</td>
<td>To complete the publication and dissemination of national asthma and COPD guidelines Preparation of questionnaires for primary care to determine the level of knowledge; to establish the training team including face to face education and web based training</td>
<td>Until the end of 2010</td>
<td></td>
</tr>
<tr>
<td>C.4.2. Supplying and expanding the usage of spirometry</td>
<td>MoH, Speciality societies</td>
<td>1. Determination of the need for spirometry among primary care centers 2. To supply lacking centers with spirometry 3. To determine the standards of spirometry in every primary care center</td>
<td>Determination of the number of spirometry needed for the project The rate of spirometry performed for COPD and asthma patients before and after the supplementation</td>
<td>Until the end of 2011</td>
<td></td>
</tr>
<tr>
<td>C.4.3. Easy access to healthcare services</td>
<td>MoH, Non-governmental organizations, MoF, MoLSC</td>
<td>1. Expanding the number of asthma and COPD outpatient clinics in the tertiary level 2. To improve the home care system 3. To improve the patient transfer system between primary and secondary-tertiary care units</td>
<td>Observation of number of patients submitting to primary care centers The number of asthma and COPD outpatient clinics before and after the project To apply questionnaires to determine the satisfaction of the patients</td>
<td>Until the end of 2011</td>
<td></td>
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</tbody>
</table>
Table 4. Integration of C4 (early detection of diseases and prevention of progress) (continued).

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Responsible parties</th>
<th>Activities</th>
<th>Performance criteria</th>
<th>Monitoring</th>
<th>Dead lines</th>
</tr>
</thead>
</table>
| C.4.4. Eliminating the risk factors (smoking, infection, occupational) | MoH, Non-governmental organizations MoLSC | 1. Contents of 4.1 also comprises this section  
2. Dissemination of smoking cessation programs  
3. Improvement in the workplace environment  
4. Dissemination of vaccines for asthma and COPD patients to prevent infections | Education programs  
should include smoking cessation  
Determination of the number of smoking cessation units  
Determination of the rate of vaccinated patients | | Until the end of 2010 |
| C.4.5. Easy access to medicine and treatment equipment | MoH, Non-governmental organizations; MoF, MoLSC, SSI | To improve the reimbursement conditions for the drugs and equipment | Observation of prescription rates by chest physicians and primary care  
To observe the expenditure for pulmonary medicines according to the records of the SSI | | In a 3 years period |
| C.4.6. Proper recording and monitoring | MoH, MoF, SSI | Improvement in the recent recording systems  
Uniforming the database systems in the hospitals and primary care | | | In a 3 years period |
Table 5. Integration of C5 (effective treatment of the diseases and prevention of complication development).

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Responsible parties</th>
<th>Activities</th>
<th>Performance criteria</th>
<th>Monitoring and assessment</th>
<th>Dead lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.5.1. Education of patients and healthcare professionals about appropriate treatment</td>
<td>MoH, Department of Non-Communicable Diseases and Chronic Conditions (Respiratory System Diseases Unit)</td>
<td>1. To hold training courses to educate the patients, the patients’ relatives and physicians 2. To copy and distribute the booklets prepared by TTS and TSNACI with the contribution of the MoH on asthma and COPD</td>
<td>To provide training for 70% of the physicians, patients family members regarding this subject and to bring the number of the certified health care professionals who are working on this subject up to 30%</td>
<td>The number of the patients and physicians who have participated in the training courses at the relevant provinces</td>
<td>1. The dates of the meetings in Samsun, Manisa, Gaziantep, Edirne: March, April, May, June 2010/4 meetings</td>
</tr>
<tr>
<td>C.5.2. Expanding home care services</td>
<td>MoH, General Directorate of Curative Services, TTS, TSNACI TSFP</td>
<td>1. To organize a workshop on home care services where the fields that have a heavy chronic patient load are invited 2. To prepare a guide that clearly defines the implementation models and transfer criteria for the home care of the pulmonary diseases</td>
<td>1. To raise the number of the universities and education research hospitals having heavy load of chronic patients with home care services to 70% 2. To raise the number of the patients with moderate to severe COPD and asthma benefit from the services regionally to 50%</td>
<td>1. The numbers of the centers applying the home care services at the first, second and third step 2. The number of the patients with COPD or asthma receiving home care services</td>
<td>Within one year following the signing of the home care services directive</td>
</tr>
<tr>
<td>C.5.3. Expanding pulmonary rehabilitation services</td>
<td>MoH, General Directorate of Curative Services and Health Education, TTS</td>
<td>1. To overcome the legislation deficiencies regarding pulmonary rehabilitation on pulmonary illnesses and to inform the SSI in writing 2. To launch the work for the accreditation of pulmonary rehabilitation centers 3. To launch the programs for the pulmonary rehabilitation certification</td>
<td>1. To increase the number of the pulmonary rehabilitation centers that are under supervision of pulmonary disease specialists to 70% 2. To provide 50% service to the patients with COPD and severe asthma</td>
<td>In 2010 for the pulmonary diseases specialists to take part in activities as a pulmonary rehabilitation multidiscipline approach</td>
<td>1. One month 2. November, 2010 3. September, 2010</td>
</tr>
<tr>
<td>Strategy</td>
<td>Responsible parties</td>
<td>Activities</td>
<td>Performance criteria</td>
<td>Monitoring and assessment</td>
<td>Dead lines</td>
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<tr>
<td>C.5.4. Easy access to medicine and treatment equipment</td>
<td>MoH, General Directorate of Primary Healthcare Services, SSI MoH, Department of Information Processing, TTS MoH, General Directorate of Primary Healthcare Services, SSI</td>
<td>1. To arrange the present data to determine the number of patients with COPD and asthma who are dependent on technology 2. To update the indications for reimbursement for the oxygen concentrator, NIMV and IMV for home use 3. To structure technology, service presentation models for patients who use the oxygen concentrator, NIMV and IMV for home 4. To register the data of the patients diagnosed with COPD or asthma that are dependent on technology on the information system of the family physicians 5. In the events the oxygen presentation system, NIMV, nebulizer, IMV for home use are prescribed the information should be inserted to the medulla system</td>
<td>1. To reach 70% of the technology dependent patients according to the specified follow-up models</td>
<td>1. The number of the centers that provide services according to the standardized follow-up models that are developed for the technology dependent patients 2. To register the number of patients who are dependent on technology diagnosed with COPD or asthma at first, second and third step of health institutions</td>
<td>1. Item: March, 2010 2. Item: November, 2010 3. Item: November, 2010 4. Item: April, 2010 5 April 2010</td>
</tr>
</tbody>
</table>
### Table 5. Integration of C5 (effective treatment of the diseases and prevention of complication development) (continued).

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Responsible parties</th>
<th>Activities</th>
<th>Performance criteria</th>
<th>Monitoring and assessment</th>
<th>Dead lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.5.5.</td>
<td>TTS, TSFP, TTS, MoH General Directorate of Health Education, General Directorate of Primary Healthcare Services, Department of Non-Communicable Diseases and Chronic Conditions (Respiratory System Diseases Unit)</td>
<td>1. To clearly define the transfer chain criteria between first, second and third step health institutions</td>
<td>To form guidelines where the transfer criteria are defined and to put them to practice</td>
<td>To reduce the mild and moderate case patients diagnosed with COPD or asthma indications to second and third step by 50%</td>
<td>1. and 2.: December 2010, 3: September 2010</td>
</tr>
</tbody>
</table>

1. To clearly define the transfer chain criteria between first, second and third step health institutions
2. To clearly define the transfer criteria for home patients diagnosed with COPD and asthma from the third and second step to the first step
3. To organize a workshop on home care services which includes the fields of third step for heavy chronic patient load

To form guidelines where the transfer criteria are defined and to put them to practice

To reduce the mild and moderate case patients diagnosed with COPD or asthma indications to second and third step by 50%

1. and 2.: December 2010

3: September 2010
Table 6. National programs which cooperated/integrated/communicated/planned for integration with C3 group.

- National Tobacco Control Program and Action Plan
- MoNE White Flag Healthy Schools Program
- National Pneumoconiosis Control Program
- MoH National Tuberculosis Control Program
- MoH National Control Program of Obesity and physical activity
- Turkish Healthy Cities Association
- MO Extended Immunization Program
- MO Prevention of voyage related legionnaire diseases program
- MO Prevention and control of childhood infection programs
- National Control Program of Cardiovascular Diseases
- National air quality monitoring network.

Table 7. Goals and strategies of C6 group.

C.6. Monitoring the chronic diseases and the control program evaluation

Goal 1. (C.6.1) Monitoring the disease burden and risk factors, developing standardized methods for obtaining proper data and collect data with these methods

Strategies:
- C.6.1.1. Collection and evaluation of current national and international data
- C.6.1.2. Collection of COPD and asthma specific prevalence and incidence data
- C.6.1.3. Defining the methods for obtaining reliable and comparable data
- C.6.1.4. Monitoring the disease burden by defined intervals
- C.6.1.5. Establishment of a unit for collecting, analyzing and reporting data within MoH

Goal 2. (C.6.2.) Monitoring, yearly evaluating and reporting of the program

Strategies:
- C.6.2.1. Defining the survey and outcomes of the program
- C.6.2.2. Preparing data collection/investigation protocols for routine use.
- C.6.2.3. Collection and evaluation of the data
- C.6.2.4 Preparing annual national report

Table 8. Goals and strategies of C2 group.

C.2. Advocacy and awareness

C.2.1. Defining the goals and principles of the program
C.2.2. Introducing the program to health professionals by these principles
C.2.3. Introducing the program to educational units by these principles
C.2.4. Introducing the program to public by these principles
REFERENCES


8. Turkish Ministry of Health Turkish Burden of Disease Study 2004, Ankara Turkey December 2006).


10. www.saglik.gov.tr/GARD