FEBRUARY 2019

DIRECTIE VOLKSGEZONDHEID

National Health Account Aruba

2015

AN OVERVIEW OF [illegible] CARE FINANCING

This report is also available digitally through the Department of Public Health.
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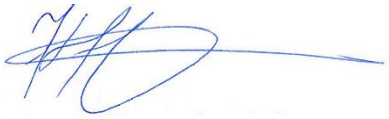
Foreword

Worldwide, health systems confront changes in demographic factors, changes in lifestyle factors and changes in morbidity and mortality. In addition, the healthcare sector also has to deal with an acceleration of technological developments and increasing scarcity on the labour market. All this results in raising costs that will increase uncontrollably to extreme amounts, if the necessary attention is not given. Aruba is no different from other countries and currently, in 2019, has to deal with a multitude of challenges in the healthcare sector. Creating a system in which the quality of care is optimal in terms of effectiveness, efficiency and patient/client orientation, and where there is accessible care and financial durability, is a continuous challenge.

The System of Health Accounts (SHA) is a system developed by the World Health Organisation (WHO) and the Organisation for Economic Co-operation and Development (OECD) that provides insight into important data on how money flows in the healthcare system. Aruba has once again embraced this system in 2016, resulting in this report, the National Health Account (NHA) 2015.

This report is written by Mr. Chris Goedhart, policy officer of the Department of Public Health Aruba (DPH) and was not possible without the cooperation of various partners, including the General Health Insurance, the Central Bureau for Statistics, the Finance Department, the Instituto Medical San Nicolas and various non-governmental organizations including the Dr. Horacio E. Oduber Hospital. Appreciation goes to all these organisations and people who have made their data available.

I hope you enjoy your reading.



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Aruba, February 2019

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MOST IMPORTANT RESULTS

The most important results of the National Health Account Aruba 2015 are shown below.

General indicators		
Total population	110,108	
Life expectancy at birth (2010)	77 years	
Exchange rate	1.79 (Afl./US$)	0.56 (US$/Afl.)
GDP	Afl. 4,820 million	US$2,693 million
Total current health expenditure	Afl. 479,663,000	US$267,986,000
GDP per capita	Afl. 44,100	US$24,600
Total healthcare costs per capita	Afl. 4,356	US$2,434
Total healthcare cost as % GDP	10.0%	
Total general government expenditure as % GDP	9.6%	

Which healthcare providers deliver healthcare goods and services?		
	x US$1,000	*% TCHE*
Hospital (Dr. Horacio E. Oduber Hospitaal)	101,826	38.0%
Pharmacies (Botica's)	30,349	11.3%
Foreign healthcare providers	19,633	7.3%
Long-term nursing care facilities	13,794	5.1%
ImSan	12,215	4.6%
Offices of general medical practitioners	10,779	4.0%
Medical and diagnostic laboratories	11,753	4.4%
Other providers	67,619	25.2%

What kinds of healthcare goods and services are consumed?		
	x US$1,000	*% TCHE*
Curative care	133,007	49.6%
Medical goods (including pharmaceuticals)	35,396	14.5%
Long-term care	35,625	13.2%
Ancillary services (including laboratory and patient transportation)	20,515	7.7%
Preventive care	10,168	3.8%
Other healthcare services	30,076	11.2%

Which financing scheme pays for these goods and services?		
	x US$1,000	*% TCHE*
UO AZV (national health insurance agency)	203,197	75.8%
Government	54,255	20.3%
Households (out-of-pocket payments)	9,307	3.5%
Commercial insurance companies and corporations	1,209	0.4%

RESUME

Objective

The National Health Account of Aruba, as an instrument, aims to monitor and assess the healthcare system of Aruba by providing insight into important data about money flows. The following three main questions are addressed: *What kind of health products and services are used? Which healthcare providers offer these products and services? Which financing arrangement pays for these products and services?*

Methodology

For the compilation of this document, the method "System of Health Accounts" (SHA) 2011 of the WHO and the OECD is applied. The definition of healthcare costs used is: *"all activities with the primary purpose of improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge"*. The costs only apply to persons living in Aruba, costs of tourists are not taken into account.

Data was collected in the period from 2016 - 2018, concerning the year 2015 by using sources from various stakeholders, including the General Health Insurance (UO AZV), the Central Bureau for Statistics, the Department of Finance and healthcare institutions including the Dr. Hocacio E. Oduber Hospital (HOH), Instituto Medico San Nicolas (ImSan) and various non-governmental organisations.

Healthcare costs

The total costs of healthcare in Aruba for the year 2015, based on the NHA, are calculated to be Afl. 479,663,000 (US$267,986,000). Converted this means an amount of Afl. 4,356 ($2,434) per capita.

The answer to the first main question, which is: "*What kind of health products and services are used?*", is as follows. Almost half of the healthcare costs (49.6%) are incurred in the context of curative care. From this, about half (46.4%) of costs relate to specialised inpatient curative care. Part of the costs of curative care that are incurred in the HOH also concern costs for medical goods and ancillary services. The costs for ancillary services and medical goods, including pharmaceuticals and therapeutic appliances that are not provided in the hospital, account for 7.7% and 14.5% respectively on the total costs of healthcare. A fourth component is long-term care, which is responsible for 13.2% of the total healthcare costs. 3.8% of the total healthcare costs relate to preventive care.

The answer to the second main question, which is: *"Which care providers offer these products and services?",* is as follows. The HOH is responsible for 38.0% of healthcare costs. These healthcare costs are higher than could be expected compared to the information from the HOH annual report. This is because within the system of the NHA, most of the independent medical specialists and their costs are considered part of the hospital. The providers of ambulatory care, including general practitioners, ImSan, independent paramedical professionals and the white and yellow cross foundation represent together 14.4% of the healthcare costs.

The answer to the third main question, which is: *"Which financing arrangement pays for these products and services?",* is as follows. Government regulations, of which the national health insurance agency (UO AZV) also forms part, are responsible for 96.1% of the financing of care in Aruba. The UO AZV finances 75.8%, versus 20.3% , which is financed through the government budget. Private payments account for 3.5% of the financing.

International comparison and share of GDP

When Aruba is compared with other countries in the Caribbean and Central and South America, with exclusion of some overseas territories, it can be seen that, after Curaçao, Aruba is in second place with regard to the highest cost of healthcare per capita ($2,434). This is equivalent to three times higher costs compared to the regional average ($711). This can partly be explained because the Gross Domestic Product (GDP) per capita of Aruba is one of the highest in the region. Internationally, there is a positive linear relationship between the level of GDP per capita and

the percentage of GDP that relates to health. The higher the GDP per capita, the higher the share of healthcare costs. With a percentage of 10.0% of GDP on healthcare costs, Aruba also scores the second highest place in the ranking for countries in the region in 2015. If Aruba is compared with other countries that have a so-called 'high-income economy', Aruba scores around the average of $2,811 in terms of healthcare costs per capita. The share of healthcare costs compared to the GDP is on average 7.8% for these countries. Aruba has a share of *public* healthcare costs as part of the GDP of 9.6%, the third highest place in the world in 2015.

The level of private contributions from households and the share of other financing schemes say something about the level of financial hardship that exist to gain access to the healthcare system. The amount of the individual contributions per capita on Aruba is with $85 per year one of the lowest in the region. Also compared with countries with a high-income economy, Aruba has relatively low out-of-pocket contributions.

Comparison of healthcare costs with the Netherlands and Curaçao

If the distribution of the total healthcare costs by type of healthcare *provider* is compared with the Netherlands, it is remarkable that in the Netherlands relatively more is spent on residential facilities of long-term care, 25.8% of total healthcare costs, compared to 6.5% on Aruba. This is also reflected in the breakdown by type of healthcare *functions*, with relatively less money being spent on long-term healthcare in Aruba (13.3%) compared to the Netherlands (25.8%). The healthcare costs for providers of ancillary services, including laboratories, are higher in Aruba (4.7%) than in the Netherlands (1.5%). Looking at the type of services, Aruba spends relatively more money (7.7%) to ancillary services, including laboratory services, imaging services and patient transport, compared to Curaçao (6.1%) and the Netherlands (1.9%). The fact that, in view of the size, the Netherlands has more (specialist) care provision, explains why the share of costs for healthcare providers abroad is much higher for Aruba (7.3%) than for the Netherlands (0.8%). The costs for the healthcare system and financial administration in Aruba are relatively high (7.1%) compared to the Netherlands (4.1%), but comparable to Curaçao (7.5%).

Life expectancy and healthcare costs

There is a positive correlation between the amount per capita spent on healthcare in a country and life expectancy at birth. Except for Curaçao, Aruba has the highest costs in the region ($2,434) and one of the highest life expectancy (77 years). In comparison with countries with a high-income economy, Aruba is not far below the average of 79 years and $2,811 healthcare costs per capita. Of those countries which have a high-income economy and spend less money per capita than Aruba, about 2/5 of them have a higher life expectancy, 2/5 a lower life expectancy and 1/5 share a similar life expectancy at birth.

Discussion

The proper assessment of the costs of care of out-of-pocket payments remains a challenge. For following NHA's, it is important to have established data collection strategies that will result in better data regarding this financing mechanism. Future NHA's will make it possible to produce trends in healthcare costs. The implications of the NHA have not been discussed in this report and must be held by various stakeholders and in different contexts, if the NHA actually wants to have a positive impact on the healthcare system of Aruba.

ACRONYMS

CARPHA	Caribbean Public Health Agency
CBS	Central Bureau for Statistics
CDC	Centre for Disease Control and Prevention (USA)
DPH	Department of Public Health Aruba (Directie Volksgezondheid)
ECDC	European Centre for Disease Prevention and Control
FA	Financing agent(s)
F.A.D.A.	Foundation Anti-Drugs Aruba (Stichting Fundacion Anti Droga Aruba)
FS	Revenues of healthcare financing schemes
GP	General physician or family doctor
GDP	Gross Domestic Product
GGHE-D	Domestic General Government Health Expenditure
HC	Healthcare function(s)
HF	Healthcare financing scheme(s)
HOH	Dr. Horacio E. Oduber Hospital
HP	Healthcare provider(s)
ICD-10	International Classification of Diseases, 10th version
ICHA	International Classification for Health Accounts
ImSan	Instituto Medico San Nicolas
MinPES	Ministry of Public Health, Elderly Care and Sport (former)
MinTVS	Ministry of Tourism, Public Health and Sport
NPISH	Non-Profit Institutions Serving Households
NHA	National Health Account
OECD	Organisation for Economic Co-operation and Development
OOPP	Out-of-pocket-payments
PAHO	Pan American Health Organization
RIVM	National Institute for Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu)
S.A.B.A.	Foundation General Elderly Care Aruba (Stichting Algemene Bejaardenzorg Aruba)
SHA	System of Health Accounts
TCHE	Total current health expenditure
UO AZV	General Healthcare Insurance Agency (Uitvoeringsorgaan Algemene Ziektekosten Verzekering)
WHO	World Health Organisation
W.G.K.	White and Yellow Cross foundation (Stichting voor de Volkshygiëne van het Wit Gele Kruis Aruba)

ABOUT THE DEPARTMENT OF PUBLIC HEALTH ARUBA

The Department of Public Health Aruba (DPH) is a public organisation under the jurisdiction of the Minister of Public Health and focuses on the promotion of public health in general[1]. The DPH's vision is *"A healthy community with a sense of responsibility for its own health"* and the mission is: *"Promoting physical, mental and social health, preventing illness, injury and disability and ensuring the essential preconditions for creating an environment in which the entire society of Aruba can lead a healthy life"*[2].

The DPH sees the following as its objectives:

- the prevention of epidemics and the spread of diseases;
- promoting healthy behaviour;
- ensuring the quality and accessibility of healthcare;
- protecting health against environmental risks;
- limiting the impact of disasters on the community.

In addition, the following as its core tasks:

- monitoring the health status;
- monitoring, diagnosing and investigating health risks;
- health promotion;
- mobilising partners in the community;
- formulation of policy;
- compliance with laws and regulations;
- ensuring accessibility to necessary health facilities;
- ensuring competence in personnel;
- making evaluations;
- conducting research;
- responding to disasters and assisting the population in the recovery.

The activities of the DPH are subdivided into seven divisions that are, the Youth Health Service (JGZ), the Youth Dental Care Service (JTZ), the Infectious Diseases Service (D.B.Z.), the Social Psychiatric Service (S.P.D.), Vector Control (G.K.M.B.), the Veterinary Service and the Department of Goods and Hygiene (D.W.H.). In addition, the DPH has five units that are, the Policy Unit, the Unit of Epidemiology and Research, the Unit of Elderly Care, the Health Promotion Unit and Medical Advice Unit.

[1] Centraal Wettenregister. *Gezondheidsverordening – Health Ordinance (1989) expired.* Article 1.
[2] Department of Public Health Aruba. (2016). *Strategisch plan Directie Volksgezondheid – Strategic Plan DPH.*

1 INTRODUCTION

1.1 ARUBA

Aruba is an island and a country within the Kingdom of the Netherlands, located in the Caribbean Sea and has a land area of 180 km^2. By the end of 2015, 110,108 people were registered in the population register of Aruba[3]. The official currency is the Aruban Florin (Afl. or AWG), which has a fixed exchange rate against the US dollar: US$1.00 = Afl. 1.79.

The gross domestic product (GDP) of Aruba is US$2,693 million (Afl. 4,820 million) and the nominal GDP per capita US$24,600 (Afl. 44,100)[4]. According to the World Bank, economically speaking, Aruba belongs to the so-called 'high-income economies'[5]. Calculations show that the economy is for 88% directly and indirectly dependent on the travel and tourism sector[6]. In 2014, Aruba welcomed 1,072,082 visitors[7]. The growth of the world economy, and specifically the economies of countries where tourists come from, influences the economic development of Aruba. Aruba faces a number of challenges to strengthen the economy within the tourism sector, to develop other sectors and to improve public finances. The development of the healthcare system and the continuity of its financing are closely related to this.

1.2 THE HEALTH OF THE ARUBAN POPULATION

The 'Health Monitor Aruba' from 2013 provides insight into figures regarding the physical and mental health and the lifestyle of the Aruban population. Life expectancy (in 2010) at birth is 76.9 years, for women 79.8 years and men 73.9 years[8]. The main causes of death (period 2000 - 2010) are diseases of the cardiovascular system and cancer, respectively responsible for 33% and 25% of all causes of death according to ICD-10 coding. Chronic non-communicable diseases are collectively responsible for 84% of the causes of death[9]. External causes, including traffic accidents, suicides, drownings and murders, however, are responsible for the majority of so-called 'potential years of life lost'.

The Aruban population suffers from alarming health risks due to lifestyle factors, such as very unhealthy dietary patterns, low physical activity and excessive alcohol consumption[16]. Overweight is a specific problem on Aruba. Of the children in kindergarten, 18% of the boys and 26% of the girls are overweight. Of the children in 5th grade of primary school, this is respectively 42% and 43% in the period 2007-2010. For adults, 36% are overweight and 41% are obese[10]. High blood pressure occurs in 49% of men and 28% of women. With regard to cholesterol, 43% of men and 41% of women suffer from elevated values[11]. These lifestyle factors, in combination with, among other things, advances in medical technology and economic growth, will increase the pressure on the financing of healthcare in Aruba.

[3] Central Bureau for Statistics Aruba. (2016). *Quarterly Demographic Bulleting, 4th Quarter 2015.*
[4] Central Bank of Aruba. (2017). *Annual statistical digest 2016.* p. XII.
[5] The World Bank. (2016). *Data: Country and Lending Groups*. Retrieved June 2, 2016, from: http://data.worldbank.org/about/country-and-lending-groups.
[6] World Travel & Tourism Council. (2015). *Travel & Tourism: economic impact 2015 Aruba.*
[7] CBS, Aruba Tourism Authority. (2016). *Stayover Visitors per County/Region: 1986-2014.*
[8] Ministry of Public Health and Sport. (2013). *Health Monitor Aruba 2013.*
[9] Central Bureau for Statistics Aruba. (2006). *STEPS Aruba 2006: Risky Living, An analysis of the risk factors underlying the main chronic diseases in Aruba.*
[10] Ministry of Public Health and Sport. (2013). *Health Monitor Aruba 2013.* p. 85-88.
[11] Central Bureau for Statistics Aruba. (2006). *STEPS Aruba 2006: Risky Living, An analysis of the risk factors underlying the main chronic diseases in Aruba. p. 74.*

1.3 THE HEALTHCARE SYSTEM OF ARUBA

Health systems worldwide are generally divided into two main categories: the National Health Service model and the Social Security model, from the founders Beveridge and Bismarck respectively. The model of Aruba, in which characteristics of both models are explicitly present, can best be categorised as a third defined model, the model of National Health Insurance. The majority of care in Aruba is financed by public funds, collected via social premiums from employees and employers and from taxes, which for a big part are managed by the 'Uitvoeringsorgaan Algemene Ziektekosten Verzekering' (UO AZV), the General Health Insurance. Every registered resident of Aruba is covered by this health insurance[12]. The UO AZV uses these funds to finance non-governmental organizations (NGO's) that mainly work in the curative care sector (first and second line of care).

The Ministry of Tourism, Public Health and Sport (MinTVS) and the Ministry of Social Affairs and Labour (MinSZA) fund government departments and some foundations within the healthcare sector. These organisations are mainly active in the preventive care for the entire population and specific target groups (including youth and older people), and in ambulatory and residential long-term care, care for people with a disability and ambulatory mental healthcare. Out-of-pocket payments and private health insurance policies play a very small role in the financing of healthcare in Aruba. Given the small scale of Aruba, sending patients for top clinical treatments (third-line of care) abroad is common.

The following paragraphs give a brief description of the healthcare delivery system of Aruba, at present time, within the three echelons of care: preventive care, curative care and the (long-term) care sector. In addition, a list of other stakeholders in het sector is given. Figure 1 provides an overview of the healthcare system in Aruba. Appendix 1 provides a brief description of the healthcare system according to the NHA methodology.

1.3.1 Preventive care

Preventive care in Aruba focusses on primary prevention by stimulating a healthy lifestyle within various target groups (concerning sufficient exercise, healthy diet, limiting smoking, alcohol and drug abuse). This happens, for example, through national campaigns, through occupational health services at work and increasingly in schools. Some components within specifically the youth healthcare focus on prevention, including the vaccination program. Breast cancer research the only population based screening on Aruba. The further strengthening of prevention programs is an important topic of debate within the healthcare sector in Aruba.

1.3.2 Curative care

Within the insurance package of the AZV, the following types of care, among others, are covered: care provision of family doctors/general physicians (GP's), care of medical specialists, obstetric care, admission, nursing and care in hospitals, medicines, physiotherapy and speech and language therapy within certain conditions, limited dental and oral hygiene care, ambulance transportation and medical goods and support services. The UO AZV has an additional package for government employees and pensioners. Citizens, either individually or via employers, can opt for additional insurance with commercial insurance companies for, for example, more extensive dental care, glasses and contact lenses and care during a stay abroad.

In Aruba, the GP performs a gatekeeper function from primary care to medical specialist care in the so called "second line of care". As far as the larger care facilities are concerned, Aruba has one hospital with a wide range of medical specializations[13] and one medical center where ambulatory care and outpatient treatments take place[14]. The medical specialists are either employed or self-employed. At the end of 2015, 181 medical doctors were employed, of which 43 general practitioner's and 77 other specialists, 48 dentists and orthodontists, 18 pharmacists, 40

[12] Centraal Wettenregister. *Landsverordening algemene ziektekostenverzekering – General health insurance ordinance*. AB 1992. no.18. Article 3.
[13] Dr. Horacio E. Oduber Hospitaal. *About HOH*. Retrieved June 9, 2016, from: http://www.arubahospital.com/.
[14] Instituto Medico San Nicolaas. Retrieved June 9, 2016, from: http://www.imsan.aw/.

physiotherapists, 30 psychologists/psychotherapists and 8 midwives[15]. In addition, five medical laboratories are established.

1.3.3 Long-term care

Aruba has various facilities for people with long-term care needs. In addition to the largest, and only government-subsidised, provider of nursing care for the elderly, there are various smaller private providers of nursing facilities and retirement homes. One NGO engages in outpatient care, part of community care, and providing help in the household. A number of foundations are active in providing day care, assistance and care for people with a physical or mental disability and combating addiction problems.

1.3.4 Other organisations

In addition to healthcare providers (in prevention, cure and care) and the UO AZV, various bodies have a role in the healthcare system of Aruba. The MinTVS is responsible for matters relating to public health, social insurance, the national healthcare insurance package, and care for the elderly and sports[16]. The Tax Administration (Departamento di Impuesto) is responsible for collecting social security contributions and other taxes for financing healthcare. As a governmental department, the DPH is the authority in the field of public health and is involved, among other things, in drafting and implementing health legislations and policies. The Department of Epidemiology and Research within the DPH is specifically responsible for mapping and evaluating the health situation of the population and the health determinants.

At this moment, there are several new laws that are gradually being implemented. Aruba has a Public Health Inspectorate (Inspectie Volksgezondheid Aruba: IVA). As being a small island, Aruba regularly uses knowledge and expertise from international organizations such as the WHO, PAHO, CARPHA, ECDC, the American CDC and agencies in the Netherlands such as the RIVM (National Institute for Public Health and the Environment: RIVM) and the Dutch Ministry of Health, Welfare and Sport. Aruba has a couple of associations in which healthcare professionals, including (self-) employed medical specialists and GPs participate.

[15] Central Bureau for Statistics Aruba. (2017). *Statistical Yearbook 2015*. p. 25.

[16] Centraal Wettenregister. *Landsverordening instelling ministeries – Ordinance Establishment of ministries 2014.* Article 7. No. 94.

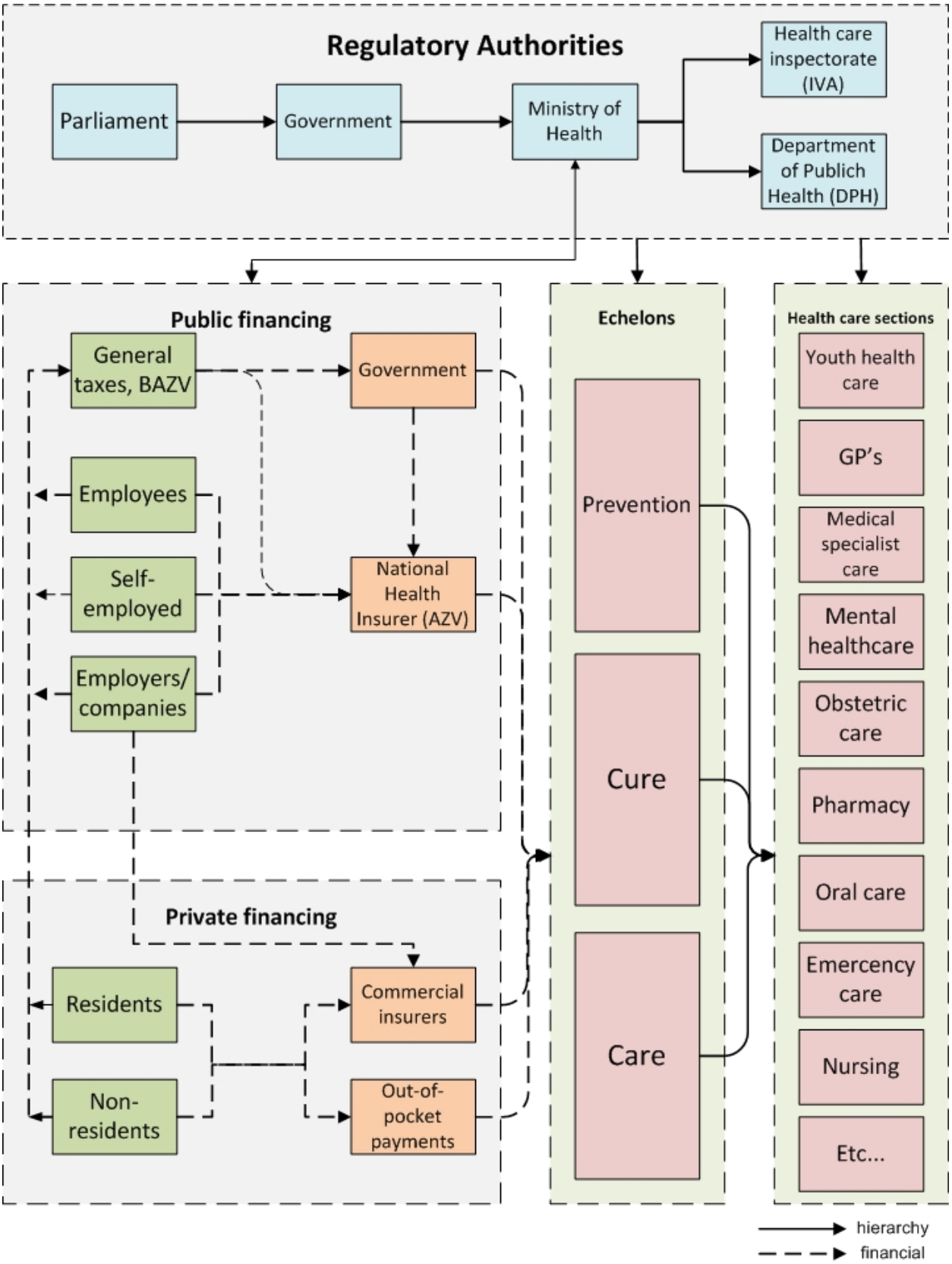

Figure 1: Overview healthcare system of Aruba

1.4 OBJECTIVE

The National Health Account of Aruba, as an instrument, aims to monitor and assess the healthcare system of Aruba by providing insight into important data about money flows.

The following three main questions are addressed:

- *What kind of health products and services are used?*
- *Which healthcare providers offer these products and services?*
- *Which financing arrangement pays for these products and services?*

2 METHODOLOGY

2.1 DATA COLLECTION AND DATA PROCESSING

Data was collected by using sources from different stakeholders. As far as possible, data supplied by organisations themselves was used. For healthcare organisations funded by the UO AZV, the AZV database was consulted, with the exception of the HOH and ImSan. This concerned a data export of the year 2015, with as export date September 2016. Transport and accommodation costs of companions of AZV insured patients, which leave for medical treatment abroad, are also included in the NHA. Data related to the costs of the government of Aruba with regard to the Ministry of Health was received at the end of 2016 from the Finance Department. For information from other ministries, data was used on costs of the year 2015, mentioned in the national budget for 2017. Financial data from the DPH, including the elderly care service, was also collected. Annual accounts of NGOs, other than organizations financed by the AZV, were requested in the period 2016 - 2017. Various meetings were held with the administrative information provision department (BIV) of the HOH, during which data was collected from the HOH, translated into the systematic approach of the NHA and has been analyzed. Data from the financial statements of ImSan have been used. Provisional data from the "Income and Expenditure Survey" of 2017, carried out by the Central Bureau of Statistics, has been used to estimate citizens' out-of-pocket payments. Finally, the association of private insurers has also been approached for data.

The NHA assumes healthcare costs, not to be confused with expenses, incurred in a certain calendar year. An important element of the NHA is that the healthcare costs of healthcare providers must be equal to the income of the financing agents in order to produce cross tables correctly. When producing the cross tables, the total costs of the healthcare providers are therefore equal to the total expenses of the financing agents. If necessary, the expenses of the financing agents are adjusted accordingly. The result is that the actual absolute costs of financing agents or the financing schemes can deviate from the costs specified by the relevant organizations.

For the international comparison of data from Aruba with other countries, data was used from the WHO, specifically the "Global Health Expenditure Database[17]". As this database contains no information from Curaçao. The basis for the comparison with this country is the document "Zorgrekeningen Curaçao 2012-2014[18]". For data from the Central Bureau of Statistics Netherlands, the online database of the CBS, StatLine[19], was used to compare Aruba with the Netherlands.

2.2 TABLES NHA

The lists of costs of healthcare providers (HP), healthcare functions (HC), healthcare financing schemes (HF) and the financing agents (FA) are produced for the year 2015. These tables contain the total expenditures, but also the expenditures per capita. In addition, a number of cross tables are produced that provide insight into the financial relationships between the mentioned concepts. These are:

Table #	Table name	Abbreviation	Page
7-8	Healthcare providers by financing agent	HP x FA	32-33
9-10	Healthcare functions by financing agent	HC x FA	34-35
11	Healthcare provider by healthcare function and financing agent	HP x HC x FA	36-37
12-13	Healthcare function by healthcare provider	HC x HP	38-39
14-15	Healthcare financing scheme by financing agent	HF x FA	40-41

[17] WHO. *Global Health Expenditure Database.* Retrieved from: http://apps.who.int/nha/database/Select/Indicators/en

[18] Ministry of Health, Environment and Nature. (2017). *Zorgrekeningen Curaçao – Healthcare accounts Curaçao 2012 – 2014.*

[19] CBS. *CBS Open data Statline*. Retrieved July 8, 2018, from: https://opendata.cbs.nl/statline/portal.html?_la=nl&_catalog=CBS

The three main questions are addressed by the following (cross) tables:

Table #	Main question	Table	Page
3-4	What kind of health products and services are used?	HC	32,33
1-2, 12-13	Which healthcare providers offer these products and services?	HP and HC x HP	23-24, 38-39
9-10, 11	Which financing arrangement pays for these products and services?	HC x FA and HP x HC x FA	34-35, 36-37

The expenditures from the concept of the revenues of healthcare financing schemes (FS) has been excluded of the NHA. The distribution of costs of the healthcare providers (HP), healthcare functions (HC), healthcare financing schemes (HF) of Aruba have also been compared with Curaçao and The Netherlands. In addition, the following cross tables have been produced:

Table #	Table name	Comparison	Abbreviation	Page
22	Healthcare function by healthcare provider	Aruba with The Netherlands	HC x HP	73
23	Healthcare provider by healthcare financing scheme	Aruba with The Netherlands	HP X HF	74
24	Healthcare function by healthcare financing scheme	Aruba with The Netherlands and Curaçao	HC x HF	75

3 RESULTS NHA TABLES

3.1 HEALTHCARE PROVIDERS

3.1.1 Expenditures by type of healthcare provider

Table 1 shows the total healthcare expenditures for 2015, distributed according to the *type of healthcare provider* (HP). The total healthcare costs in Aruba are US$267,968,000. The total healthcare costs per capita[20] are $2,434. The largest part is made by the HOH, accounting for a little over one third (38.0%), followed by costs of ambulatory care providers (14.4%) including general practitioners, ImSan, independent paramedical professionals and the W.G.K foundation. Providers of preventive care, being the DPH and foundation F.A.D.A., represent the smallest part of costs (2.5%).

Table 1: Expenditures by type of healthcare provider (HP)

Code	Type healthcare provider	Expenditure x $1,000	Expenditure per capita in $	Part
HP.1	Hospitals (HOH)[21]	101,826	925	38.0%
HP.2	Residential long-term care facilities	17,468	159	6.5%
HP.3	Providers of ambulatory care	38,717	352	14.4%
HP.4	Providers of ancillary services	12,472	113	4.7%
HP.5	Retailers and other providers of medical goods	34,327	312	12.8%
HP.6	Providers of preventive care	6,821	62	2.5%
HP.7	Providers of healthcare system administration and financing	26,794	243	10.0%
HP.8	Rest of economy	7,875	72	2.9%
HP.9	Rest of the world	19,633	178	7.3%
HP.0	Healthcare providers not able to classify	2,034	18	0.8%
	Total	**267,968**	**2,434**	**100%**

[20] 110,108 persons. Central Bureau for Statistics Aruba. (2016). *Quarterly Demographic Bulleting, 4th Quarter 2015.*
[21] Including $11.0 million (10.8%) regarding independent medical specialists who mainly work in the HOH.

Figure 2 shows the distribution of the total healthcare costs for the year 2015 by type of healthcare provider.

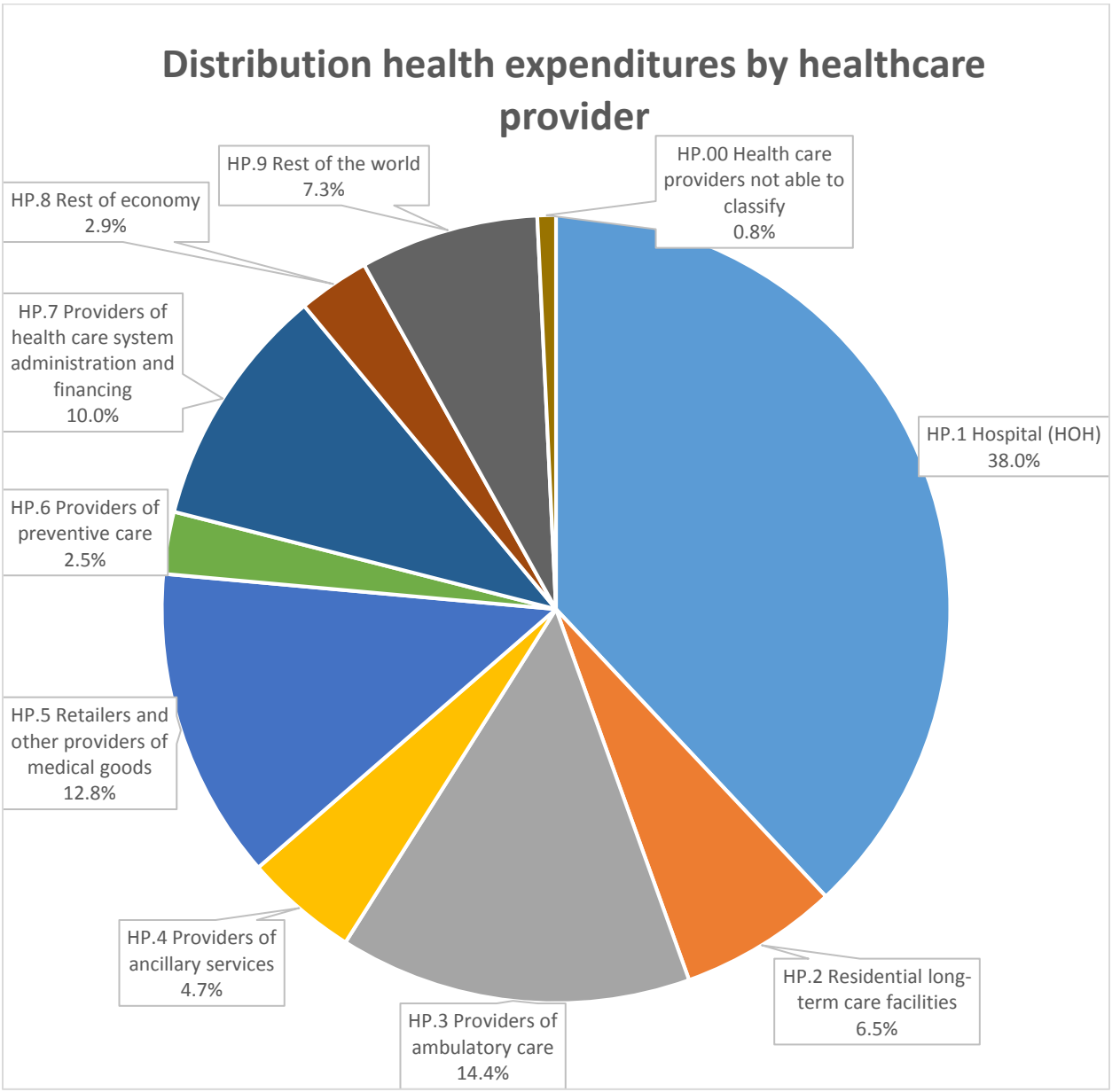

Figure 2: Distribution expenditures by healthcare provider (HP)

3.1.2 Expenditures by type of healthcare provider specified

Table 2 again shows the total healthcare expenditures for the year 2015, distributed into type of healthcare provider and per capita, with a further specification in detail.

Table 2: Expenditures by healthcare providers (HP) specified

Code	Type healthcare provider	Expenditure x $1,000	Expenditure per capita in $	Part
HP.1	**Hospitals (HOH)[22]**	101,826	925	**38.0%**
HP.2	**Residential long-term care facilities**	17,468	159	**6.5%**
HP.2.1	Long-term nursing care facilities	13,794	125	5.1%
HP.2.2	Mental health and substance abuse facilities	3,674	33	1.4%
HP.3	**Providers of ambulatory healthcare**	38,717	352	**14.4%**
HP.3.1.1	Offices of general medical practitioners	10,779	98	4.0%
HP.3.1.3	Offices of medical specialists	1,581	14	0.6%
HP.3.2	Dental practice	5,175	47	1.9%
HP.3.3	Other healthcare practitioners	5,464	50	2.0%
HP.3.4.1	Family planning centres	136	1	0.1%
HP.3.4.9	All other ambulatory centres (ImSan)	12,215	111	4.6%
HP.3.5	Providers of home healthcare services	3,367	31	1.3%
HP.4	**Providers of ancillary services**	12,472	113	**4.7%**
HP.4.1	Providers of patient transportation and emergency rescue	719	7	0.3%
HP.4.2	Medical and diagnostic laboratories	11,753	107	4.4%
HP.5	**Retailers and other providers of medical goods**	34,327	312	**12.8%**
HP.5.1	Pharmacies	30,349	276	11.3%
HP.5.2	Retailers and other providers of medical goods and medical appliances	3,978	36	1.5%
HP.6	**Providers of preventive care**	6,821	62	**2.5%**
HP.7	**Providers of healthcare system administration and financing**	26,794	243	**10.0%**
HP.7.1	Government health administration agencies	16,759	152	6.3%
HP.7.2	Social health insurance agencies (UO AZV[23])	10,036	91	3.7%
HP.8	**Rest of economy**	7,875	72	**2.9%**
HP.9	**Rest of the world[24]**	19,633	178	**7.3%**
HP.0	**Healthcare providers not able to classify**	2,034	18	**0.8%**
	Total	**267,968**	**2,434**	**100%**

[22] Including $11.0 million (10.8%) regarding independent medical specialists who mainly work in the HOH.

[23] UO AZV operational costs.

[24] Including transport and accommodation costs of companion and per diem through UO AZV.

3.2 HEALTHCARE FUNCTIONS

3.2.1 Expenditures by type of healthcare function

Table 3 shows the total healthcare costs for 2015, distributed by type of healthcare function. Almost half of all healthcare costs, $133.0 million (49.6%) concern curative care, being $1,208 per capita. Costs of medical goods, including pharmaceuticals (excluding those provided in the hospital) and therapeutic appliances follow second (14.5%).

Table 3: Expenditures by healthcare function (HC)

Code	Healthcare function	Expenditure x $1,000	Expenditure per capita in $	Part
HC.1	Curative care	133,007	1.208	49.6%
HC.2	Rehabilitative care	8,589	78	3.2%
HC.3	Long-term care	35,396	321	13.2%
HC.4	Ancillary services[25]	20,515	186	7.7%
HC.5	Medical goods[26]	38,807	352	14.5%
HC.6	Preventive care	10,168	92	3.8%
HC.7	Governance, and health system and financing administration	19,008	173	7.1%
HC.9	Other healthcare services not elsewhere classified	2,479	23	0.9%
	Total	**267,968**	**2,434**	**100%**

Figure 3 shows the distribution of the total healthcare costs for the year 2015 by type of healthcare function.

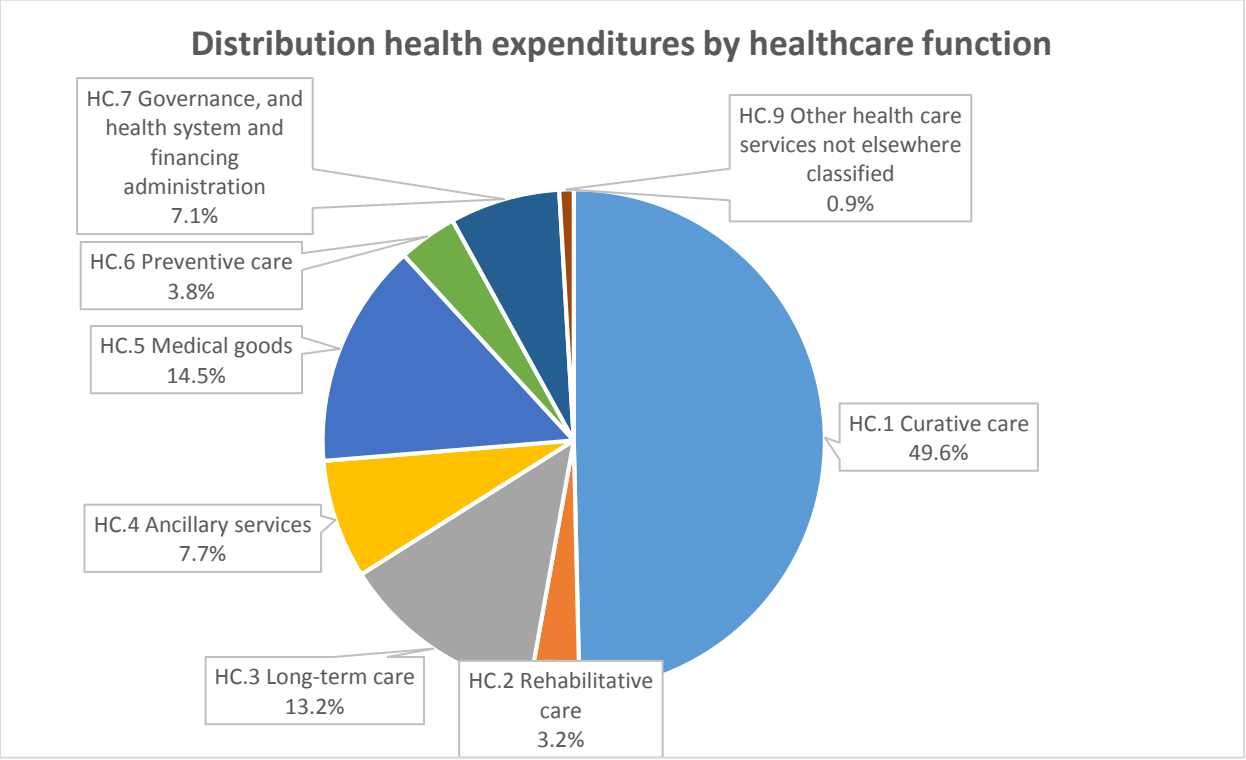

Figure 3: Distribution expenditures by healthcare function (HC)

[25] Non-specified by function, costs of ancillary services that are not an integral part of a package of services whose purpose relate to curative care, rehabilitative care, long-term care or preventive care.

[26] Including pharmaceuticals, not provided by the hospital.

3.2.2 Expenditures by type of healthcare function specified

Table 4 again shows the total healthcare expenditures for the year 2015, distributed into type of healthcare functions and per capita, but with a further specification in detail.

Table 4: Expenditures by healthcare function (HC) specified

Code	Healthcare function	Expenditure x $1,000	Expenditure per capita in $	Part
HC.1	**Curative care**	133,007	1,208	**49.6%**
HC.1.1	Inpatient curative care	62,567	568	23.3%
HC.1.1.1	General inpatient curative care	897	8	0.3%
HC.1.1.2	Specialised inpatient curative care	61,670	560	23.0%
HC.1.2	Day curative care	14,649	133	5.5%
HC.1.2.2	Specialised day curative care	14,649	133	5.5%
HC.1.3	Outpatient curative care	55,791	507	20.8%
HC.1.3.1	General outpatient curative care	16,812	153	6.3%
HC.1.3.2	Dental outpatient curative care	6,365	58	2.4%
HC.1.3.3	Specialised outpatient curative care	32,614	296	12.2%
HC.2	**Rehabilitative care**	8,589	78	**3.2%**
HC.2.1	Inpatient rehabilitative care	4,336	39	1.6%
HC.2.3	Outpatient rehabilitative care	4,253	39	1.6%
HC.3	**Long-term care**	35,396	321	**13.2%**
HC.3.1	Inpatient long-term care	22,178	201	8.3%
HC.3.2	Day long-term care	10,847	99	4.0%
HC.3.3	Outpatient long-term care	156	1	0.1%
HC.3.4	Home-based long-term care	2,215	20	0.8%
HC.4	**Ancillary services**	20,515	186	**7.7%**
HC.4.1	Laboratory services	11,029	100	4.1%
HC.4.2	Imaging services	426	4	0.2%
HC.4.3	Patient transportation	9,060	82	3.4%
HC.5	**Medical goods**	38,807	352	**14.5%**
HC.5.1	Pharmaceuticals and other medical non-durable goods	29,101	264	10.9%
HC.5.1.1	Prescribed medicines	25,787	234	9.6%
HC.5.1.2	Over-the counter medicines	2,551	23	1.0%
HC.5.1.3	Other medical non-durable goods	763	7	0.3%
HC.5.2	Therapeutic appliances and other medical goods	9,706	88	3.6%
HC.6	**Preventive care**	10,168	92	**3.8%**
HC.6.1	Information, education and counselling programmes	3,604	33	1.3%
HC.6.2	Immunisation programmes	222	2	0.1%
HC.6.4	Health condition monitoring programmes	3,360	31	1.3%
HC.6.5	Epidemiological surveillance and risk and disease control programmes	2,982	27	1.1%
HC.7	**Governance, and health system and financing administration**	19,008	173	**7.1%**
HC.7.1	Governance and health system administration	8,973	81	3.3%
HC.7.2	Administration of health financing	10,036	91	3.7%
HC.9	**Other healthcare services not elsewhere classified**	2,479	23	**0.9%**
	Total	**267,968**	**2,434**	**100%**

3.2.3 Expenditures curative care

Figure 4 shows the distribution of the healthcare costs for curative care, according to the underlying type of healthcare function. The total costs for curative care are $133.0 million of which almost half, $61.7 million (46.4%) concern specialist inpatient curative care.

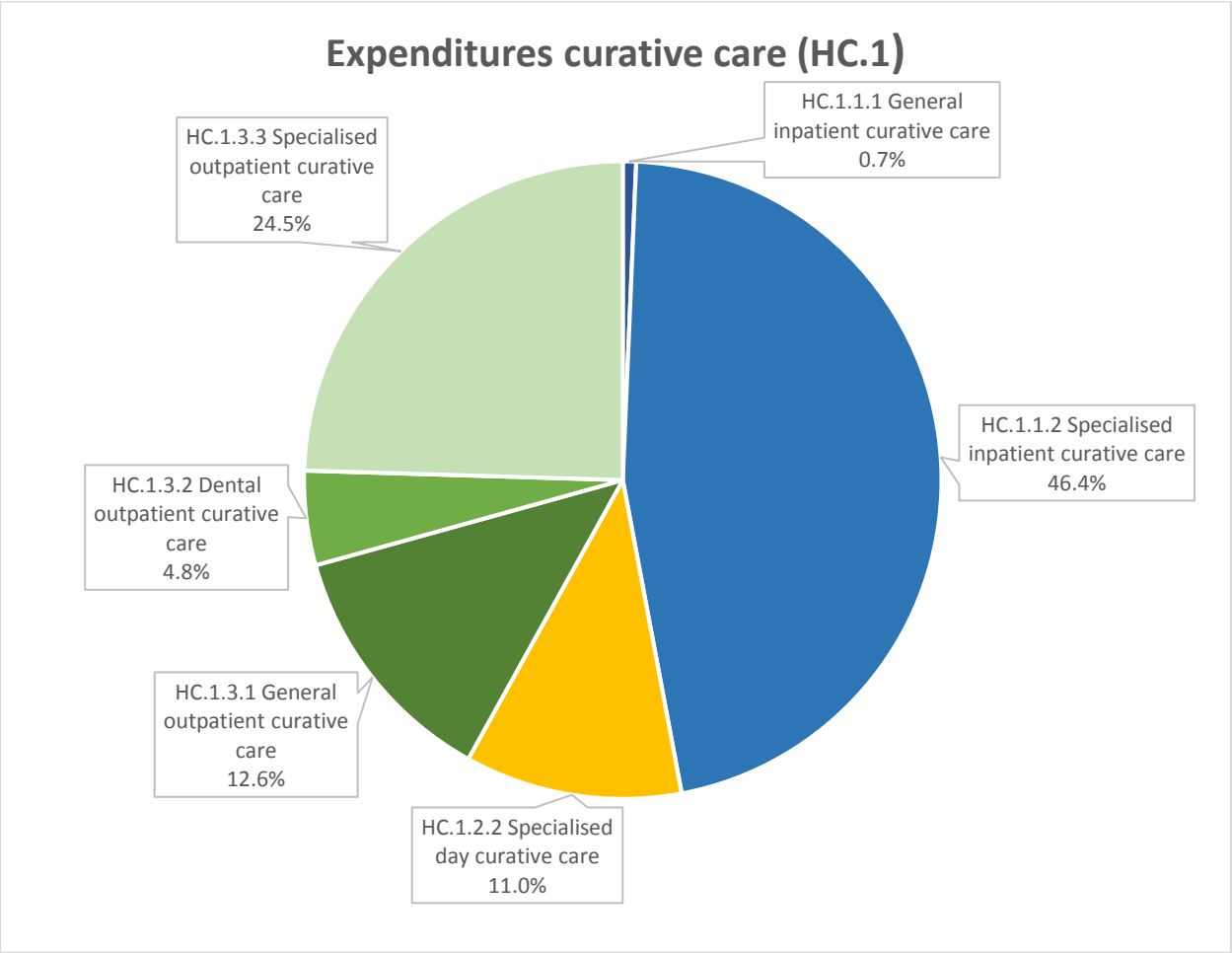

Figure 4: Expenditures curative care (HC.1)

3.2.4 Expenditures by healthcare functions

Figure 5 shows the distribution of the healthcare costs of $177.0 million for four types of healthcare functions: inpatient care[27], day-care[28], outpatient care[29] and home-based care[30]. This distribution applies to the costs associated with curative care, rehabilitation and long-term care[31]. Inpatient care is responsible for half (50.3%) of these costs. Home-based care is still very limited (1.3%).

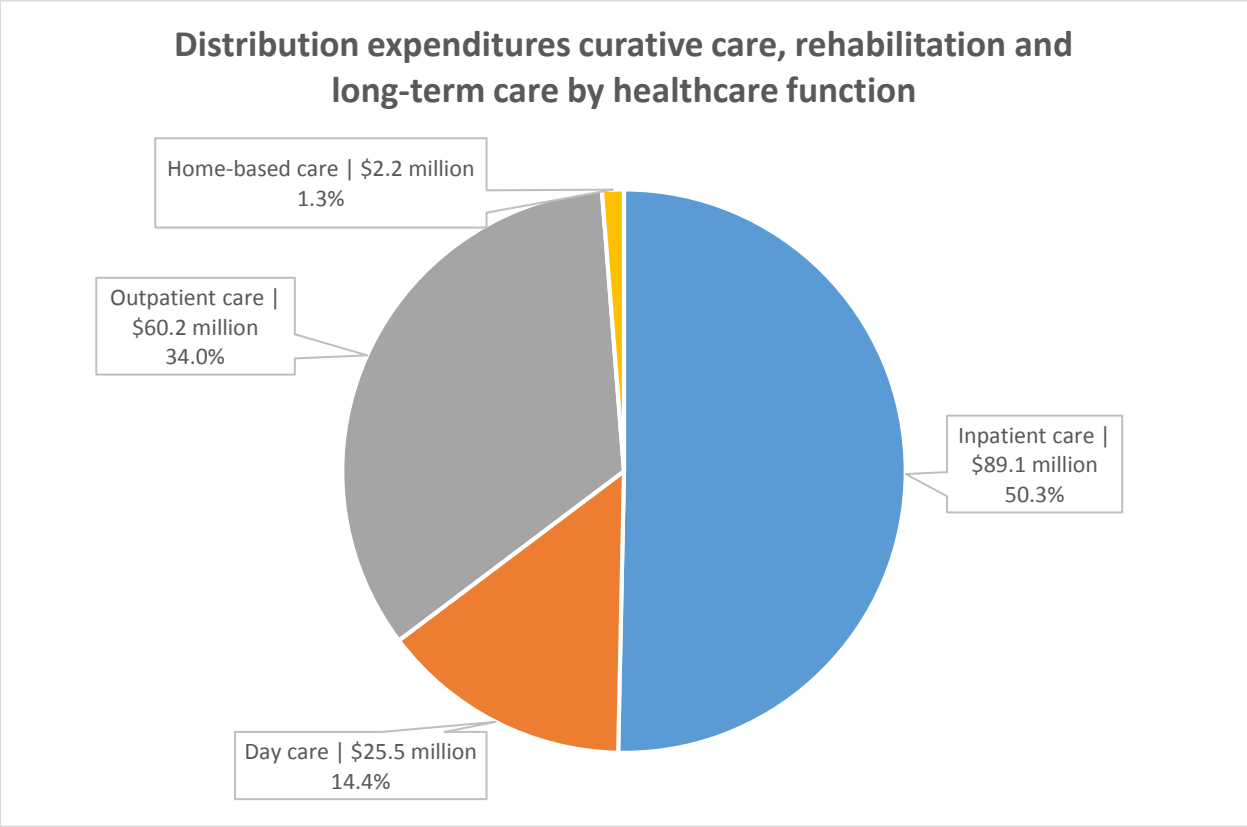

Figure 5: Expenditures curative care, rehabilitation and long-term care by healthcare function

[27] HC.1.1, HC.2.1, HC.3.1
[28] HC.1.2, HC.3.2
[29] HC.1.3, HC.2.3, HC.3.3
[30] HC.3.4
[31] HC.1, HC.2, HC.3

3.3 FINANCING AGENTS

Table 5 shows the total healthcare costs and per capita for the year 2015, distributed by type of financing agent. The central government, including the UO AZV, finances almost all healthcare costs (96.1%). Other financing agents, private insurance companies, corporations, non-profit institutions and households have a very limited role (together 3.9%). Within the government, the UO AZV is the main financing agent (75.8%), followed by the ministry responsible for public health (18.8%). $2,339 per capita concerns financing by the central government, of which $1,845 per capita concerns the UO AZV.

Table 5: Expenditures by financing agent (FA)

Code	Type financing agent	Expenditure x $1,000	Expenditure per capita in $	Part
FA.1	**General government**	257,579	2,339	**96.1%**
FA.1.1.1	Ministry of Health	50,361	457	18.8%
FA.1.1.2	Other ministries and public units	4,021	37	1.5%
FA.1.1.4	National Health Service Agency (UO AZV)	203,197	1,845	75.8%
FA.2	**Insurance corporations**	1,117	10	**0.4%**
FA.3	**Corporations (other than insurance)**	75	1	**0.0%**
FA.4	**Non-profit institutions serving households**	7	0	**0.0%**
FA.5	**Households**	9,190	83	**3.5%**
	Total	**267,968**	**2,434**	**100%**

Figure 6 shows the distribution of healthcare costs by financing agent.

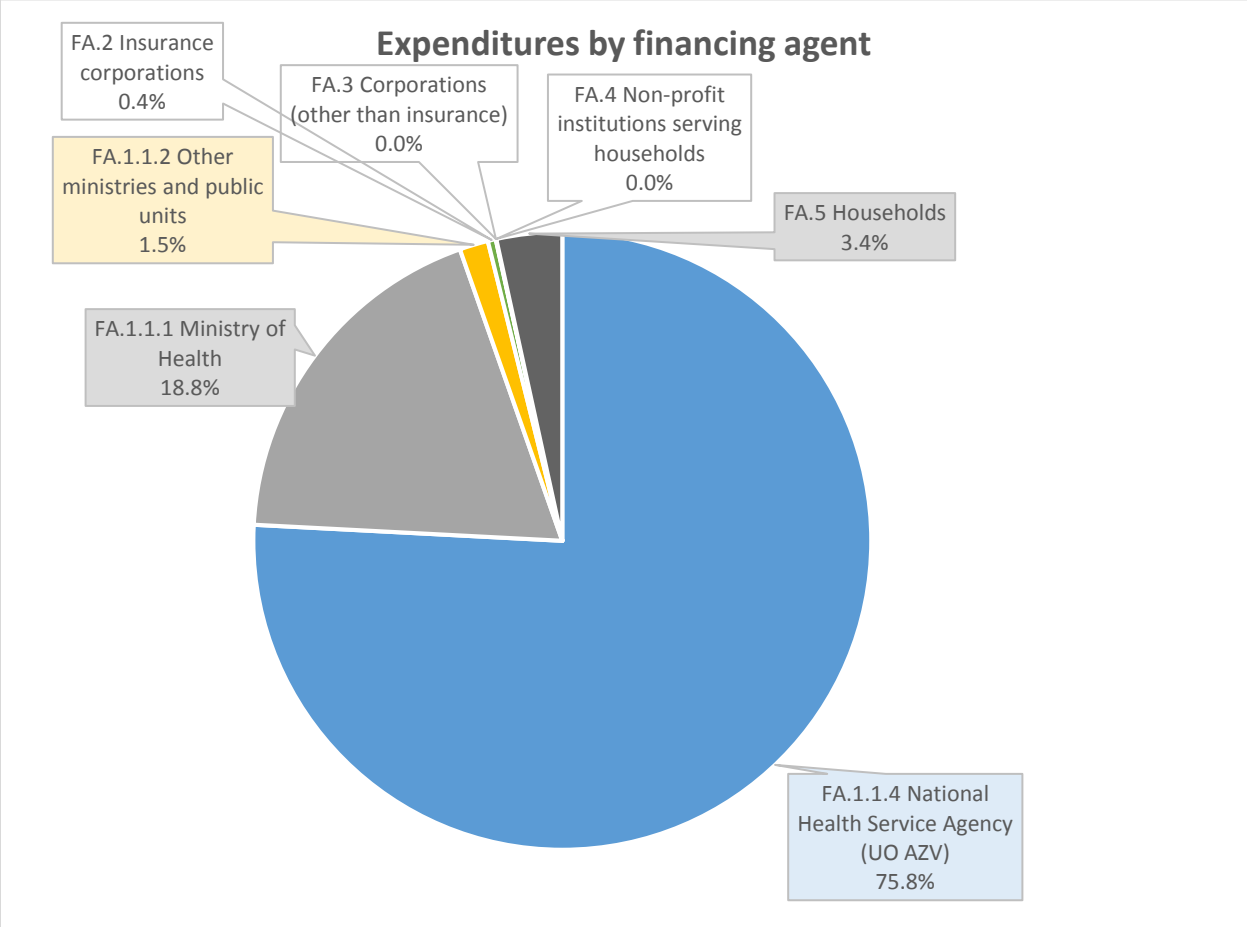

Figure 6: Expenditures by financing agent (FA)

3.4 HEALTHCARE FINANCING SCHEMES

Table 6 shows the total healthcare costs for 2015 and per capita, distributed by type of financing scheme. Almost all healthcare costs (96.1%) are financed by central government schemes (20.3%) or the social health insurance scheme AZV (75.8%). This means that the public share of healthcare costs, or the "domestic general government health expenditure (GGHE-D)", represents 91.6% of the total costs for Aruba. Other schemes represent a very limited role (together 3.9%). $493 (20.3%) per capita concerns financing by the central government and $1,845 (75.8%) the social health insurance AZV.

Table 6: Expenditures by healthcare financing schemes.

Code	Type financier	Expenditure x $1,000	Expenditure per capita in $	Part
HF.1	**Government schemes and compulsory healthcare financing schemes**	257,452	2,338	**96.1%**
HF.1.1.1	Central government schemes	54,255	493	20.3%
HF.1.2.1	Social health insurance schemes	203,197	1,845	75.8%
HF.2	**Voluntary healthcare payment schemes**	1,209	11	**0.4%**
HF.2.1.2.2	Other complementary/supplementary insurance	559	5	0.2%
HF.2.2.1	NPISH financing schemes	80	1	0.0%
HF.2.3.1	Enterprises financing scheme	571	5	0.2%
HF.3	**Household out-of-pocket payment**	9,307	85	**3.5%**
HF.3.1	**Out-of-pocket excluding cost-sharing**	8,847	80	3.3%
HF.3.2.1	Cost sharing with government schemes and compulsory health insurance schemes	459	4	0.2%
	Total	**267,968**	**2,434**	**100%**

Figure 7 shows the distribution of healthcare costs by healthcare financing scheme.

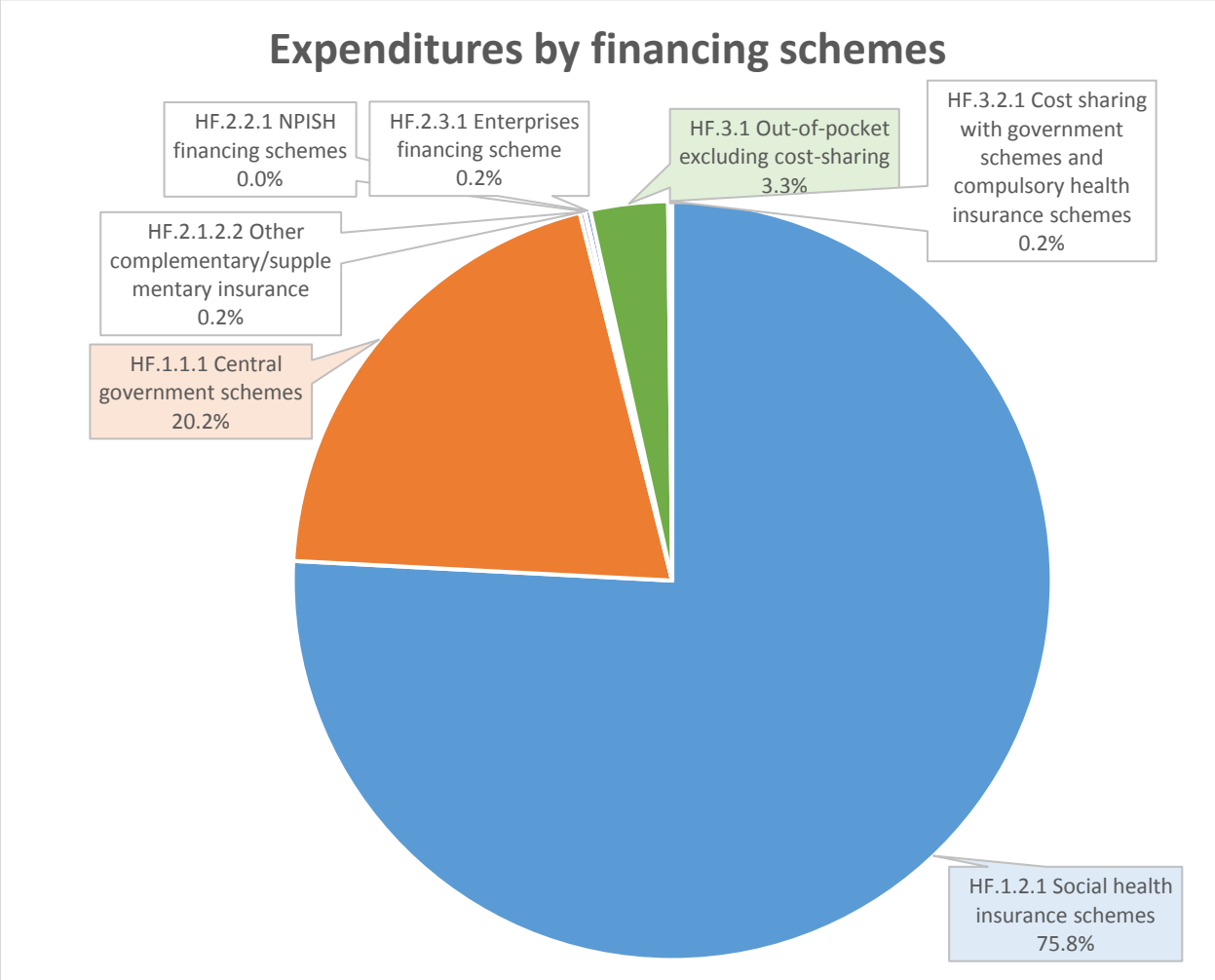

Figure 7: Expenditures by financing scheme (HF)

3.5 CROSS TABLES

On the following pages, a number of cross tables follow that provide insight into the relationships between the different concepts of the NHA. Consecutively:

- Table 7 shows the distribution of health expenditures by financing agents (FA) and by healthcare providers (HP), and table 8 shows these expenditures per capita.
- Table 9 shows the distribution of health expenditures by financing agents (FA) and by healthcare functions (HC), and table 10 shows these expenditures per capita.
- Table 11 shows the distribution of health expenditures by financing agents (FA) and by healthcare providers (HP) and healthcare functions (HC).
- Table 12 shows the distribution of health expenditures by healthcare providers (HP) by healthcare functions (HC), and table 13 shows these costs per capita.
- Table 14 shows the distribution health expenditures by financing agents (FA) and by healthcare financing scheme (HF), and table 15 shows these costs per capita.

Table 7: Distribution of expenditures by financing agents (FA) and by healthcare providers (HP)

Amount X US$1,000 Healthcare providers (HP)	Financing agents (FA)							Total	Total %
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.4** National Health Insurance Agency	**FA.2.1** Commercial insurance companies					
HP.1.1 Hospitals			101,826					**101,826**	38.0%
HP.2.1 Long-term nursing care facilities	12,587		20		4		1,184	**13,794**	5.1%
HP.2.2 Mental health and substance abuse facilities		3,674						**3,674**	1.4%
HP.3.1.1 Offices of general medical practitioners			10,779					**10,779**	4.0%
HP.3.1.3 Offices of medical specialists			1,581					**1,581**	0.6%
HP.3.2 Dental practice			4,578				597	**5,175**	1.9%
HP.3.3 Other healthcare practitioners	55		4,765		15		629	**5,464**	2.0%
HP.3.4.1 Family planning centres		136						**136**	0.1%
HP.3.4.9 All other ambulatory centres			12,215					**12,215**	4.6%
HP.3.5 Providers of home healthcare services	2,248		736		55		327	**3,367**	1.3%
HP.4.1 Providers of patient transportation and emergency rescue			668				51	**719**	0.3%
HP.4.2 Medical and diagnostic laboratories	7,334		4,368				51	**11,753**	4.4%
HP.5.1 Pharmacies			27,696				2,653	**30,349**	11.3%
HP.5.2 Retailers and other providers of medical goods and medical appliances			1,208				2,770	**3,978**	1.5%
HP.6 Providers of preventive care	6,592	211			1	7	11	**6,821**	2.5%
HP.7.1 Government health administration agencies	16,759							**16,759**	6.3%
HP.7.2 Social health insurance agencies			10,036					**10,036**	3.7%
HP.8.2 All other industries as secondary providers of healthcare	2,576	0	5,299					**7,875**	2.9%
HP.9 Rest of the world	2,211		17,422					**19,633**	7.3%
HP.0 Healthcare providers not able to classify				1,117			916	**2,034**	0.8%
Total	**50,361**	**4,021**	**203,197**	**1,117**	**75**	**7**	**9,190**	**267,968**	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

Table 8: Distribution of expenditures by financing agents (FA) and by healthcare providers (HP), per capita

Amount X US$1,000 Healthcare providers (HP)	Financing agents (FA)							Total	Total %
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.4** National Health Insurance Agency	**FA.2.1** Commercial insurance companies					
HP.1.1 Hospitals			925					**925**	38.0%
HP.2.1 Long-term nursing care facilities	114		0		0		11	**125**	5.1%
HP.2.2 Mental health and substance abuse facilities		33						**33**	1.4%
HP.3.1.1 Offices of general medical practitioners			98					**98**	4.0%
HP.3.1.3 Offices of medical specialists			14					**14**	0.6%
HP.3.2 Dental practice			42				5	**47**	1.9%
HP.3.3 Other healthcare practitioners	0		43		0		6	**50**	2.0%
HP.3.4.1 Family planning centres		1						**1**	0.1%
HP.3.4.9 All other ambulatory centres			111					**111**	4.6%
HP.3.5 Providers of home healthcare services	20		7		1		3	**31**	1.3%
HP.4.1 Providers of patient transportation and emergency rescue			6				0	**7**	0.3%
HP.4.2 Medical and diagnostic laboratories	67		40				0	**107**	4.4%
HP.5.1 Pharmacies			252				24	**276**	11.3%
HP.5.2 Retailers and other providers of medical goods and medical appliances			11				25	**36**	1.5%
HP.6 Providers of preventive care	60	2			0	0	0	**62**	2.5%
HP.7.1 Government health administration agencies	152							**152**	6.3%
HP.7.2 Social health insurance agencies			91					**91**	3.7%
HP.8.2 All other industries as secondary providers of healthcare	23	0	48					**72**	2.9%
HP.9 Rest of the world	20		158					**178**	7.3%
HP.0 Healthcare providers not able to classify				10			8	**18**	0.8%
Total	**457**	**37**	**1,845**	**10**	**1**	**0**	**83**	**2,434**	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

Table 9: Distribution of expenditures by financing agents (FA) by healthcare functions (HC)

Amount X US$1,000 Healthcare function (HC)	Financing agents (FA)							Total	Total %
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.4** National Health Insurance Agency	**FA.2.1** Commercial insurance companies					
HC.1 Curative care	7,530		124,485				992	**133,007**	49.6%
HC.2 Rehabilitative care	142	3,674	4,524		15		234	**8,589**	3.2%
HC.3 Long-term care	17,650		16,293		26		1,428	**35,396**	13.2%
HC.4 Ancillary services[32]	7,334		13,078				103	**20,515**	7.7%
HC.5 Medical goods			33,383				5,423	**38,807**	14.5%
HC.6 Preventive care	8,734	347	953		35	7	94	**10,168**	3.8%
HC.7 Governance, and health system and financing administration	8,973		10,036					**19,008**	7.1%
HC.9 Other healthcare services not elsewhere classified			445				916	**2,479**	0.9%
Total	**50,361**	**4,021**	**203,197**	**1,117**	**75**	**7**	**9,190**	**267,968**	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

[32] Not specified by function, not being costs that form an integral part of curative care, rehabilitation, long-term care or preventive care.

Table 10: Distribution of expenditures by financing agent (FA) by healthcare functions (HC), per capita

Amount X US$ 1,000 **Healthcare function (HC)**	**Financing agent (FA)**							**Total**	**Total %**
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.4** National Health Insurance Agency	**FA.2.1** Commercial insurance companies					
HC.1 Curative care	68		1,131				9	**1,208**	49.6%
HC.2 Rehabilitative care	1	33	41		0		2	**78**	3.2%
HC.3 Long-term care	160		148		0		13	**321**	13.2%
HC.4 Ancillary services[33]	67		119				1	**186**	7.7%
HC.5 Medical goods			303				49	**352**	14.5%
HC.6 Preventive care	79	3	9		1	0	1	**92**	3.8%
HC.7 Governance, and health system and financing administration	81		91					**173**	7.1%
HC.9 Other healthcare services not elsewhere classified			4	10			8	**23**	0.9%
Total	**457**	**37**	**1,845**	**10**	**1**	**0**	**83**	**2,434**	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

[33] Not specified by function, not being costs that form an integral part of curative care, rehabilitation, long-term care or preventive care.

Table 11: Distribution of expenditures by financing agents (FA) by healthcare providers (HP) and healthcare functions (HC)

Amount XUS$ 1,000 Healthcare providers (HP)	Healthcare functions (HC)	Financing agents (FA)							Total	Total %
		FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
		FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.1** Ministry of Health	**FA.1.1.2** Other ministries and public units					
HP.1 Hospitals (HOH)[34]	**HC.1** Curative care			88,382					**88,382**	33.0%
	HC.2 Rehabilitative care			977					**977**	0.4%
	HC.3 Long-term care			12,467					**12,467**	4.7%
HP.2 Residential long-term care facilities	**HC.2** Rehabilitative care		3,674						**3,674**	1.4%
	HC.3 Long-term care	12,587		20		4		1,184	**13,794**	5.1%
HP.3 Providers of ambulatory care	**HC.1** Curative care			22,080				992	**23,072**	8.6%
	HC.2 Rehabilitative care	55		3,547		15		234	**3,851**	1.4%
	HC.3 Long-term care	1,124		3,804		22		244	**5,194**	1.9%
	HC.4 Ancillary services[35]			3,883					**3,883**	1.4%
	HC.5 Medical goods			388					**388**	0.1%
	HC.6 Preventive care	1,124	136	953		34		83	**2,330**	0.9%
HP. 4 Providers of ancillary services	**HC.1** Curative care			724					**724**	0.3%
	HC.4 Ancillary services[70]	7,334		4,312				103	**11,748**	4.4%
HP.5 Retailers and other providers of medical goods	**HC.5** Medical goods			28,904				5,423	**34,327**	12.8%
HP.6 Providers of preventive care	**HC.3** Long-term care	615							**615**	0.2%
	HC.6 Preventive care	5,034	211			1	7	11	**5,263**	2.0%
	HC.7 Governance, and health system and financing administration	944							**944**	0.4%

[34] Including independent medical specialists who mainly work in the HOH.

[35] Not specified by function, not being costs that form an integral part of curative care, rehabilitation, long-term care or preventive care.

Table 14: Distribution of expenditures by financing agents (FA) by healthcare providers (HP) and healthcare functions (HC) - continuation

Amount X US$1,000 Healthcare providers (HP)	Healthcare function (HC)	Financing agent (FA)							Total	Total %
		FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
		FA.1.1.1 Ministry of Health	**FA.1.2** Other ministries and public units	**FA.1.1.1** Ministry of Health	**FA.1.1.2** Other ministries and public units					
HP.7 Providers of healthcare system administration and financing	**HC.1** Curative care	7,530							**7,530**	2.8%
	HC.2 Rehabilitative care	87							**87**	0.0%
	HC.3 Long-term care	1,113							**1,113**	0.4%
	HC.7 Governance, and health system and financing administration	8,028		10,036					**18,064**	6.7%
HP.8 Rest of economy	**HC.4** Ancillary services[36]			1,207					**1,207**	0.5%
	HC.5 Medical goods			4,092					**4,092**	1.5%
	HC.6 Preventive care	2,576							**2,576**	1.0%
HP.9 Rest of the world	**HC.1** Curative care			13,299					**13,299**	5.0%
	HC.3 Long-term care	2,211		2					**2,212**	0.8%
	HC.4 Ancillary services[71]			3,676					**3,676**	1.4%
	HC.9 Other healthcare services not elsewhere classified			445					**445**	0.2%
HP.0 Healthcare providers not able to classify	**HC.9** Other healthcare services not elsewhere classified				1,117			916	**2,034**	0.8%
Total		**50,361**	**4,021**	**203,197**	**1,117**	**75**	**7**	**9,190**	**267,968**	100%
Total %		18,8%	1,5%	75,8%	0,4%	0,0%	0,0%	3,5%	100%	

[36] Not specified by function, not being costs that form an integral part of curative care, rehabilitation, long-term care or preventive care.

Table 12: Distribution of expenditures by healthcare provider (HP) by healthcare function (HC)

Amount X US$1,000 **Healthcare functions (HC)**	**Healthcare providers (HP)**										**Total**	**Total %**
	HP.1 Hospitals (HOH)	**HP.2** Residential long-term care facilities	**HP.3** Providers of ambulatory care	**HP.4** Providers of ancillary services	**HP.5** Retailers and other providers of medical goods	**HP.6** Providers of preventive care	**HP.7** Providers of healthcare system administration and financing	**HP.8** Rest of economy	**HP.9** Rest of the world	**HP.0** Healthcare providers not able to classify		
HC.1 Curative care	88,382		23,072	724			7,530		13,299		**133,007**	49.6%
HC.2 Rehabilitative care	977	3,674	3,851				87				**8,589**	3.2%
HC.3 Long-term care	12,467	13,794	5,194			615	1,113		2,212		**35,396**	13.2%
HC.4 Ancillary services[37]			3,883	11,748				1,207	3,676		**20,515**	7.7%
HC.5 Medical goods			388		34,327			4,092			**38,807**	14.5%
HC.6 Preventive care			2,330			5,263		2,576			**10,168**	3.8%
HC.7 Governance, and health system and financing administration						944	18,064				**19,008**	7.1%
HC.9 Other healthcare services not elsewhere classified									445	2,034	**2,479**	0.9%
Total	**101,826**	**17,468**	**38,717**	**12,472**	**34,327**	**6,821**	**26,794**	**7,875**	**19,633**	**2,034**	**267,968**	100%
Total %	38.0%	6.5%	14.4%	4.7%	12.8%	2.5%	10.0%	2.9%	7.3%	0.8%	100%	

[37] Non-specified by function, costs of ancillary services that are not an integral part of a package of services whose purpose relate to curative care, rehabilitative care, long-term care or preventive care.

Table 13: Distribution of expenditures by healthcare providers (HP) by healthcare functions (HC), per capita

Amount X US$ 1,000 **Healthcare functions (HC)**	**Healthcare providers (HP)**										**Total**	**Total %**
	HP.1 Hospitals (HOH)	**HP.2** Residential long-term care facilities	**HP.3** Providers of ambulatory care	**HP.4** Providers of ancillary services	**HP.5** Retailers and other providers of medical goods	**HP.6** Providers of preventive care	**HP.7** Providers of healthcare system administration and financing	**HP.8** Rest of economy	**HP.9** Rest of the world	**HP.0** Healthcare providers not able to classify		
HC.1 Curative care	803		210	7			68		121		**1,208**	49.6%
HC.2 Rehabilitative care	9	33	35				1				**78**	3.2%
HC.3 Long-term care	113	125	47			6	10		20		**321**	13.2%
HC.4 Ancillary services[38]			35	107				11	33		**186**	7.7%
HC.5 Medical goods			4		312			37			**352**	14.5%
HC.6 Preventive care			21			48		23			**92**	3.8%
HC.7 Governance, and health system and financing administration						9	164				**173**	7.1%
HC.9 Other healthcare services not elsewhere classified									4	18	**23**	0.9%
Total	**925**	**159**	**352**	**113**	**312**	**62**	**243**	**72**	**178**	**18**	**2,434**	100%
Total %	38.0%	6.5%	14.4%	4.7%	12.8%	2.5%	10.0%	2.9%	7.3%	0.8%	100%	

[38] Non-specified by function, costs of ancillary services that are not an integral part of a package of services whose purpose relate to curative care, rehabilitative care, long-term care or preventive care.

Table 14: Distribution of expenditures by financing agent (FA) by financing scheme (HF)

Amount X US$1,000 Financing schemes (HF)	Financing agents (FA)							Total	Total %
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.1** Ministry of Health	**FA.1.1.2** Other ministries and public units					
HF.1.1.1 Central government schemes	50,361	3,893						**54,255**	20.3%
HF.1.2.1 Social health insurance schemes			203,197					**203,197**	75.8%
HF.2.1.2.2 Other complementary/supplementary insurance				559				**559**	0.2%
HF.2.2.1 NPISH financing schemes					63	7	11	**80**	0.0%
HF.2.3.1 Enterprises financing scheme				559	12			**571**	0.2%
HF.3.1 Out-of-pocket excluding cost-sharing		127					8,720	**8,847**	3.3%
HF.3.2.1 Cost sharing with government schemes and compulsory health insurance schemes							459	**459**	0.2%
Total	**50,361**	**4,021**	**203,197**	**1,117**	**75**	**7**	**9,190**	**267,968**	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

Table 15: Distribution of expenditures by financing agent (FA) by financing scheme (HF), per capita

Amount X US$ 1,000 **Financing scheme (HF)**	**Financing agent (FA)**							**Total**	**Total %**
	FA.1 General government			**FA. 2** Insurance corporations	**FA.3** Corporations (other than insurance)	**FA.4** Non-profit institutions serving households (NPISH)	**FA.5** House-holds		
	FA.1.1.1 Ministry of Health	**FA.1.1.2** Other ministries and public units	**FA.1.1.1** Ministry of Health	**FA.1.1.2** Other ministries and public units					
HF.1.1.1 Central government schemes	457	35						493	20.3%
HF.1.2.1 Social health insurance schemes			1,845					1,845	75.8%
HF.2.1.2.2 Other complementary/supplementary insurance				5				5	0.2%
HF.2.2.1 NPISH financing schemes					1	0	0	1	0.0%
HF.2.3.1 Enterprises financing scheme				5	0			5	0.2%
HF.3.1 Out-of-pocket excluding cost-sharing		1					79	80	3.3%
HF.3.2.1 Cost sharing with government schemes and compulsory health insurance schemes							4	4	0.2%
Total	457	37	1,845	10	1	0	83	2,434	100%
Total %	18.8%	1.5%	75.8%	0.4%	0.0%	0.0%	3.5%	100%	

4 COMPARISON THROUGHOUT THE YEARS AND PART OF GDP

The total healthcare costs in 2015 are compared with the total healthcare costs as set out in the concept version of the national health account of 2007[39]. As a previous version of the NHA was used in 2007, comparisons are limited to comparing total healthcare costs, total healthcare costs per capita and total healthcare costs as part of the gross domestic product (GDP).

4.1 TOTAL HEALTHCARE COSTS 2015 VS 2007

Table 16 shows the total healthcare costs and the healthcare costs per capita for the year 2015 and 2007. The international term used for this is *"total current health expenditure (TCHE)"*. Healthcare costs have risen by US$54.6 million (+ 25.6%), which corresponds to an average growth of US$6.8 million per year, or an average growth of +2.9% per year. The healthcare costs per capita have risen less rapidly, +18.5% over the 8-year period, or an average growth rate of + 2.2% per year. This difference in growth rate, between the total healthcare costs and the healthcare costs per capita, is mainly due to demographic factors, because the population increased by 6,272 persons (+6.0%) in 2015 compared to 2007.

Table 16: Comparison total costs 2015 vs 2007

	Total healthcare costs in million US$	Healthcare costs per capita in US$
Year 2007[76]	213.3	2,053
Year 2015	268.0	2,434
Absolute difference 2015 vs 2007	+ 54.6	+ 381
Difference in percentage 2015 vs 2007	+ 25.6%	+ 18.5%
Average absolute increase per year[40]	+ 6.8	+ 48
Growth rate per year[77]	+ 2.9%	+ 2.2%

Figure 8 shows schematically the total healthcare costs and the costs per capita for the years 2007 and 2015.

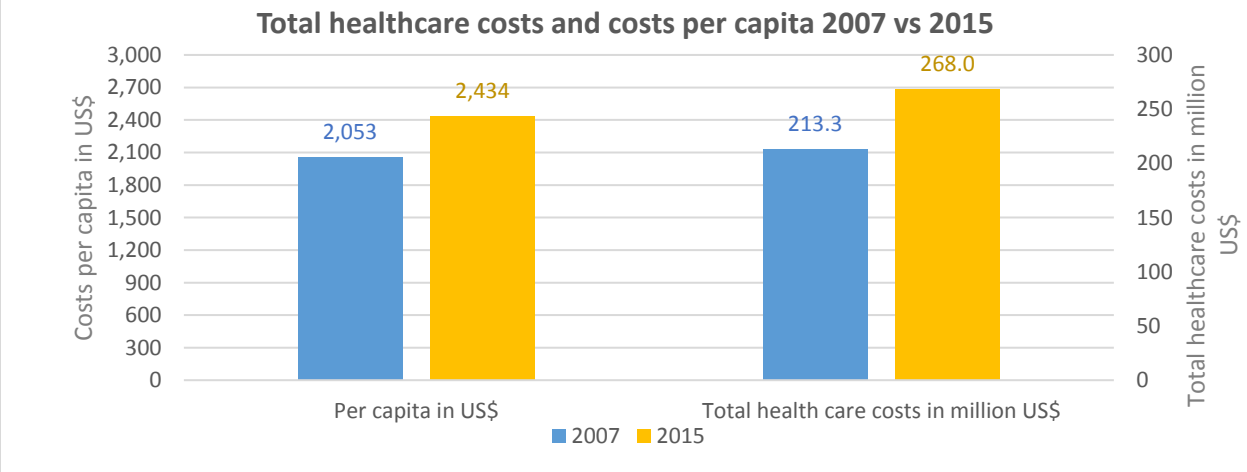

Figure 8: Total costs and total costs per capita 2007 versus 2015

[39] Eelens, F.(NIDI), Doolabi-Geerman, N. (DVG). (2011). *Gezondheidsrekeningen Aruba 2007*. Concept version.
[40] Assuming linear growth during the eight years.

Table 17 shows healthcare costs as part of GDP. In 2015, the percentage is 10.0% compared to 8.2% in 2007. This accounts to a growth of +21.4% in eight years, or an average growth factor of +2.5% per year. The total healthcare costs increased faster than the GDP, therefore the costs as part of the GDP increased over the years.

Table 17: Healthcare costs as part of GDP

	GDP in million US$. [41]	Total healthcare costs in million US$	Costs healthcare as part of GDP
Year 2007[76]	2,615	213.3	8.2%
Year 2015	2,693	268.0	10.0%
Absolute difference 2015 vs 2007	+78	+ 54.6	+1.8%-point
Difference in percentage 2015 vs 2007	+3.0%	+ 25.6%	+21.4%
Average absolute increase per year[42]	+9,8	+ 6.8	+0.2%-point
Growth rate per year[77]	+0.4%	+ 2.9%	+2.5%

Figure 9 shows schematically the increase in healthcare costs as part of GDP.

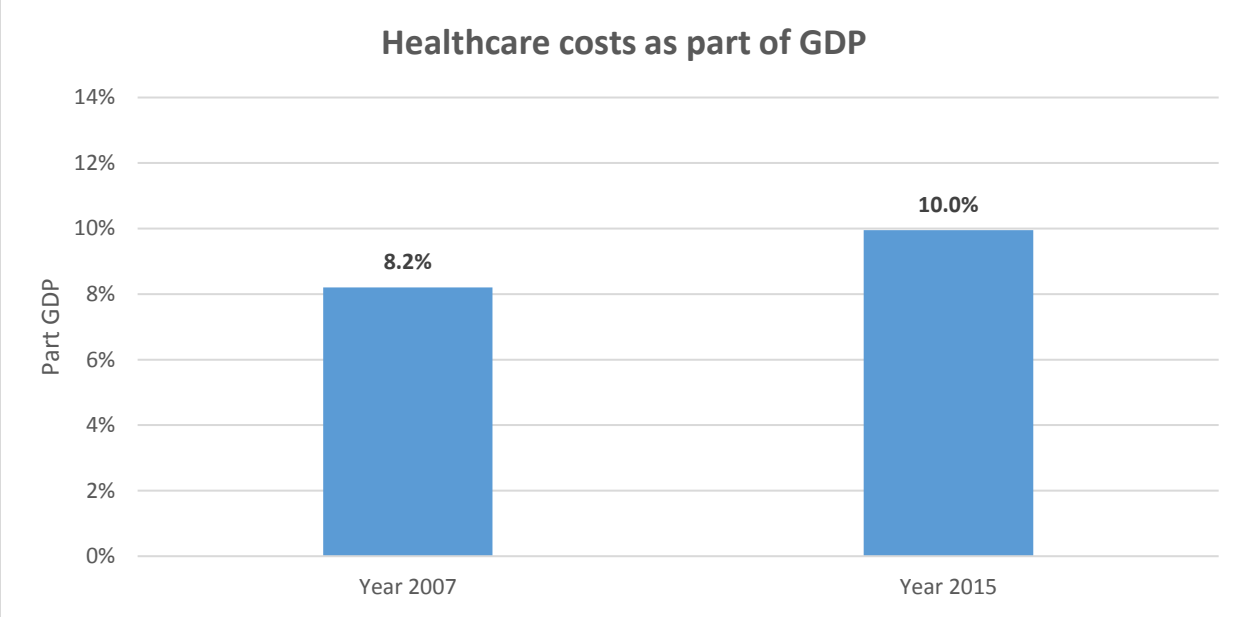

Figure 9: Healthcare costs as part of GDP

[41] Central Bank of Aruba. (2017). Annual statistical digest 2016. p. xi – xii.

[42] Assuming linear growth during the eight years.

5 INTERNATIONAL COMPARISON

In view of international standardisation, the methodology of SHA offers opportunities to compare the Aruban data of the NHA with other countries. The choice of the countries that are compared with Aruba should be based on the choice of "similar" countries.

Similar countries can be countries that:

- are located in the same geographical area (Caribbean and/or Central and South America);
- are part of the same sovereign state, being the Kingdom of the Netherlands;
- have a similar population size;
- have similar prosperity and economic development.

Countries that are compared with Aruba in this report are countries from the Caribbean and South and Central America. In addition, countries that according to the WHO World Bank can be classified as countries with a high-income economy (HIE), being countries in which the gross national income (GNI) per capita equal to or exceeds US$ 12,236 per year[43], are compared with Aruba. Within the Kingdom of the Netherlands, data of the Netherlands and Curaçao is compared. See appendix 2 and appendix 3 for various relevant indicators per country.

5.1 COMPARISON TOTAL HEALTH COSTS

The total healthcare costs per capita of Aruba in 2015 are compared to the healthcare costs of 33 other countries in the Caribbean and South and Central America, see figure 10[44]. After Curaçao, Aruba comes in second with an amount of US$2,434 with regard to the highest costs per capita. The average in the region is an amount of US$711. Data from Saint Martin (Sint Maarten), Bonaire, Sint Eustatius, Saba and other overseas territories are excluded from the comparison.

[43] The World Bank. (2016). *Data: Country and Lending Groups*. Retrieved June 2nd 2016 from: http://data.worldbank.org/about/country-and-lending-groups.

[44] WHO. (2018). *Global Health Expenditure Database.* Retrieved April 20th 2018 from: http://apps.who.int/nha/database/Select/Indicators/en.

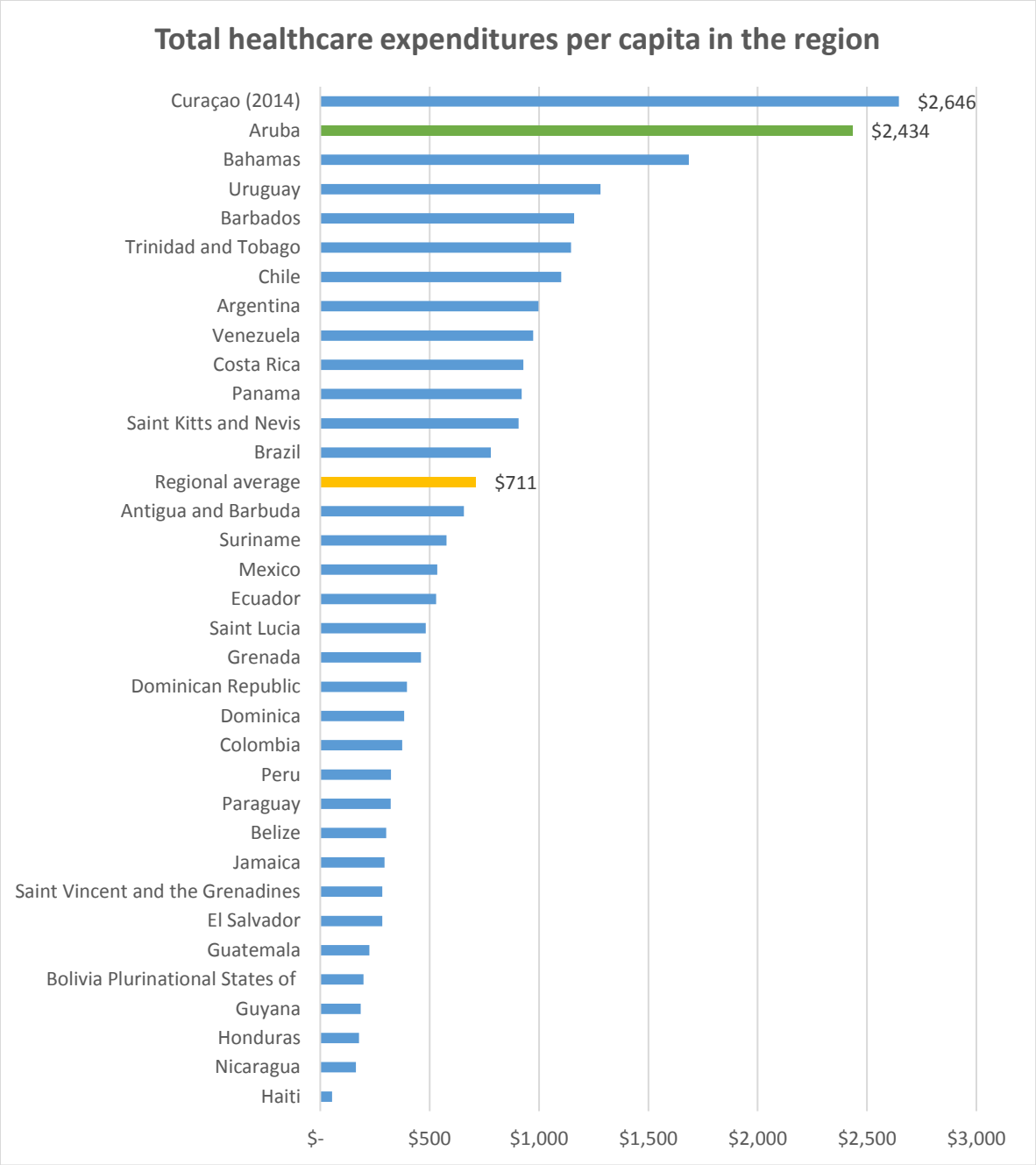

Figure 10: Total healthcare expenditures per capita in the region

Figure 11 compares the total healthcare costs per capita of Aruba with figures from 56 other countries with a high-income economy. With an amount of US$2,434 in healthcare costs per capita, Aruba is in the middle range, below the average of US$2,811.

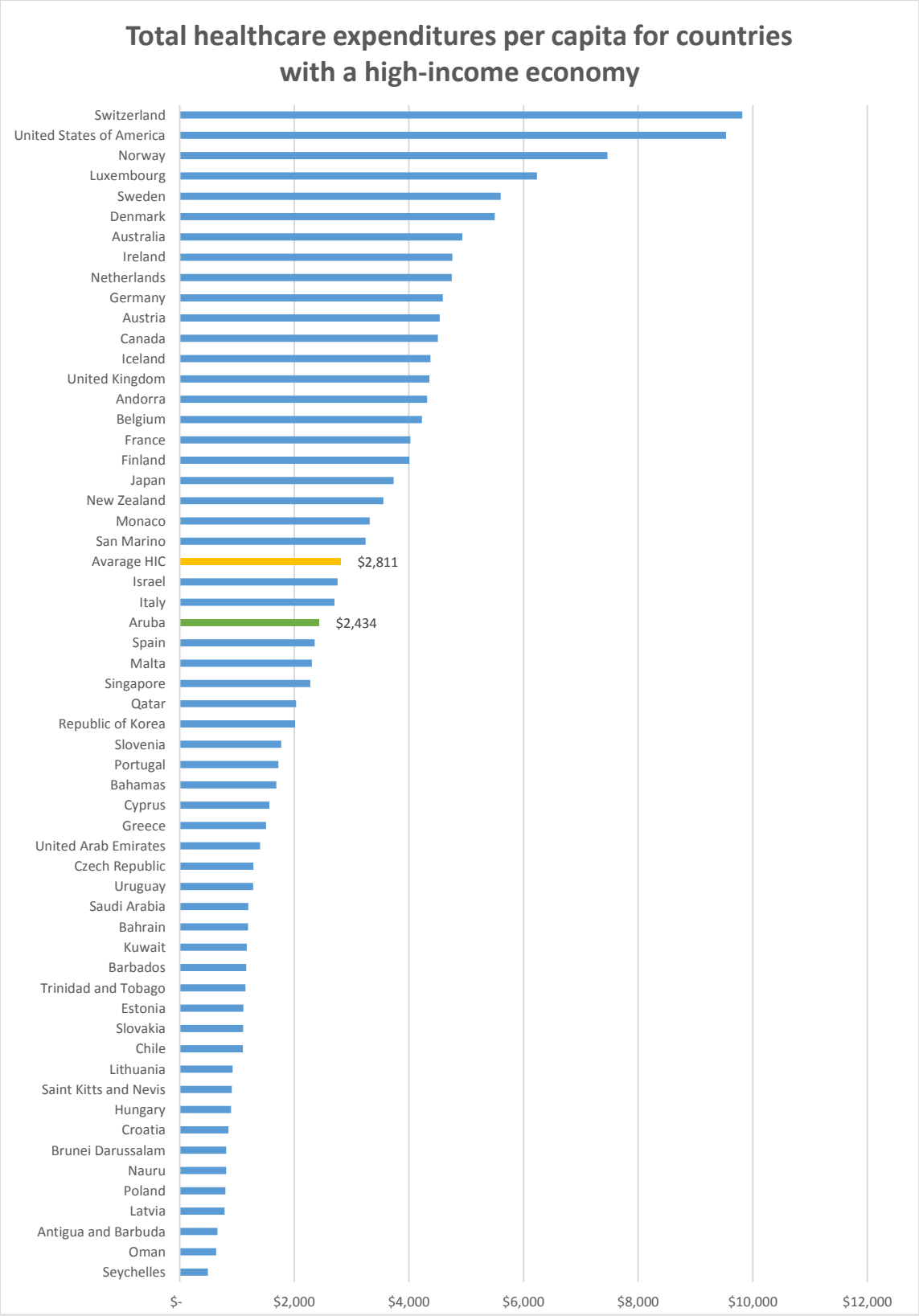

Figure 11: Total healthcare expenditures for countries with a high-income economy

5.2 COMPARISON TOTAL HEALTHCARE EXPENDITURES AS PART OF GDP

Figure 12 shows that if the total healthcare costs for Aruba are calculated as part of the GDP, Aruba with 10.0% comes second in place in terms of highest percentage in the region. Curaçao, with 12.9% in 2014, comes first. The average in the region is a percentage of 6.8% of GDP which concerns healthcare.

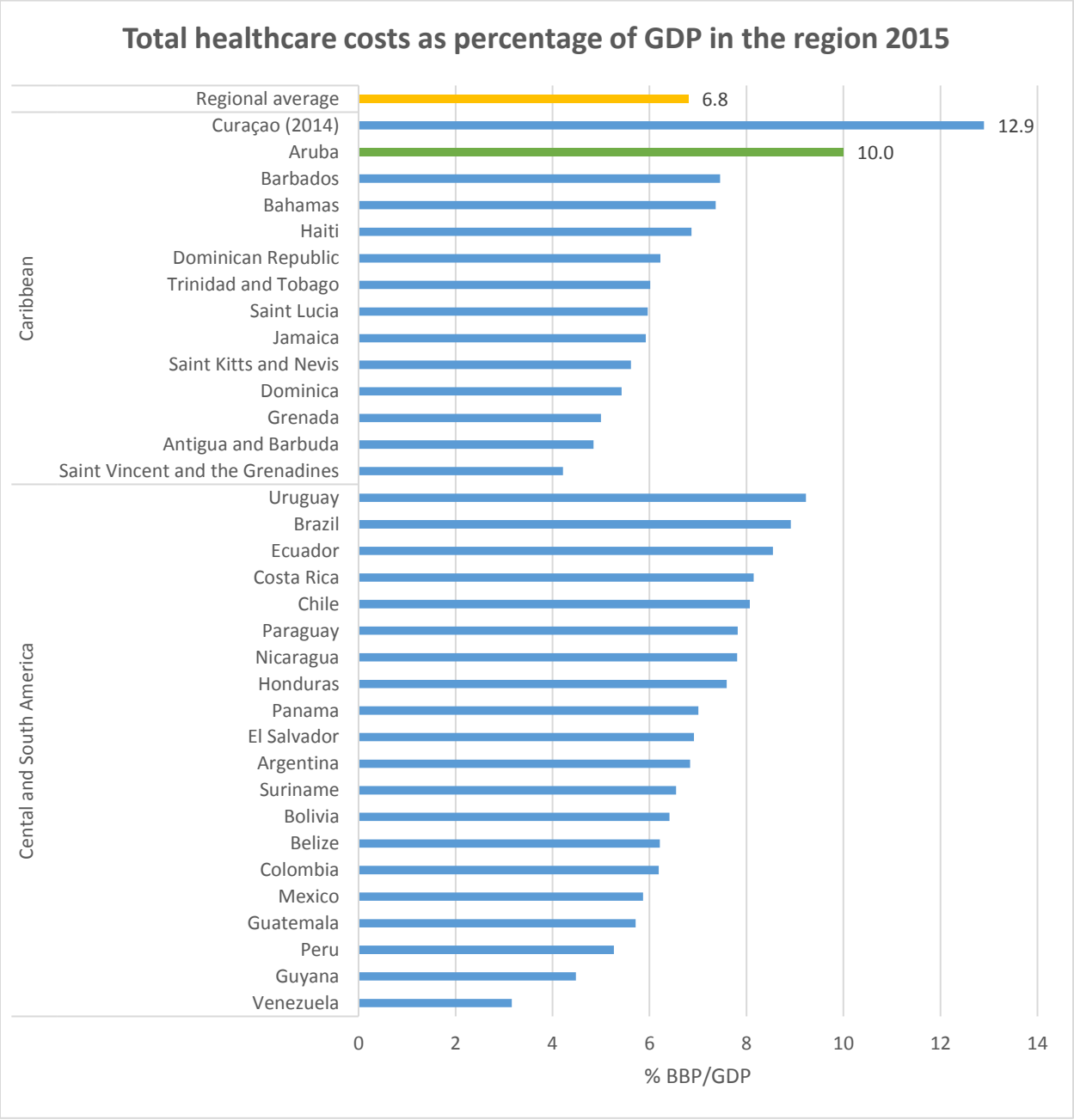

Figure 12: Total healthcare expenditures as percentage of GDP 2015 in the region

Figure 13 also shows the part of healthcare expenditures relative to GDP, but for countries with a high-income economy. Aruba has 10.0% healthcare costs as a percentage of GDP, 2.2%-points above the average of 7.8%.

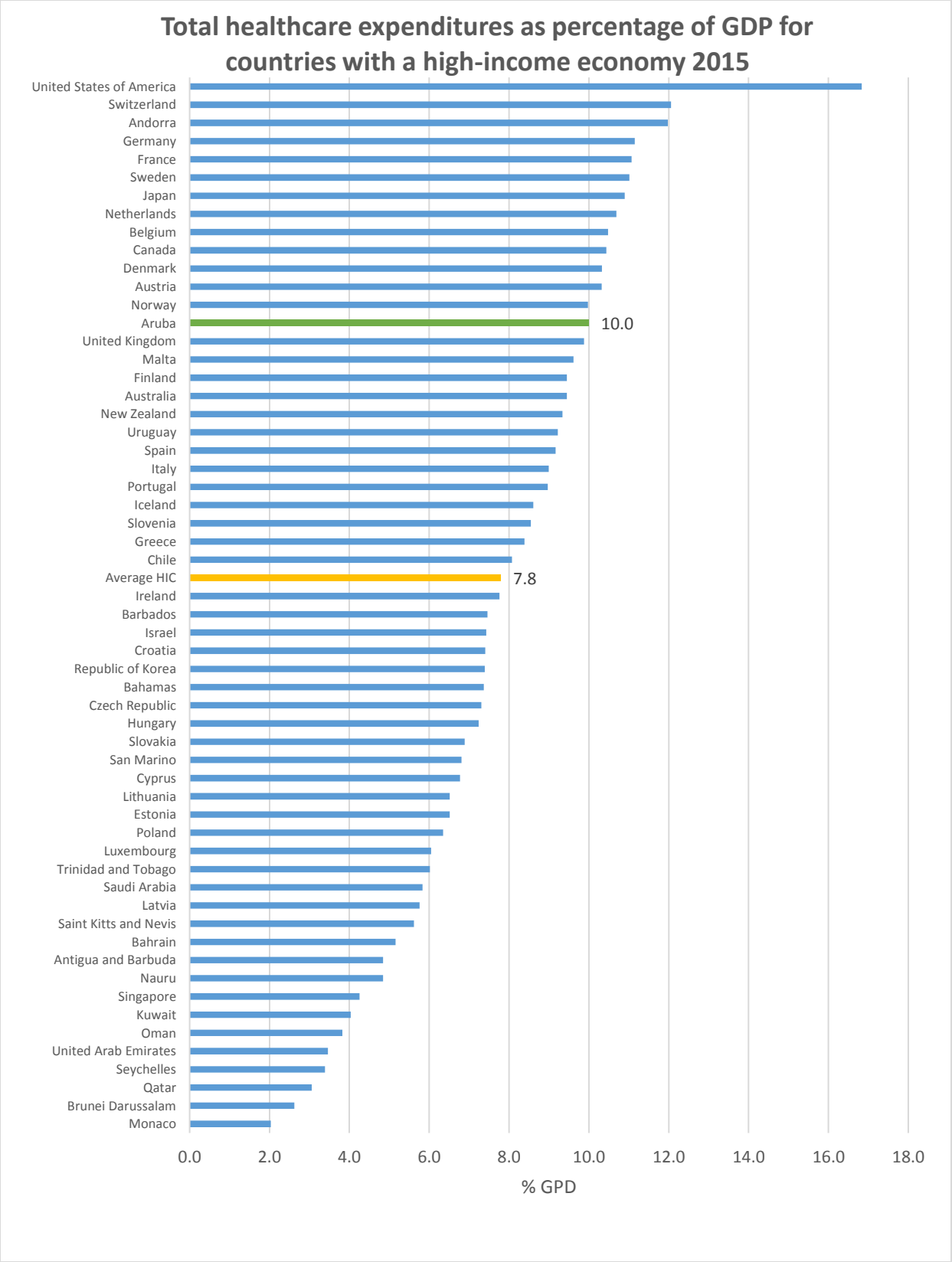

Figure 13: Total healthcare expenditures as percentage of GDP 2015 for countries with a HIE

Figure 14 compares the total healthcare costs per capita (in US$) in comparison with the percentage of the total healthcare costs as part of the GDP. Each dot represents a country in the Caribbean or South and Central America. A trend line is added, which shows that as total healthcare costs per capita rise, a larger share of GDP goes to healthcare. Aruba (marked in red) is in the upper right quadrant, given the high healthcare costs per capita and high percentage of healthcare costs relative to GDP.

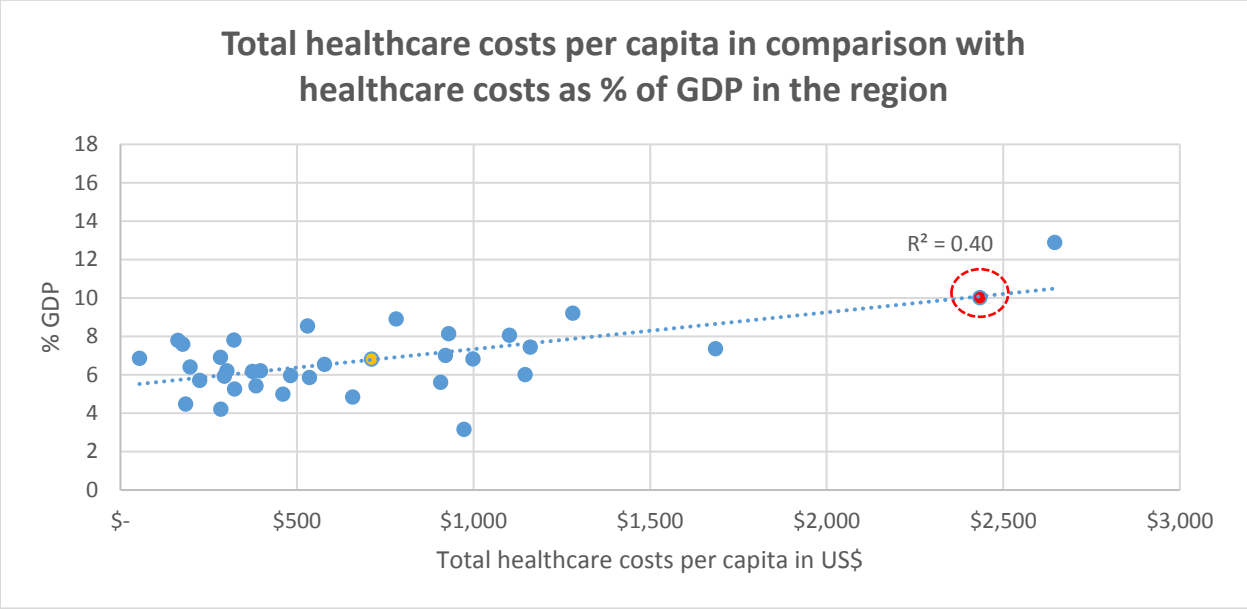

Figure 14: Total healthcare costs per capita in comparison with healthcare costs as % of GDP in the region 2015

Figure 15 also compares the total healthcare costs per capita (in US$) in comparison with the percentage of the total healthcare costs as part of the GDP, but for countries with a high-income economy. Aruba, marked in red, is about in the middle of the trend line for this group of countries.

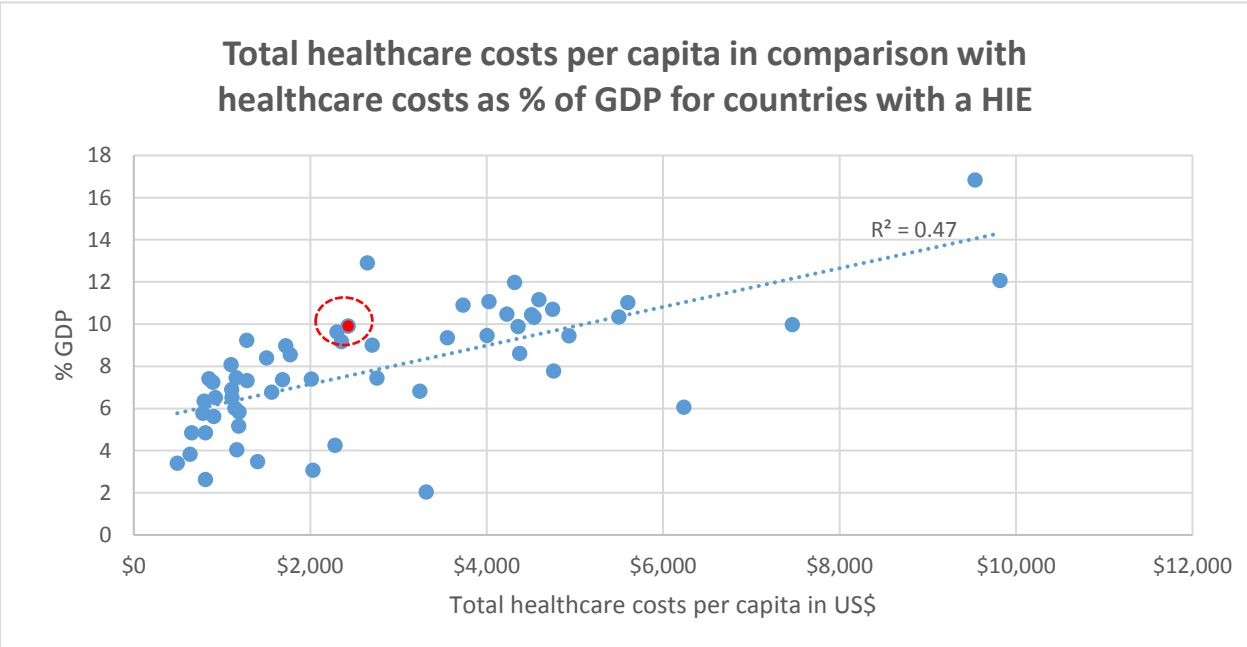

Figure 15: Total healthcare costs per capita in comparison with healthcare costs as % of GDP HIE countries

5.3 TOTAL PUBLIC HEALTHCARE COSTS AS PERCENTAGE OF GDP

The *public* healthcare costs, or domestic general government health expenditures (GGHE-D), as part of GDP of Aruba in 2015, are compared to the healthcare costs as part of the GDP of 32 other countries in the Caribbean and South and Central America, see figure 16[45]. In figure 17, Aruba is compared with countries with a high-income economy.

It is assumed that a large share of these public healthcare costs, both as a percentage of GDP and as a percentage of total healthcare costs, make access to the healthcare system equitable, minimizing individual financial hardship. As indicated, the percentage GGHE-D as part of the total healthcare costs is 96.1%. Compared to GDP, the GGHE-D is 9.6%.

This means that no other country in the Caribbean, South and Central America or country with a high-income economy, scores a higher percentage of GGHE-D / GDP compared to Aruba. In the world, for the year 2015, only the Marshall Islands (11.8%) and Tuvalu (14.4%) had a higher share of public healthcare costs as part of the GDP compared to Aruba. The PAHO / WHO target is at least 6%[46].

[45] WHO. (2018). *Global Health Expenditure Database.* Retrieved September 3th, from: http://apps.who.int/nha/database/Select/Indicators/en.

[46] WHO, Regional Committee for the Americas. (2014). Strategy for Universal Access to health and Universal Health Coverage. p.20

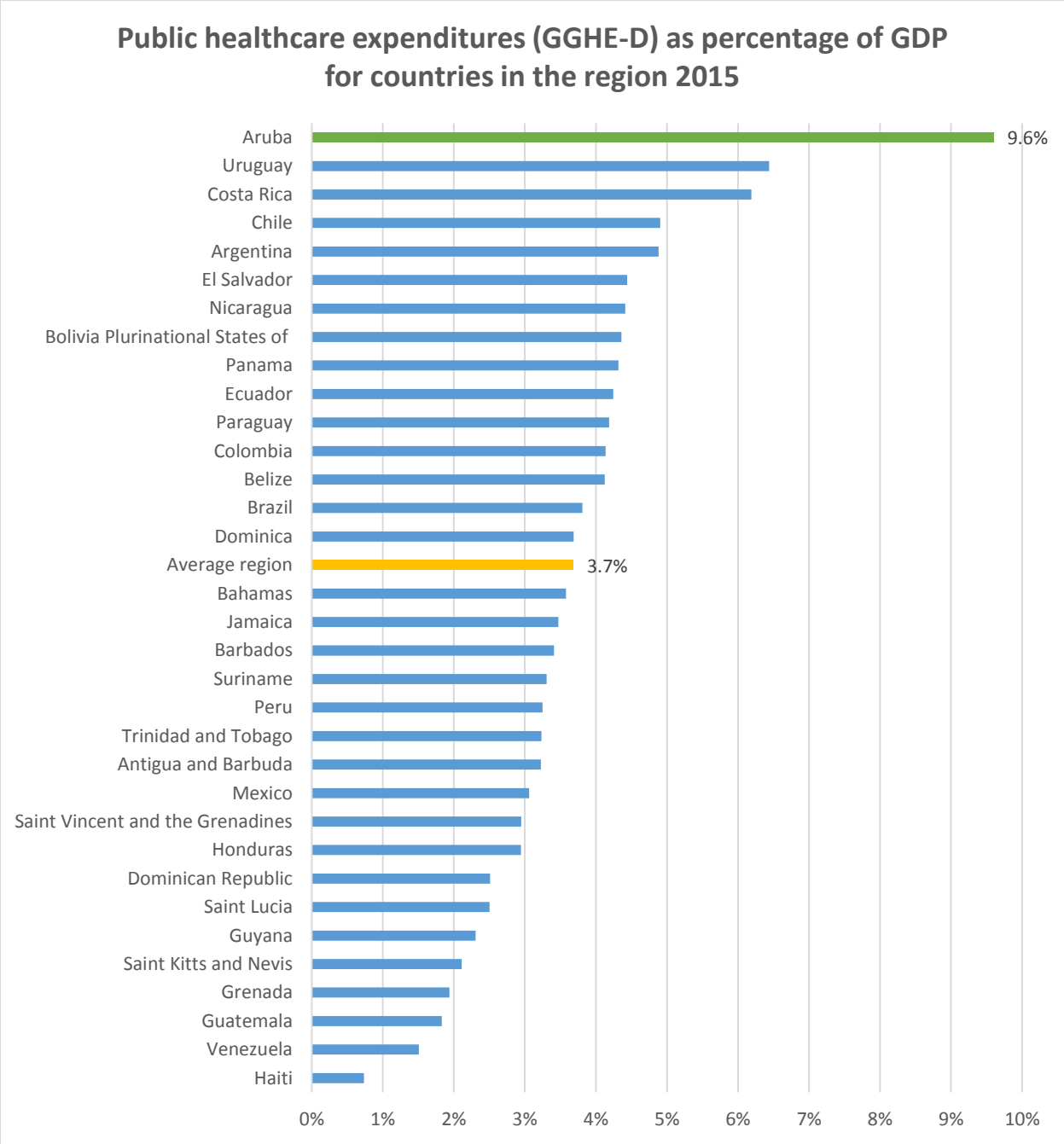

Figure 16: Public healthcare costs (GGHE-D) as percentage of GDP in de region 2015

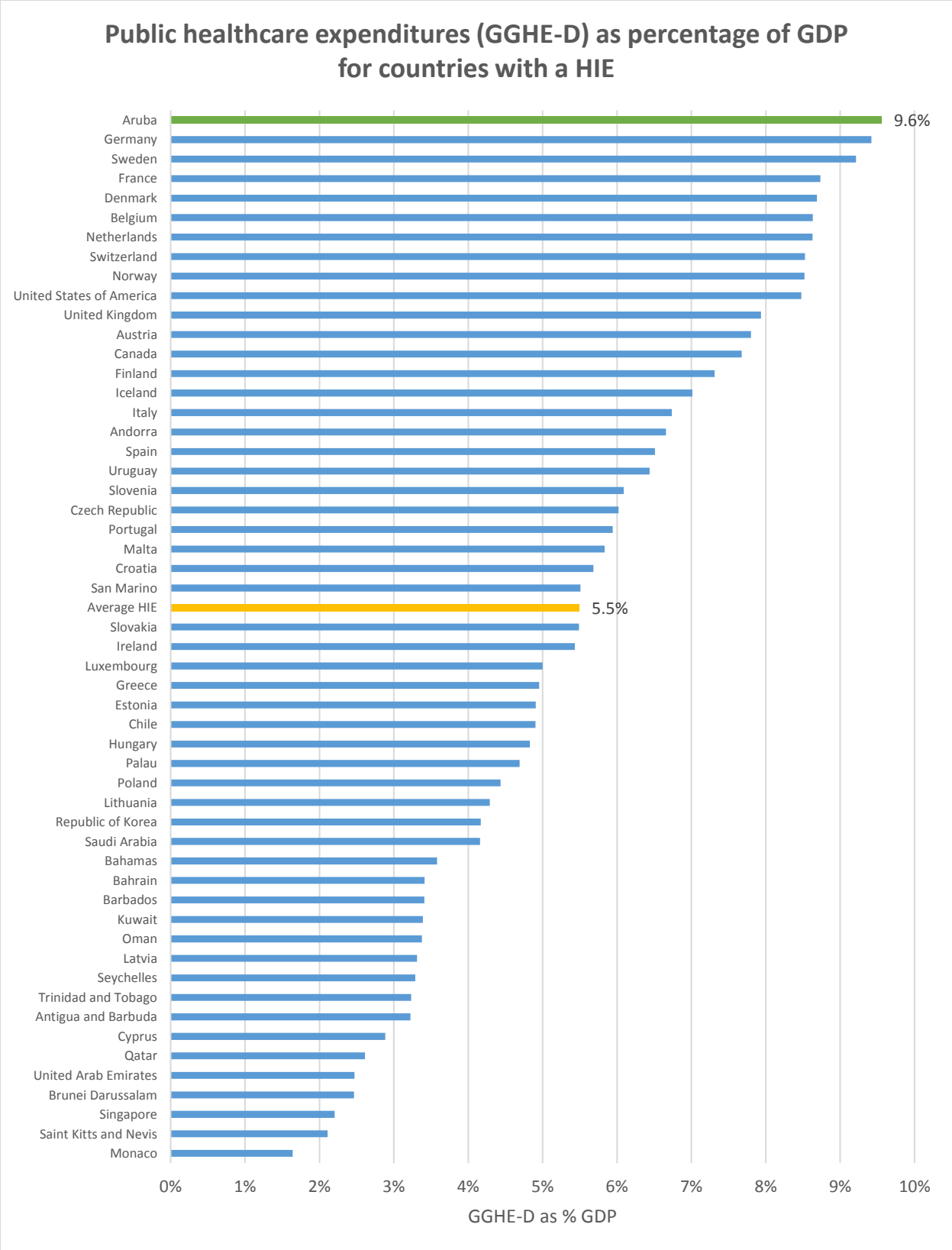

Figure 17: Public healthcare costs (GGHE-D) as percentage of GDP for HIE countries

5.4 COMPARISON OUT-OF-POCKET PAYMENTS

As shown in Figure 18, Aruba has the lowest percentage of out-of-pocket payments (OOPP) as part of total healthcare costs, compared to other countries in the Caribbean and Central and South America. On average, OOPP represent one third (32.9%) of the total financing of healthcare in the region, whereas for Aruba it represents 3.5%.

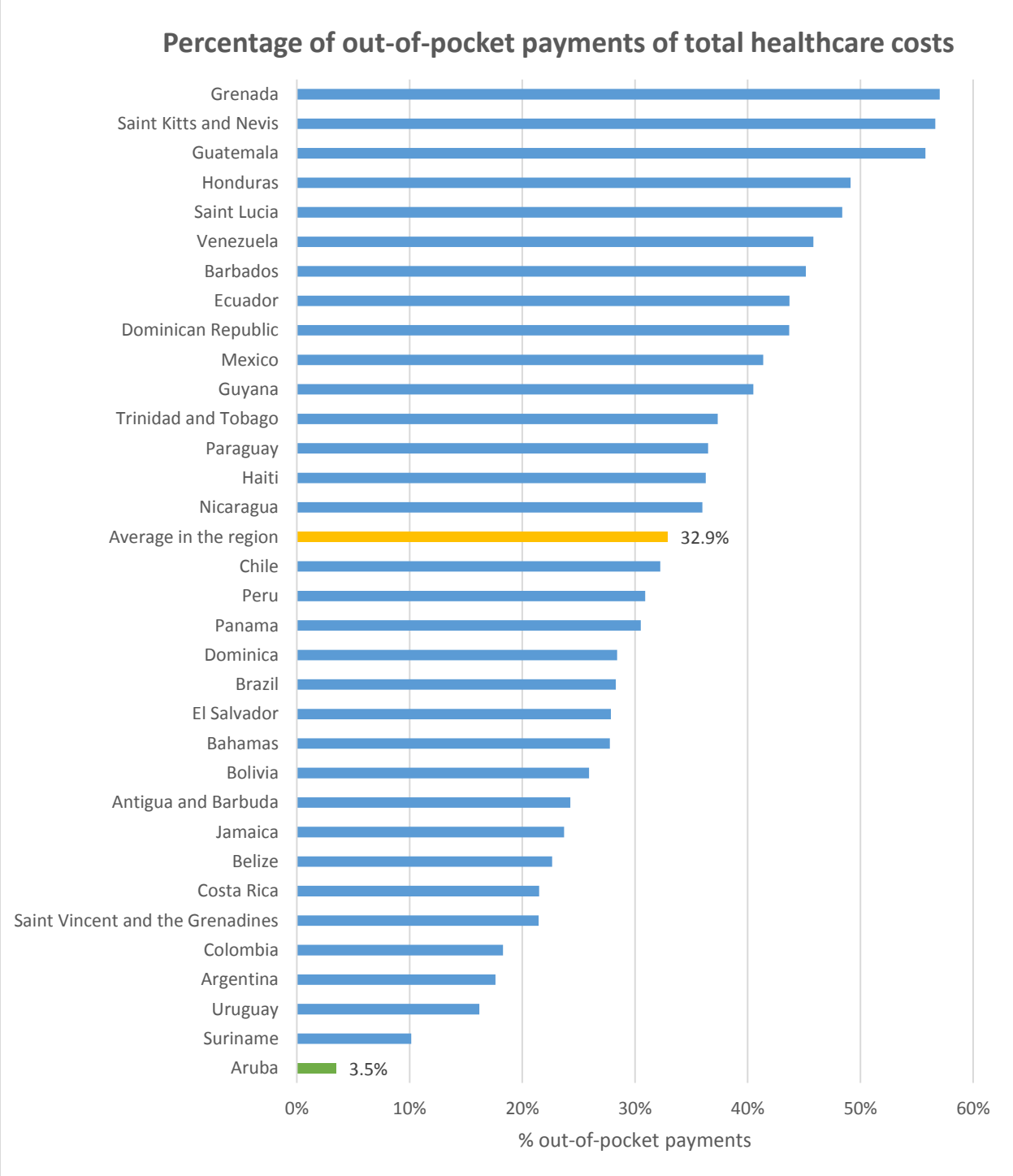

Figure 18: Percentage out-of-pocket payments of total healthcare costs in the region 2015

From a percentage point of view, financing of healthcare through out-of-pocket payments on Aruba is low (3.5%). Also in absolute amounts, with costs of US$84 (Afl. 151, -) per capita per year as shown in Figure 19.

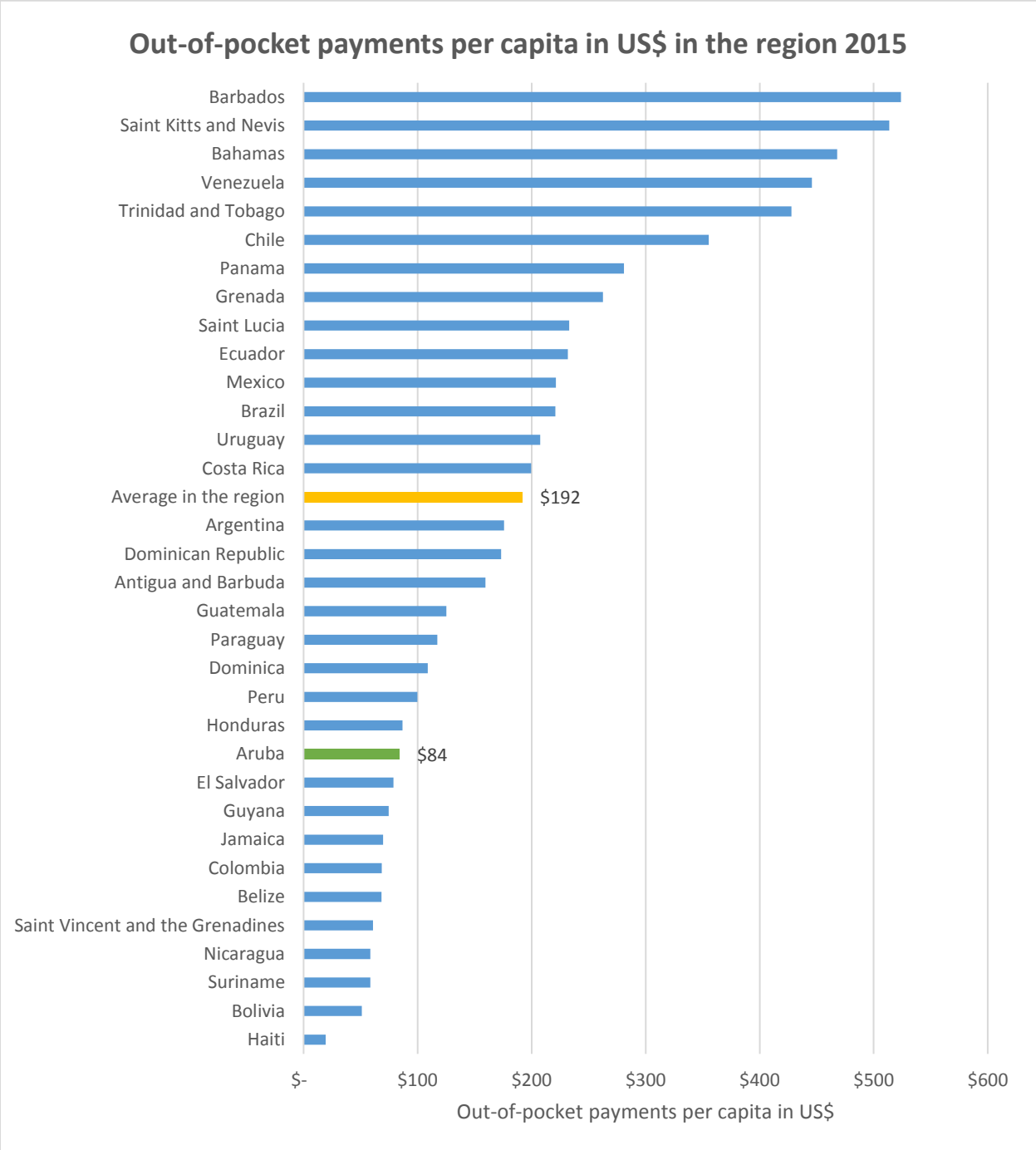

Figure 19: Out-of-pocket payments per capita in the region 2015

Figure 20 shows that compared to other countries with a high-income economy, the out-of-pocket payments per capita in Aruba are among the lowest, at US$84. For countries in the region, an average of $516 in out-of-pocket payments per capita finances healthcare.

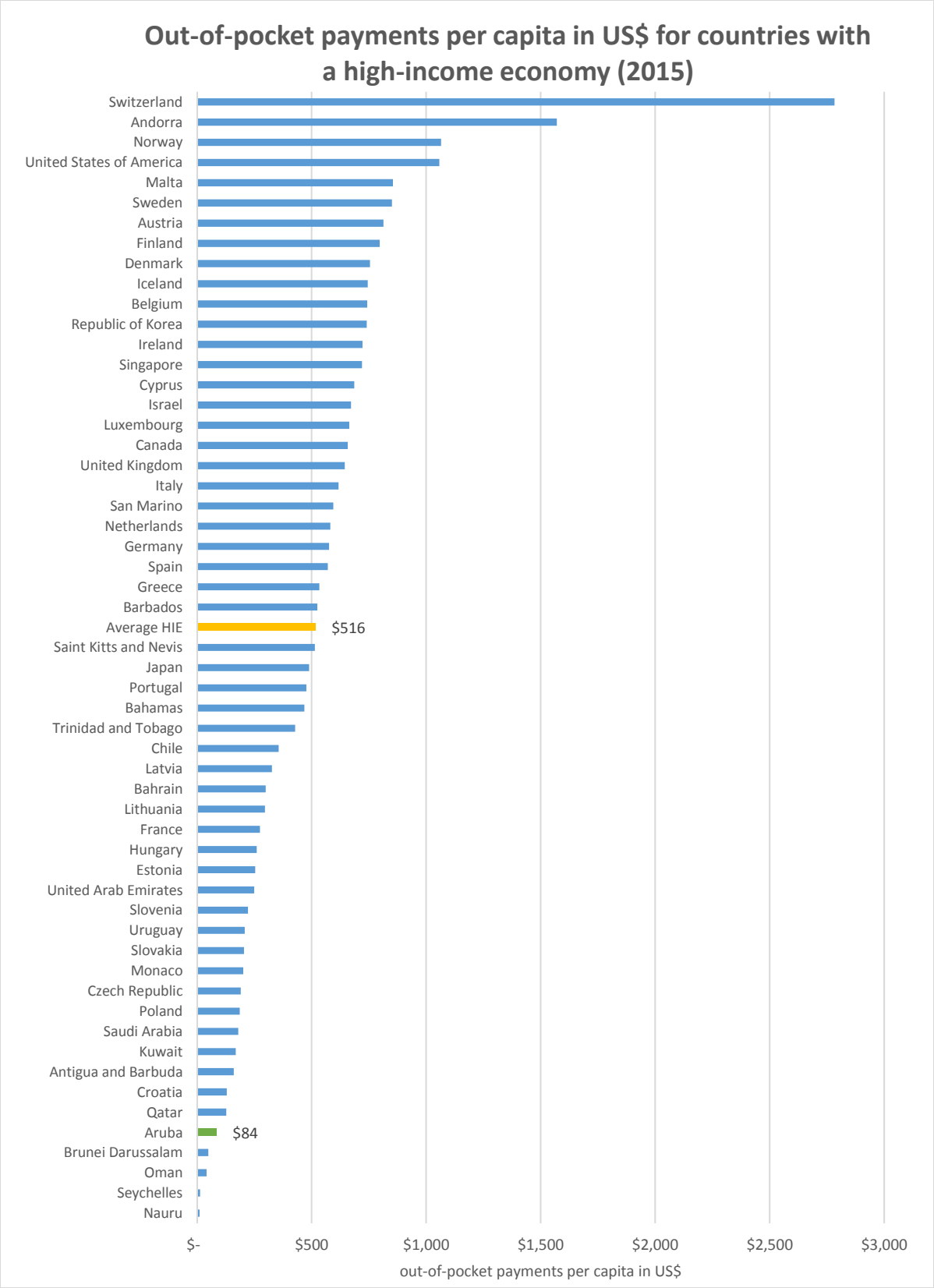

Figure 20: Out-of-pocket payments per capita for HIE 2015

Figure 21 compares the total healthcare costs per capita with the amount of the out-of-pocket payments for countries in the region. The higher the healthcare costs per capita, the higher the out-of-pocket payments. It appears that the out-of-pocket payments on Aruba (marked in red) are relatively low, based on what would be expected from the trend line.

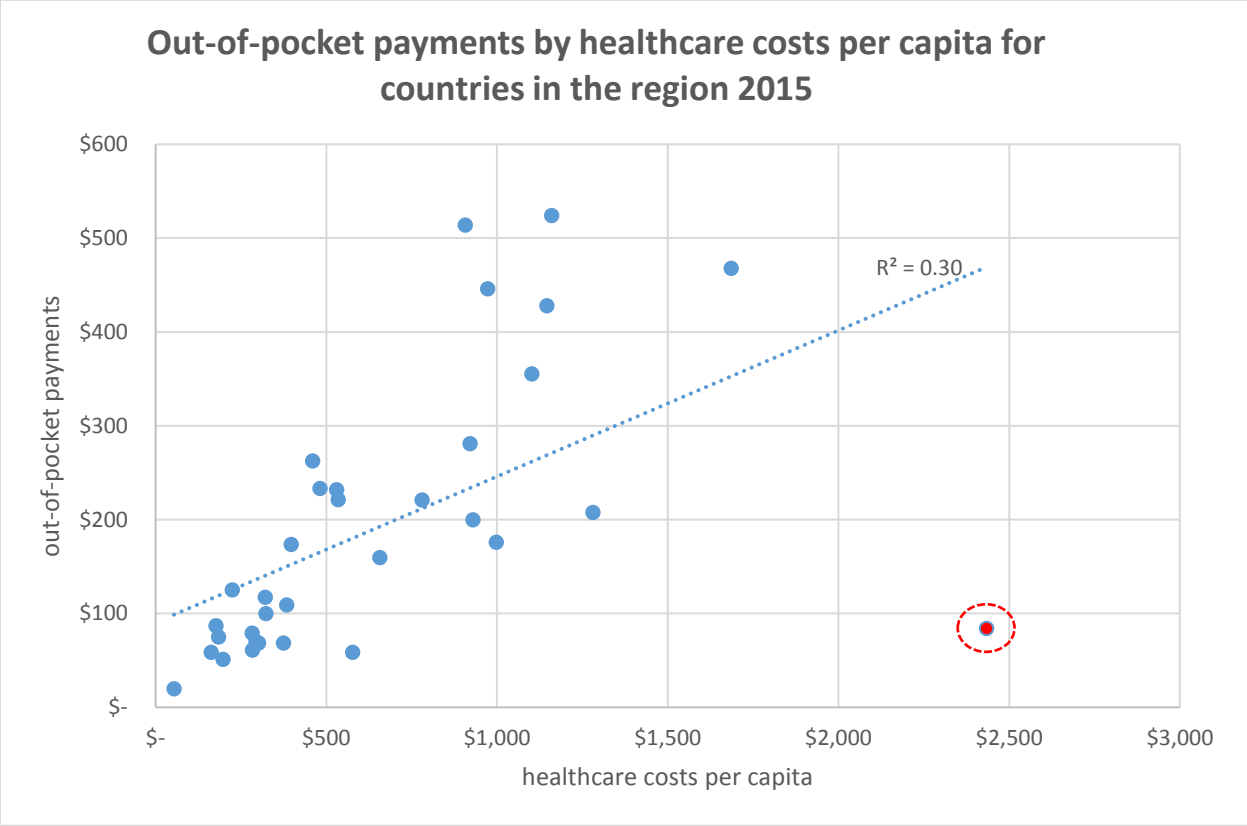

Figure 21: Out-of-pocket payments by healthcare costs per capita for countries in the region 2015

Figure 22 also shows the total healthcare costs per capita with the amount of the out-of-pocket payments, but for countries with a high-income economy. Here, as well, can be seen that Aruba is far from the trend line, which means that out-of-pocket payments are relatively low.

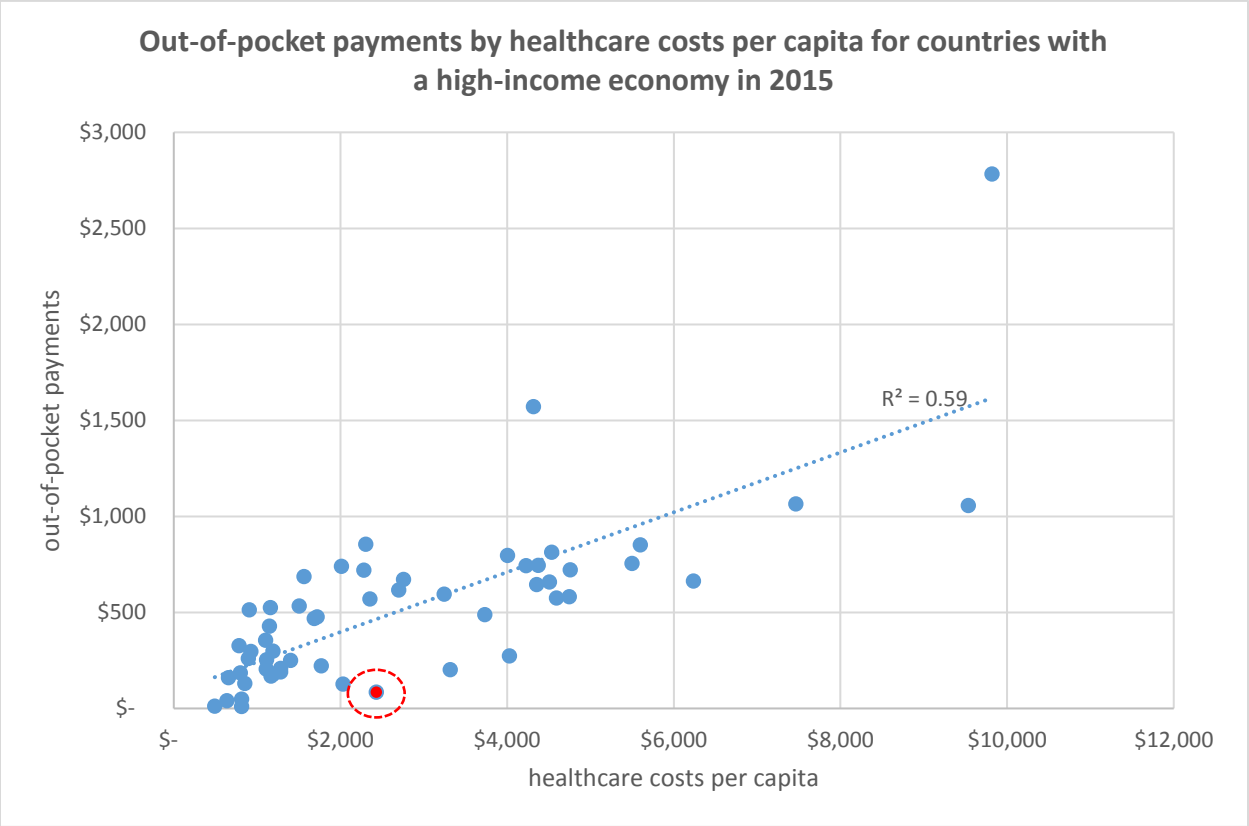

Figure 22: Out-of-pocket payments by healthcare costs per capita for countries with a high-income economy 2015

6 COMPARISON WITHIN THE KINGDOM

Besides Aruba, Curaçao and the Netherlands also have data available according to the NHA methodology. This makes comparisons possible. Table 17 and figure 23 compare the distribution of total healthcare costs by type of healthcare provider, between these three countries within the Kingdom.

6.1 COMPARISON HEALTHCARE PROVIDERS

A notable difference is mainly the percentage of healthcare costs that are spent in the Netherlands on residential long-term care facilities, which represent a quarter (25.8%) of the total healthcare costs, versus 6.5% in Aruba. Providers of ancillary services, including laboratories, are higher in Aruba (4.7%) than in the Netherlands (1.5%). The fact that the Netherlands, given the size of the country, has more (specialist) care provision, partly explains why the share in Aruba costs for healthcare providers abroad (7.3%) is much higher than in the Netherlands (0.8%).

Table 18: Comparison healtcare costs by healthcare providers: Aruba, Curacao and the Netherlands

Code	Type healthcare provider	Costs as % of total healthcare costs 2015		
		Aruba	Curaçao (2014)[47]	Netherlands[48]
HP.1	Hospitals (HOH)	38.0	28.8	34.6
HP.2	Residential long-term care facilities	6.5	9.5	25.8
HP.3	Providers of ambulatory care	14.4	21.8	16.9
HP.4	Providers of ancillary services	4.7	6.1	1.5
HP.5	Retailers and other providers of medical goods	12.8	18.5	11.7
HP.6	Providers of preventive care	2.5	3.0	2.5
HP.7	Providers of healthcare system administration and financing	10.0	7.5	5.4
HP.8	Rest of economy	2.9	0.0	0.9
HP.9	Rest of the world	7.3	4.8	0.8
HP.0	Healthcare providers not able to classify	0.8	-	-
	Total	**100%**	**100%**	**100%**

[47] Ministry of Health, Environment and Nature. (2017). *Zorgrekeningen Curaçao – Healthcare accounts Curaçao 2012–2014.* p. 3
[48] Central Bureau for Statistics. (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; aanbieders en financiering*. Retrieved July 8th, from: https://opendata.cbs.nl/#/CBS/nl/dataset/84078NED/table?ts=1528465665075.

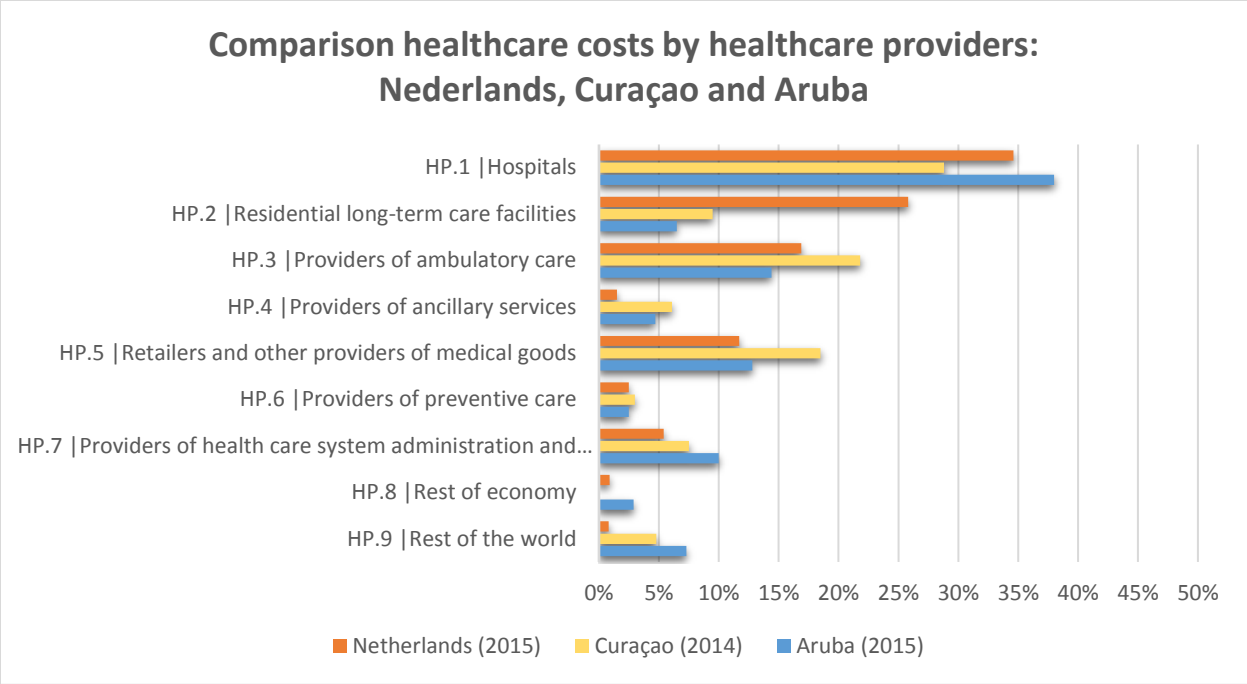

Figure 23: Comparison healthcare costs by healthcare providers: Netherlands, Curaçao and Aruba

6.2 COMPARISON HEALTHCARE FUNCTIONS

Table 18 and figure 24 show the distribution of the total healthcare costs by healthcare function, compared to Curaçao and the Netherlands. A notable difference is that relatively less money is spent on long-term (health) care for Aruba (13.2%) compared to the Netherlands (25.8%). Aruba spends relatively more money (7.7%) to support services (HC.4), including laboratory services, imaging services and patient transport, compared to Curaçao (6.1%) and the Netherlands (1.9%). It should be noted here that the method of calculating these costs in Curaçao and the Netherlands may have taken place in a different way, so that conclusions about this need to be drawn with some caution. This also applies to the medical supplies (HC.5). The costs for the healthcare system and financial administration (HC.7) in Aruba are relatively high (7.1%) compared to the Netherlands (4.1%), but comparable to Curaçao (7.5%).

Tabel 19: Comparison healthcare costs by healthcare functions: Aruba, Curaçao and the Netherlands

Code	Type healthcare function	Costs as % of total healthcare costs 2015		
		Aruba	Curaçao (2014)[49]	Netherlands[50]
HC.1	Curative care	49.6	54.8	47.6
HC.2	Rehabilitative care	3.2	0.6	4.3
HC.3	Long-term care	13.2	9.5	25.8
HC.4	Ancillary services	7.7	6.1	1.9
HC.5	Medical goods	14.5	18.5	12.1
HC.6	Preventive care	3.8	3.0	3.6
HC.7	Governance, and health system and financing administration	7.1	7.5	4.1
HC.9	Other healthcare services not elsewhere classified	0.9	0.0	0.6
	Total	**100%**	**100%**	**100%**

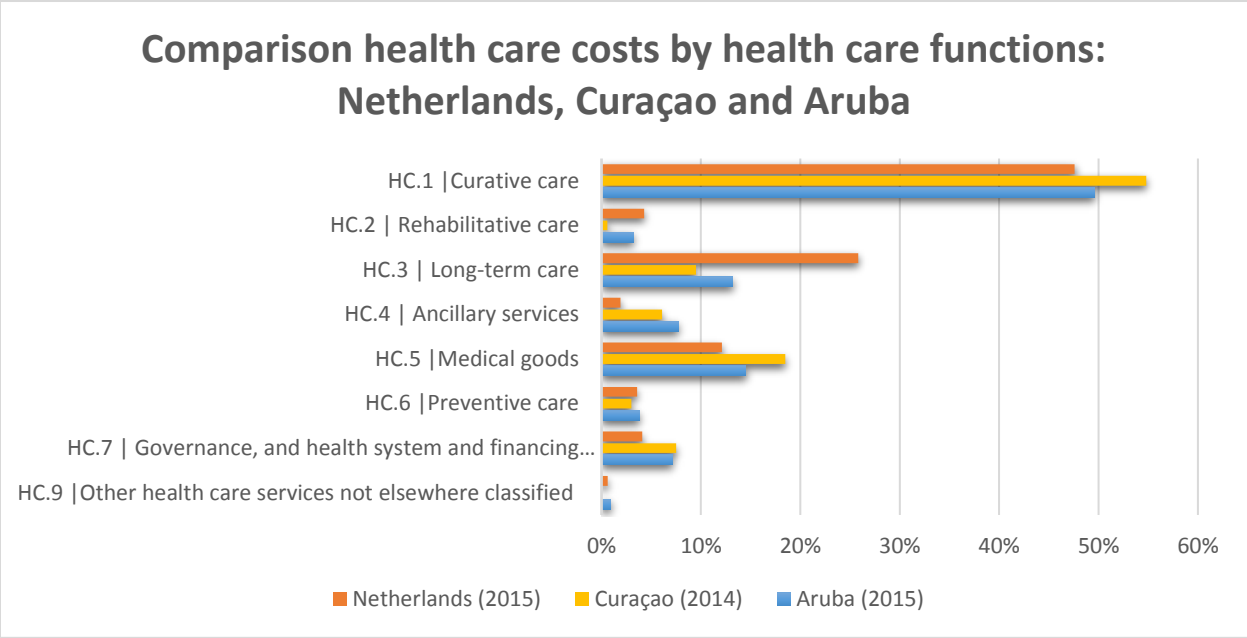

Figure 24: Comparison healthcare costs by healthcare functions: Netherlands, Curaçao and Aruba

[49] Ministry of Health, Environment and Nature. (2017). *Zorgrekeningen Curaçao – Healthcare accounts Curaçao 2012–2014.* p. 3
[50] Central Bureau for Statistics. (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; functies, aanbieders*. Retrieved July 8th,2018 from: https://opendata.cbs.nl/#/CBS/nl/dataset/83072NED/table?ts=1528466981910.

6.3 COMPARISON HEALTHCARE FINANCING SCHEME

Table 29 and Figure 25 show the distribution of total healthcare costs by healthcare financing scheme compared to Curaçao and the Netherlands. For all three countries, the vast majority of the costs are financed through government or national health insurances. Where in Curaçao and the Netherlands there is voluntary (supplementary) health insurance, the share of voluntary financing schemes in Aruba is almost zero (0.4%). In proportion, costs of personal contributions in Aruba (3.5%) are higher than in Curacao (0.3%), but less compared to the Netherlands (11.6%)

Table 20: Comparison healthcare costs by healthcare functions: Aruba, Curaçao and the Netherlands

Code	Type healthcare financing scheme	Costs as % of total healthcare costs 2015		
		Aruba	Curaçao (2014)[51]	Netherlands[52]
HF.1	Government schemes and compulsory healthcare financing schemes	96.1	88.5	81.0
HF.2	Voluntary healthcare payment schemes	0.4	11.3	7.4
HF.3	Household out-of-pocket payment	3.5	0.3	11.6
	Total	**100%**	**100%**	**100%**

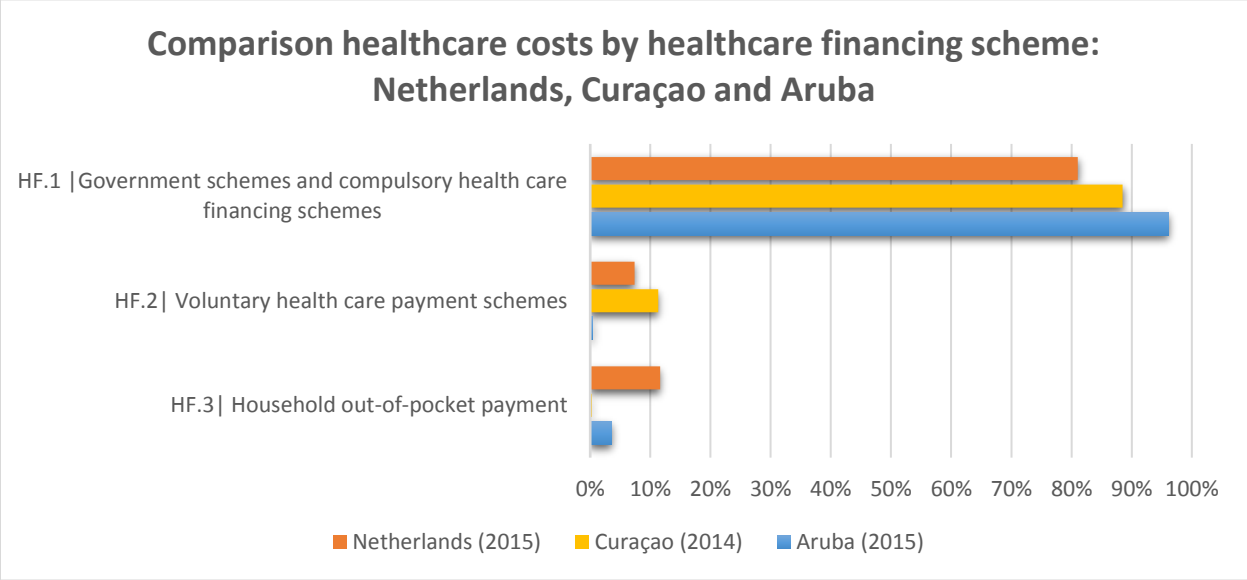

Figure 25: Comparison healthcare costs by healthcare financing scheme: Netherlands, Curaçao and Aruba

6.4 COMPARISON CROSS TABLES NETHERLANDS, CURAÇAO AND ARUBA

Three cross tables have been drawn up that show relationships between three dimensions of the NHA, for the Netherlands, Curaçao and Aruba. This provides additional information in detail. See appendices 4, 5 and 6.

Table #	Table name	Abbreviation	Comparison	Appendix	Page
22	Healthcare function by healthcare provider	HC x HP	Netherlands and Aruba	4	73
23	Healthcare provider by healthcare financing scheme	HP x HF	Netherlands and Aruba	5	74
24	Healthcare function by healthcare financing scheme	HC x HF	Netherlands, Curaçao and Aruba	6	75

[51] Ministry of Health, Environment and Nature. (2017). *Zorgrekeningen Curaçao – Healthcare accounts Curaçao 2012–2014.* p. 4
[52] Central Bureau for Statistics. (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; aanbieders en financiering*. Retrieved July 8th 2018, from: https://opendata.cbs.nl/#/CBS/nl/dataset/84078NED/table?ts=1528465665075

7 LIFE EXPECTANCY AND HEALTHCARE COSTS

The life expectancy of a population says something about the health of the population. Although the organisation and supply of healthcare is just one of many aspects that have an impact on life expectancy, the international comparison of life expectancy to healthcare costs offers interesting information. Figure 26 gives an overview of the life expectancy at birth of countries in the Caribbean and South and Central America for the year 2013[53], and figure 27 for countries with a high-income economy. Life expectancy in Aruba is with 77 years[54] one of the highest in the region, 3 years above average. Regarding countries with a high-income economy, Aruba marks 2 years below the average of 79 years.

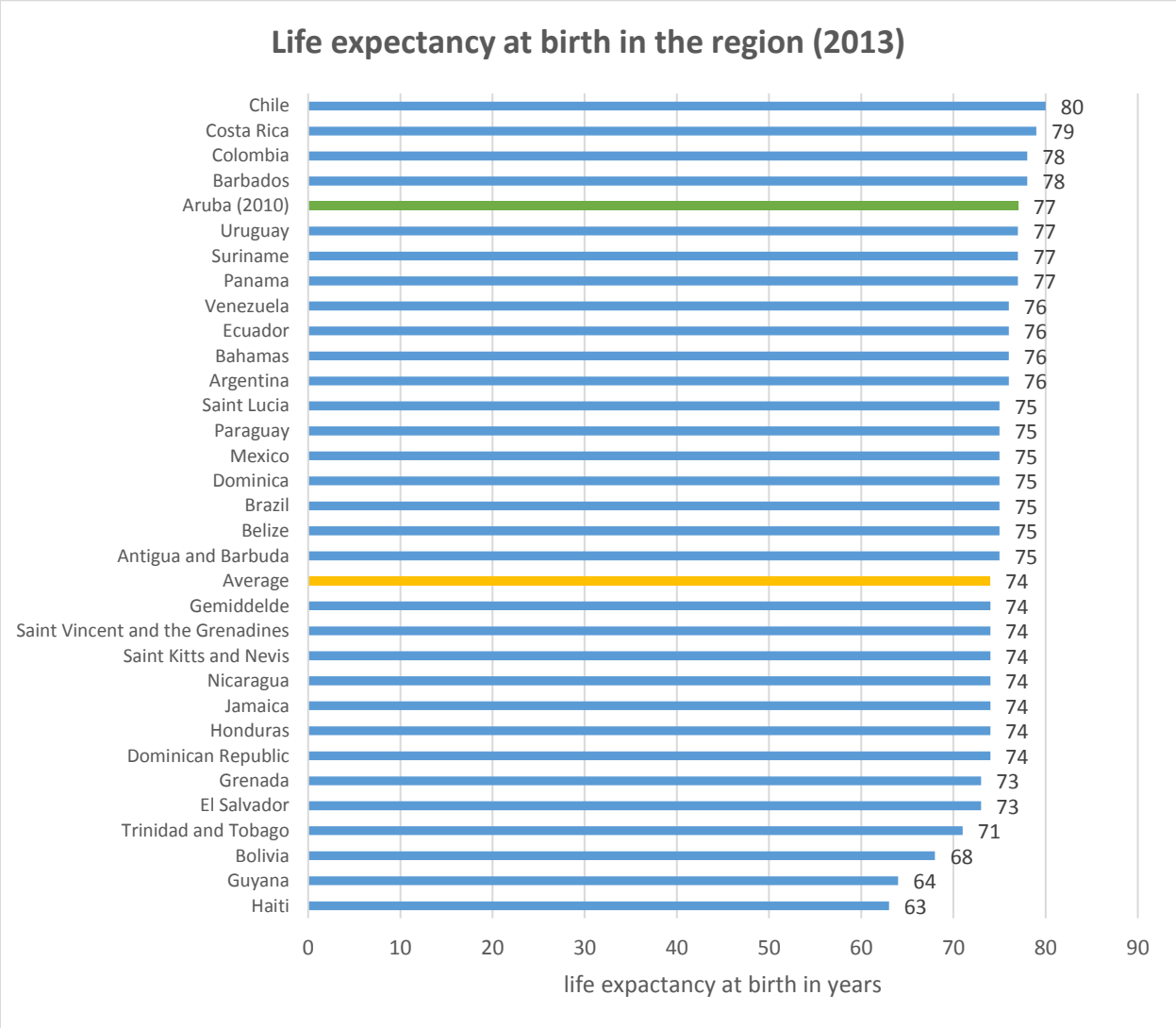

Figure 26: Life expectancy at birth in the region (2013)

[53] WHO. (2018). *Global Health Expenditure Database: Life expectancy at birth.* Retrieved June 12th 2018 from: http://apps.who.int/nha/database/Select/Indicators/en

[54] Ministry of Public Health and Sport. (2013). *Health Monitor Aruba 2013. P 31*

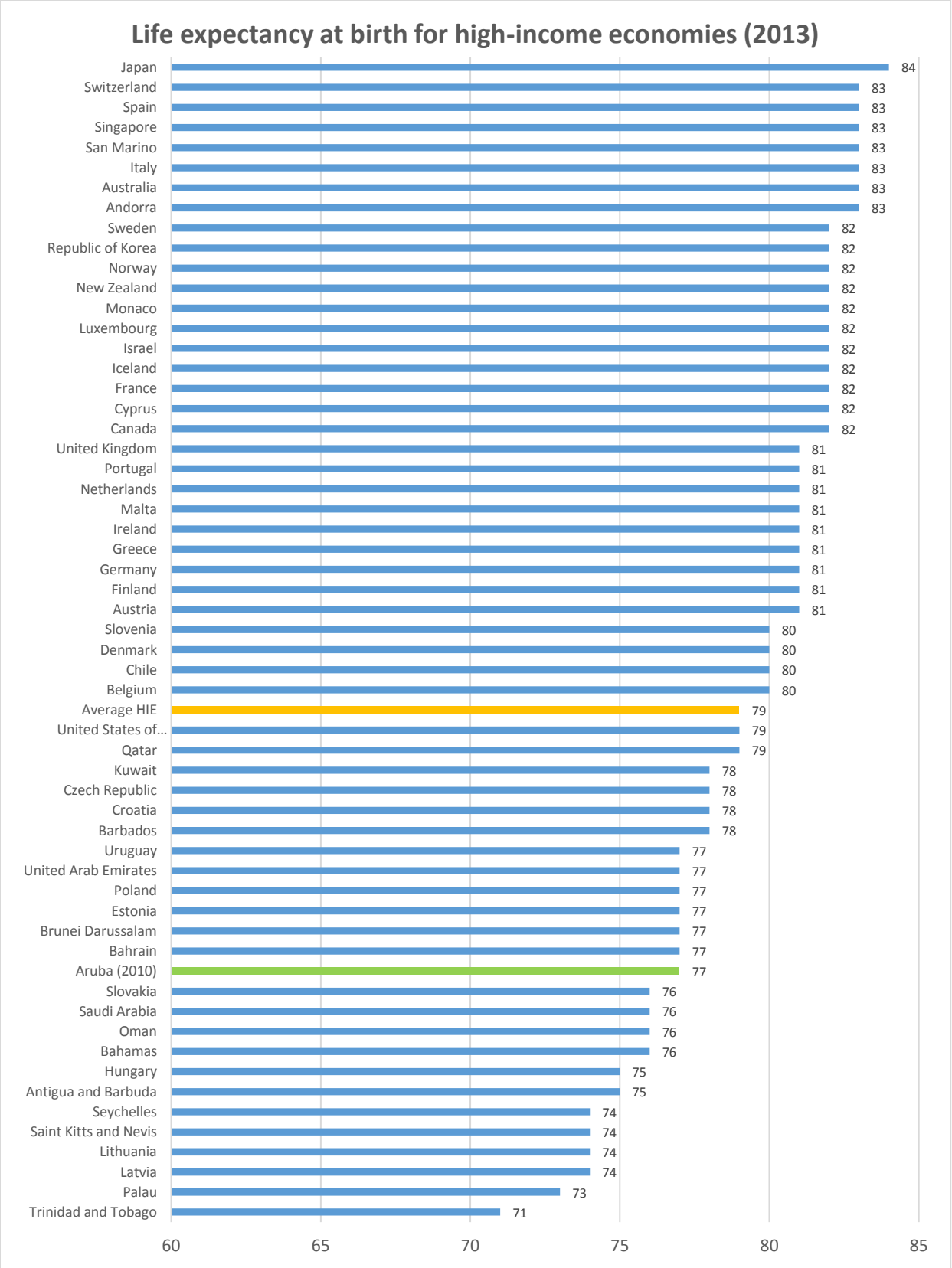

Figure 27: Life expectancy at birth for high-income economies (2013)

Figure 28 shows the total healthcare costs per capita against life expectancy at birth for countries in the Caribbean, South and Central America. A moderate logarithmic correlation is visible (determination coefficient R2 = 0.47[55]). Aruba is marked with a red dot, the average of the region with a yellow dot. Although Aruba has the highest healthcare costs per capita (US$2,434) in the region, there are countries that have the same or higher life expectancy with (much) less costs. These are Barbados, Chile, Colombia, Costa Rica, Panama, Suriname and Uruguay. See appendix 2 for the relevant table.

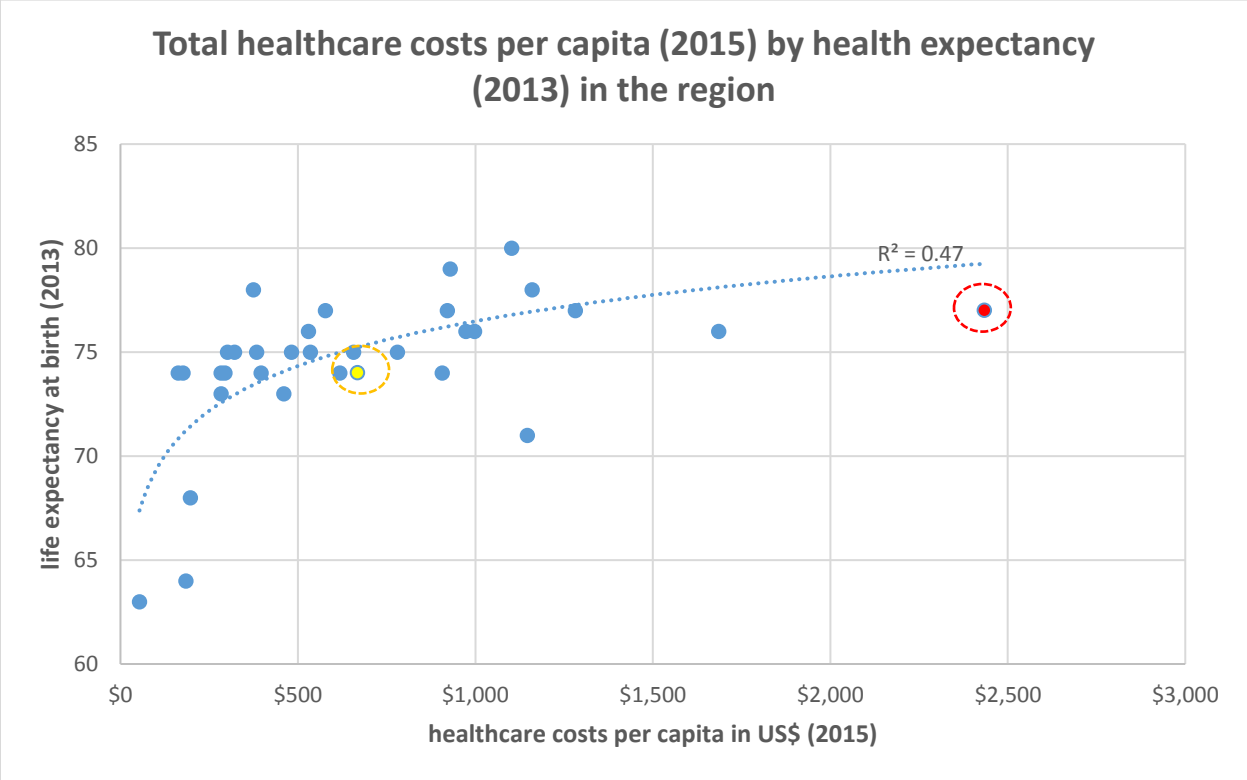

Figure 28: Total healthcare costs per capita by life expectancy in the region

[55] 47% of the variability is explained by the statistical model.

Figure 29 compares the total healthcare costs per capita by life expectancy at birth for countries with a high-income economy. See Appendix 3 for the details per country. A moderate logarithmic correlation is also visible here (determination coefficient R2 = 0.55[56]). Aruba is marked with a red dot with a life expectancy at birth of 77 years and healthcare costs per capita of US$2,434. The dot marked in yellow reflects the average (79 years and US$2,821). The Netherlands is marked orange with a life expectancy of 81 years and US$4,746 in healthcare costs per capita.

All 27 countries that spend more money on healthcare per capita also have a higher life expectancy. Of the 29 high-income economies that spend less money per capita compared to Aruba, 11 countries (38%) have a higher life expectancy, 6 countries (21%) have the same life expectancy and 12 countries (41%) have a lower life expectancy.

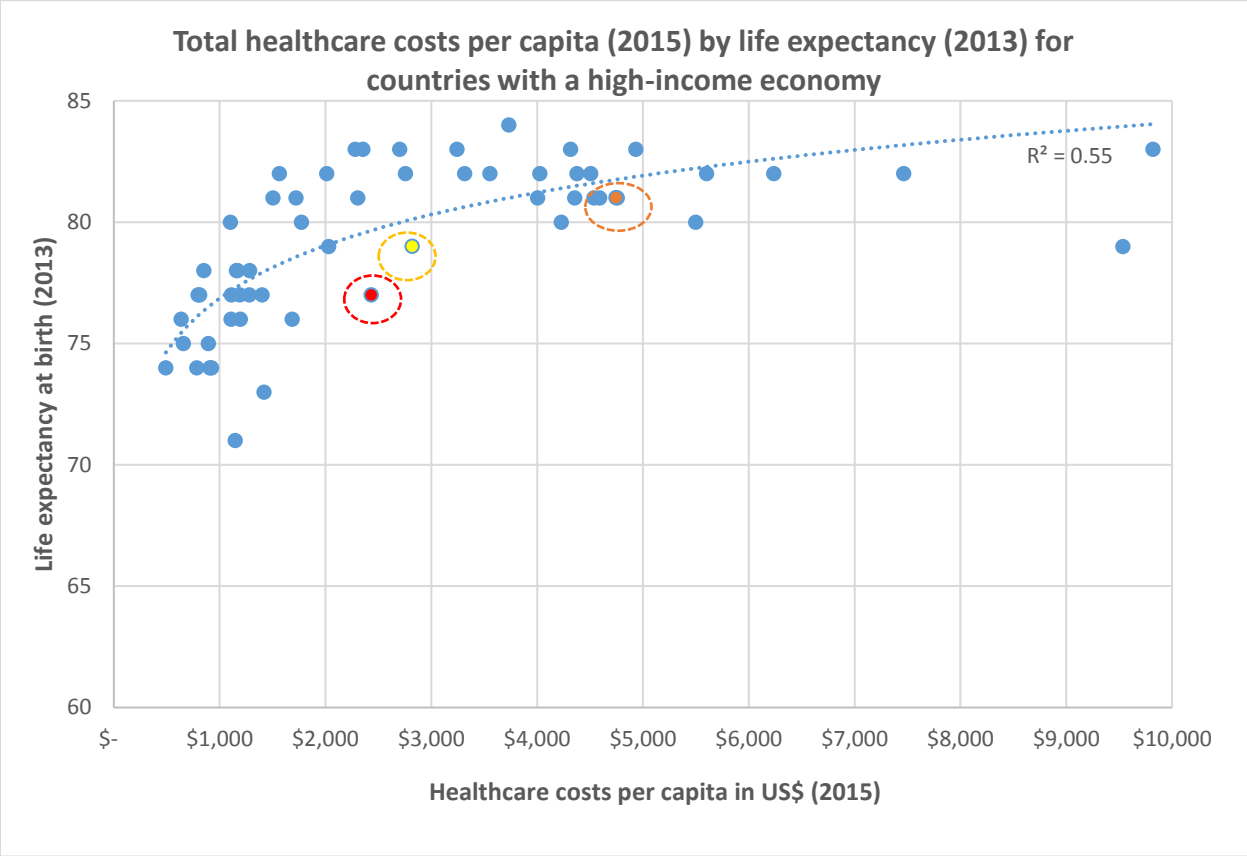

Figure 29: Total healthcare costs per capita by life expectancy for HIE

[56] 55% of the variability is explained by the statistical model.

8 DISCUSSION

Properly estimating the out-of-pocket healthcare costs remains a challenge. Although recent data from the CBS offers insight, the current opinion is that these figures are an underestimate. The allocation of these costs to healthcare functions and healthcare providers is also insufficient. For subsequent NHAs, it is important to establish data collection strategies that get a better grip on the out-of-pocket contributions. Another point of discussion with regard to data collection, concerns the costs of private insurance that are contracted directly with citizens, or through employers. Although this share does not appear to be significant, it has not been possible to receive detailed information about this for the year 2015.

Making trends visible with regard to healthcare costs over the past years offers very valuable information. Since the penultimate NHA was drafted in 2007, it is currently not possible to provide that kind of information. The intention is to set up the NHA for 2016 within a relatively short period of time, so that time comparisons will gradually take shape. Now that the framework for data collection has been established and there is cooperation with key stakeholders, the belief is that the preparation of future NHAs is less time-consuming. The preparation of the NHA, however, remains fragile as it depends on the policy priorities of the DPH and the availability of expertise.

The scope of this NHA is primarily intended to monitor and assess the healthcare system and to analyze the importance of healthcare costs in the economy. This provides relevant information for creating health policy. The implications of the NHA are not discussed herein and must take place with different stakeholders and in different contexts if the NHA is to have an actual impact on the healthcare system of Aruba. Combining non-financial data with information from the NHA is necessary for assessing the efficiency and effectiveness of the healthcare system.

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APPENDIX 1: BRIEF DESCRIPTION OF THE ARUBAN HEALTHCARE SYSTEM

Based on methodology as described in the document "*Guide to producing national health accounts*"[57].

Actor	Population covered	Benefits or activities	Sources of funding	Provider-payer relationships
		Insurers		
UO AZV National Insurance Agency	Every registered resident of Aruba is covered by this health insurance	Different kind of healthcare, mainly curative care	Public funds, collected via social premiums from employees and employers, general taxes and specifically turnover taxes	Contracts
UO AZV plus (Government employees scheme)	Government employees, retired government employees	Additional healthcare products and services	Government	Contracts
Private insurance	Customers (employees or others)	Additional healthcare products and services (e.g. dentist, medical care during stay abroad)	Individuals, employers and employees	
		Providers		
Hospital Dr, Horacio E. Oduber Hospitaal	All patients on Aruba (including tourists)	Secondary line of care, ancillary services	Mainly UO AZV	Contacted lump sum amount
Medical centre Instituto Medico San Nicolas	All patients on Aruba (including tourists)	Ambulatory and policlinic services	Mainly UO AZV	Contacted lump sum amount
General physicians/family doctors	All insured residents	First line of care	UO AZV	Contract based on amount of patients inscribed
Pharmacies	All insured residents	Pharmaceuticals and other products	UO AZV and out-of-pocket payments	Per product
Laboratories	All patients/clients	Examinations	Mainly UO AZV	Per product
Other independent healthcare professionals	All patients/clients	Various	UO AZV, out-of-pocket payments and private insurances	Per product
Various foundations	Specific target groups	Preventive and (long-term) care services	Government	Subsidies
Healthcare providers abroad	All insured residents	Tertiary specialized curative care	UO AZV	Per product
		Government institutions		
Ministry of Public Health	All residents	Policies and regulations	Taxes	Provider of subsidies
Department of Public Health	All residents	Various health related public and individual services	Government	Government institution
Healthcare inspectorate	All residents	Quality of care control	Government	Government institution

[57] WHO (2003). *Guide to producing national health accounts: with special applications for low-income and middle-income countries.* ISBN 9241546077. p. 125-126.

Instituto Bida Saudabel y Activo (IBiSA)	All residents	Health promotion	Government	Government institution

APPENDIX 2: NHA INDICATORS COUNTRIES CARIBBEAN AND SOUTH AND CENTRAL AMERICA

Table 21: NHA indicators countries Caribbean and south and Central America

Countries	Total current health expenditures (CHE) as % GDP	Current health expenditure (CHE) per capita in US$	GDP in million US$	Out-of-pocket payments (OOPS) as % total healthcare expenditures (CHE)	Out-of-pocket payments (OOPS) per capita in US$	Population in thousands	Life expectancy at birth (2013)
Antigua & Barbuda	4.8	657	1,356	24.3	159	100	75
Argentina	6.8	998	633,956	17.6	176	43,418	76
Aruba	**10.0**	**2,434**	**2,693**	**3.5**	**84**	**110**	**77**[58]
Bahamas	7.4	1,685	8,854	27.8	468	387	76
Barbados	7.5	1,160	4,422	45.2	524	284	78
Belize	6.2	301	1,743	22.7	68	359	75
Bolivia	6.4	197	32,998	25.9	51	10,725	68
Brazil	8.9	780	1,803,650	28.3	221	205,962	75
Chile	8.1	1,102	242,518	32.2	355	17,763	80
Colombia	6.2	374	291,520	18.3	68	48,229	78
Costa Rica	8.1	929	54,840	21.5	200	4,808	79
Dominica	5.4	384	517	28.4	109	73	75
Dominican Republic	6.2	397	67,103	43.7	173	10,528	75
Ecuador	8.5	530	100,177	43.7	232	16,144	74
El Salvador	6.9	283	25,850	27.9	79	6,312	76
Grenada	5.0	460	984	57.0	263	107	73
Guatemala	5.7	224	63,794	55.8	125	16,252	-
Guyana	4.5	184	3,164	40.5	75	769	64
Haiti	6.9	54	8,355	36.3	19	10,711	63
Honduras	7.6	177	20,844	49.1	87	8,961	74
Jamaica	5.9	294	14,262	23.7	70	2,872	74
Mexico	5.9	535	1,148,060	41.4	221	125,891	75
Nicaragua	7.8	163	12,693	36.0	59	6,082	74
Panama	7.0	921	52,132	30.5	281	3,969	77
Paraguay	7.8	321	27,283	36.5	117	6,639	75
Peru	5.3	323	192,475	30.9	100	31,377	-
Saint Kitts and Nevis	5.6	907	876	56.6	514	54	74
Saint Lucia	6.0	482	1,431	48.4	233	177	75
Saint Vincent and the Grenadines	4.2	284	738	21.4	61	109	74
Suriname	6.5	577	4,879	10.1	59	553	77
Trinidad and Tobago	6.0	1,146	25,917	37.3	428	1,360	71
Uruguay	9.2	1,281	47,668	16.2	207	3,432	77
Venezuela	3.2	973	958,806	45.8	446	31,155	76

[58] Life expectancy at birth for Aruba is based on data from 2010

APPENDIX 3: NHA INDICATORS COUNTRIES WITH A HIE

Table 22: NHA indicators countries with a HIE

Countries	Total current health expenditures (CHE) as % GDP	Current health expenditure (CHE) per capita in US$	GDP in million US$	Out-of-pocket payments (OOPS) as % total healthcare expenditures (CHE)	Out-of-pocket payments (OOPS) per capita in US$	Population in thousands	Life expectancy at birth (2013)
Andorra	12.0	4,316	2,812	36.4	1571	78	83
Antigua & Barbuda	4.8	657	1,356	24.3	159	100	75
Aruba	**10,0**	**2.434**	**2.693**	**3.5**	**84**	**110**	**77**[59]
Australia	9.4	4,934	1,243,240	-	-	23,800	83
Austria	10.3	4,536	376,967	17.9	813	8,576	81
Bahamas	7.4	1,685	8,854	27.8	468	387	76
Bahrein	5.2	1,190	31,664	25.1	299	1,372	77
Barbados	7.5	1,160	4,422	45.2	524	284	78
Belgium	10.5	4,228	454,991	17.6	743	11,274	80
Brunei Darussalam	2.6	812	12,930	6.0	49	418	77
Canada	10.4	4,508	1,552,808	14.6	657	35,950	82
Chile	8.1	1,102	242,518	32.2	355	17,763	80
Croatia	7.4	852	48,630	15.2	129	4,225	78
Cyprus	6.8	1,563	19,560	43.9	686	847	82
Czech Republic	7.3	1,284	185,156	14.8	190	10,538	78
Denmark	10.3	5,497	301,308	13.7	754	5,660	80
Estonia	6.5	1,112	22,460	22.8	253	1,315	77
Finland	9.4	4,005	232,362	19.9	797	5,480	81
France	11.1	4,026	2,418,946	6.8	274	66,488	82
Germany	11.2	4,592	3,363,600	12.5	575	81,687	81
Greece	8.4	1,505	194,860	35.5	534	10,858	81
Hungary	7.2	894	121,715	29.0	259	9,856	75
Iceland	8.6	4,375	16,784	17.0	745	330	82
Ireland	7.8	4,757	283,716	15.2	721	4,629	81
Israel	7.4	2,756	299,094	24.4	672	8,065	82
Italy	9.0	2,700	1,824,902	22.8	617	60,796	83
Japan	10.9	3,733	4,383,076	13.1	489	127,975	84
Kuwait	4.0	1,169	114,058	14.4	168	3,936	78
Latvia	5.8	784	27,025	41.6	326	1,986	74
Lithuania	6.5	923	41,400	32.1	296	2,921	74
Luxemburg	6.0	6,236	58,048	10.6	664	563	82
Malta	9.6	2,304	10,287	37.1	855	429	81
Monaco	2.0	3,316	6,255	6.1	201	38	82

[59] Life expectancy at birth for Aruba is based on data from 2010

Table 25: NHA indicators countries with a HIE - continued

Countries	Total current health expenditures (CHE) as % GDP	Current health expenditure (CHE) per capita in US$	GDP in million US$	Out-of-pocket payments (OOPS) as % total healthcare expenditures (CHE)	Out-of-pocket payments (OOPS) per capita in US$	Population in thousands	Life expectancy at birth (2013)
The Netherlands	10.7	4,746	750,318	12.3	581	16,901	81
New Zealand	9.3	3,554	175,564	-	-	4,615	82
Norway	10.0	7,464	386,578	14.3	1,065	5,166	82
Oman	3.8	636	69,832	6.4	41	4,200	76
Palau	10.6	1,420	284	21.8	200	21	73
Poland	6.3	797	477,066	23.2	185	38,006	77
Portugal	9.0	1,722	199,082	27.7	476	10,375	81
Qatar	3.1	2,030	164,641	6.2	126	2,482	79
Republic of Korea	7.4	2,013	1,377,873	36.8	741	50,594	82
Saint Kitts and Nevis	5.6	907	876	56.6	514	54	74
San Marino	6.8	3,243	1,569	18.3	594	33	83
Saudi Arabia	5.8	1,194	646,002	15.0	179	31,557	76
Seychelles	3.4	492	1,360	2.5	12	94	74
Singapore	4.3	2,280	296,836	31.6	719	5,535	83
Slovakia	6.9	1,108	87,268	18.4	204	5,421	76
Slovenia	8.5	1,772	42,777	12.5	222	2,063	80
Spain	9.2	2,354	1,192,955	24.2	570	46,450	83
Sweden	11.0	5,600	495,694	15.2	851	9,747	82
Switzerland	12.1	9,818	670,790	28.3	2,783	8,238	83
Trinidad and Tobago	6.0	1,146	25,917	37.3	428	1,360	71
United Arab Emirates	3.5	1,402	370,296	17.8	249	9,154	77
United Kingdom	9.9	4,356	2,861,093	14.8	644	64,875	81
United States of America	16.8	9,536	18,120,714	11.1	1,057	319,929	79
Uruguay	9.2	1,281	47,668	16.2	207	3,432	77

APPENDIX 4: HEALTHCARE PROVIDERS BY HEALTHCARE FUNCTIONS THE NETHERLANDS AND ARUBA

Table 23: Distribution in percentages of current expenditures of health by healthcare providers (HP) and by healthcare functions (HC)

% total healthcare expenditures **Healthcare functions (HC)**	**Country**[60]	**Healthcare providers (HP)**										**Total %**
		HP.1 Hospitals	**HP.2** Residential long-term care facilities	**HP.3** Providers of ambulatory healthcare	**HP.4** Providers of ancillary services	**HP.5** Retailers and other providers of medical goods	**HP.6** Providers of preventive care	**HP.7** Providers of healthcare system administration and financing	**HP.8** Rest of the economy	**HP.9** Rest of the world	**HP.0** Health care providers not able to classify	
HC.1 Curative care	Aruba	33.0		8.6	0.3			2.8		5.0		**49.6**
	The Netherlands	31.8	1.0	12.9				0.8	0.4	0.7		**47.6**
HC.2 Rehabilitative care	Aruba	0.4	1.4	1.4								**3.2**
	The Netherlands	1.1	0.9	2.3								**4.3**
HC.3 Long-term care (health)	Aruba	4.7	5.1	1.9			0.2	0.4		0.8		**13.2**
	The Netherlands	1.6	23.8	0.2					0.1			**25.8**
HP.4 Providers of ancillary services	Aruba			1.4	4.4				0.5	1.4		**7.7**
	The Netherlands				1.5		0.1		0.3			**1.9**
HP.5 Retailers and other providers of medical goods	Aruba			0.1		12.8			1.5			**14.5**
	The Netherlands			0.3		11.7				0.2		**12.1**
HC.6 Preventive care	Aruba			0.9			2.0		1.0			**3.8**
	The Netherlands			1.2			2.3		0.1			**3.6**
HC.7 Governance, and health system and financing administration	Aruba						0.4	6.7				**7.1**
	The Netherlands							4.0				**4.1**
HC.9 Other healthcare services not elsewhere classified (n.e.c.)	Aruba									0.2	0.8	**0.9**
	The Netherlands		0.1					0.5			0.6	**0.6**
Total %	**Aruba**	**38.0**	**6.5**	**14.4**	**4.7**	**12.8**	**2.5**	**10.0**	**2.9**	**7.3**	**0.8**	**100%**
	The Netherlands	**34.6**	**25.8**	**16.9**	**1.5**	**11.7**	**2.5**	**5.4**	**0.9**	**0.8**		

[60] Statistics Netherlands. (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; functies en aanbieders*. Retrieved July 8, 2018, from: https://opendata.cbs.nl/#/CBS/nl/dataset/84035NED/table?ts=1528723405879

APPENDIX 5: HEALTHCARE FINANCING SCHEME BY HEALTHCARE PROVIDER

Table 24: Distribution in percentages of current expenditures of health by financing scheme (HF) and by healthcare providers (HP)

% total healthcare expenditures **Healthcare providers (HP)**	**Country**[61]	**Healthcare financing scheme (HF)**			**Total %**
		HF.1 Government schemes and compulsory healthcare financing schemes	**HF.2** Voluntary healthcare payment schemes	**HF.3** Household out-of-pocket payment	
HP.1 Hospitals	Aruba	38.0			**38.0**
	The Netherlands	31.8		2.8	**34.6**
HP.2 Residential long-term care facilities	Aruba	6.1		0.4	**6.5**
	The Netherlands	23.8		2.0	**25.8**
HP.3 Providers of ambulatory care	Aruba	13.8		0.6	**14.4**
	The Netherlands	10.3	4.6	2.0	**16.9**
HP.4 Providers of ancillary services	Aruba	4.6		0.1	**4.7**
	The Netherlands	0.9	0.5	0.1	**1.5**
HP.5 Retailers and other providers of medical goods	Aruba	10.8		2.0	**12.8**
	The Netherlands	6.8	0.5	4.4	**11.7**
HP.6 Providers of preventive care	Aruba	2.5			**2.5**
	The Netherlands	1.7	0.7	0.0	**2.5**
HP.7 Providers of healthcare system administration and financing	Aruba	10.0			**10.0**
	The Netherlands	4.5	0.8	0.0	**5.4**
HP.8 Rest of economy	Aruba	2.9			**2.9**
	The Netherlands	0.8	0.1	0.0	**0.9**
HP.9 Rest of the world	Aruba	7.3			**7.3**
	The Netherlands	0.5	0.1	0.2	**0.8**
HP.0 Healthcare providers not able to classify	Aruba		0.4	0.4	**0.8**
	The Netherlands				
Total %	**Aruba**	**96.1**	**0.4**	**3.5**	**100%**
	The Netherlands	**81.0**	**7.4**	**11.6**	

[61] Statistics Netherlands (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; aanbieders en financiering*. Retrieved July 8, 2018, from: https://opendata.cbs.nl/#/CBS/nl/dataset/84078NED/table?ts=1528745935337.

APPENDIX 6: HEALTHCARE FINANCING SCHEME BY HEALTHCARE FUNCTION THE NETHERLANDS, CURAÇAO AND ARUBA

Table 25: Distribution in percentages of current expenditures of health by financing scheme (HF) and by healthcare functions (HC)

% total healthcare expenditures **Healthcare functions (HC)**	**Country** [62] [63]	**Healthcare financing scheme (HF)**			**Total %**
		HF.1 Government schemes and compulsory healthcare financing schemes	**HF.2** Voluntary healthcare payment schemes	**HF.3** Household out-of-pocket payment	
HC.1 Curative care	Aruba	49.3		0.4	**49.6**
	The Netherlands	39.9	3.2	4.6	**47.6**
	Curaçao[64]	49.4	5.2	0.2	**54.8**
HC.2 Rehabilitative care	Aruba	3.1		0.1	**3.2**
	The Netherlands	2.6	1.4	0.2	**4.3**
	Curaçao	0.5			**0.5**
HC.3 Long-term care (health)	Aruba	12.7		0.5	**13.2**
	The Netherlands	23.8		2.1	**25.8**
	Curaçao	9.5			**9.5**
HC.4 Ancillary services	Aruba	7.6		0.0	**7.7**
	The Netherlands	1.3	0.5	0.1	**1.9**
	Curaçao	5.3	0.8		**6.1**
HC.5 Medical good	Aruba	12.5		2.0	**14.5**
	The Netherlands	7.1	0.5	4.4	**12.1**
	Curaçao	16.4	2.0		**18.5**
HC.6 Preventive care	Aruba	3.7		0.1	**3.8**
	The Netherlands	2.5	0.9	0.1	**3.6**
	Curaçao	3.0		0.1	**3.0**
HC.7 Governance, and health system and financing administration	Aruba	7.1			**7.1**
	The Netherlands	3.3	0.8		**4.1**
	Curaçao	4.3	3.2		**7.5**
HC.9 Other healthcare services not elsewhere classified (n.e.c.)	Aruba	0.2	0.4	0.3	**0.9**
	The Netherlands	0.5	0.1	0.1	**0.6**
	Curaçao				**0.0**
Total %	Aruba	**96.1**	**0.4**	**3.5**	**100%**
	The Netherlands	**81.0**	**7.4**	**11.6**	
	Curaçao	**88.5**	**11.3**	**0.3**	

[62] Statistics Netherlands. (2018). *StatLine: Zorguitgaven internationaal vergelijkbaar; functies en financiering.* Retrieved July 8, 2018, from: https://opendata.cbs.nl/#/CBS/nl/dataset/84043NED/table?ts=1528733200964.

[63] Ministry of Health, Environment and Nature. (2017). *Zorgrekeningen Curaçao Healthcare accounts Curaçao 2012–2014* p. 12

[64] Data from Curaçao concerns year 2014 instead of 2015

APPENDIX 7: CLASSIFICATION OF HEALTHCARE PROVIDERS (HP)

Code[65]	Description
HP.1	**Hospitals**
HP.1.1	General hospitals
HP.1.2	Mental health hospitals
HP.1.3	Specialised hospitals (other than mental health hospitals)
HP.2	**Residential long-term care facilities**
HP.2.1	Long-term nursing care facilities
HP.2.2	Mental health and substance abuse facilities
HP.2.9	Other residential long-term care facilities
HP.3	**Providers of ambulatory healthcare**
HP.3.1	Medical practices
HP.3.1.1	Offices of general medical practitioners
HP.3.1.2	Offices of mental medical specialists
HP.3.1.3	Offices of medical specialists (other than mental medical specialists
HP.3.2	Dental practice
HP.3.3	Other healthcare practitioners
HP.3.4	Ambulatory healthcare centres
HP.3.4.1	Family planning centres
HP.3.4.2	Ambulatory mental health and substance abuse centres
HP.3.4.3	Free-standing ambulatory surgery centres
HP.3.4.4	Dialysis care centres
HP.3.4.9	All other ambulatory centres
HP.3.5	Providers of home healthcare services
HP.4	**Providers of ancillary services**
HP.4.1	Providers of patient transportation and emergency rescue
HP.4.2	Medical and diagnostic laboratories
HP.4.9	Other providers of ancillary services
HP.5	**Retailers and other providers of medical goods**
HP.5.1	Pharmacies
HP.5.2	Retailers and other providers of medical goods and medical appliances
HP.5.9	All other miscellaneous sellers and other suppliers of pharmaceuticals and medical goods
HP.6	**Providers of preventive care**
HP.7	**Providers of healthcare system administration and financing**
HP.7.1	Government health administration agencies
HP.7.2	Social health insurance agencies
HP.7.3	Private health insurance administration agencies
HP.7.9	Other administration agencies
HP.8	**Rest of economy**
HP.8.1	Households as providers of home health
HP.8.2	All other industries as secondary providers of healthcare
HP.8.9	Other industries n.e.c.
HP.9	**Rest of the world**

Table 26: Classification of healthcare providers (ICHA-HP)

[65] OECD, Eurostat, WHO. (2011). *A System of Health Accounts*. OECD Publishing. p. 130

APPENDIX 8: CLASSIFICATION OF HEALTHCARE FUNCTIONS (HC)

Code[66]	Description English
HC.1	**Curative care**
HC.1.1	Inpatient curative care
HC.1.1.1	General inpatient curative care
HC.1.1.2	Specialised inpatient curative care
HC.1.2	Day curative care
HC.1.2.1	General day curative care
HC.1.2.2	Specialised day curative care
HC.1.3	Outpatient curative care
HC.1.3.1	General outpatient curative care
HC.1.3.2	Dental outpatient curative care
HC.1.3.3.	Specialised outpatient curative care
HC.1.4	Home-based curative care
HC.2	**Rehabilitative care**
HC.2.1	Inpatient rehabilitative care
HC.2.2	Day rehabilitative care
HC.2.3	Outpatient rehabilitative care
HC.2.4	Home-based rehabilitative care
HC.3	**Long-term care (health)**
HC.3.1	Inpatient long-term care (health)
HC.3.2	Day long-term care (health)
HC.3.3	Outpatient long-term care (health)
HC.3.4	Home-based long-term care (health)
HC.4	**Ancillary services (non-specified by function)**
HC.4.1	Laboratory services
HC.4.2	Imaging services
HC.4.3	Patient transportation
HC.5	**Medical goods (non-specified by function)**
HC.5.1	Pharmaceuticals and other medical non-durable goods
HC.5.1.1	Prescribed medicines
HC.5.1.2	Over-the counter medicines
HC.5.1.3	Other medical non-durable goods
HC.5.2	Therapeutic appliances and other medical goods
HC.5.2.1	Glasses and other vision products
HC.5.2.2	Hearing aids
HC.5.2.3	Other orthopaedic appliances and prosthetics (excluding glasses and hearing aids)
HC.5.2.9	All other medical durables. including medical technical devices
HC.6	**Preventive care**
HC.6.1	Information. education and counseling programmes
HC.6.2	Immunisation programmes
HC.6.3	Early disease detection programmes
HC.6.4	Healthy condition monitoring programmes
HC.6.5	Epidemiological surveillance and risk and disease control programmes
HC.6.6	Preparing for disaster and emergency response programmes
HC.7	**Governance. and health system and financing administration**
HC.7.1	Governance and health system administration
HC.7.2	Administration of health financing
HC.9	**Other healthcare services not elsewhere classified (n.e.c.)**
Memorandum items	

[66] OECD, Eurostat, WHO. (2011). *A System of Health Accounts*. OECD Publishing. Pp. 83-84.

Reporting items	
HC.RI.1	Total pharmaceutical expenditure (TPE)
	of *which* Inpatient pharmaceutical consumption
HC.RI.2	Traditional. Complementary and Alternative Medicines (TCAM)
HC.RI.2.1	Inpatient TCAM
HC.RI.2.2	Outpatient and home-based TCAM
HC.RI.2.3	TCAM goods
HC.RI.3	Prevention and public health services
HC.RI.3.1	Maternal and child health; family planning and counseling
HC.RI.3.2	School health services
HC.RI.3.3	Prevention of communicable diseases
HC.RI.3.4	Prevention of non-communicable diseases
HC.RI.3.5	Occupational healthcare
HC.RI.3.9	All other miscellaneous preventive care services
Healthcare related	
HCR.1	Long-term care (social)
HCR.1.1	In-kind long-term social care
HCR.1.2	Long-term social care cash-benefits
HCR.2	Health promotion with multi-sectoral approach

Table 27: Classification of healthcare functions (ICHA-HC)

APPENDIX 9: CLASSIFICATION OF HEALTHCARE FINANCING SCHEMES (HF)

Code[67]	Description
HF.1	**Government schemes and compulsory healthcare financing schemes**
HF.1.1	Government schemes
HF.1.1.1	Central government schemes
HF.1.1.2	State/regional/local government schemes
HF.1.2	Compulsory contributory health insurance schemes
HF.1.2.1	Social health insurance schemes
HF.1.2.2	Compulsory private insurance schemes
HF.1.3	Compulsory Medical Saving Accounts (CMSA)
HF.2	**Voluntary healthcare payment schemes**
HF.2.1	Voluntary health insurance schemes
HF.2.1.1	Primary/substitutory health insurance schemes
HF.2.1.1.1	Employer-based insurance (other than enterprise schemes)
HF.2.1.1.2	Government-based voluntary insurance
HF.2.1.1.3	Other primary coverage schemes
HF.2.1.2	Complementary/supplementary insurance schemes
HF.2.1.2.1	Community-based insurance
HF.2.1.2.2	Other complementary/supplementary insurance
HF.2.2	NPISH financing schemes
HF.2.2.1	NPISH financing schemes (excluding HF.2.2.2)
HF.2.2.2	Resident foreign government development agencies schemes
HF.2.3	Enterprise financing schemes
HF.2.3.1	Enterprises (except healthcare providers) financing schemes
HF.2.3.2	Healthcare providers financing schemes
HF.3	**Household out-of-pocket payment**
HF.3.1	Out-of-pocket excluding cost-sharing
HF.3.2	Cost sharing with third-party payers
HF.3.2.1	Cost sharing with government schemes and compulsory health insurance schemes
HF.3.2.2	Cost sharing with voluntary insurance schemes
HF.4	**Rest of the world financing schemes**
HF.4.1	Compulsory schemes (non-resident)
HF.4.1.1	Compulsory health insurance schemes (non-resident)
HF.4.1.2	Other compulsory schemes (non-resident)
HF.4.2	Voluntary schemes (non-resident)
HF.4.2.1	Voluntary health insurance schemes (non-resident)
HF.4.2.2	Other schemes (non-resident)
HF.4.2.2.1	Philanthropy/international NGOs schemes
HF.4.2.2.2	Foreign development agencies schemes
HF.4.2.2.3	Schemes of enclaves (e.g. international organisations or embassies)
Memorandum items	
Financing agents managing the financing schemes	
HR.RI.1.1	Government
HR.RI.1.2	Corporations
HR.RI.1.3	Households
HR.RI.1.4	NPISH
HR.RI.1.5	Rest of the world
Financing schemes and the related cost-sharing together	
HR.RI.2	Government schemes and compulsory contributory health insurance schemes together with cost-sharing (HF.1 + HF.3.2.1)
HR.RI.3	Voluntary health insurance schemes together with cost-sharing (HF.2 + HF.3.2.2)

Table 28: Classification of healthcare financing schemes (ICHA-HF)

[67] OECD, Eurostat, WHO. (2011). *A System of Health Accounts*. OECD Publishing. p. 165

APPENDIX 10: CLASSIFICATION OF FINANCING AGENTS (FA)

Code[68]	Description
FA.1	**General government**
FA.1.1	General government
FA.1.1.1	Ministry of Health
FA.1.1.2	Other ministries and public units (belonging to central government)
FA.1.1.3	National Health Service Agency
FA.1.1.4	National Health Insurance Agency
FA.1.2	State/Regional/Local government
FA.1.3	Social security agency
FA.1.3.1	Social Health Insurance Agency
FA.1.3.2	Other social security agency
FA.1.9	All other general government units
FA.2	**Insurance corporations**
FA.2.1	Commercial insurance companies
FA.2.2	Mutual and other non-profit insurance organisations
FA.3	**Corporations (other than insurance corporations**
FA.3.1	Health management and provider corporations
FA.3.2	Corporations (other than providers of health services)
FA.4	**Non-profit institutions serving households (NPISH)**
FA.5	**Households**
FA.6	**Rest of the world**
FA.6.1	International organisations
FA.6.2	Foreign governments
FA.6.3	Other foreign entities

Table 29: Classification of financing agents (ICHA-FA)

[68] OECD, Eurostat, WHO. (2011). *A System of Health Accounts*. OECD Publishing. p. 448

APPENDIX 11: CLASSIFICATION OF REVENUES OF HEALTHCARE (FS)

Code[69]	Description
FS.1	**Transfers form government domestic revenue (allocated to health purposes)**
FS.1.1	Internal transfers and grants
FS.1.2	Transfers by government on behalf of specific groups
FS.1.3	Subsidies
FS.1.4	Other transfers from government domestic revenue
FS.2	**Transfers distributed by government from foreign origin**
FS.3	**Social insurance contributions**
FS.3.1	Social insurance contributions from employees
FS.3.2	Social insurance contributions from employers
FS.3.3	Social insurance contributions form self-employed
FS.3.4	Other social insurance contributions
FS.4	**Compulsory prepayment (other than FS.3)**
FS.4.1	Compulsory prepayment from individuals/households
FS.4.2	Compulsory prepayment form employers
FS.4.3	Other compulsory prepaid revenues
FS.5	**Voluntary prepayment**
FS.5.1	Voluntary prepayment from individuals/households
FS.5.2	Voluntary prepayment from employers
FS.5.3	Other voluntary prepaid revenues
FS.6	**Other domestic revenues n.e.c.**
FS.6.1	Other revenues from households n.e.c.
FS.6.2	Other revenues from corporations
FS.6.3	Other revenues from NPISH n.e.c.
FS.7	**Direct foreign transfers**
FS.7.1	Direct foreign financial transfers
FS.7.1.1	Direct bilateral financial transfers
FS.7.1.2	Direct multilateral financial transfers
FS.7.1.3	Other direct foreign financial transfers
FS.7.2	Direct foreign aid in kind
FS.7.2.1	Direct foreign aid in goods
FS.7.2.1.1	Direct bilateral aid in goods
FS.7.2.1.2	Direct multilateral aid in goods
FS.7.2.1.3	Other direct foreign aid in goods
FS.7.2.2	Direct foreign aid in kind: services (including TA)
FS.7.3	Other direct foreign transfers (n.e.c.)

Table 30: Classification of revenues of healthcare (ICHA-FS)

[69] OECD, Eurostat, WHO. (2011). *A System of Health Accounts*. OECD Publishing. p. 199


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