

Country report Austria – October 2016



Report by

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Health care | Risk factors | Prevention methods | Prevention activities | Cardiac rehabilitation | Future

I. Structure of Health care in Austria

Structure

“The Austrian health system provides universal coverage for a wide range of benefits and high-quality care. Free choice of providers and unrestricted access to all care levels (general practitioners, specialist physicians and hospitals) are characteristic features of the system.” (1) 273 hospitals with about 64.000 beds, 23.000 physicians and more than 85.000 other health care professionals are employed in hospitals. The density of physicians in Austria is with 4.7 physicians per 1000 inhabitants in 2011 above the European average. In 2014 there were 51 doctors for internal medicine per 100.000 inhabitants available (2).

In addition to the Austrian Parliament, the federal Ministry of Health as well as of Labour, Social Affairs, Consumer Protection, the social security institutions and advocacy groups also play a major role at federal level. The Austrian Health Care Structure Plan and the Regional Health Care Structure Plan are used as planning tools in the health sector. The social security system includes health, pension and pension insurance and consists of 22 institutions with the Main Association of Austrian Social Security (HVB). All the institutions work on the principles of being compulsory, solidary and self-governing. Although health insurance is compulsory, the affiliation to a health insurance depends on the profession of the insured and their place of work and can't be chosen by the employee (3).

As the costs of the health system were rising in the last years, the Austrian parliament defined ten core health targets. These core targets build the basis for a health care

reform. Prevention is one of the key factors of this reform and should play an important role in the future health care system, with the aim of being able to provide sufficient funding also in future (4). Nowadays the Austrian population is offered a variety of preventive services like the mother-child examination programme, annual health examinations of pupils, Army recruits and initiatives aimed at improving care for chronically ill persons. In 2014 a systematic and quality assured National Breast Cancer Screening Programme was launched. In addition to these initiatives a National Action Plan on Nutrition as well as on exercise and a national health promotion and prevention strategy has been implemented in order to make the Austrian population aware of the necessity to lead a healthy lifestyle (3). 37,5% of the population reported their health status as very good, 39,1% as good, 19,5% as average, 5% as bad and 1% very bad.

Finances

All the above mentioned preventative actions are covered by the health insurances. Also medication that is prescribed by a medical doctor is covered by the health insurances. The insured person has to pay a prescription fee only. Cardiac rehabilitation is also covered by the health insurances after written application and its approval. In 2014 Austria spent 33,794.94 Million Euros on health care (2).

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- 1) Europe PMC (<http://europepmc.org/abstract/med/24334772>)
- 2) Eurostat (<http://ec.europa.eu/eurostat>)
- 3) The Austrian Health Care System Key Facts updated Version 2013 – BMG (http://www.bmgf.gv.at/cms/home/attachments/3/4/4/CH1066/CMS1291414949078/austrian_health_care_key_facts_2013.pdf)
- 4) http://www.bmgf.gv.at/home/Gesundheit/Gesundheitsfoerderung_Praevention/Oeffentliche_Ausgaben_fuer_Gesundheitsfoerderung_und_Praevention_in_Oesterreich_2012
(German only)

II. Risk factor statistics

Although the incidence of myocardial infarction slightly decreased over the last ten years, cardiovascular diseases are still the leading cause of death. Risk factors play a major role in cardiovascular diseases. According to the Ministry of Health and Women (6) only approximately 20% of 11-15-year old school children can be considered to be sufficiently physically active. Also, only 25% of the adult population report to fulfil WHO and ESC recommendations, whereas 1/3 remains physically inactive." (5)

Also the number of smokers has continuously decreased over the last few decades, the percentage of Austrians who smoke regularly amounts to 23.3% of the population (1). This amount of smokers still exceeds the EU-15-average of 22.1%. Compared to other EU-countries, Austria has one of the highest percentages of young smokers. Smoking at least once a week at the age of 15 was reported in 29% of girls and 25% of boys. A worrying development is also seen in alcohol use in young people. In 2009/10 37% of 15 year old boys and 28% of the girls have drunk alcohol at least once a week (2). This adds up to about 16% of the Austrian population who show harmful levels of alcohol use or suffer from alcoholism (3).

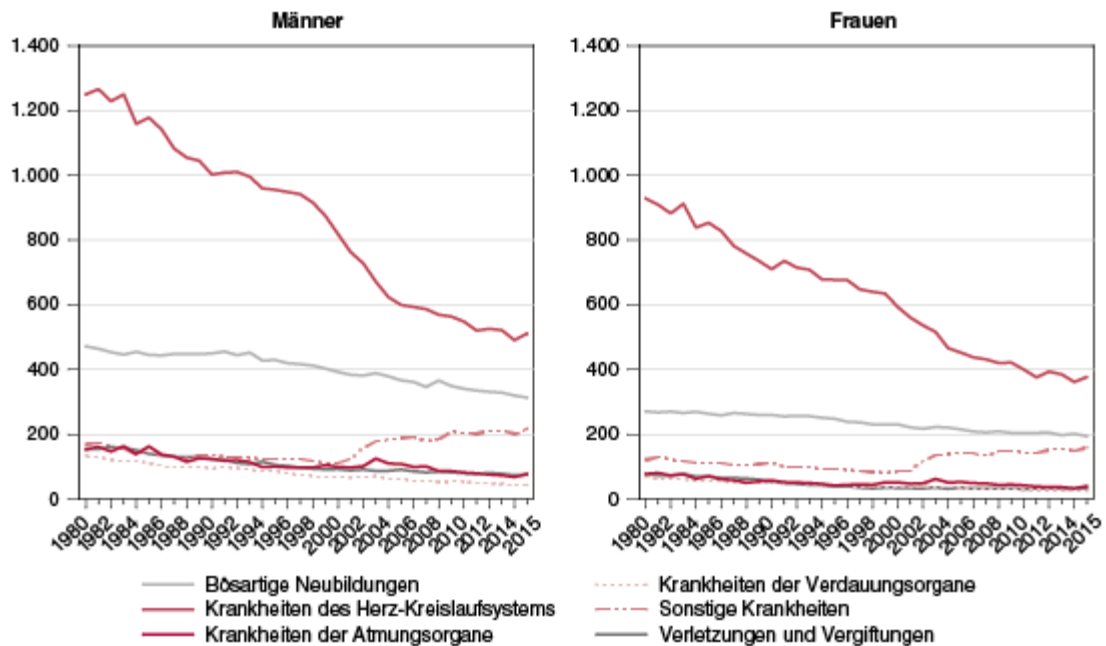
The typical diet of the Austrian population continues to contain too much fat, especially saturated fatty acid.

Diabetes Mellitus as a key risk factor for cardiovascular diseases was reported in 6% of the population in the Austrian health survey, whereas 68% of male and 74% female are at an age older than 65 years (4).

As a result of this unfavourable risk factor profile, 49.9% of the Austrian adult population have a BMI of ≥ 25 of which 32.6% are classified as overweight and 14.4% as obese (5).

The following figures and table are only available in German:

Sterblichkeit nach Todesursachen 1980-2015
(altersstandardisierte Sterbeziffern auf 100.000 Personen)



Q: STATISTIK AUSTRIA, Todesursachenstatistik. Erstellt am 06.07.2016. Ab 2009 Zeitreihenbruch durch verbesserte Vollzähligkeit (im Ausland Gestorbene).

Source:

http://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/gesundheit/todesursachen/todesursachen_im_ueberblick/index.html (figures)

TABELLE 4: KHK-RELEVANTE RISIKOFAKTOREN IN DEN BUNDESLÄNDERN LAUT AT-HIS 2006/07 IN PROZENT

BUNDESLAND	Mischkost mit viel Fleisch	Intensives Training/Leistungssport	Jogging, oder ähnliches mind. 1x/Woche	Rauchen	Übergewicht	Adipositas	Hypertonie	Erhöhter Cholesterinwert	Diabetes	Herzinfarkt
Burgenland	21,8%	5,3%	15,6%	24,7%	36,4%	18,1%	30,1%	17,3%	7,0%	3,0%
Kärnten	23,1%	5,5%	19,4%	20,6%	35,1%	9,9%	20,1%	12,9%	6,7%	1,8%
Niederösterreich	27,6%	5,7%	21,2%	20,0%	36,8%	16,0%	24,8%	15,8%	5,9%	2,6%
Oberösterreich	26,1%	7,7%	18,9%	21,5%	35,0%	14,9%	22,6%	13,4%	5,8%	1,7%
Salzburg	22,0%	10,1%	20,6%	23,9%	33,9%	9,3%	19,7%	10,7%	4,4%	2,2%
Steiermark	26,5%	7,4%	26,3%	19,4%	39,0%	10,1%	22,8%	13,2%	7,0%	2,7%
Tirol	25,6%	8,7%	15,9%	23,9%	30,8%	8,4%	19,1%	11,3%	4,3%	2,2%
Vorarlberg	26,8%	7,7%	13,8%	23,8%	30,5%	12,8%	19,5%	8,9%	4,6%	1,0%
Wien	26,4%	9,3%	13,3%	25,0%	34,8%	12,9%	22,5%	16,4%	7,8%	2,5%
ÖSTERREICH	25,7%	7,5%	19,3%	22,0%	35,2%	12,7%	22,6%	13,6%	6,0%	2,2%

Source:

<http://www.hauptverband.at/cdscontent/load?contentid=10008.566527&version=1391184725> (see page 67)
<http://www.goeg.at/de/GOEG-Aktuelles/Herz-Kreislauf-Erkrankungen-in-Oesterreich.html>

CVD Mortality

Per 100.000 inhabitants:

2011: Total 194; Men: 257,9; Women: 150,3

The percentage of 30 days survival after MI in 2011 is 92.3%.

Age groups are not available. (7)

PCI resources

Number of PCI centres per 1 million inhabitants:

34 PCI Centres, 282.751 people per PCI Centre, 23.044 PCIs/year, 2686 PCIs /million (8)

Table: Main CVD risk factors

Risk factor	% population	male [% population if not indicated differently]	female [% population if not indicated differently]
Smoking		26,7%	22,2
physical activity (HEPA-revommendation)	51%	52%	49%
HEPA and MSPA	25%	28%	22%
overweight BMI 25-30	32,6%	39,5%	25,8%
adiposity BMI > 30	14,4%	15,7%	13,1%
alcohol (hazardous consumption)	4%	5%	4%
alcohol (risky)	1,3	2,1%	0,5%
high blood lipids	13,6		
blood pressure [Hypertony] (2006)	22,6%		
Diabetes mellitus	6%		

source: <http://regis.goeg.at/> (in German only)

Klimont, J.; Baldaszti, E. (2015): Österreichische Gesundheitsbefragung 2014. Statistik Austria, Im Auftrag des Bundesministeriums für Gesundheit. Wien (9)

<http://www.hauptverband.at/cdscontent/load?contentid=10008.566527&version=1391184725> (in German only)

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- 4) Jahrbuch Gesundheitsstatistik 2014 Statistik Austria
- 5) https://www.gesundheit.gv.at/Portal.Node/ghp/public/content/Bewegungsverhalten_oest_erreich.html
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- 9) Klimont, J.; Baldaszi, E. (2015): Österreichische Gesundheitsbefragung 2014. Statistik Austria, Im Auftrag des Bundesministeriums für Gesundheit. Wien

III. Main actors and Prevention methods

The main actors in the Austrian health system varied in the last years, because of demographical and epidemiological developments. A health care plan helps the system to react on developments within the health care system and to guarantee medical coverage for the population. In this process the federal government, all states and all insurances are involved. "Gesundheit Österreich GmbH" (Health Austria Ltd.) works on the core concept of the system, which is revised on a regular basis (1).

Medical assistance is separated in outpatient and inpatient medical treatment. Outpatient medical assistance is mainly performed by general practitioners, medical specialists and dentists in their own local surgeries. Half of the general practitioners have contracts with insurances that cover the cost of the patients' treatment. But traditionally the Austrian health coverage is inpatient orientated. In 2010 26,1 Austrians out of 100 were discharged from hospitals. This is the highest number of discharges per 100 inhabitants in Europe. There are 273 hospitals including 70 Rehabilitation Centres, whereas 13 centres provide rehabilitation for cardiovascular diseases. In addition to the 13 inpatient cardiac rehabilitation centres there are 13 outpatient centres, mainly in the bigger cities of Austria. These centres are accredited by the AGAKAR (Austrian Work Group for Outpatient Cardiac Rehabilitation). They published in cooperation with the Austrian Society of Cardiology, national guidelines for outpatient cardiac rehabilitation which were updated in 2008. These guidelines help institutes all over Austria to work at the same standards. International guidelines are discussed and promoted at national conferences and published on the WebPages of the national medical associations.

In 2004 the federal government released a law with focus on quality standards in the health system. Patient safety was a primary target, to build up a quality control system all over Europe a further step (2). Unfortunately there exists no auditing system in cardiac rehabilitation. Only the AGAKAR institutes have a web based database, in which all patients are registered. Some inpatient centres use their own databases to document the improvement during the rehabilitation phase. But this is only for their own interest.

In 2012 the health care system spent 2,02 Billion Euro on prevention.

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1) Österreichischer Strukturplan Gesundheit; www.gesundheit.gv.at (in German only)

2)

https://www.gesundheit.gv.at/Portal.Node/ghp/public/content/QualitaetimGesundheitswesen_LN.html (in German only)

IV. Main Prevention activities

If we think of prevention in Austria, we think of the “Vorsorgeuntersuchung” (preventive medical examination). “Vorsorgeuntersuchung” started in 1974 and is one of the reasons of increased life expectancy in Austria since start of the intervention. Main objective is the avoidance of risk factors and or early detection of diseases, mainly cardiovascular and cancer. In addition to the increased life expectancy there is also a 45% reduction of stroke due to earlier detection of high blood pressure and also a 50% reduction of cervical cancer due to PAP-smear. Since 2014 there exists a national program on early detection of breast cancer. All women at the age of 40 are personally invited to the screening and it can be repeated after two years for free. At the age of 50 men and women can have a colon cancer screening on a yearly basis and a colonoscopy every ten years. Starting at the age of 30 prevention of periodontitis plays an important role in the preventive medical screening as periodontitis causes 70% of dental fail. All these screenings are offered by general practitioners, cardiologists and pulmonologists. The PAP-smear takes place at gynaecologist, mammography at the radiologists. All doctors have to have contracts with the insurance companies, which will then cover the costs of the screening (1).

In the Austrian Cardiovascular Disease Report which is published by the Ministry of Health all preventive strategies are summarised which focus on changes of lifestyle and promote nationwide roll out. Most of the interventions focus on nutrition (48) and exercise (32), eight out of 114 on cardiovascular diseases. There are also several nationwide projects that focus on prevention or aim at increasing physical activity. Links and contact to nationwide projects that focus on prevention:

- Fit Sport Austria: <http://www.fitsportaustria.at> (in German only); contact: office@fitsportaustria.at
- Klug und fit: <http://www.klugundfit.at> (in German only); contact: kuf@sbq.ac.at
- Die Bewegungsbox: <http://www.bewegungsbox.at> (in German only), contact: office@oedg.at
- Bewegung und Sport: <http://www.bewegung.ac.at> (in German only)
- Früh erkennen: www.frueh-erkennen.at (in German only), contact: serviceline@frueh-erkennen.at

In 2015 and 2016 the public focus in prevention is on children and adolescents. There are several projects on “equal health opportunities in children and adolescents” (2).

The FGÖ (Fonds for healthy Austria) initialises many projects as an organiser or financial sponsor. They run a databasa on advanced training courses for all health and prevention themes (3).

In addition to these project-based interventions there are also political strategies to prevent atherosclerosis as the main reason for cardiovascular diseases. There is the Strategy for Child- and Adolescent Health, Austrian Core Health Targets, national action

plan on nutrition, national exercise plan as well as the health promoting strategy and country core health targets.

Topics of cardiac rehabilitation increasingly become part of the Physiotherapists' and Sport Sciences' curricula in order to become experts for training and exercise. Prevention is meanwhile part of some nursing education curriculae but it is not being taught as separate subjects in medical schools or other health professions. The Austrian Working Group of Outpatient Cardiac Rehabilitation offers post-graduate training courses for physicians, sports scientist and physiotherapists to specialise in the field of cardiac rehabilitation.

Detailed information <http://www.fortbildung-kardio.at/informationen/> (in German only) and also within the guidelines: http://www.agakar.at/guidelines/oekg_guidelines.pdf (in German only)

The following table is only available in German:

Tabelle 6.8:

Übersicht der Maßnahmen, die bundesweit oder in mehreren Bundesländern umgesetzt werden

Name der Maßnahme / des Projektes	Reichweite	Art der Maßnahme	Interventionsebene	Themenfeld
Richtig essen von Anfang an! (REVAN)	bundesweit	Workshops/Schulungen Informationsmaterial	Verhalten	Ernährung
ENCARE – European Network for Children Affected by Risky Environments within the Family	bundesweit	Netzwerk	Verhältnisse	Gesundheitsförderung Suchtprävention (Alkohol)
Fit für Österreich (sportliche Anreize für mehr Lebensqualität)	bundesweit	Workshops/Schulungen Netzwerkarbeit	Verhältnisse	Bewegung
Hotline für Essstörungen	bundesweit	Beratung und Information	Verhalten	Ernährung (Essstörungen)
Rauchertelefon	bundesweit	Beratung und Coaching	Verhalten	(Nicht-)Rauchen
Rauchfrei per Mausclick	bundesweit	Onlinetool	Verhalten	(Nicht-)Rauchen
www.feel-ok.at – Rauchen – Alkohol – Gewicht – Bewegung – Ernährung – Stress	bundesweit	Onlinetool	Verhalten	Gesundheitskompetenz Sucht
http://www.1-2-free.at/	bundesweit	Onlinetool	Verhalten	Suchtprävention
Surf dich schlank mit KiloCoach	Burgenland, Oberösterreich	Beratung und Coaching	Verhalten	Übergewicht(sreduktion)
Gesunde Küche	Kärnten, Oberösterreich	Beratung Informationsmaterial Workshops und Schulungen	Verhalten und Verhältnisse	Ernährung
MbM – MitarbeiterInnen bewegen MitarbeiterInnen	Oberösterreich, Salzburg, Wien, Steiermark	Workshops/Schulungen	Verhalten und Verhältnisse	Bewegung
Schule bewegt gestalten	Tirol, Wien	Beratung und Coaching Informationsveranstaltung Informationsmaterial	Verhalten und Verhältnisse	Bewegung

Quelle und Darstellung: GÖG/ÖBIG

Source: <http://www.goeg.at/de/GOEG-Aktuelles/Herz-Kreislauf-Erkrankungen-in-Oesterreich.html> (Download available see page 56)

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https://www.gesundheit.gv.at/Portal.Node/ghp/public/content/Die_Vorsorgeuntersuchung_LN.html#headline11 (in German only)

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3) <https://weiterbildungsdatenbank.fgoe.org/> (in German only)

V. Cardiac rehabilitation

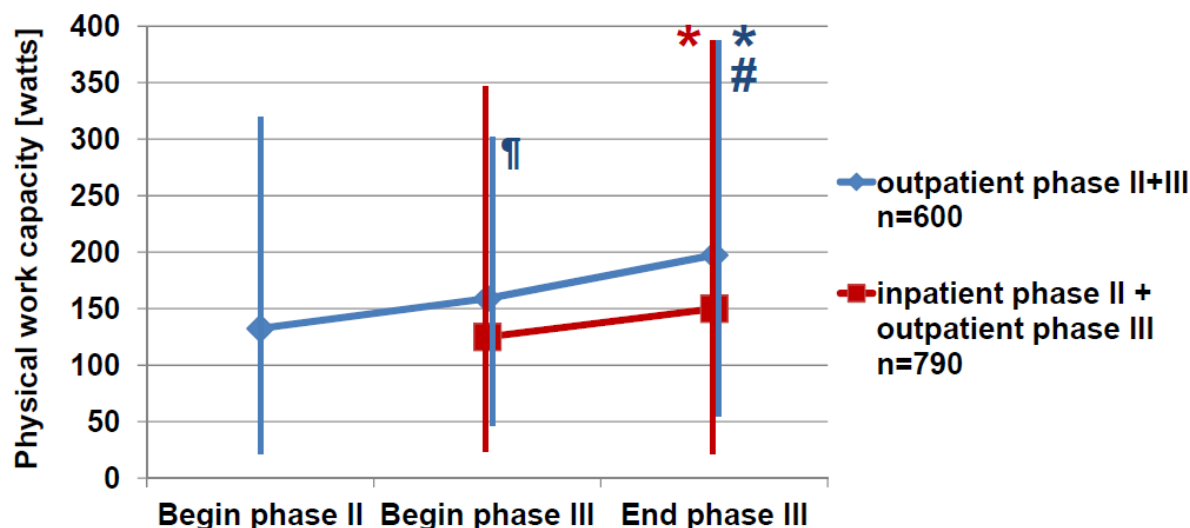
There are 13 rehabilitation facilities in Austria which provide inpatient cardiac rehabilitation (CR) phase II only and 11 facilities for outpatient CR offering phase II and III. There is no overview available for inpatient facilities who offer outpatient phase III CR. The number of private rehabilitation centres increased in the last few years. There are two outpatient CR centres that are being operated by the social insurance company, all the others are operated by private organisations. The trend of privately operated CR centres is also seen in inpatient facilities. Only a few years ago all rehabilitation centres were operated by the social insurances. Meanwhile almost half of the centres are operated by private organisations. No matter if the CR centre is private or public, many professionals cooperate within the CR centres, such as cardiologists, internal medicine specialists, sports medicine specialists, nurses, physiotherapists, occupational therapists, sport scientists, and others. As many professions work on cardiac patients, CR topics are part of the Physiotherapists and Sport science school programs. For example, sports scientists had the possibility to obtain a university certificate in rehabilitation.

Nowadays rehabilitation is part of the university curriculae. With the bachelor degree, sports scientists can enter the list of accredited sport scientists for rehabilitation at the ministry of health. Also the Austrian Working Group of Cardiac Rehabilitation (AGAKAR) offers a certificate for physiotherapists, general practitioners and sports scientists for outpatient cardiac rehabilitation. This guarantees a high quality standard within the different medical professions. Furthermore, in Austria there are both a National Cardiac Rehabilitation Program and National Cardiac Rehabilitation Guidelines in place. The above mentioned quality standards might be a reason for a very high adherence rate of 95% among the selected group of patients who actually enrolled in rehabilitation programs. Another reason for this high adherence rate could be the fact that only 30% of eligible patients for phase II truly start rehabilitation phase II, and only 20% of eligible phase III patients start phase III. (1)

Due to the lack of national rehabilitation databases no data are available of drop-outs. Only the outpatient centres that are accredited by the AGAKAR to be eligible for reimbursement are obliged to enter data of all patients into a web based database at enrolment into phase II, end of phase II/ beginning of phase III, and end of phase III. But there are some data available regarding the average length of hospitalisation, which is 8 days in the acute care. Between the event and the start of rehabilitation in hospital there are 36 days. Nearly 17.000 patients per year were referred to CR and the rehabilitation was performed in rehabilitation centers for inpatients and outpatient clinics. In 2014 there was a strong prevalence of inpatients CR (94%) vs. outpatients (6%). In outpatient centers there are no costs for patients, in inpatient they have to contribute to food and the overnight stay, depending on their income.

Outpatient cardiac rehabilitation facilities are rather in urban areas, whereas inpatient facilities are in rural areas. It is not uncommon that inpatient cardiac rehabilitation centres are the main employers in rural areas.

Figure 1:
Physical work capacity during
outpatient cardiac rehabilitation phase II and III



¶ Begin phase II vs. Begin phase III: $p < 0.001$
 # Begin phase II vs. End phase III: $p < 0.001$
 * Begin phase III vs. End phase III: $p < 0.001$

Figure 1: Physical work capacity during outpatient cardiac rehabilitation phase II and III. Niebauer et al. 2014 (2)

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VI. The Future

“One of the key weaknesses of the health-care system lies in the prevention of diseases. Spending on preventive medicine, i.e. 2% of total health spending, is significantly lower than the EU15 and OECD average (both 3%), and also shows a below-average rate of growth. It remains to be seen whether the focus on health promotion and prevention of the 'framework health goals' approved in 2012 will be translated into concrete measures, whether clear responsibilities for implementation can be assigned, and whether sufficient funding will be made available. This would be likely to improve the health of the Austrian population and would help to reduce costs associated with preventable diseases.” (1)

Even though cardiac rehabilitation is a class IA indication, cardiologists continue to be reluctant in prescribing it. Even inpatient centres often do not send their patients to outpatient centres for phase III rehabilitation. And if they do so, it is almost impossible to get outpatient cardiac rehabilitation, as there are too few centres and in addition all of them are located in major cities. Also, patients are not aware of their eligibility for rehabilitation. The application process itself is also often seen as an obstacle, because it is quite complicated and needs several interventions whether from the patient or the doctor before the insurance company eventually agrees. If all the centres as well as the social insurance companies would promote cardiac rehabilitation, referral rates would be much higher. Promotion should not only be directed to the patients but especially to cardiologists and general practitioners who prescribe cardiac rehabilitation. If we focus on prevention, it is only recommendations that can be given, with no consequences if nothing changes. The benefit should be communicated more clearly to the patient or even a reward system should be implemented if lifestyle changes occur.

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