2025

Baseline Assessment on Healthy Aging in Sint Maarten



FINAL REPORT

JULY - SEPTEMBER 2025

Acknowledgements

This report was completed by Dr. Caroline Allen with the support of the Pan American Health Organization/World Health Organization and the Ministry of Public Health, Social Development and Labour Sint Maarten.

Contents

List of tables 4
List of figures 4
Acronyms 5
Introduction 6
Methodology 6
Conceptual framework 6
Assessment methods 10
Results 13
Overview of the status of older people in Sint Maarten 13
Health conditions 16
The macro-context: political, demographic, economic and environmental conditions 17
Gender issues in the population structure 25
Institutional context 37
Finance and administration 37
Initiatives for populations in need 41
Health and Social Care institutions 44
Prevention and health promotion 47
Disaster Emergency preparedness and response 51
Environmental health and management 52
Employment, human resources, education and training for Health and Social care 54
Housing and Infrastructure 57
Housing and infrastructure for older people 57
Climate-resilient housing and infrastructure 59
Infrastructure for exercise and health co-benefits 60
Government policy 61
Community and Social support 62
Support from professional and voluntary carers 62
Intrinsic capacities 67
Locomotor capacity 68
Sensory capacity 69
Vitality 74
Cognition 75
Psychological capacity 75
Functional abilities 76
Ability to meet basic needs 76

Ability to learn, grow and make decisions 77
Ability to be mobile 78
Ability to build and maintain relationships 79
Ability to contribute to society 80
Discussion and recommendations: a roadmap for healthy ageing in Sint Maarten 82
Enhancing ability to meet basic needs 83
1: Social security and labor market reforms to enhance economic development 83
Recommendations 83
2: Integration of health promotion and preventive health care in the social security system 84
Recommendations 84
3: Health promotion across the life course 84
Recommendations 85
4: Initiatives to assist people in navigating the health, social care and social security systems 85
Recommendations 86
5: Social housing and residential options for older people 86
Recommendations 87
6: Health promoting infrastructure and environments 87
Recommendations 88
7: Health and social care workforce capacity-building 88
Recommendations 89
Enhancing ability to be mobile 89
8. Mobility initiatives 89
Recommendations 90
Enhancing ability to learn, grow and make decisions 90
9. Educational and empowerment initiatives with older people 90
Recommendations 91
Enhancing ability to build and maintain relationships 91
10. Initiatives for companionship and elder support 91
Recommendations 91
Enhancing ability to contribute to society 92
11. Initiatives to enhance elders' contributions and meaningful involvement in society 92
Recommendations 92
Roadmap for Healthy Aging in Sint Maarten 93
Conclusion 101
References 103

List of tables

Table 1: NCD risk factors in Sint Maarten: results from the 2015 How Healthy is Sint Maarten-Saint Martin? Survey, the 2013 PAHO Adolescent Health Survey and the 2023 STEPS survey 14
Table 2: Population distribution by age group in Sint Maarten, 2017 and 2022 19
Table 3: Dependency ratios in Sint Maarten, 2017 and 2022 19
Table 4: Estimated old age dependency ratio, selected Caribbean countries and world regions, 1960, 2017 and 2024 20
Table 5: Population density and total population in Sint Maarten, 1930-2022 21
Table 6: Population density (people per sq. km of land area) for selected Caribbean countries and world regions, 2022 22
Table 7: Population change Sint Maarten, 2014-16 23
Table 8: Immigration by major sending countries (on the left), and emigration by major receiving countries (on the right), 2016 24
Table 9: Sint Maarten population by nationality in 1992, 2001, 2011 and 2022 24
Table 10: Population and sex ratio by age group, 2022 26
Table 11: Estimated monthly average household cost in Sint Maarten, 2022 29
Table 12: Population by type of insurance 40
Table 13: Reforms to the labor market and social security systems in Sint Maarten 62
Table 14: Arrangements for the support of the intrinsic capacities of older people in Sint Maarten 70

List of figures

Figure 1: Components of Healthy Aging 7
Figure 2: Contextual factors influencing intrinsic capacities and functional abilities: a socio-ecological approach 8
Figure 3: The WHO Health Systems Framework 10
Figure 4: Population of Sint Maarten by age group, 2022 18
Figure 116: Average temperature in degrees centigrade in Sint Maarten, 1971-2016 35

Acronyms

ANG	Antillean Guilder
BES	Bonaire, Sint Eustatius and Saba
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CDFHA	Community Development, Family and Humanitarian Affairs
CPS	Collective Prevention Services
CVD	Cardiovascular disease
CVRM	Cardiovascular Risk Management
GP	General Practitioner
MAP	Multisectoral Action Plan
MECYS	Ministry of Education, Culture, Youth and Sports
MHF	Mental Health Foundation
MHP	Mental Health Plan
NCD	Noncommunicable disease
NCD MAP	National NCD Multisectoral Action Plan
NGO	Non-Governmental Organization
NIPA	National Institute for Professional Advancement
PAHO	Pan American Health Organization/ World Health Organization
PP	Pro Pauper
Project HELP	Project Health-Education-Literacy-Prevention
SIDS	Small Island Developing States
SMHDF	Sint Maarten Housing Development Foundation
SMMC	Sint Maarten Medical Centre
SVB	Social Insurance Bank (Sociale Verzekerings Bank)
SZV	Social and Health Insurances
USM	University of Sint Maarten
VROMI	Ministry of Public Housing, Spatial Planning, Environment and Infrastructure
VSA	The Ministry of Public Health, Social Development and Labor
WHO AIMS	World Health Organization Assessment Instrument for Mental Health Systems
WYCCF	White and Yellow Cross Care Foundation
XCG	Caribbean guilder Curacao and Sint Maarten

Introduction

In common with most countries in the world, Sint Maarten is experiencing demographic shifts, with increasing life expectancy and declining fertility rates contributing to a growing proportion of older adults in the population. As a small island developing state (SIDS), Sint Maarten faces challenges in addressing the needs of its ageing population. These include limited health and social care infrastructure, workforce constraints, and the need for integrated, multisectoral approaches to ageing and the threat of climate change. At the same time, the island has opportunities to leverage its close-knit communities, existing health systems, and regional partnerships to promote healthy ageing.

To support evidence-based policy development, the government of Sint Maarten has requested technical assistance from the Pan American Health Organization/ World Health Organization (PAHO) to conduct a baseline assessment of the current situation of older persons in Sint Maarten. This includes understanding the demographic profile, health status, social determinants, service availability, and policy environment affecting older adults.

The findings from this baseline assessment will inform the development of a national roadmap for healthy ageing in Sint Maarten, aligned with the WHO Decade of Healthy Ageing framework. These initial steps will lay the foundation for setting priorities, strengthening partnerships, and guiding strategic action to address population ageing and improve the wellbeing of older persons in Sint Maarten.

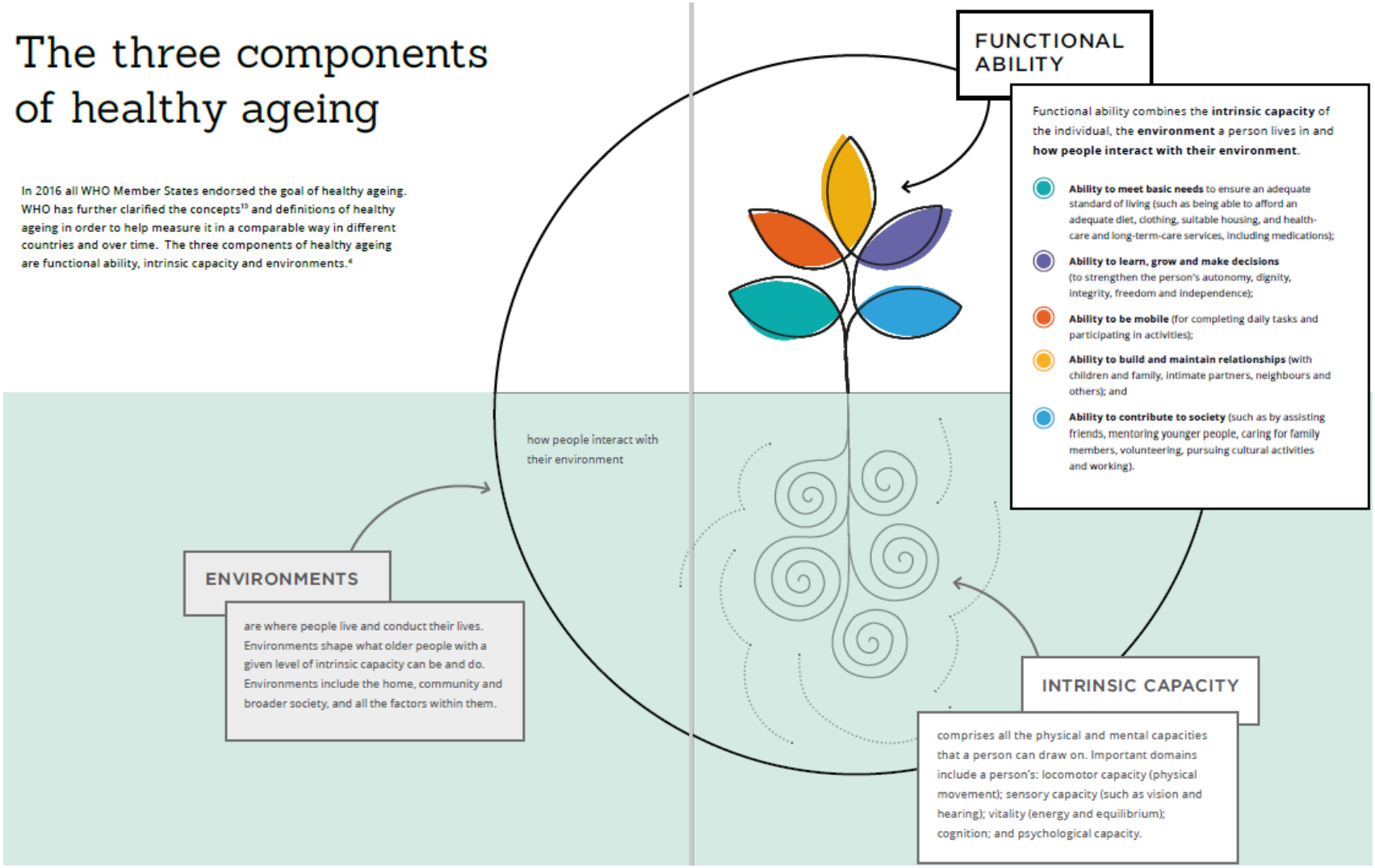
Methodology

Conceptual framework

Healthy ageing does not only refer to being free from disease but rather can be defined as, *"the process of developing and maintaining the functional ability that enables well-being in older age*" (World Health Organization, 2015). This process involves creating supportive environments and opportunities. The healthy ageing concept is fundamentally about maximizing the amount of time in the life course during which functional abilities are maintained.

This baseline assessment is informed by the World Health Organization (WHO) framework on healthy ageing, presented in the WHO's *Decade of Healthy Ageing: Baseline Report* (World Health Organization, 2020) **(Figure 1)**. According to this, the goal of strategies on ageing should be to maximize functional abilities, from the most basic (e.g. ability to obtain adequate food and medication) to the most aspirational (ability to contribute to society). **Figure 1** shows that the roots of functional abilities lie in intrinsic capacities: locomotor capacity, sensory capacity, vitality, cognition and psychological capacity. Health care and health promotion play important roles in maintaining and improving intrinsic capacities and functional abilities. However, it is important to recognize that factors beyond health services play important roles in determining and influencing intrinsic capacities and functional abilities.

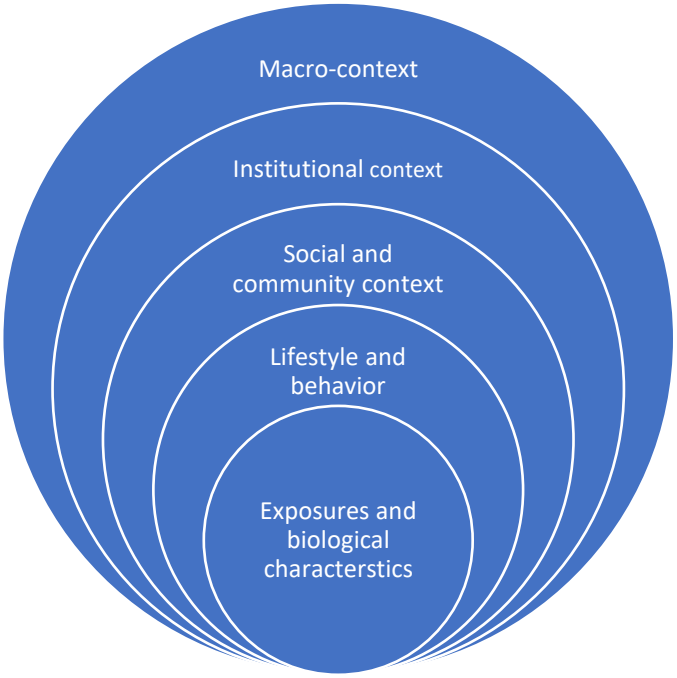
Figure 1: Components of Healthy Aging



Source: (World Health Organization, 2020), pages 12-13.

A broad socio-ecological approach is necessary to understand the range of environmental contextual factors influencing intrinsic capacities and functional abilities of older people. **In Figure 2**, the layers of factors are summarized. The **macro-context** comprises political, demographic, economic and environmental conditions. The macro-context frames the **institutional context**: the actions of institutions, such as governments, employers, and providers of health, education, housing, food and utilities such as water, electricity and telecommunications. The institutional context in turn affects relationships and access to resources within social and community contexts. Factors at all these levels affect personal lifestyles and behaviors. Biological characteristics and exposures to pathogens, toxins and pollutants also affect health outcomes and ultimately intrinsic capacities and functional abilities.

Figure 2: Contextual factors influencing intrinsic capacities and functional abilities: a socio-ecological approach



Source: Adapted from (McLeroy, Bibeau, Steckler, & Glanz, 1988)

This report is structured to provide analyses of factors at each of these levels and of the intrinsic capacities and functional abilities of older people in Sint Maarten. It also provides analysis of the four key action areas of the WHO's *Decade of Healthy Ageing,* i.e.,

1) Delivering person-centered, integrated care and primary health services responsive to older people.
2) Providing access to long-term care for older people who need it.
3) Changing how we think, feel, and act toward age and ageing.
4) Ensuring that communities foster the abilities of older people.

Action areas 1 and 2 are considered as ways to change **the institutional context** through health and social care systems. **Action areas 3 and 4** are considered as ways to strengthen **social and community networks, relationships** and support to optimize the intrinsic capacities and functional abilities of older people.

In examining the health of older people, it is important to acknowledge that certain diseases and disabilities are more common among them, and that many older people experience several disease and disability conditions simultaneously (co-morbidities). There are some conditions that are especially common among them, known as **geriatric giants (Box 1)**, which affect their intrinsic capacities. Health and social care should be capable of addressing comorbidities and geriatric giants in a coordinated, cohesive manner.

A final critical issue to address in strategies on ageing is health across the life course. Lifestyles, socio-economic conditions, diseases and injuries throughout life will affect intrinsic capacities and functional abilities in old age. Life course approaches should be adopted, incorporating prevention of illness and disability throughout life. Health promoting environments are needed, including public policy provisions in areas such as lifelong learning, nutrition, social security provision, immunizations, screenings, access to medication, transport, housing, environmental management and employment opportunities (Neil Henderson & Carson Henderson, 2010; World Health Organization, 2002). The healthy ageing approach promotes investments in prevention, care and support throughout life to enable the benefits of ageing to be fulfilled.

BOX 1: GERIATRIC GIANTS

Mobility disorders

Instability and falls

Sarcopenia (muscular atrophy)

Frailty

Anorexia of ageing

Visual and auditory disturbance

Depression

Cognitive impairment

Urinary incontinence

Stool incontinence

Sources: (Bartoszek, Niedorys, & Szalast, 2019; Morley, 2017)

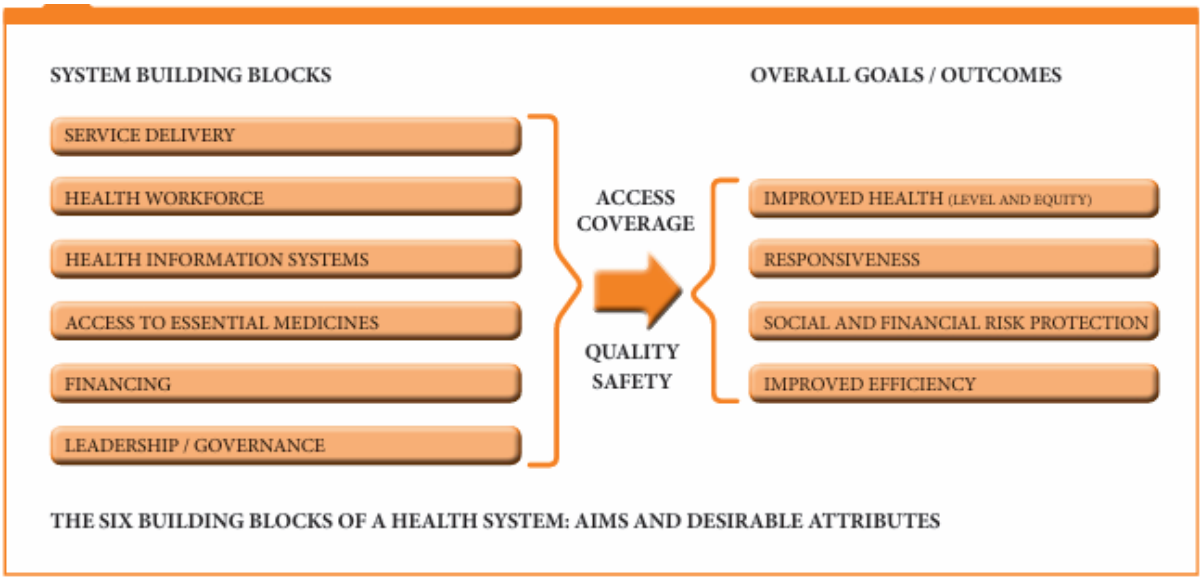
The major results sections of the report draw on these conceptual frameworks and are as follows:

- Macro-context: political, demographic, economic and environmental conditions.
- Institutional context:
    - Health, social care and social security systems
    - Employment and human resources
    - Education and training
    - Housing and infrastructure
    - Utilities
    - Environmental management
    - Government policy

- Community and social support
- Health risk factors and outcomes
- Intrinsic capacities
- Functional abilities

The discussion section provides a framework for action on ageing in Sint Maarten, structured to highlight promising practices and provide recommendations to enhance each type of functional ability It is informed by values and principles outlined in that section and by the building blocks of health systems approach illustrated in Figure 3 (World Health Organization, 2010):

Figure 3: The WHO Health Systems Framework



Source: (World Health Organization, 2010), page vii

Figure 3 presents the WHO Health Systems Framework, which conceptualizes health systems comprising six interrelated building blocks (World Health Organization, 2010). The framework highlights that progress in population health and equity depends on the coordinated functioning of all components, rather than isolated improvements in individual areas. In this assessment, the framework is used to structure analysis and recommendations for healthy ageing in Sint Maarten, ensuring that proposed actions address not only service provision but also the enabling functions of financing, workforce development, information systems, and governance. Applying this systems perspective supports the development of integrated, sustainable responses to the complex and multidimensional needs of an ageing population

Assessment methods

This assessment was completed viadesk review and a consultative process involving primary data collection from 24 July to 25 September 2025. The assessment was facilitated by the Ministry of Public Health, Social Development and Labour

Desk review

The desk review was designed to yield information on:

1) Demographic, health, economic and social issues relevant to healthy ageing in Sint Maarten
2) Policy strategies and progress in implementation
3) Evidence on alignment with international frameworks and technical guidance
4) Gaps in information.

Available evidence on Healthy Ageing in Sint Maarten was gathered from national stakeholders and via online searches, analyzed and summarized. This included review of:

1) International frameworks, technical guidance and agreements relating to Healthy Ageing.
2) Information on relevant policy and legislation in Sint Maarten, sourced with guidance from the Department of Social Development, people consulted and from Internet searches.
3) Demographic and health data from Sint Maarten. The Department of Statistics and Civil Registry supplied specific data from Sint Maarten on request. Further data was sourced from the Department of Statistics' website and from study reports provided by people consulted and by searching scientific databases.

Field assessment and stakeholder engagement

Consultations were conducted in person and online between 6th August and 8th September 2025. These included individual interviews and focus group discussions.

Data collection and analysis focused on identifying challenges, assets and opportunities in the four key action areas of the Decade of Healthy Ageing listed above. Key informant interviews and focus group discussions were conducted with government officials, health and social service providers, caregivers and older people. Perceptions and information about status and services were collected about the four key action areas.

Data collection was conducted using instruments in **Appendix 1**. The instruments in **sections 1 to 3** were designed **for policy officials and service providers**, to yield information relating to the following key action areas of the WHO's *Decade of Healthy Ageing*:

- Delivering person-centered, integrated care and primary health services responsive to older people.
- Providing access to long-term care for older people who need it.

The instruments in **sections 4 and 5** were designed **for informal carers and older people themselves**, and focused on the following key action areas of the WHO's *Decade of Healthy Ageing:*

- Changing how we think, feel, and act toward age and ageing.
- Ensuring that communities foster the abilities of older people.

Participants were invited to reflect on macro, institutional, community, and behavioral factors influencing the action areas. Before each session, they were informed that their names would remain confidential, though their organization or role could be cited. Consent was obtained to record discussions for analysis purposes only, and recording began after verbal agreement from all participants.

The agencies and groups whose representatives participated in interviews and focus group discussions are listed in **Appendix 2**.

The main limitation of the assessment was the timeframe, which did not allow for full triangulation of all information. Given the wide range of factors influencing the wellbeing of older people, it was also not possible to consult every relevant agency.

.

Results

Overview of the status of older people in Sint Maarten

Systematic data collection on the status of older people in Sint Maarten is not currently formalized and is fragmented within different agencies and departments.

The 2013 Elderly Research *For a Change* identified social and environmental factors which to be addressed such as poverty and lack of medical insurance; lack of support from family and/or neighbors; lack of community spirit; lack of respect; lack of safety; doubt about help in case of an emergency; risk of physical and mental abuse; inappropriate housing; lack of transportation; and feeling of not being safe in neighborhoods. The study found that 25% of older persons felt lonely and that existing NGO services were underutilized. As many elders are reluctant to seek help, it recommended that family doctors and church members help connect them to needed services. The study also called for expanded home care, more recreational and social activities, and clearer roles for service providers to improve older persons' wellbeing. (For a change N.V., 2013).

These results confirm the importance of a socio-ecological approach to improving the status of older people, which addresses factors at various levels, e.g.,

- **Macro factors** that influence poverty, such as national economic resources, the population structure and population density
- **Institutional factors** such as social security, labor market, housing and health care systems
- **Social and community factors**, such as physical safety and the attitudes to ageing of people in local communities
- **Risk factors** that influence health outcomes and eventually intrinsic capacities and functional abilities.

Before examining contextual factors, key health risks and outcomes in Sint Maarten are summarized.
Health risk and protective factors

Population-based surveys provide information on risk and protective factors in Sint Maarten. Information from the 2023 STEPS survey with adults aged 15 to 69 can be compared with the 2015 *How Healthy is Sint Maarten-Saint Martin?* survey with adults aged 18 and over and the 2013 PAHO Adolescent Health Survey with 13 to 19 year olds (Ministry of Public Health Social, Development and Labour & Pan American Health Organization, 2024; Observatoire Sint Maarten Saint Martin, 2015; Pan American Health Organization, 2013). **Table 1** presents a comparison of selected results on risk factors between the three surveys. It should be noted that the indicators differ, making comparisons difficult.

Table 1: NCD risk factors in Sint Maarten: results from the 2015 How Healthy is Sint Maarten-Saint Martin? Survey, the 2013 PAHO Adolescent Health Survey and the 2023 STEPS survey

Risk Factor	***How Healthy is Sint Maarten-Saint Martin?* Survey (2015)**	**Adolescent Health Survey (2013)**	**Sint Maarten STEPS Survey 2023**
Smoking	• 10.2% smoked. • 24.5% were exposed to secondhand smoke regularly.	• 35.9% had ever smoked. • 23.1% had done so over the past 30 days.	• 11.2% currently smoke tobacco. • 13.8% had been exposed to second hand smoke in the workplace in the past 30 days.
Harmful use of alcohol	• 14% drank alcohol twice or more per week. • 2.9% drank alcohol every day. • 21% had 6 or more drinks on one occasion weekly or more frequently in past 1 year.	• 72.6% had ever drunk alcohol • 4.7% had drunk on 11 or more days of past 30 days. • 23.6% had ever been "really" drunk, 0.9% on 10 or more occasions.	• 64.8% had ever drunk alcohol. • 39.0% currently drink (drank alcohol in past 30 days). • 13.4% engaged in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)
Unhealthy diet	• 29.3% were obese and 37.5% pre-obese (Body Mass Index was measured). • 43.7% ate fruit and 55.7% vegetables more than once a day. • 11.5% ate fruit and 6.7% ate vegetables less than once per week. • Most common reasons for not eating fruits and vegetables: "Not a habit"; "Too expensive" (@30% each)	• No biological measurements • 45.9% ate fruit and 44.9% vegetables more than once a day. • 30.5% ate no fruit and 26.9% no vegetables over past 7 days.	• 43.8% were obese and 73.5% overweight. • 93.5% ate less than 5 servings of fruit and/or vegetables per day. • 12.5% always or often ate processed foods high in salt.

Physical activity	• 35% had no physical exercise in the past 7 days. • 59.2% did up to 3 hours exercise per week.	• 15.3% had no physical exercise in the past 7 days. • 57.8% engaged in sedentary behaviors for at least three hours per day.	• 35% had insufficient physical activity (<150 minutes of moderate-intensity activity per week). • 65.3% were not doing any leisure activities (sports, fitness or recreational activities).

Sources: (Ministry of Public Health, Social Development and Labour & Pan American Health Organization, 2024; Observatoire Sint Maarten Saint Martin, 2015; Pan American Health Organization, 2013)

The results of the surveys showed that less than a quarter of participants had risky levels of smoking and drinking, with significantly higher rates of these among males than females. The most striking levels of risk were seen in dietary and exercise practices. There were very low levels of fruit and vegetable consumption. Dietary risks did not differ significantly between men and women. In the latest survey, around a third of people did insufficient physical activity, and two-thirds did not participate in any leisure activities (sports, fitness or recreational activities). Physical inactivity risks were significantly higher among women than men. This may help explain why rates of overweight and obesity were also significantly higher among women than men. The percentage with three or more risk factors was 47.4% in 2023, and significantly higher among women (51.9%) than men (47.4%) (Ministry of Public Health, Social Development and Labour & Pan American Health Organization, 2024).

These findings point to the likelihood of high rates of non-communicable diseases (NCDs), mental health challenges and disabilities among older people as a result of risk behaviors, with women facing higher risks than men as they age. These results also highlight the need to address dietary and physical activity risks, using a gender-sensitive approach.

Health conditions

The most common diseases in Sint Marteen are NCDs, or chronic outcomes of communicable and vector-borne diseases such as respiratory infections and chikungunya (Observatoire Sint Maarten Saint Martin, 2015) (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019). A health outreach project to lower income and more remote communities by the government's Department of Collective Prevention (CPS) and the American University of the Caribbean (AUC) (Project HELP) found rates among their patients between 2013 and 2016 of more than 30% of vision problems, high blood pressure, pain and arthritis – all issues that especially affect older people. Breathing difficulties, diabetes and depression each affected more than 15% of the patients (data supplied by the American University of the Caribbean).

The *How healthy is Sint Maarten/ Saint Martin?* 2015 survey included measures of cognitive functioning as well as emotional health. The 2015 health survey reflected mental/ health conditions such as chronic depression (5.9%), other psychological problems (1.2%), with relatively low rates of medical diagnosis of these conditions (54.2% and 75% respectively). It is important to note that this survey completed was prior to Hurricane Irma and the COVID-19 pandemic. Both these events are likely to have had a large impact on mental health.

Difficulty remembering or concentrating was reported by 20.9% of participants. Around 1 in 20 reported that they physically performed less (5.4%) or performance level decreased (5.2%) due to emotional stress or problems. 20.7% reported being nervous, anxious or depressed monthly or more. However, only 6.6% had ever taken medication for these feelings. Around a third of people were relatively socially isolated, in that they thought they only had two or fewer people so close to them that they could count on them if they had a serious personal problem (34.9%) (Observatoire Sint Maarten Saint Martin, 2015).

PAHO's 2013 Adolescent Health Survey among 13-19 year olds also included data suggesting challenges in mental health among young people, confirming the importance of addressing mental health throughout life (PAHO, 2013b). These findings underscore the life course perspective of healthy ageing, as mental health risks in adolescence can influence wellbeing and functional capacity in later years.

The macro-context: political, demographic, economic and environmental conditions

Political context

Sint Maarten is a Small Island Developing State (SIDS) in the Caribbean Sea. The area of Sint Maarten is 13 square miles/ 34 square km, or approximately 40% of the island of Sint Maarten/ St. Martin (Department of Statistics Sint Maarten, 2017).

After being part of the Netherlands Antilles for over 50 years, Sint Maarten became a constituent country within the Kingdom of the Netherlands on October 10th, 2010, essentially becoming a constitutionally equal partner with Aruba, Curaçao, and the Netherlands.

Sint Maarten now has its own government and parliament. These institutions are empowered to enact legislation regarding the country's own affairs. Since October 10th, 2010 (colloquially termed 10-10-10), Sint Maarten has been governed by its own Constitution and the following institutions of government: Governor as the representative of the Head of State, Parliament and the Council of Ministers headed by the Prime Minister. The parliament is the highest legislative body of Sint Maarten and represents the population of the Dutch side of the island. The Council of Ministers, chaired by the Prime Minister, is answerable to parliament.

The Kingdom Government remains responsible for defense and foreign affairs. The King of the Netherlands is Head of State and is represented locally by the Governor. Dutch and English are the official languages.

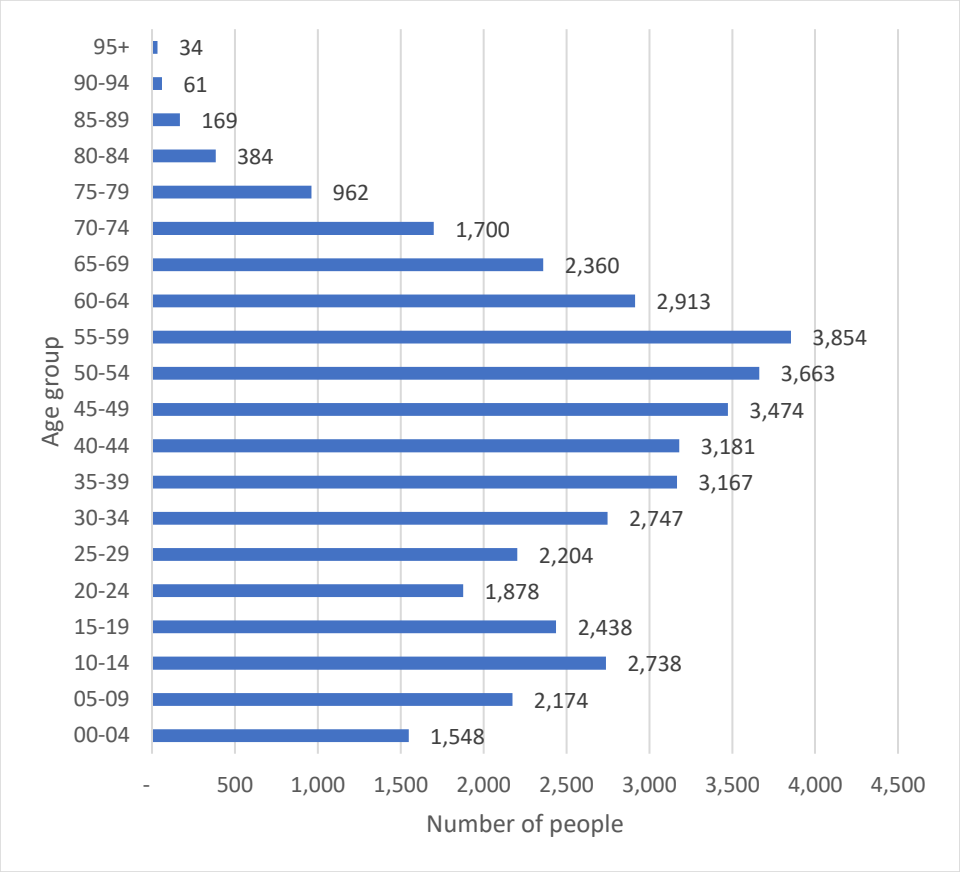
Relevant governance systems for individual sectors, such as health and housing, are presented below in the section on institutional context.

Demographic context

Age structure of the population

The most recent census, in 2022, showed that the population of Sint Maarten was 41,902. The distribution by age group is shown in **Figure 4**. The majority of people are of working age, with the largest age groups between 30 and 64 years old.

Figure 4: Population of Sint Maarten by age group, 2022



Source: 2022 census data supplied by the Sint Maarten Department of Statistics

A notable feature of the population distribution is the relatively small size of the population of young adults in their 20s. This may reflect the emigration of young people to pursue higher education or employment abroad. This may present a "brain drain" unless the young people return.

Comparison of figures from 2017 and 2022 in **Table 2** shows that the percentage of the population in the older population, 65+, is growing while the percentage of children aged 0-14 is shrinking, as typifies an ageing population. Additionally the percentage of the population in the working age population 15-64 is also shrinking.

Table 2: Population distribution by age group in Sint Maarten, 2017 and 2022

Age group	2017 n	2017 %	2022 n	2022 %
Children 0-14	8347	20.6	6,460	15.4
Age 15-64	29210	72.1	29,519	70.4
Older people 65+	2979	7.3	5,670	13.5
Not reported	-		253	
TOTAL	40536		41902	

Source: 2022 calculations using data supplied by the Sint Maarten Department of Statistics. 2017 figures calculated from Sint Maarten Statistical Yearbook 2017, table 3.2 (Department of Statistics Sint Maarten, 2017)

Dependency ratios shown in **Table 3** show a large increase in the old age dependency ratio from 10.2% in 2017 to 19.2% in 2022;. The figures indicate that the working age population is facing a potentially increasing burden of caring for older people in Sint Maarten unless effective healthy ageing measures are implemented.

Table 3: Dependency ratios in Sint Maarten, 2017 and 2022

	Means of calculation	2017 %	2022 %
Dependency ratio	$\frac{\text{Number of people aged 0-14 + Number of people aged 65 and over}}{\text{Number of people aged 15-64}}$	38.8	41.1
Child dependency ratio	$\frac{\text{Number of people aged 0-14}}{\text{Number of people aged 15-64}}$	28.6	21.9
Old age dependency ratio	$\frac{\text{Number of people aged 65 and over}}{\text{Number of people aged 15-64}}$	10.2	19.2

Sources: 2022 calculations using data supplied by the Sint Maarten Department of Statistics. 2017 figures calculated from Sint Maarten Statistical Yearbook 2017, table 3.2 (Department of Statistics Sint Maarten, 2017)

Table 4 puts the figures from Sint Maarten into regional and global context by enabling comparisons with other Caribbean countries, metropolitan countries and world regions. The Dutch Caribbean countries of Aruba, Curacao and Sint Maarten have high levels of old age dependency relative to most other Caribbean countries. However, their rates are lower than

in metropolitan countries such as The Netherlands and United States, and higher than developing regions such as Latin America and the Caribbean as a whole and sub-Saharan Africa. All countries have seen ageing of their populations since 1960, but the change has been very small in low-income countries and regions such as Haiti and sub-Saharan Africa which still have young populations.

Table 4: Estimated old age dependency ratio, selected Caribbean countries and world regions, 1960, 2017 and 2024

Country or region	1960	2017	2024
Caribbean			
Aruba	5	19	26
Barbados	8	20	25
Belize	8	6	7
Cuba	7	21	24
Curacao	8	22	25
Dominican Republic	5	9	12
Grenada	8	15	18
Guyana	7	15	11
Haiti	6	7	7
Jamaica	8	9	11
Sint Maarten	**11**	**13**	**20**
St. Lucia	8	11	13
St. Vincent and the Grenadines	8	15	18
Trinidad and Tobago	6	12	18
Other countries and regions			
The Netherlands	15	29	32
United States	15	23	28
Euro area	16	32	35
Latin America and the Caribbean	7	12	15
Sub-Saharan Africa	5	6	6

Source: World Bank Databank
(https://data.worldbank.org/indicator/SP.POP.DPND.OL)

The population structure in Sint Maarten is typical of populations undergoing a demographic transition from one where the youngest age groups are the largest to a population where the adult age groups are the largest and the number of middle-aged to older people is growing. Demographic transition occurs when there is a shift in patterns of population ages, usually resulting from periods of high fertility and high mortality to low fertility and low mortality. This has implications for care of older persons, since as the population ages there may be higher incidence and prevalence of NCDs while the number of people of working age shrinks relative to the population of retirement age (Adogu, Ubajaka, Emelumadu, & Alutu, 2015).

Population growth and density

Sint Maarten has experienced rapid population growth since the1930s. This has been accompanied by large increases in population density, as shown in the following **table 5**. Population growth was fastest in the 1980s, more than doubling during that decade.

Table 5: Population density and total population in Sint Maarten, 1930-2022

Year	Population density	Total population
1930	68.68	2,335
1960	80.24	2,728
1972	229.62	7,807
1981	386.94	13,156
1992	947.68	32,221
2001	899.82	30,594
2011	988.50	33,609
2022	1,232.41	41,902

Source: Data supplied by the Department of Statistics, Sint Maarten.

Population density in Sint Maarten is around twenty times higher than population density in the world as a whole (62 people per square km of land area) (World Bank Databank, https://data.worldbank.org/indicator/EN.POP.DNST). **Table 6** shows that Sint Maarten has the highest population density of the Caribbean countries listed.

Table 6: Population density (people per sq. km of land area) for selected Caribbean countries and world regions, 2022

Country or region	Population density
Caribbean	
Aruba	596
The Bahamas	40
Barbados	657
Belize	18
British Virgin Islands	255
Cayman Islands	298
Cuba	107
Curacao	338
Dominica	89
Dominican Republic	233
Grenada	344
Guyana	4
Haiti	417
Jamaica	262
Sint Maarten (Dutch part)	**1,239**
St. Kitts and Nevis	180
St. Lucia	293
St. Martin (French part)	577
St. Vincent and the Grenadines	262
Suriname	4
Trinidad and Tobago	266
Turks and Caicos	48
Other countries and regions	
The Netherlands	526
United States	37
Euro area	127
Latin America and the Caribbean	33
Sub-Saharan Africa	51

Source: World Bank Databank, https://data.worldbank.org/indicator/EN.POP.DNST

Rapid population growth accompanied by high population density can place a strain on the natural and human-made resources available, such as housing and green spaces for exercise that support the health and wellbeing of older and other people in Sint Maarten. These issues are discussed in the section on housing and infrastructure below.

Population change and migration

Population change reflects births and deaths as well as immigration and emigration. While births exceed deaths in Sint Maarten, net migration contributes more to population growth. Immigration surpasses emigration, and in 2022, 67.2% of residents were born outside Sint Maarten. Civil Registry data for 2025 (to May) show this trend continues for both men and women.

Table 7: Population change Sint Maarten, 2014-16

	2014			2015			2016		
	M	F	Total	M	F	Total	M	F	Total
Live births	277	255	532	269	231	500	227	231	458
Deaths	99	70	169	117	80	197	108	52	160
Natural increase	178	185	363	152	151	303	119	179	298
Registered immigration	706	869	1,575	723	818	1,541	775	873	1,648
Registered emigration	350	474	824	314	367	681	381	441	822
Net registered migration	356	395	751	409	451	860	394	432	826
Total	**535**	**580**	**1,115**	**562**	**602**	**1,164**	**513**	**611**	**1,125**

Source: (Department of Statistics Sint Maarten, 2017), table 3.3

There is a difference between the "sending countries" and "receiving countries" for migrants to and from Sint Maarten. The largest number of migrants come from or go to the Netherlands. Roughly equal numbers of people migrate from or to Bonaire, Sint Eustatius and Saba (the BES islands). Slightly more people emigrate to than immigrate from Aruba and Curacao. These patterns reflect the continuing strength of ties with the Netherlands and Dutch Caribbean countries and territories. Migration is to a limited range of countries other than these: most migrants move to Dutch territories, the USA or India.

Immigration is from numerous countries, with people from the Dominican Republic, USA and the Caribbean Community (CARICOM) countries accounting for most immigrants. There are also significant numbers of immigrants from China and India.

The 2022 census confirmed the multinational and multicultural characteristics of the population of Sint Maarten.

Table 8: Immigration by major sending countries (on the left), and emigration by major receiving countries (on the right), 2016

Registered immigration[1]

	2016
Total	**1635**
Netherlands	309
BES	43
Guadeloupe	6
Aruba	26
USA	128
Dominican Republic	225
Jamaica	132
Guyana	62
Haiti	57
Curacao	83
Dominica	22
Suriname	48
China	56
India	41

Source: Population Registry
1) Excluding administrative corrections

Registered immigration[1]

	2016
Total	**818**
Netherlands	448
BES	47
Aruba	38
Curacao	97
USA	41
India	14
Guadeloupe	1

Source: Population Registry

Emigration is likely to be underestimated due to under registration of emigration

1) Excluding administrative corrections

Source: (Department of Statistics Sint Maarten, 2017), tables 3.6 and 3.7

Over half (53.6%) were of Dutch nationality, with Dominican Republic and CARICOM nationals accounting for most of the remaining population (**Table 8**).

Table 9: Sint Maarten population by nationality in 1992, 2001, 2011 and 2022

NATIONALITY	1992	2001	2011	2022
Dutch	47.9%	50.6%	64.7%	53.6%
Dominican Republic	11.5%	10.1%	5.8%	8.5%
Haiti	14.0%	9.7%	6.9%	6.5%
Jamaica	1.8%	5.0%	5.5%	6.4%
Dominica	3.0%	4.4%	3.0%	3.4%
Guyana	0.6%	3.0%	3.9%	4.7%
France	3.8%	2.7%	0.4%	4.4%
England	4.3%	2.0%	0.1%	1.1%
USA	2.4%	1.8%	1.0%	2.3%
Other	18.5%	10.7%	8.7%	9.1%

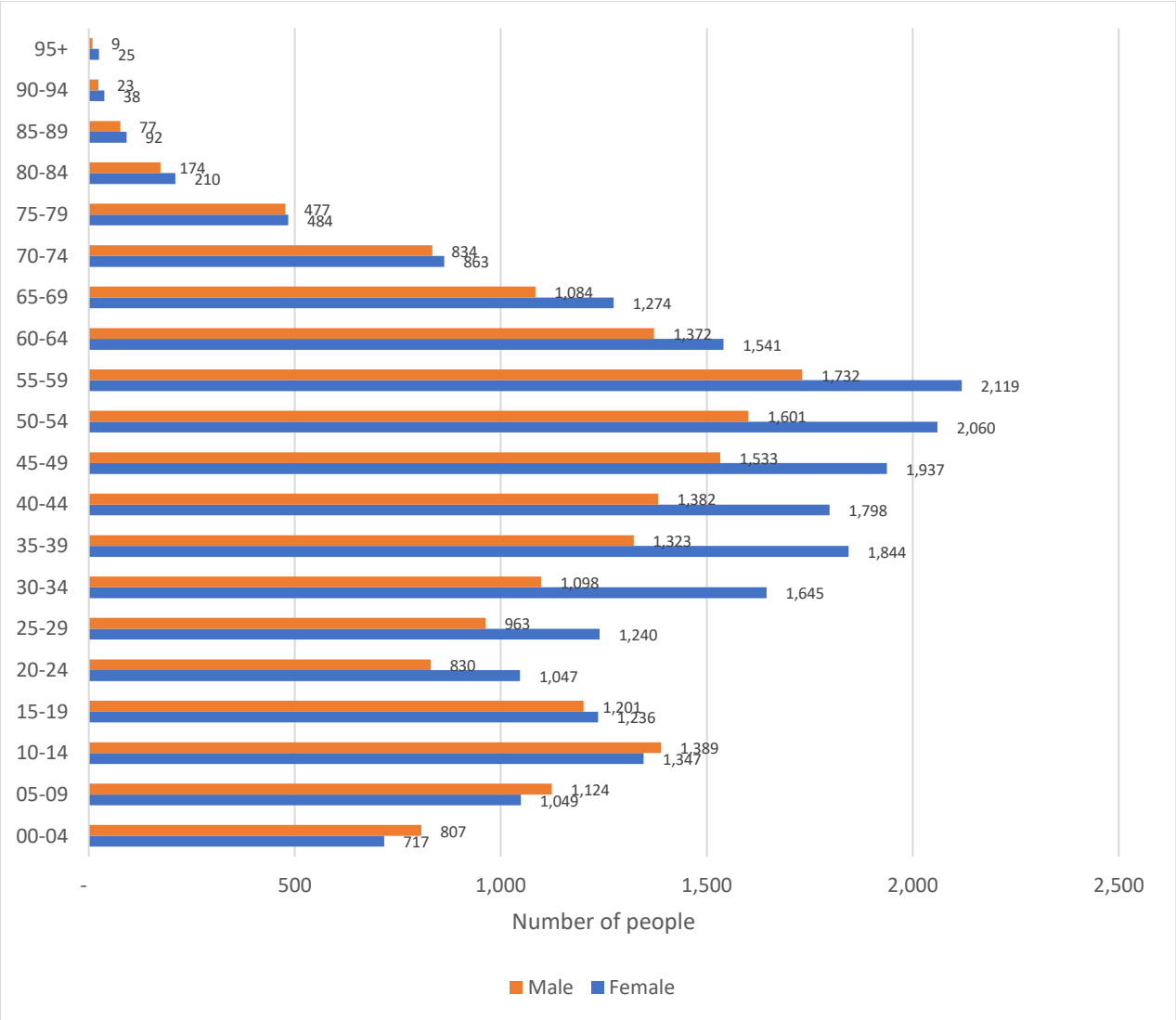
Source: (Sint Maarten Department of Statistics, 2023)

These trends have important implications for elderly care, particularly given the role of migration in population growth. Cultural, language, and income differences may affect access to services and levels of support, while emigration may reduce the workforce available for care provision.

Gender issues in the population structure

Of those whose sex was reported in the 2022 census, 19,114 were male and 22,665 female: 843 males per 1,000 females. **Table 7** (Population change in Sint Maarten 2014-'16). This shows that death rates and emigration rates are higher among males than females, while most immigrants are female.

Figure 5: Population by age group and sex, 2022 census



Source: Source: Data supplied by the Bureau of Statistics from the 2022 census.

Figure 5 shows that the male population exceeds the female population until the age of 19. This appears to reflect the global pattern of more males than females being born. In adult age

groups from age 20, there are more women than men. The male-to-female ratio is lowest in the working-age group (15–64), with about four men for every five women **(Table 10).** This means the workforce includes significantly more women than men, which may influence skill availability given gendered patterns of employment.

Table 10: Population and sex ratio by age group, 2022

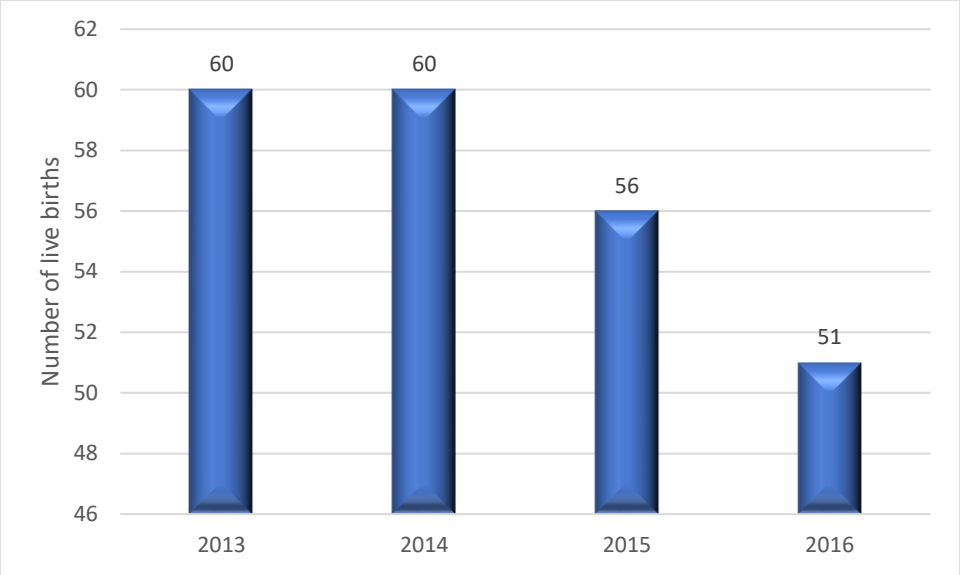
Age group	Female (n)	Male (n)	Total (n)	Sex ratio: Number of males per thousand females
Children 0-14	3,113	3,320	6,433	1066
Adults 15-64	16,467	13,035	29,502	792
Elders 65+	2,986	2,678	5,664	897
"Young elders" 65-74	2,137	1,918	4,055	898
Elders 75-84	694	651	1,345	938
"Oldest elders" 85+	155	109	264	703

Source: Data supplied by the Bureau of Statistics from the 2022 census.

Among those aged 65+, there are about nine men for every ten women, and only seven men for every ten women among those 85+, reflecting women's longer life expectancy. Social challenges that particularly affect older Caribbean men, such as social isolation and substance use (Caribbean Public Health Agency, 2020; Rawlins, Simeon, Ramdath, & Chadee, 2008), may therefore require targeted attention, especially in the 65–85 age group. At the same time, older women may face greater poverty risks due to inconsistent lifetime contributions to social security, underscoring the need for a gender-responsive approach to ageing (Caribbean Public Health Agency, 2020).

The number of live births per 1,000 women aged 15-44 is decreasing over time, which is consistent with the demographic transition and an ageing population **(Fig. 6).**. It indicates that population ageing is likely to continue.

Figure 6: Live births per 1,000 women aged 15-44, 2013-16



Source: (Department of Statistics Sint Maarten, 2017), Table 3.4

Economic context

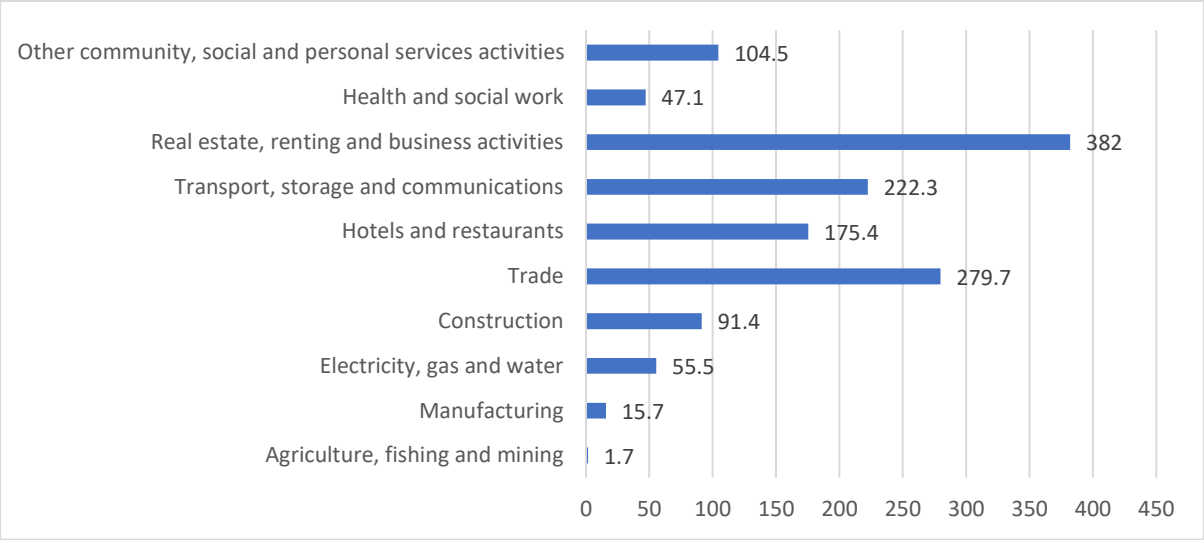
Structure of the economy

Sint Maarten is a small, open-island economy, driven primarily by cruise ship, stay-over and marine/ yachting tourism. Each year over 2 million tourists visit the island. The tourism industry accounts for the greatest contribution to the island's Gross Domestic Product and employment

Before the twentieth century, Sint Maarten's economy was based on salt mining and agriculture, particularly sugar. In 1939, the island became duty-free, boosting trade, especially with the United States during and after the Second World War. From the 1950s onward, tourism expanded rapidly, and the economy shifted to being service-based.

The growth of tourism and related services increased demand for labor, contributing to significant immigration that continues to shape the island's population today. **Figure 7** shows that agriculture accounts for only a very small fraction of Gross Domestic Product (Department of Statistics Sint Maarten, 2017).

Figure 7: Gross Domestic Product, by sector and industry, 2016, measured in Antillean Guilders (ANG)



Source: (Department of Statistics Sint Maarten, 2017), Table 13.2

Issues relevant to the health and wellbeing of older people include:

- The small size of the agricultural sector raises concerns about food security and availability, especially fresh, unprocessed food, which is generally more beneficial to health than imported, processed food.
- The high reliance on tourism, real estate and trade makes Sint Maarten vulnerable to international economic trends and shocks. It also tends to push up prices for essentials such as housing in Sint Maarten.
- Services most relevant to health and wellbeing, such as health and social work, and other community, social and personal service activities, play a relatively small part in generation of gross domestic product. Financing of these sectors may depend on transfers from other sectors through insurance and taxation, except in cases where these services are sold at cost or profitable prices.

Income and costs

Sint Maarten is a relatively high-income country, with per capita Gross Domestic Product of estimated at US$35,608 in 2024 (United Nations, 2025). The 2022 census showed that mean individual net annual income was Antillean Guilders (ANG) 42,540, or approximately US$23,771. Underlying this indicator of prosperity, there are economic and social factors impacting on the health and wellbeing of older people, which will be explored throughout this report. Income and cost of living are among the important challenges.

According to the 2022 census, mean individual net income per month was ANG 3,546, and was higher among men (ANG 3,916) than among women (ANG 3,193), reflecting a gender wage gap demonstrated in censuses since 1992. Half of individuals had incomes of ANG 2,750 or less (approximately US$1,536 per month: median income). The fact that median income was below mean income indicates inequality, with more prosperous individuals pushing up the average income. In 2022, a quarter of households in Sint Maarten had a monthly

household income below the European poverty threshold, i.e., 25.5% of households had income of ANG1,651 or less (approximately US$922) (Sint Maarten Department of Statistics, 2023).

Analyses by the Department of Statistics of the 2022 census also indicated that costs of living may be unaffordable for most households, since average household costs per month were ANG 3,552 (US$1,984) while median individual income was ANG 2,750 (US$1,536). The costs of rent and groceries accounted for 34.9% and 20.8% respectively (**Table 11**). It can be inferred therefore, that the average household may need more than one income earner to meet costs of living.

Table 11: Estimated monthly average household cost in Sint Maarten, 2022

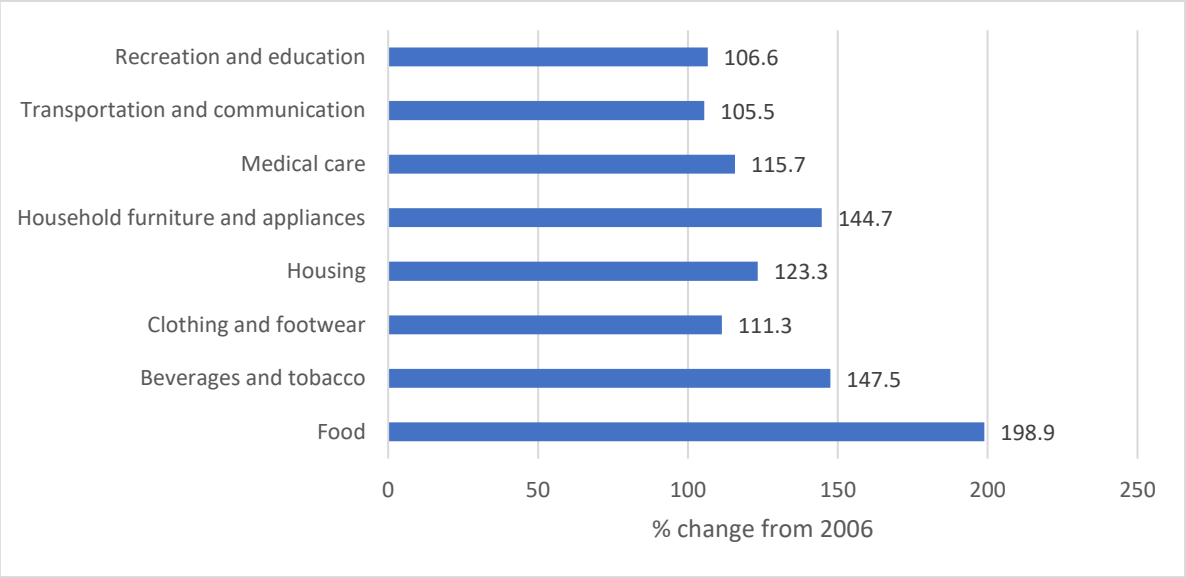
Average Electricity & Water	**ANG 383.35**
Average Rent	ANG 1,238.73
Average Telecommunication (Internet, Cable, Telecom package)	**ANG 132.11**
Average Internet	ANG 120.29
Average Telecommunication Package	ANG 167.72
Average Cable	ANG 108.33
Average Groceries	ANG 741.95
Average Transportation	**ANG 515.75**
Average Transportation (No Vehicles/motorcycles)	ANG 172.27
Average Transportation (Has at least 1 vehicle/motorcycle)	ANG 254.50
Average Education	**ANG 539.93**
TOTAL	ANG 3,551.82

Source: (Sint Maarten Department of Statistics, 2023)

Data was not presented by age group. However, analyses indicated that a senior (65+) living with a child under 18 years would require ANG 2,304 for household expenses. A household with more than one adult with children under 18 and at least one senior would require ANG 3,683. A household with more than one adult, at least one senior and no children would require ANG 2,340 (Sint Maarten Department of Statistics, 2023).

Difficulties in meeting expenses are compounded by the fact that most people in Sint Maarten live in rented property (61.6%), with only 36.8% living in property that they/ their family own and 0.6% in free accommodation (Sint Maarten Department of Statistics, 2023). This suggests lack of accumulated wealth among most people in Sint Maarten.

Figure 8: Consumer price index in Sint Maarten, based on October 2006=100, as of 2016, by major expenditure category



Source: (Department of Statistics Sint Maarten, 2017), Table 14.2

Real income is eroded by price inflation. In the ten years 2006-'16, prices in general increased by25.6%. This included an increase in the cost of medical care by 15.7%. Most striking was the doubling in the cost of food items, with an increase of 98.9%. More nutritious items faced even higher price rises, e.g., potatoes, vegetables, and fruit prices increased by 158%, and meat and fish by 114%. Increases in GDP over the same period did not keep pace with cost increases (Department of Statistics Sint Maarten, 2017; Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

Table 9: Source of income by sex, Sint Maarten, 2019

Source of main income	Male %	Female %	Total%
Salary / Labor / Business	87.0	78.3	82.7
Property rental	0.9	1.0	1.0
Private old age pension	1.2	1.3	1.3
Old age pension SZV (AOV)	8.4	14.4	11.4
Welfare	1.1	2.5	1.8
Widow's pension		0.5	0.2
Other	1.3	1.9	1.6

Source: Calculations using data in (Department of Statistics, 2019)

While salaries, labor and business are the main sources of income in Sint Maarten, old age pension is the second main source, accounting for the income of 8.4% of women and 14.4% of men: 11.4% overall. Table shows that private old age pensions are the main source of income for only 1.3% of people. More women than men depend on welfare. The figures suggest more widespread poverty among women than men, especially in old age.

While not specific to older people, these data highlight important challenges:

- Costs of living are high relative to incomes, with housing and food posing particular burdens.
- Most people do not own their homes, and heavy reliance on social insurance suggests limited ability to accumulate savings for old age.
- High prices for healthy foods make it difficult to maintain healthy lifestyles and may contribute to ill-health and reduced intrinsic capacity among older people.

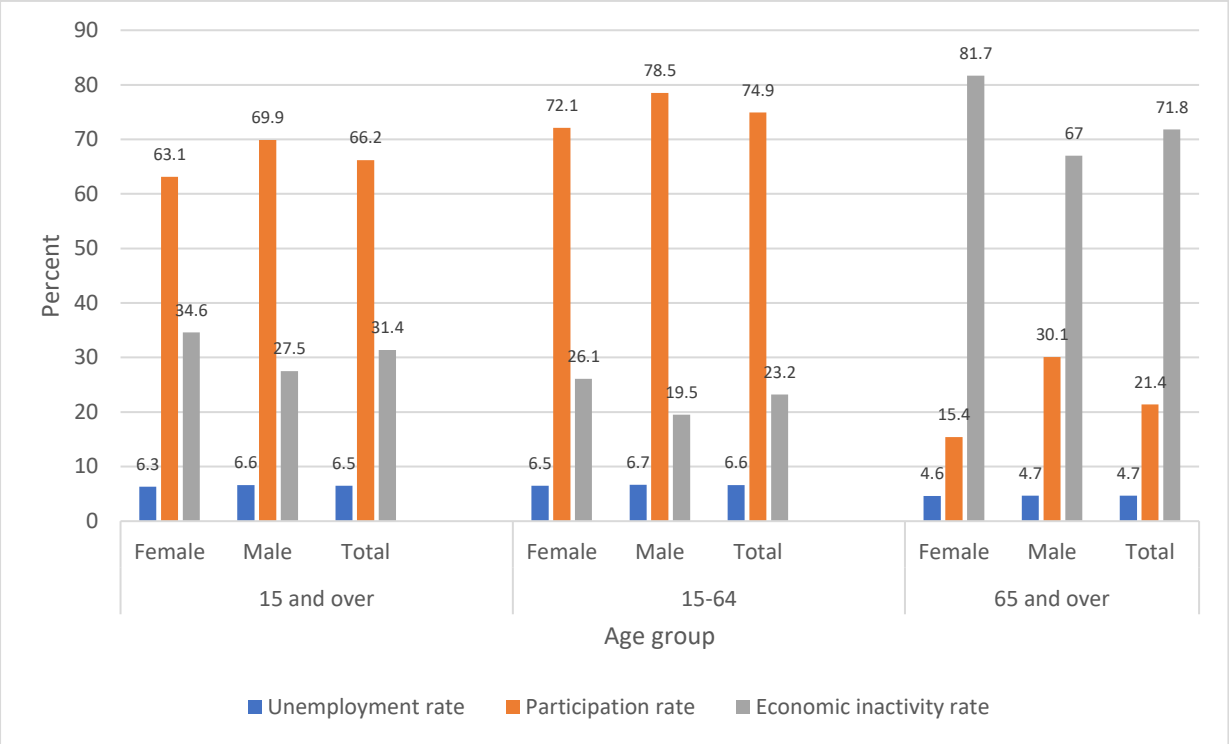
Together, these factors increase the risk of financial insecurity and health vulnerability in later life, particularly for those who depend mainly on pensions or fixed incomes.

The labor market

The capacity to care for the growing older population will be conditioned by the availability of workers. Rates of unemployment and participation may indicate some spare capacity that may be helpful in addressing shortages in service provision for the ageing population. Higher employment levels bring additional contributions to insurance schemes to support those who are unemployed, do not participate in the labor force, and/ or have impaired intrinsic capacities. Human resource requirements for provision of such services will be further explored under employment and human resources in the institutional context section. Insurance schemes are examined under health and social care systems in the institutional context section.

The participation of older workers in the workforce should also be examined. Contribution to society is one of the key functional abilities of older people that the healthy ageing framework aims to achieve. Working is a critical dimension of contribution to society, which will be further explored in the section on functional abilities.

Figure 9: Rates of unemployment, labor force participation and economic inactivity by age group and sex, 2022



Source: Calculations from data supplied by the Department of Statistics, Sint Maarten, from the 2022 census

Definitions (Department of Statistics, 2019):

- *Employed persons: All persons 15 years and older with a job or their own business or who, during the week prior to the survey, worked 4 hours or more for a remuneration.*
- *Unemployed persons: All persons 15 years and older who during the survey were unemployed, were actively looking for work the month prior to the survey, and who could start working within 2 weeks, should they find a job.*
- *Labor Force (also called the economically active population): The number of employed and unemployed added together.*
- *Economically Inactive: All persons 15 years and older who are neither employed nor unemployed.*
- *Unemployment rate: The number of unemployed divided by the labor force multiplied by 100.*
- *Participation rate: The labor force divided by the total population multiplied by 100. It indicates what proportion of the total population is economically active.*

2022 census figures are presented in Figure 9. About two-thirds of people aged 15 and over participate in the labor force, including 63.1% of women and 69.9% of men. Participation is higher among those aged 15–64, where nearly three-quarters (74.9%) are economically active. Around one in five people aged 65 and over (21.4%) remain in the labor force.

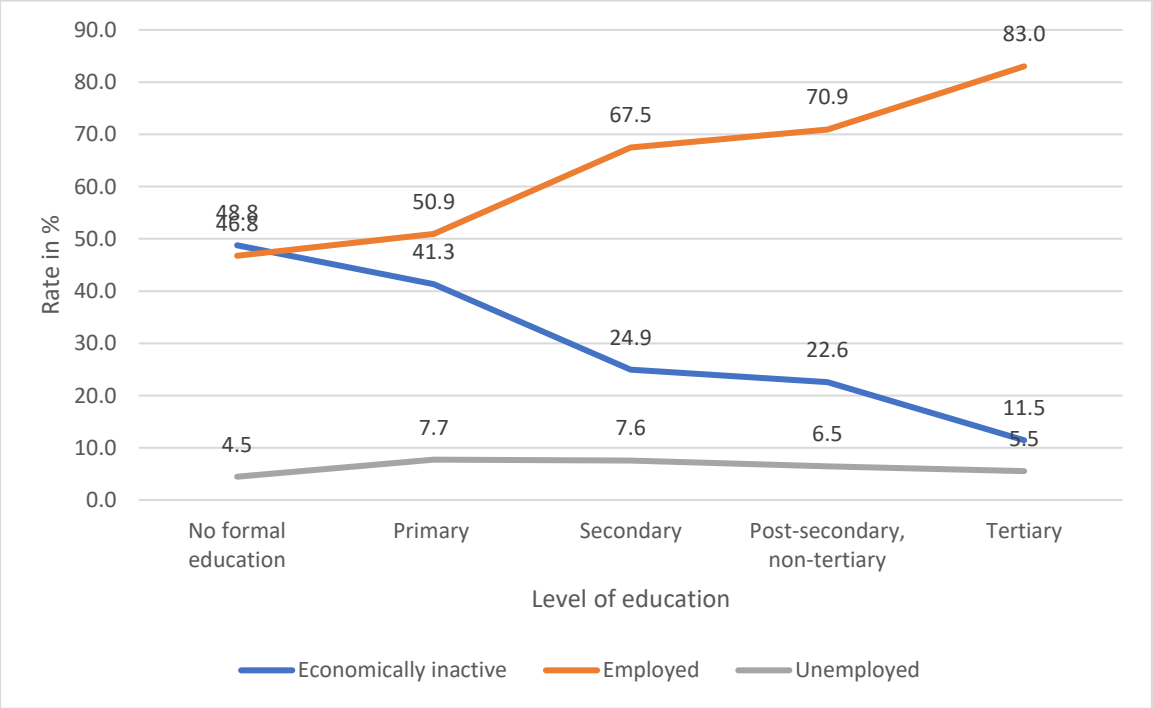
Across all age groups, men participate at higher rates than women. Among older adults, men's participation (30.1%) is about twice that of women (15.4%). The unemployment rate is 6.5% and is similar for men and women, though slightly higher among men.

Of those who indicated in the 2022 census that they were economically inactive, 39.2% indicated they were retired (the largest group of non-workers)19.8% indicated they were

studying, 12.4% were homemakers, 5.4% were not in the labor force for health reasons and 23.4% indicated other or no reason (Sint Maarten Department of Statistics, 2023).

Longitudinal data from the Sint Maarten labor force survey show that between 2011 and 2018, unemployment fell from 11.5% to 9.9%, while the participation rate declined slightly from 57.5% to 57.0. However, there was a sharp increase in unemployment from 6.2% in 2017 to 9.9% in 2018 following the passage of Hurricane Irma (Department of Statistics, 2019).

Figure 10: Rates of employment, unemployment and economic inactivity by level of education in Sint Maarten, 2019



Source: Calculations from data in (Department of Statistics, 2019)

Results from the 2019 labor force survey indicated that there is a positive relationship between level of education and being employed, and a negative relationship between level of education and economic inactivity, while the rate of unemployment does not appear to be associated with education level **(Figure 10)**.

These findings suggest there is some scope to increase employment, given an unemployment rate of 6.6% and an inactivity rate of 31.4%, though gains would mainly come from reducing inactivity. It is also possible that inactivity is overstated, as some undocumented migrants may be working but not officially recorded.

Inactivity is highest among those with lower levels of education, indicating a need for skills development, particularly for people with no formal, primary, or secondary education. A

gender-sensitive approach is also important, as women—especially older women—have lower participation rates, which may reflect caregiving roles, longer life expectancy, and higher likelihood of health limitations.

Proposals to increase the retirement age could help address labor shortages and strengthen social security revenues, alongside efforts to promote acceptance of older persons in the workforce. At the same time, participation should remain a choice, recognizing that some older adults may be unable or unwilling to work. Recent data suggest unemployment has declined and participation has increased since 2019, but sustaining these trends will require supportive, rights-based policies, particularly for elders and women.

Environmental context

Environmental challenges to the health and wellbeing of older people arise from the geography and population density of Sint Maarten. We consider two main categories; climate change and environmental pollution.

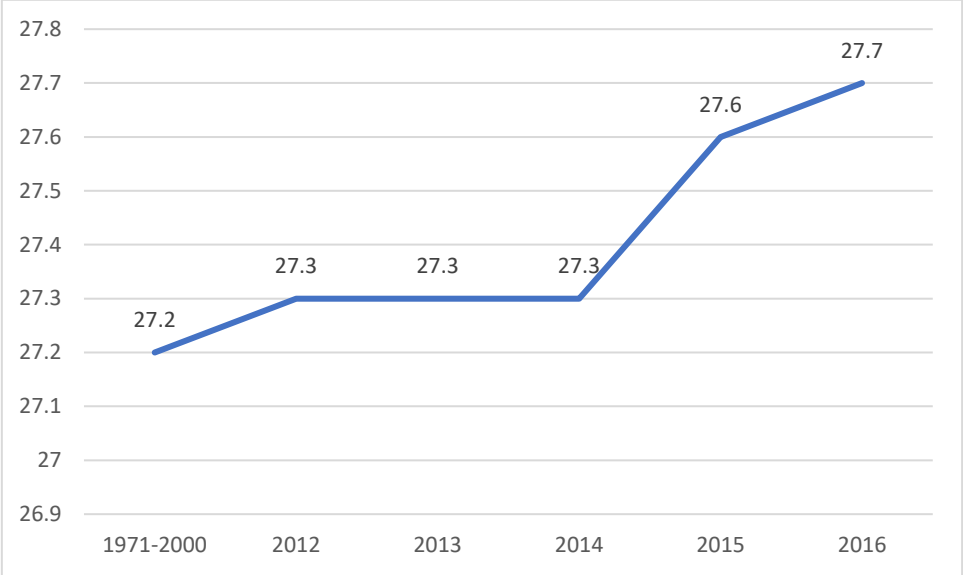
Climate variability and change

Sint Maarten, like other Caribbean small island developing states (SIDS) faces climate change hazards, including flooding, drought, increased hurricane intensity, extreme heat, and sea level rise. The health of Caribbean people is threatened directly by these hazards, and indirectly by features of SIDS that affect health systems' capacities to respond, including the small human resource base, economic fragility, and concentration of populations and infrastructure near coastlines (Allen et al., 2024).

Evidence of climate change has been established in the Caribbean using regional models. These indicate that temperatures across the Caribbean will continue to rise, and that most of the Caribbean, including Sint Maarten, will experience less rainfall and more prolonged dry periods and (unless appropriate adaptations are made) drought (Campbell, Taylor, Stephenson, Watson, & Whyte, 2011; M.A. Taylor et al., 2013; M.A. Taylor et al., 2007; M. A. Taylor et al., 2018).

Figure 11 shows the upward trend in average temperatures in Sint Maarten. Between 1971-2000 and 2016, there was also an increase in absolute maximum temperature from 32.7 to 32.8, and in absolute minimum temperature from 18.6 to 21.7. Figures on precipitation show a downward trend since the 1971-2000 baseline period. National data also suggest changes in seasonal patterns, with higher temperatures in more months than before (Department of Statistics Sint Maarten, 2017).

Figure 115: Average temperature in degrees centigrade in Sint Maarten, 1971-2016



Note: Measured at Princess Juliana airport

Source: (Department of Statistics Sint Maarten, 2017), Table 2.1

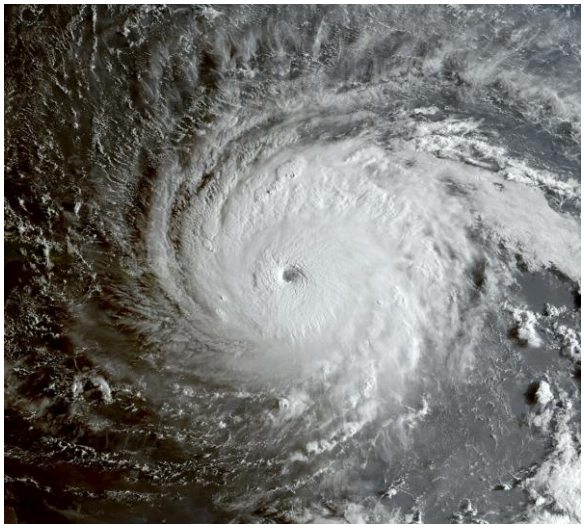
Challenges to the health and wellbeing of older adults arising from climate change in Sint Maarten include:

- **Heat related illness.** Older persons are especially vulnerable to heat-related illness, mostly because heat-regulating bodily functions become less effective. Heat also aggravates cognitive impairment, and can interact negatively with some drugs commonly prescribed for the management of NCDs and mental health.
- **Drought.** Management of scarce water supplies in SIDS becomes especially challenging in times of drought. This can lead to dehydration, threaten water and food safety, and lead to infections linked to poor water quality and access Increasing dry conditions have led to more bush fires, which are the most common reason for fire service calls in Sint Maarten. Between 2012 and 2016, there were an average of 48 bush fire calls per year.(Department of Statistics Sint Maarten, 2017), Table 6.13).
- **Floods** from heavy rainfall can spread diseases rapidly, especially water-borne diseases such as cholera and zoonoses such as leptospirosis. Older persons are at higher risk of poor outcomes from these diseases. Floods may also restrict older peoples' access to care, vital food and medical supplies.
- **Sea level rise** can lead to saltwater intrusion and spread of pollution into the water supply.
- **Extreme weather events** such as hurricanes can harm older people directly (e.g., by being hit by debris) and indirectly by contributing to pollution and restricting their access to health care and increase their vulnerability post disaster to related diseases (Allen et al., 2024; Hassan et al., 2020; Joshipura et al., 2022; Kishore et al., 2018).

On September 6th, 2017, Sint Maarten experienced one of the most devastaing extreme weather events in recent history: Hurricane Irma. This hit Sint Maarten at Category-5 with

sustained wind speeds of approximately 180 mph/ 285 kmh (Cangialosi, Latto, & Berg, 2018). This event continues to have social and economic repercussions that affect older people and society's capacity to care for them.

Figure 12: Hurricane Irma at peak intensity while making landfall in Sint Maarten/ St Martin on September 6, 2017



Source: *File:Irma 2017-09-06 1115Z.jpg - Wikimedia Commons*

Hurricane Irma displaced an estimated 5,000 people in Sint Maarten and destroyed or severely damaged 50.1% of buildings, disrupting key infrastructure and the tourism-dependent economy (United Nations Children's Fund, 2017). For older persons, the impacts were severe. High winds and debris created injury risks and public health hazards, including air pollution and mosquito breeding. Many older residents lived for extended periods in damaged homes or shelters, without electricity for essential appliances such as refrigerators needed for food and medication storage.

Older people with NCDs were particularly vulnerable. Dialysis patients were evacuated due to unsafe water supplies, while people with diabetes struggled to manage their diets and medications, leading to increased complications, including amputations reported at the SMMC. Drug shortages and power outages disrupted treatment, especially for medications requiring refrigeration, and respiratory conditions such as COPD and asthma increased, likely due to poor air quality following the hurricane.

(Sint Maarten Ministry of Public Health, Social Development and Labor & Pan American Health Organization, 2019).

Environmental management and pollution

The small land area and high population density of Sint Maarten pose challenges for environmental management, including:

- **Waste management.** There are few places to safely dispose of solid waste. The main public dump is on the Great Bay Salt Pond island next to the Government Administration Building. Extreme heat contributes to the risks of contamination of water supply, and poor air quality (e.g. from fumes and fires) affecting the population from solid waste disposal practices. (Sint Maarten Ministry of Public Health, Social Development and Labor & Pan American Health Organization, 2019)
- **Air pollution.** Respondents in the current assessment reported that the vast majority of road, air and cruise ship transport uses fossil fuel energy. This may lead to health hazards from air pollution given high population density. For instance, toxic ground level ozone is created when fossil fuels are exposed to high temperatures.
- **Limited green spaces.** While some natural spaces are protected by law in Sint Maarten (see Institutional context section), population and property development pressures have led to a reduction in green spaces that may have assisted people in exercising and improving their health.

In the *How Healthy is Sint Maarten/ Saint Martin?* survey, of respondents in Sint Maarten, 6.5% reported that they were severely exposed, and 15.2% that they were somewhat exposed to air pollution at home. At work, 4.4% reported that they were severely exposed, and 8.9% somewhat exposed to air pollution. Around a quarter of Sint Maarten respondents experienced a bad smell at home (24%), and 15.4% experienced a bad smell at work (University of the Virgin Islands & University of St Martin, 2015).

These environmental management challenges have particular implications for older people, who are more vulnerable to air pollution, poor water quality, extreme heat, and limited access to safe outdoor spaces. Poor environmental conditions can accelerate loss of intrinsic capacity and increase the burden of chronic disease.

Institutional context

Health, Social care and Social insurance systems

Finance and administration

In Sint Maarten, provision of health care, social care and social insurance are closely linked. The **VSA** is the government entity chiefly responsible for policy direction as well as the monitoring and execution of some services, in these areas, with its work paid from general taxation. As regards the elderly population, the **Department of Social Development** of the VSA focuses on policy development, legislation, data collection, and strategic planning rather than direct service provision. Most health and social care are provided by the private and non-governmental sectors, paid via a social insurance system. The government employs advisors on specific issues such as Social Development; however, as much of the health system is delivered through private providers, their direct executive authority within service provision is more limited.

Social and Health Insurances (SZV) is the entity that administers social and health insurance. The SZV Act of 2010 established SZV as an independent entity responsible for executing social insurance legislation. The agency manages the national health and social schemes which include insurance for general old age, widowers and orphans, accident, sickness benefits, severance pay, and general insurance for exceptional long-term medical expenses. Insurance provisions especially relevant for older people include:

- Pensions
    - AOV (Old Age Insurance) – This is the national/ general pension.
    - AWW (Widows and Orphans) - Pension scheme for widows and orphans
    - APS (General Sint Maarten Pension Fund) - Pension scheme for civil servants, teachers and other organizations appointed by law (including SZV staff). APS is an independent agency that manages the pension fund for civil servants.
- Health and social insurance- Employers and employees pay premiums which provide entitlements to health and social care.
    - The main schemes are health insurance (ZV) and disability insurance (OV).
    - **OZR (Sickness Insurance Scheme):** OZR is one of the statutory health insurance schemes administered by Social and Health Insurances (SZV), providing coverage for insured employed persons outside the government sector. The scheme finances ambulatory and specialist medical care, hospital-based services, paramedical care (including physical therapy, psychology, occupational therapy and dietetics), pharmaceuticals, selected assistive devices, and limited dental services. Together with ZV and FZOG, OZR constitutes part of Sint Maarten's regular health insurance arrangements, generally covering short- to medium-term care. Responsibility for prolonged, chronic, and disability-related care is transferred to AVBZ following the initial treatment period or upon confirmation of long-term care needs.
    - Health and social care providers receive payment for their services from the social insurance scheme.
    - AVBZ is the national insurance scheme to cover the care of people with prolonged ill-health or disability.
    - FZOG is an insurance scheme for retired government workers or their widow(er).
    - 60+ insurance provides seniors with insurance if no other medical insurance is available for him/ her. Premiums must be paid from the older person's income from their pension, employment or savings. (Interview with representative of Social and Health Insurances (SZV), 5 September 2025; Social and Health Insurances (SZV), Undated-a)

Further schemes are detailed at https://www.szv.sx/info/seniors-benefits/62plus-medical-insurance/

Eligibility criteria for the listed pension schemes differ. For AOV pensions, eligibility is determined by:

- Legal residency status:
    - Legal residents of Sint Maarten are entitled to pension by virtue of being registered at the Civil Registry.
    - Coverage begins at age 15 and continues until pension age (currently 65).
    - Even those who never worked or contributed can qualify if they were registered residents.
- For non-residents:
    - Must have been assessed for income tax in Sint Maarten.
    - Need to have filed tax returns (not necessarily paid taxes but been assessed).

- Calculation of benefits:
    - The full pension for people born on or after July 1, 1960, requires 50 years of insurance (from age 15 to 65),
    - Benefits are proportional to insured years (e.g., 40 years = 80% of maximum pension).
    - People born before January 1, 1958 have a pensionable age of 60.
    - People born between December 31, 1957, and June 30, 1960, have a pensionable age of 62.
    - Periods spent outside Sint Maarten are not counted toward insured years if a person deregisters from the Civil Registry. However, if a person remains registered in Sint Maarten (e.g., while studying elsewhere without formal deregistration), their insurance record continues uninterrupted within the Dutch Kingdom system . (Social and Health Insurances (SZV), Undated-a)

Older people must apply for AOV and are advised to do so six months before reaching eligibility age. Late applications are paid retroactively for a maximum of one year. The maximum AOV is linked to a percentage of the minimum wage and adjusted for inflation; however, the amount is generally not sufficient to meet all the financial needs of an older person on its own. (Interview with representative of Social and Health Insurances (SZV), 5 September 2025).

The current maximum pension is XCG 1,383 guilders per month, though the average payment is around XCG 700. Lower pension amounts are due to incomplete insurance periods (Interview with representative of Social and Health Insurances (SZV), 5 September 2025).

Private employers provide company pension schemes, and some individuals also purchase annuities to provide old age pensions. Many workers, notably in tourism and hospitality, do not have access to company pension schemes. As outlined previously 11.4% of people aged 15 and over rely on AOV as their main source of income, while 1.3% have private pensions as their main income source.

The insurance scheme for long-term illnesses, AVBZ, covers care that is not addressed by regular health insurance plans. Key aspects of AVBZ relevant to elderly care include:

- Coverage for long-term care, such as physical therapy, beyond the initial three months covered by regular health insurance
- Home adaptations for people with disabilities to assist mobility at home, e.g., widening doors, bathroom modifications
- Assistive devices such as wheelchairs, special beds, and shower chairs
- District nursing services
- Support for persons with physical/mental disabilities from birth
- Care for people with Alzheimer's disease at home or in residential care
- Institutionalized and other care for people with chronic mental health challenges being cared for by the Mental Health Foundation.
- Subsidization or partial coverage of transportation costs for elderly and disabled people needing medical appointments, particularly for hospital visits and dialysis.

AVBZ complements other health insurance schemes. Regular SZV insurance (ZV, FZOG, or government insurance) usually covers the first 90 days of treatment, after which AVBZ covers approved long-term care needs.

To receive coverage, a referral from a designated provider is required. Once approved, SZV authorizes contracted suppliers to provide medication, equipment, or services. Clients usually collect items themselves, and cases are reviewed every six months.

Dental coverage is limited. OZR and FZOG partially cover check-ups and routine care. OV covers dental treatment resulting from workplace accidents, and ZV covers treatment for certain non-caries oral diseases.

Access to SZV services is managed through an online portal where applicants submit documentation. Providers receive guidance on eligibility and coverage rules, and SZV staff offer assistance in person or online. In emergencies, such as after Hurricane Irma, paper-based processes may be used.

Access to SZV benefits requires provider referral and administrative approval, primarily through an online portal, which may present barriers for some older persons.

Lack of insurance coverage affects a substantial proportion of the population. In 2011, 12.3% of the population were not insured, 14.6% had private insurance, and a further 1.7% had insurance by an employer: see table below (Department of Statistics Sint Maarten, 2017).

Table 12: Population by type of insurance

	2001	2011
SVB/SZV	11899	21799
BZV	2171	
ZOG	541	320
Insurance by employer	944	559
Private insurance	3412	4897
Other type of insurance	1234	
Not insured	9238	4121
Don't know		1373
Total	**30594**	**33609**

Source: STAT/CBS Population Census

Source: (Department of Statistics Sint Maarten, 2017), Table 6.10

The ZV insurance is mandatory for those employees who qualify. There is no opt-out option. Criteria for eligibility which restrict access to SZV (ZV) health insurance include:

- Undocumented unemployed persons are not eligible.

- Undocumented migrants who are employed and work full-time are eligible for SZV insurance, but their undocumented spouses and family dependents are not.
- Those uninsured may also include the self-employed or informally employed, persons earning above the wage limit of SZV, and persons working part-time. Persons who work for more than one employer at the same time are insured if they do not surpass the wage limit.
- SZV will only insure persons who work 5 or 6 days a week. The 5- or 6-day stipulation does not apply to the number of hours worked, only to the number of days per week worked. (Interview with representative of Social and Health Insurances (SZV), 5 September 2025; Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

People who lost their employment as a result of Hurricane Irma became un-insured. The 2013 elderly research study indicated that that 12.3% of the elderly lacked medical insurance (For a change N.V., 2013). The current system of health insurance, then, does not provide universal health coverage.

It was noted that the transition from being an employee to being a pensioner is sometimes far from smooth. Some people find that they are no longer eligible for insurance benefits through employment, but do not yet have a pension or insurance related to their elder status or long-term health issues (Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025).

Uninsured individuals in Sint Maarten have limited access to health care and generally must pay out of pocket. Hospitals are required to provide emergency treatment, after which payment arrangements are usually discussed. However, many uninsured patients are unable to settle these costs, resulting in unpaid debts for health facilities.

If an uninsured person requires medical evacuation, SZV may request government approval to guarantee coverage. This guarantee applies only to the evacuation and treatment abroad; once the person returns to Sint Maarten, they must arrange their own ongoing care.

For individuals with no or very low income who have been legally resident for at least three months, access to care may be provided through the charitable medical assistance scheme **Pro Pauper (PP)** (Interview with representative of Social and Health Insurances (SZV), 5 September 2025). In addition, low-income individuals may qualify for financial and/or medical assistance from the Department of Social Services, as described in the following section.

Initiatives for populations in need

The **Department of Social Services** of the Ministry of VSA is charged with providing social aid services to the general public. Social Services officers assist clients in accessing health insurance, social security and social work, guidance and care. They provide services such as budget counselling, life coaching sessions and the “Feed our Families” initiative, to name a few.

The Department provides material aid in terms of accessing medical assistance, financial assistance, and legal assistance. Other assistance includes Social Worker Intervention, advice and crisis care.

People who wish for assistance can come to the Department of Social Services to make an appointment. After they have assembled all of the necessary documents, a Social Welfare Officer works with them in determining, according to the National Ordinance in place, whether they qualify for assistance (Government of Sint Maarten, Undated-b).

Financial aid is granted to those who cannot provide for their basic needs and that of their family. People who can qualify are:

- Dutch nationals who have been registered at the census office longer than three months prior to application
- Anyone who is 18 years or older who is registered as unemployed and is actively seeking employment.

Applicants must provide documents to support their applications, including (among other things) proof of income and expenditure, and proof (if applicable) that the applicant is actively looking for work. The amount to be received is dependent on documents submitted. One-time financial assistance is also available for school fees, school uniforms, funeral expenses and calamities such as fire and floods. Similar documentation is required for these as for financial aid, plus the bill for the item (Government of Sint Maarten, Undated-c).

Medical aid is coverage for medical expenses provided to those who qualify and are not insured elsewhere. People who can qualify include:

- Dutch nationals who have been registered at the census office longer than three months prior to the date of application
- Non-Dutch nationals, older than 60 years, in the possession of a valid permanent residence permit, who have been registered at the census office longer than five years prior to application.
- People who are registered as unemployed and actively seeking employment.

The medical coverage is of limited duration. For senior citizens (60 years and older) and people with physical impairments, coverage is granted for 5 years (Government of Sint Maarten, Undated-e).

Legal aid provides legal representation to those who cannot afford to pay for necessary legal services. People who can qualify include:

- Dutch nationals who have been registered at the census office
- Anyone who is 18 years or older
- Anyone who has an income of less than minimum wage per month.
- Anyone within defined income boundaries in a labor case (for partial legal assistance) (Government of Sint Maarten, Undated-d).

A study found that about 70% of applicants for the three types of aid are women, suggesting that they are in greater need or that they have a greater propensity to seek and request assistance for themselves or their families (UNICEF, 2013).

Social Workers in the Department support individuals, families, and communities to strengthen their social functioning. Services are delivered in accordance with the

Constitution, which prohibits discrimination on grounds such as age, race, sex, disability, religion, nationality, marital status, birth status, or sexual orientation.

Vulnerable groups, including older persons and people with disabilities, are among those served. A key informant reported that Social Workers "develop care plans with each client, monitor implementation of the plan, support referrals, and follow up with a range of service providers."

(Government of Sint Maarten, Undated-g).

Crisis Care aims to provide 24-hour support and guidance for people needing crisis assistance, focusing on people experiencing mental health crises. Therapeutic help, development of care plans and referrals are provided (Government of Sint Maarten, Undated-a).

Also, within the Ministry of VSA, the **Department of Community Development, Family and Humanitarian Affairs (CDFHA)** works with vulnerable populations including seniors, collaborating with various government departments and NGOs. Examples of partnerships include those with:

- Sint Maarten Housing Development Foundation (SMHDF) for affordable housing
- White and Yellow Cross Care Foundation (WYCCF) for provision of senior medical care and accommodation
- A Meals on Wheels program for free food delivery in partnership with a nonprofit organization
- Faith-based organizations for food pantries and soup kitchens

It has developed notable initiatives to assist older people.

- Senior Smart Tech Program: This is a three-month weekly digital literacy training program. Older people are among trainers. The program is free or subsidized for seniors depending on their pension amount.
- Exercise program serving 95 seniors weekly
- Upcoming "Bridging the Gap" program to connect youth and seniors
- Senior income tax assistance program, to help them complete tax forms
- Community help desks in four locations providing government services with one specifically for seniors. – The Gaston Boasman Helpdesk for the Elderly and Disabled.
- A guided living home for seniors needing support while maintaining independence (see section on health and social care institutions below). However, this is limited to persons coming from the Dr. J. Shelter.
- Subsidization of services for food security provided by Meals on Wheels and faith-based organizations, and collection of data on users.
- A homelessness project that serves seniors, providing immediate relief while collecting data for long-term solutions

The interviewee noted that both nationals and non-nationals access these services, with possibly more of the non-nationals utilizing them due to limited family support networks

(Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) 6 July 2025).

To implement its work, CDFHA works closely with and empowers Community Councils with skills-training, assistance in becoming registered NGOs and accessing funding, providing project management tools and improving communication capabilities. The organization also works with NGO's, FBO's and governmental organizations.

To assist in coordinating responses to populations in need in Sint Maarten, the Ministry of VSA has developed the **Social Registry program**. This is designed as a database that:

- Collects and stores household information
- Serves multiple purposes:
    - Disaster management (locating people before/after disasters)
    - Case management for households with various needs
    - Facilitates collaboration between different agencies

The system categorizes cases as:

- Non-complex: households with a single need (e.g., financial aid only)
- Complex: households with multiple needs across various life domains

For complex cases, the Social Registry enables different organizations to collaborate as a team to find comprehensive solutions. The system is currently in testing and piloting phases, with plans to launch in the near future. It is not yet embedded in the organizational structure but is intended to become its own division within the VSA (Interview with representatives of the Department of Social Development, 6 July 2025).

NGOs play an important role in supporting older people. Several foundations operate Activity Centers where seniors can socialize, receive emotional support, share meals, and take part in games and other activities. These centers are open two or three days per week and are largely run by volunteers, mostly middle- and older-aged women. Small membership and meal fees are charged.

Volunteers also assist with errands, transport, and occasional light home support, and some organizations arrange outings and recreational activities. Foundations providing these services include Home Away from Home Taking Care of the Golden Agers, the Sint Maarten Senior Citizen Recreational Center, Hearts United, and the Community Outreach Mentorship and Empowerment Foundation (C.O.M.E. Center). These organizations rely mainly on donations, fundraising, and volunteer support.

Health and Social Care institutions

Health care is provided by a variety of private, non-governmental professionals and agencies in Sint Maarten. Social care is delivered primarily by private and non-governmental agencies, while the government's Department of Social Services and the Department of Community Development, Family and Humanitarian Affairs (CDFHA) also provide social work services. (Ministry of Public Health Social Development and Labour, 2014; PAHO, 2017; Sector Health Care Affairs, 2002; WHO, 2018).

Primary care is generally delivered through the following avenues:

1. General Practitioners (GPs) – These are considered the 'gate-keepers' to the health system.
2. District Nurses – These provide care in the home environment for the elderly, young mothers with babies and toddlers and the disabled at home. They are employed by the White and Yellow Cross Care Foundation (WYCCF) (described below).
3. Dental professionals.
4. Paramedics and other health care professionals working in the allied health care services, e.g. physical therapy, remedial therapy, occupational therapy, speech therapy, podiatry, psychology and dietetics.
5. NGOs and voluntary service providers. A variety of agencies provide social and health care for older people, such as via Activity Centers, and to address relevant health needs (e.g., The Diabetes Foundation).

Secondary care is chiefly provided by the **Sint Maarten Medical Center (SMMC)**, the **WYCCF**, and the **Mental Health Foundation (MHF)** (PAHO, 2017; WHO, 2018).

The SMMC, the only hospital on the island, is a private and non-subsidized medical center providing primary and secondary care. It has both in-patient facilities and out-patient facilities (PAHO, 2017; Sector Health Care Affairs, 2002; WHO, 2018). Due to the location of the SMMC, accessibility can be seen as a challenge (Ministry of Public Health Social Development and Labour, 2013a). Overseas referrals are necessary for treatment of some conditions.

There is one Social Worker employed at the SMMC whose responsibilities include supporting seniors, managing hospital admissions, and coordinating with various community organizations. This professional collaborates with social services and other organizations, working together to provide support despite limited formal resources (Focus group discussion with social care professionals, 27 August 2025).

The **WYCCF** serves the older population and people with disabilities. AVBZ insurance pays for most of the clients of WYCCF. It has the following main facilities: Sint Martin's Home, Sister Basilia Centre, District Nursing and Hospice Care (Social and Health Insurances (SZV), Undated-b).

The **Sint Martin's Home** provides elderly care and nursing home care. It offers living spaces and provides health care for people with physical disabilities (Ministry of Public Health Social Development and Labour, 2013b). The Nursing Home is for psycho-geriatric and somatic clients who are chronically ill and/or have a disability. These clients are provided with intensive care and guidance. The Elderly Care unit is for clients who are semi-independent and still active. The clients are helped with their daily routines. They are encouraged to do as much as possible independently and when necessary, will be supported by a nurse. There is also a Psycho-geriatric Daycare that provides a comprehensive assessment, treatment and rehabilitation program for clients with conditions such as dementia. During the day, clients are engaged in recreational and therapeutic activities.

Physical Rehabilitation provides therapy to assist patients who have experienced significant life changes due to an undergoing illness (e.g., Parkinson's disease), injury or surgical

procedure (e.g., amputation following complications of diabetes) (Social and Health Insurances (SZV), Undated-b). WYCCF assists people with disabilities through professional assistance in making orthopedic instruments and obtaining tailored assistive devices (Interview with representattive of WYCCF, 20 August 2025). Support groups are facilitated for clients and their family members.

Reported challenges include limited staffing capacity, with one psychologist employed by WYCCF and one social worker serving all departments except the Sister Basilia Center. In addition, waiting times for nursing home placement have been reported to range from approximately 1.5 to 2 years (Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025).

The **Sister Basilia Center** provides care for people with intellectual disabilities of all ages.

The **District Nursing** department provides services to clients who are getting older, chronically ill, recovering from surgery, or have disabilities. Care is provided to clients of all ages to remain safely at home. The following advantages of care at home are cited:

> "Nursing Care allows clients to stay safely in their homes. It helps avoid unnecessary hospitalization by offering a more client-centered solution. Interacting with loved ones in their own environment keeps clients active and mentally stimulated. Receiving specialized Nursing Care is the key to achieving the highest level of recovery and quality of life…. compared to the hospitalized client, the Nursing Care client often has a greater role in determining how and even if specific interventions will be implemented. *(Source: DN NURSING CARE | WHITE & YELLOW CROSS)*

The home care services to support health and activities of daily living. They can assist with meal planning, grocery shopping, and, if necessary, support adequate medication use by administering medications, picking up prescriptions, and monitoring vital signs. The aide also supports meaningful companionship and peace of mind for clients and their families by engaging clients in hobbies and activities or escorting them to appointments *(Source: DN HOME CARE | WHITE & YELLOW CROSS)*.

The WYCCF Hospice provides palliative care to residents in their last stage of life. Staff aim to reduce stress and anxiety in a tranquil and peaceful atmosphere. Personalized care, guidance, safety, and tranquility are prioritized so that the client can reach a comfortable state, physically, mentally, socially, and spiritually. A variety of professionals provide hospice care, such as physical therapists, a dietician, and social workers. They are in close contact with the doctors who may be consulted any day or night. Clients who are fit enough to go out for a few hours are free to do so. Loved ones and faith-based organization members can be involved in their care and can visit any time *(Source: HOSPICE | WHITE & YELLOW CROSS)*.

The paramedical care staff complement of the WYCCF includes physiotherapists, ergonomists, occupational therapists, instrument makers, rehabilitation directors, psychiatrists, psychologists and dietitians (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

The **Mental Health Foundation (MHF)** is ain provider of secondary mental health services in Sint Maarten, funded by AVBZ (Mental Health Foundation, 2018).

Its services include inpatient admissions for people in crisis or needing 24-hour care; outpatient clinic services such as assessment, diagnosis, therapy, and counselling; community-based outreach for those unable to leave home; crisis intervention and follow-up; and day treatment at the Faraja Center for adults with mental illness. MHF also provides public education and prevention activities, as well as short- and long-stay residential units that support recovery and independence.

The **Turning Point Foundation** complements the work of the MHF by providing therapy and residential care for people with addictions.

Tertiary health care is provided off-island in Aruba, Columbia, Cuba, Curacao, the Dominican Republic, the United States and Venezuela through agreements between the insurer and facilities in these countries (PAHO, 2017).

The **guided living home operated by the Department of Community Development Family and Humanitarian Affairs** is structured to promote independence with support for seniors. Key features include:

- Staff are present 24/7 working in shifts, in partnership with the Hearts United NGO.
- The facility currently houses 4-5 seniors, with 2 expected to transition out soon.
- It is designed for seniors to maintain independence while receiving necessary support.
- Services include assistance with meals, room cleaning, and personal hygiene when needed.
- Staff ensure residents get fresh air and social interaction.
- There are organized activities such as mini cruises and movie outings.
- It accommodates differently able seniors with mobility or continence issues.
- Some residents stay short-term while transitioning to independence, while others with ongoing medical conditions may stay long-term

The facility was converted from what was previously a transitional shelter for people displaced by natural disasters, which was downsized due to budget constraints (Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) 6 July 2025). The facility is temporary and no longer takes admissions.

Prevention and health promotion

Health from conception onwards affects health as people age. Prevention of disease, loss of intrinsic capacities, and functional abilities using a life course approach is critical to healthy ageing. Factors that affect health at various levels of the socio-ecological model (Figure 2) must be addressed using a health promotion approach.

CPS is the entity principally responsible for prevention and health promotion. It has two departments: General Health Care and Youth Health Care (Interview with representative of Collective Prevention Services, 21 August 2025). Its core tasks are to:

- Register, prevent and trace /follow up of diseases
- Provide public health information and awareness

- Report, measure, and analyze epidemiological data on infectious diseases.
- Prevent AIDS and STIs
- Support target group policies
- Implement the Youth Dental Program
- Implement the immunization and screening program
- Supervise the functioning of public health medical care and legislation
- Ensure the execution of tasks in the area of health and public health *(Source: Department of Collective Prevention)*

The publicly-funded vaccination program administered by CPS is for children only (see below). Adults who wish to be vaccinated must access this from private doctors. Pharmacists can order vaccines, such as for influenza and shingles, on demand. The Pharmacy Division of the Inspectorate of Health is in charge of drug regulation and quality control. (Interview with representative of Collective Prevention Services, 21 August 2025)

Coverage of preventive health care in the care financing system

Prevention of NCDs receives limited coverage by the health and social care financing system. **SZV** covers some screening and testing (e.g., for cancer) and monitoring equipment such as glucometers. Dental checkups and care are partially covered.

Recently, SZV started a pilot prevention project targeting people with NCD risk factors (e.g., obesity). This one-year initiative works with four General Practice (GP) clinics and employs nurse practitioners who rotate between these practices. Features of the pilot include:

- Voluntary participation for insured individuals regardless of their specific insurance type
- Nurse practitioners follow participants, providing guidance and monitoring
- Collaboration with physical therapists and lifestyle change professionals
- Focus on helping participants with risk factors like being overweight
- Requirement that participants follow prescribed instructions to remain in the program
- SZV covers the costs of the interventions and professional guidance

The project aims to demonstrate the value of preventive care, with the goal of encouraging legislative changes to permanently include prevention in health insurance coverage. Currently, none of the Sint Maarten health insurance legislation formally covers preventive care, though SZV has made some exceptions (like covering glucometers) when the preventive measure clearly reduces more expensive treatments later (Interview with representative of Social and Health Insurances (SZV), 5 September 2025).

Maternal and child preventive health services

Maternal and child preventive health services represent a core upstream investment in healthy ageing across the life course. In line with the WHO healthy ageing framework, early-life interventions—including antenatal care, immunization, nutrition, growth monitoring, and cognitive development—directly influence intrinsic capacities and shape risks for

noncommunicable diseases, disability, and functional decline in adulthood and older age. From a health systems perspective, these services contribute to long-term population health, reduce avoidable future demand on curative and long-term care, and strengthen system efficiency and sustainability. Their inclusion in this assessment reflects a life-course approach, recognizing that outcomes in older age are determined not only by services for older persons, but also by preventive actions implemented from pregnancy through childhood.

CPS operates a Youth Health Care Division that provides preventive services for children aged 0–3 and 4–17 years. Scheduled contact visits ensure age-appropriate health checks and vaccinations, and parents receive guidance on infant feeding. Vision and behavioral screening is conducted at age 5, and growth and behavioral checks take place at ages 10–11.

All pregnant women receiving antenatal care are offered screening for gestational diabetes. Breastfeeding is recommended for six months, with continued breastfeeding up to one year encouraged. CPS also hosts group support sessions known as the Breastfeeding Café.

CPS runs a dental health program for children aged 7–8, including cavity checks, fluoride application, and community education with distribution of oral health kits. Parents are encouraged to support good oral hygiene. Dental care is generally not covered by insurance, except for specified procedures (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

Strengthening coverage, quality, and equity of maternal and child preventive services therefore constitutes a strategic component of Sint Maarten's healthy ageing agenda, supporting healthier ageing trajectories while mitigating future pressures on health and social care systems.

National strategies for prevention and control of NCDs and mental health

Several national strategies address NCDs and mental health in Sint Maarten.

The **National Multisectoral Action Plan (MAP) for the Prevention and Control of NCDs**, developed following a situation analysis and stakeholder consultations (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019), focuses on strengthening surveillance and research, improving governance and multisectoral coordination, reducing risk factors through health promotion, and providing integrated, people-centered NCD care, including support for self-management (Ministry of Public Health, Social Development and Labor, 2020).

The **Cardiovascular Risk Management (CVRM) Program** established care standards and a strategy to guide service delivery, policy, and reimbursement systems (ACSION, 2010, 2013; Asin, Henry, & Arnell, 2010).

The **2014–2018 National Mental Health Plan** aimed to guide the development and restructuring of mental health services while safeguarding patients' human rights (Ministry of Public Health, Social Development and Labour, 2014).

A **School Nutrition and Physical Education Policy** was developed in 2009 to promote healthy eating, physical activity, and positive health behaviors among youth, and to strengthen the school environment and teacher capacity (Directorate of Public Health Social Development and Labour, 2009). Although not fully implemented due to limited CPS staffing, collaboration with the Ministry of Education, Culture, Youth and Sports continues through healthy schools initiatives (Interview with VSA Noncommunicable Disease Advisor, 10 September 2025).

Earlier, the **Public Health Policy Plan: Building a Healthy Island (2002)** identified health promotion and prevention of lifestyle-related conditions as national priorities (Sector Health Care Affairs, 2002).

A WHO STEPS risk factor survey has been completed. The Mental Health Plan and related legislation are under review, NCD surveillance is being strengthened, and the tobacco policy is being updated to align with the Framework Convention on Tobacco Control (Interview with VSA Noncommunicable Disease Advisor, 10 September 2025).

However, implementation of the NCD Multisectoral Action Plan has faced challenges, including limited inter-ministerial collaboration—particularly on commercial determinants—and unsuccessful efforts to introduce taxes on sugar-sweetened beverages and alcohol. Dependence on imported food and high food prices also hinder efforts to promote healthy diets (Interview with VSA Noncommunicable Disease Advisor, 10 September 2025).

Education and community mobilization strategies to involve people in managing their health

(CPS) conducts community education and screening activities that contribute to healthy ageing by addressing risk factors for noncommunicable diseases (NCDs). Through its national Health Observances calendar, CPS organizes monthly campaigns in collaboration with NGOs and community partners. Activities include health fairs, screenings, media outreach, and public education on issues such as healthy weight, hypertension and stroke, breast cancer, and safe behaviors (Observatoire Sint Maarten Saint Martin, 2015; Sint Maarten Ministry of Public Health, Social Development and Labor & Pan American Health Organization, 2019). These initiatives support early detection and promote healthier lifestyles that influence functional ability in later life.

Project HELP, implemented with the American University of the Caribbean and funded by SZV, has provided community-based screening and health education, including outreach to underserved populations. This has strengthened identification of chronic disease risk and improved access to basic screening services (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

CPS has also organized activities specifically for older persons, including a Senior Health Day to improve awareness of available services. Mobility and fitness classes for older adults have been conducted in collaboration with partners such as WYCCF and INI Fitness, although transport costs have limited participation for some seniors (Interview with representative of Collective Prevention Services, 21 August 2025). Dental outreach and education initiatives have included sessions for older groups, with plans to revive mobile dental services.

More broadly, policies led by the Ministry of Education, Culture, Youth and Sport (MECYS) support a life-course approach to healthy ageing. School-based nutrition and physical education initiatives, youth camps promoting healthy lifestyles, school meal programs, and after-school activities contribute to long-term prevention of NCDs and the development of cognitive and physical capacity. However, formal collaboration between MECYS and VSA remains limited.

NGOs and foundations further support healthy ageing through disease-specific education and support groups, including the Alzheimer's Foundation, Heart and Stroke Foundation, Diabetes Foundation, breast cancer support organizations, and others. Activity Centers and community groups provide education, peer support, and opportunities for engagement, helping maintain social connectedness and wellbeing in older age (Interview with representative of WYCCF, 20 August 2025).

Overall, these initiatives contribute to prevention, early detection, and social engagement—key components of maintaining intrinsic capacity and functional ability across the life course.

A digital directory of non-profit NGOs is available: NPO Listing.

Disaster Emergency preparedness and response

The **CDFHA** plays a key role in disaster management in Sint Maarten. Its responsibilities fall under Emergency Support Function 7, responsible for shelter management. It:

- Manages 11 emergency shelters that operate during hurricanes and other emergencies.
- Conducts hurricane preparedness information sessions before hurricane season.
- Provides shelter management training, with staff now qualified as trainers.
- Organizes shelters into quadrants with special areas for elderly residents positioned closer to bathrooms, medical support, and shelter coordinators.
- Responds to various emergencies (e.g., it recently housed fire victims).
- Empowers community councils to serve as "eyes and ears" during disasters, identifying vulnerable residents including seniors and differently-abled persons.
- CDFHA collaborates with the Social Registry in its outreach approach to identifying vulnerable populations
- Partners with medical support organizations such as the Red Cross during emergencies.
- Previously operated a transitional shelter for disaster-displaced persons (later downsized to the guided living home).
- Assists Community Councils in channeling information to the emergency response system on vulnerable residents, including older people, and evolving needs in local neighborhoods (Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) 6 July 2025).

Following Hurricane Irma in 2017, CDFHA's Community Help Desks played a central role in outreach and relief coordination. They distributed food vouchers to 1,689 applicants—most of whom were women and seniors—and conducted house-to-house visits to assess the financial, social, and health needs of residents, recognizing that the most vulnerable often face barriers in accessing services. The Association of Psychologists and Allied Professionals

also gathered information on populations particularly affected by the hurricane (Sint Maarten Ministry of Public Health, Social Development and Labor & Pan American Health Organization, 2019).

A related social initiative supported older persons and people with disabilities through a minor home repair program. Originally designed to assist with small household repairs, the program was expanded after Hurricane Irma and remained active until 2025. Eligible individuals could receive assistance with roof repairs, replacement of windows and doors, and essential building materials. Approximately 105 families benefited. This initiative contributed to safer housing conditions and reduced environmental health risks for older residents.

The Sint Maarten Housing Development Foundation also supports the development of climate-resilient housing, including housing tailored for older persons (see Housing and Infrastructure section).

Hurricane Irma further exposed institutional vulnerabilities. Power and Internet outages disrupted access to the SZV online portal at a time of heightened need. In response, SZV issued printed lists of insured patients to doctors to help ensure continuity of care (Interview with representative of Social and Health Insurances (SZV), 5 September 2025).

Environmental health and management

Environmental health and management functions—including vector control, food safety, sanitation, housing inspections, and environmental regulation—play a critical preventive role in healthy ageing by reducing exposure to communicable diseases, environmental hazards, and unsafe living conditions. Within the WHO healthy ageing framework, these services support the maintenance of intrinsic capacities, particularly vitality, locomotor function, and psychological wellbeing, while also protecting older persons from disproportionate risks associated with climate variability and environmental degradation. From a health systems perspective, effective environmental health governance represents a core public health function that mitigates avoidable morbidity and contributes to the long-term sustainability of health and social care services. The Ministry of Public Housing, Spatial Planning, Environment and Infrastructure (VROMI) is primarily responsible for environmental management and housing policy. Its responsibilities include managing public housing and spatial planning; developing and overseeing environmental, housing, infrastructure and land-use policies; coordinating disaster preparedness, infrastructure resilience and emergency response; and promoting public awareness of sustainable development and environmental protection (Government of Sint Maarten, Undated-f).

The Sint Maarten Housing Development Foundation (SMHDF) serves as an executing agency under this framework. As an independent foundation, SMHDF manages and delivers social housing on behalf of VROMI, playing a key role in implementing housing policy and supporting access to safe and affordable housing, including for vulnerable groups such as older persons**.**

(Government of Sint Maarten, Undated-f)

These preventive functions are particularly important for older adults, who face increased susceptibility to vector-borne disease, foodborne illness, heat stress, and unsafe housing conditions. Strengthening environmental health capacity therefore directly supports

functional ability in later life while reducing downstream demand for clinical and long-term care services.

CPS addresses environmental health as part of its public health mandate through the Vector Control Program.. Samples of standing water in the community are tested to measure the number of mosquito larvae, and advice is given to community members for elimination of breeding sites.

Environmental and public health functions are supported by regulatory oversight to ensure standards are implemented and risks are monitored. The Inspector General within VSA oversees enforcement of public health laws, assesses institutional performance, and manages a quality system that includes reporting and complaint mechanisms. Food safety and drinking water quality are among the areas monitored.

Air pollution is regulated under the VROMI Ordinance, with oversight by the Inspectorate. This Ordinance also covers waste management, coastal waters, and sewage treatment. Exposure to air pollution disproportionately affects older adults, increasing the risk of heart and lung disease, cognitive decline, and functional loss. Effective regulation therefore supports healthy ageing by preventing avoidable illness and reducing pressure on health and long-term care services. Although solar energy options are available in Sint Maarten, uptake remains limited and the use of electric vehicles is minimal, meaning that the transition away from fossil fuels has been slow.

The Public Health Law, approved in 2016 and published in 2017, is aligned with the International Health Regulations and includes provisions addressing toxic fumes, such as those from the landfill. The Inspectorate also supported implementation of PAHO's Smart Health Care Facilities Initiative in Sint Maarten.

(PAHO, 2013a, n.d.; Sint Maarten Ministry of Public Health, Social Development and Labor & Pan American Health Organization, 2019)

Beyond routine environmental regulation, climate-related shocks further underscore the importance of resilient environmental health systems for protecting older populations and maintaining continuity of care. Following Hurricane Irma, multiple agencies came to Sint Maarten or provided funds to assist in recovery. The Dutch Government changed the modality of providing funds to support the rebuilding by channeling the funds through the World Bank. Projects supported by these funds have included climate resilience initiatives and job training to assist people who lost employment due to the hurricane.

Integrating environmental health and management into Sint Maarten's healthy ageing strategy requires sustained intersectoral coordination across health, housing, infrastructure, and environmental governance. Investments in inspection systems, climate adaptation, vector control, and safe community environments should be regarded as upstream interventions that protect intrinsic capacity across the life course, delay functional decline, and enhance system resilience in the context of population ageing and climate change.

Employment, human resources, education and training for Health and Social care

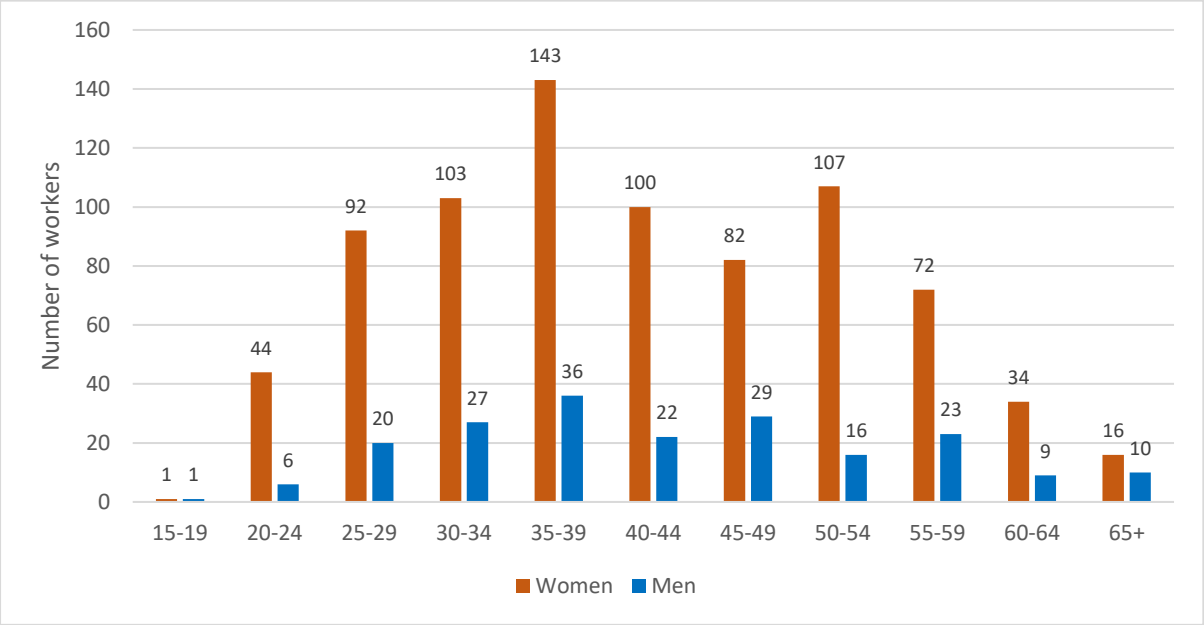
As noted in the labor market section, about one-third of people aged 15 and over are economically inactive and 6.5% are unemployed, suggesting some untapped labor capacity. However, inactivity may reflect undocumented work, low functional ability—particularly among older persons—or informal caregiving responsibilities.

Economic inactivity is higher among those with lower education levels, with nearly half of people with no formal education inactive, compared to 11.5% of those with tertiary education. Unemployment is highest among those with primary or secondary education. Proposed policy reforms aim to reduce inactivity and strengthen income generation among adults.

Figures from the 2022 census show that 993 people were employed in the category, "Human health and social work activities (hospital, medical field)", representing 4.5% of the employed population. Health and social work is the ninth largest industry in terms of people employed (Sint Maarten Department of Statistics, 2023). Far more women (794) than men (199) were employed in this sector, representing 6.9% of women and 1.9% of men employees respectively. There were 237 health and social care workers for every 10,000 people in Sint Maarten.

Figure 13 shows that, from age 20 onwards, more women than men are employed in this field in every age group, with a peak in the 30-35 age group in the number of people employed. Considerable numbers of women aged 50 and over are also employed in this sector.

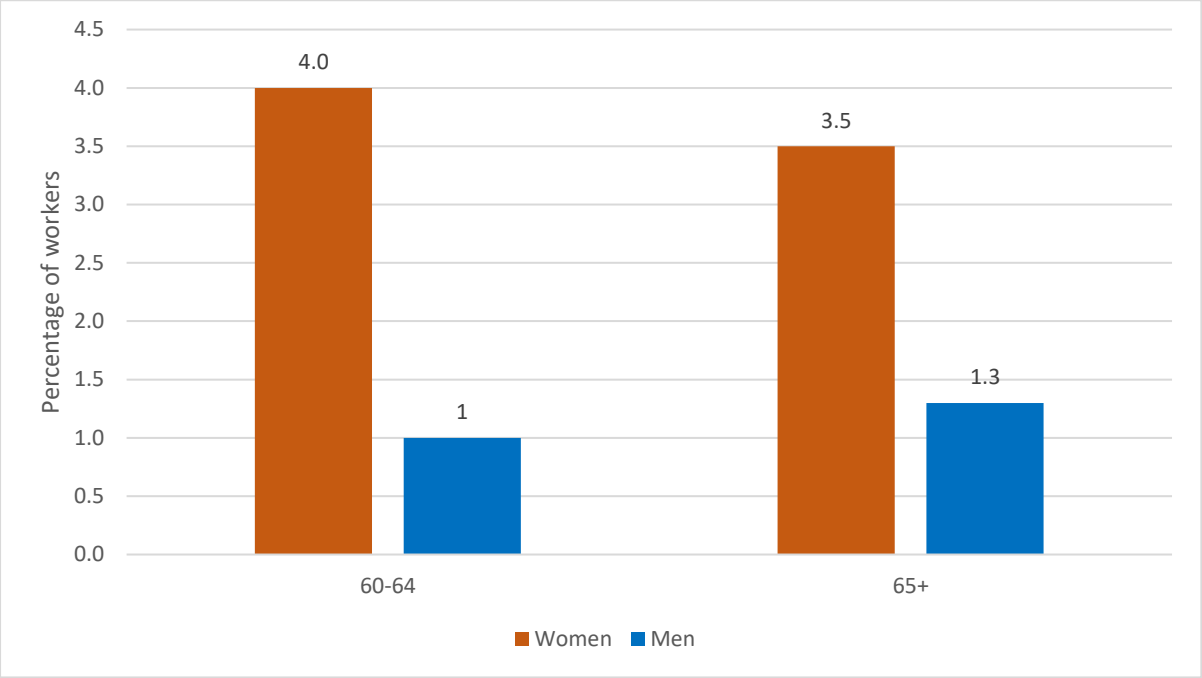
Figure 13: Number of people employed in human health and social work activities (hospital, medical field) in Sint Maarten, by age group and sex, 2022



Source: 2022 census figures provided by the Department of Statistics

Among seniors, 2.5% of workers aged 60-64 and 2.1% of workers aged 65+ are employed in this field. **Figure 14** shows that the percentages of older female workers in health and social work exceeds those of male workers.

Figure 14: Percentage of workers aged 60 and over employed in human health and social work activities (hospital, medical field) by sex in Sint Maarten, 2022



Source: 2022 census figures provided by the Department of Statistics

In the health and social care industry in 2022, more workers were foreign-born than locally born (65.5% and 34.5% respectively. The percentage foreign born was lower than among the top two employing sectors: hotels and restaurants (81.1% foreign born) an wholesale and retail trade (83.8%), but higher than in public administration and defense (55.7%) (Sint Maarten Department of Statistics, 2023). The human health and social work industry had the highest education of all industries; 57% had tertiary level qualifications (Sint Maarten Department of Statistics, 2023).

These figures indicate that while there are considerable levels of economic inactivity, it may be difficult to involve many of the economically inactive population in the health and social care field, in part because high levels of education are required. This may be a challenge as health and social care needs increase as the elderly population grows.

The Ministry of VSA is involved in monitoring and acting to meet human resource needs in the health sector. Manpower audits are conducted every 3 to 5 years, comparing human resource needs with available registered practitioners in primary health care and among medical specialists. For example, the 2018 audit showed that for most professions the number of staff was roughly equal to or in excess of the norm. However, it was noted that some of the staff may have been working part time, and some of the registered professionals are on rotation and work in this capacity in Sint Maarten only some of the time. The latter applied to cardiologists, ear, nose and throat specialists and ophthalmologists (VSA, 2018).

From this it appears that there is a qualified workforce of registered specialists with the range of needed skills, but there is a need to manage their availability in Sint Maarten to ensure access. It was indicated that the need for geriatric specialists is now included in manpower audits.

There are currently fourteen General Practice clinics in Sint Maarten. They charge fees, which may be covered by insurance. As part of the pilot prevention project targeting people with NCD risk factors (see the section on coverage of preventive health care in the care financing system above),Nurse Practitioners recruited from Curaçao are supporting clinic patients in maintaining healthy lifestyles. There are plans to train additional Nurse Practitioners locally in Sint Maarten. Training is currently provided by a Dutch institution, but collaboration with the National Institute for Professional Advancement (NIPA) is being explored. These professionals are skilled in chronic disease management and could receive further training in mental health and geriatric care (Interview with VSA Noncommunicable Disease Advisor, 10 September 2025).

The Ministry of VSA maintains the Health Care Registry (list of registered practitioners) and defines standards of eligibility for inclusion. It is developing standards for various types of nursing. The Ministry of VSA also hosted a lifestyle medicine workshop for practitioners to increase their skills in preventive health care.

Medical and other health care training is generally provided outside Sint Maarten, with many in the sector having trained in the Netherlands. Some specialists pursue courses elsewhere, which can present a challenge as Dutch medical qualifications are legally required to practice medicine (Interview with representatives of the VSA, 9 September 2025).

NIPA offers advanced vocational education for students who want to further their education after secondary schools and adults already in the workforce. It is the only government-recognized institute for advanced vocational and technical education in Sint Maarten. Among the qualification courses offered there are some relevant to elderly care, such as Registered Nurse (Level 4), Licensed Practical Nurse (Level 3), and Social Pedagogic Worker (Levels 2 and 3).[1]

Locally based universities have had minimal involvement in human resource development in health and social care. The **American University of the Caribbean (AUC)** is an offshore medical school with its campus on Sint Maarten. It has around 600 students, of which most are from the USA and 7-10% from Canada. Up to four scholarships are available to students from Sint Maarten to attend the AUC. AUC students and faculty members assist the Ministry of VSA in projects (such as Project HELP – see above) but there is little direct capacity development for the Sint Maarten health system (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019).

The **University of Sint Maarten (USM)** provides training mainly in hospitality services, education and business for around 350 students. Their courses are accredited through Dutch

[1] A Social Pedagogic Worker performs a wide range of tasks related to helping people to live as independently as possible. The caregiver works with children, adults, the elderly, and people with disabilities, providing support in different areas of their lives (https://www.nipa.sx/#!/social-pedagogic-worker-4.html).

and British institutions. In 2018 they were in discussions with the AUC about the possibility of establishing a Batchelor's degree in medicine and were considering establishing a Bachelor's degree in Public Health (Sint Maarten Ministry of Public Health Social Development and Labor & Pan American Health Organization, 2019)

Other entities also provide relevant training and capacity-building. CDFHA strengthens emergency preparedness through shelter management training, mental health first aid for staff, and training for community council members (Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA), 6 July 2025). The National Employment Service Center hosts seminars and workshops, connects job seekers with employers, and provides support with job applications and letter writing. There is also growing attention to dementia care in Sint Maarten, including professional training and support groups. (Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025)

Housing and Infrastructure

Housing and infrastructure for older people

Interviewees, focus group participants, and the desk review identified several housing and infrastructure challenges affecting older people in Sint Maarten.

Affordability and access. There is limited affordable housing for older persons, many of whom have low incomes and do not own their homes. High rental costs reduce their ability to meet basic needs such as adequate nutrition. The housing market is divided between high-end properties owned largely by wealthy foreigners and modest or substandard housing occupied by low- and middle-income residents. An estimated 20–25% of the population lives in informal settlements, primarily low-income households, migrants, and undocumented persons.

Housing quality and safety. Some rental properties—particularly in the informal market—are of poor quality, with issues such as vermin, structural damage, and unresolved hurricane-related repairs since 2017. Many homes and public buildings are not climate-resilient, although improvements are underway. Few public buildings are fully accessible, lacking features such as wheelchair ramps. In addition, limited access to air conditioning in homes occupied by older persons increases vulnerability to heat-related illness (VSA Social Development, Undated).

Policy and preparedness gaps. Environmental and emergency response policies do not specifically address the needs of older people, despite their increased vulnerability during disasters and climate-related events.

The **Sint Maarten Housing Development Foundation (SMHDF)** is an independent entity tasked with providing social housing on behalf of VROMI. Their work includes:

- Manageing social and around 800 low-income housing units, with rent capped at 30% of tenants' gross household income
- Operating the Red Cross Building, which now serves as a senior facility with 24 units
- Partnering with the WYCCF to provide guided living for people with disabilities
- Planning to expand the senior facility by another 48 units
- Developing a sustainability strategy through market-rate projects (such as Blue Mountain) to fund social housing

The Foundation faces challenges including high construction costs, insufficient funding for senior housing, and a housing shortage with many families on the waiting list since their homes were destroyed by Hurricane Irma. While grants and subsidies exist, they are often insufficient or delayed, and commercial loans are not viable due to low rental income from senior facilities. The foundation is currently developing the Blue Mountain Project to generate profits for future social projects. They use a 50/50 ratio approach - half social housing and half market-value housing - to remain financially viable (Interview with representative of Sint Maarten Housing Development Foundation (SMHDF), 29 August 2025).

The SMDHF Red Cross facility has 24 units for older people on low incomes who can live independently. The rent is as low as XCG 50 per month. It contains a mix of studio and one-bedroom apartments. Accessibility features are installed by the SMDHF where needed (grab rails, etc.). It includes a community/recreational area. A Red Cross unit is on-site to check on residents. The SMHDF plans to expand low-cost housing for seniors with a facility comprising 48 one-bedroom units. The new facility will incorporate lifts and a gym for greater accessibility and exercise opportunities.

To be eligible for social housing, applicants must provide proof of Sint Maarten residency and income. There are plans to acquire automated housing software to ensure a fair allocation process.

It was noted that, given zoning regulations and the increasing population, it may be necessary to build more tower blocks to meet Sint Maarten's housing needs (Interview with representative of Sint Maarten Housing Development Foundation (SMHDF), 29 August 2025).

A new housing policy (the first ever for Sint Maarten) has recently been finalized and is awaiting approval. This focuses on meeting the needs of specific target groups including vulnerable people, elderly, and young professionals. Other notable features include:

- Updating zoning regulations
- Planning for the amount of housing needed to be built in upcoming years
- Prioritizing housing for the population of Sint Maarten rather than foreign investors
- Requirements to build to hurricane resistant standards
- Sustainable energy integration (Interview with representative of Sint Maarten Housing Development Foundation (SMHDF), 29 August 2025; Interview with representative of VROMI, 27 August 2025)

Recent building code updates by VROMI include accessibility standards for public buildings, but not yet for private housing. There was a proposal about three years ago to improve beach

access for elderly and disabled people by providing ramps at Great Bay in Philipsburg, but the implementation status is unclear (Interview with representative of VROMI, 27 August 2025).

The representative from VROMI indicated that future plans include:

- A potential requirement for developers to dedicate a certain percentage of new developments to social or affordable housing
- Possible zoning regulations requiring affordable housing components in residential areas
- Focus on making housing purchase accessible to middle-income earners, as even those with good jobs struggle to afford housing and this contributes to emigration of skilled workers from the country (Interview with representative of VROMI, 27 August 2025).

Climate-resilient housing and infrastructure

Following Hurricane Irma, building codes were updated to include more hurricane-proof and earthquake-proof standards to improve resilience against extreme weather events. The national housing policy includes considerations for climate-proof housing, acknowledging Sint Maarten's location in a hurricane belt.

The Sint Maarten Trust Fund was established for relief and "building back better" after Hurricane Irma in 2017. The fund had amounts earmarked for building and repairing housing to climate resilient standards; development of a housing policy (which was successfully completed); building code updates including hurricane-proof standards; earthquake-proof standards implementation; and updates of environmental norms and standards. However, it was indicated that not all planned initiatives were completed as intended. For example, some money earmarked for housing construction was reallocated to address an energy crisis when generators broke down, causing blackouts and load shedding for several months (Interview with representative of VROMI, 27 August 2025). Nevertheless, the SMHDF was able to participate in post-Hurricane Irma reconstruction using 5.8 million euros from the Netherlands to repair 84 housing units across 6 towers, making them more hurricane-resistant. SMHDF also noted that their facility for older people, the Red Cross Home, was built to resilient standards and withstood the test of Hurricane Irma. It was noted that renewable energy is a critical aspect of climate-resilient infrastructure, given the fragility of the electricity supply system (Interview with representative of Sint Maarten Housing Development Foundation (SMHDF), 29 August 2025) .

Some emergency shelters have been strengthened since Hurricane Irma, and two new shelters are planned to be built. Some sports facilities serve as hurricane shelters. Funding has been earmarked for reconstruction/renovation of sports facilities that serve as shelters (Interview with representative of VROMI, 27 August 2025).

Infrastructure for exercise and health co-benefits

As noted in the section on risk and protective factors, levels of physical activity in Sint Maarten may not be sufficient to optimally prevent noncommunicable diseases (NCDs) and support the maintenance of health and wellbeing as people age. . Access to exercise and sports facilities, and green spaces, are important contributors to physical and mental health. Environmentally sustainable infrastructure can also reduce air pollution (a risk factor for NCDs) and greenhouse gas emissions that contribute to climate change.

VROMI is responsible for nature protection through zoning plans, which include specific conservation areas designated as green or natural areas. Legislation is in effect to protect natural areas, including hilltops, from construction and ensure that they can only be used for activities like hiking trails or walking paths. VROMI has zoned certain areas as natural parks and reserves, including a protected marine park, and a wetland lagoon that has been declared of international importance. There are plans for a terrestrial park on a small island in Simpson Bay Lagoon and the area around Rainforest Adventure/Emilio Wilson Park. VROMI also develops and maintains environmental and nature policies, including a Nature Policy Plan that is published online. However, it was stated that the ministry faces challenges with limited available land as Sint Maarten is becoming increasingly overdeveloped (Interview with representative of VROMI, 27 August 2025).

Zoning plans in Sint Maarten face challenges with the legal basis for enforcement. However, current measures include: :

- The Permits Department assesses building applications based on zoning plans and various policies (hillside, beach, parking).
- VROMI's Policy Department checks if proposals comply with zoning standards.
- An Inspections Department visits sites before permits are issued to verify land suitability.
- While not legally established, zoning plans have gained some legal weight through precedent. A recent court verdict determined that because these plans have been used consistently for advising, they constitute an "established policy" that the minister cannot simply ignore.
- The ministry faces challenges with enforcement, as sometimes buildings are constructed up to road boundaries despite recommendations to leave space for future infrastructure like cycling paths.

VROMI is working toward merging the thirteen separate zoning plans into one comprehensive plan for the entire island.

Initiatives to support access to exercise, green spaces and clean air include:

- VROMI is developing an aesthetics policy for public spaces, which could potentially include considerations for specific target groups such as elderly people.
- VROMI designates specific areas as "sports areas" in their zoning plans, in which only sports facilities are permitted to be built.
- VROMI has designated space for future cycle paths and walking paths along some large or main roads in their zoning plans.

- Air quality standards are included in the environmental norms report that VROMI is finalizing.
- An energy policy from 2014 set ambitious goals for 20-25% renewable energy by 2020, however these have not yet been achieved.
- A feasibility study was completed in 2024 by a Danish company, commissioned by the utility company, to evaluate options for renewable energy development.
- An interactive map, called a Climate Impact Atlas, is being developed with help from the Netherlands that shows areas most vulnerable to climate change impacts. Public workshops were held to validate this map, though attendance was limited.

While VROMI handles the zoning aspect, the responsibility for developing and maintaining sports and exercise facilities falls under the Ministry of Education, Youth and Sports (Interview with representative of VROMI, 27 August 2025).

Access to exercise amenities varies in practice. Population density and high visitor arrivals affect access to and the enjoyment of green spaces and beaches. Financial access by people from low-income households is of concern for the many sports and exercise options. Most clubs and facilities charge fees. The **National Sports Institute (NSI)** is a non-governmental foundation that aims to increase access to sporting opportunities.

Government policy

While there is no specific policy relating to older people in Sint Maarten, there are several current policy initiatives relevant to issues considered above. Major ones include:

- **Housing and infrastructure:** This includes the draft Housing Policy and updates to zoning regulations, building codes, considerations for vulnerable groups such as the elderly, and the aesthetics policy
- **Health:** This includes the National Multisectoral Action Plan (MAP) for the Prevention and Control of NCDs in Sint Maarten, 2021-'30. There is also a plan to update mental health legislation to include geriatric care provisions.

These and other initiatives are described earlier in the Institutional Context section. In addition, policymakers have agreed on a major package of cross-cutting labor market and social security reforms. Following Hurricane Irma, part of the recovery funding was used to conduct an economic review of these systems, with the aim of reducing financial vulnerability and strengthening economic sustainability. The agreed measures, known as the "Country Package," are summarized in **Table 13.**

.

Table 13: Reforms to the labor market and social security systems in Sint Maarten

Recommendation	Desired outcome
Introduce an unemployment benefit scheme	Less employee risk, less poverty
Abolish Cessantia, while maintaining severance pay	Increase efficiency and improve functioning of the labor market
Differentiate ZV and OV employer premiums in order to stimulate sickness prevention	Less employee risk, less poverty, higher quality of labor
Automatically index the AOV eligibility age to life expectancy	Ensure financial sustainability
Formalize financial assistance for elderly with an incomplete AOV	Less poverty
Streamline and fasten work and residence permit procedures	Increase efficiency
Streamline and fasten dismissal procedures	Increase efficiency
Develop new legislation for temporary agency workers	Less employee risk
Automatically index the minimum wage, Financial Assistance (FA), and AOV benefits to inflation (CPI)	Less poverty
Strengthen incentives for FA recipients to accept paid work	Less poverty

Source: (SEO Amsterdam and Economisch Bureau Amsterdam; Van Buiren & Van Vuuren, 2022)

Reforms of special relevance to healthy ageing include the following:

- Introducing unemployment benefit is expected to stimulate participation in the formal labor force throughout life, reducing poverty.
- Employers will have incentives to develop health promotion programs for their employees as they will be obliged to support more of the cost of sick leave.
- More integrated financial assistance will be provided to older people to reduce poverty among those who are not eligible for full AOV pensions and to provide social care.
- The package includes incentives to participate in occupational pensions.
- AOV and the minimum wage will be indexed to inflation.
- Social protection of migrants is expected to be improved. Linking the age of AOV eligibility to life expectancy will generate large savings that will be available to support some of the other reforms. The package is expected to increase work incentives and efficiency while reducing poverty (Van Buiren, Boerdijk, & Mak, 2022; Van Buiren & Van Vuuren, 2022; Van Vuuren et al., 2022). Work is ongoing with implementing agencies such as SZV to reform their systems to conform with the new policies.

Community and Social support

Support from professional and voluntary carers

Community workers include **District Nurses** from **the WYCCF**, **Social Workers from the Social Services Department** and **SMMC**, and **CDFHA** staff. The tentative plan to provide Nurse Practitioners may expand the number of people providing care in the community. Some social and health care professionals consulted suggested that house doctors do not make sufficient visits to patients in their homes, which can lead to inadequate follow-up care for bedridden patients (Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025).

District Nurses from the WYCCF provide some domestic assistance as well as nursing, such as light cleaning and cooking. It was noted that older people who are unable to carry out

domestic tasks must generally rely on their families or make costly private arrangements with individuals, which they generally cannot afford. There is also an American nursing company offering care at home, but this is unaffordable to most older people and is not covered by the insurance system.

Older people indicated that it was difficult to access their entitlements, and they were sometimes confused and frustrated by the bureaucracy.

> *There's a lot of kind of red tape to get, you know, to get your own money (Focus group discussion with informal carers, 20 August 2025)*

An informal carer had similar experiences.

> *I already had the insurance for her, right, but it was a matter that it took months going through the process, because the daycare has a process we have to go through. You have to go through a lot of different offices and do a lot of different stuff. So, the process took us months to get everything to apply. Then everybody did the checks and balances, including the insurance literally researched everything, came to the home, you know. It's a whole process. (Focus group discussion with informal carers, 20 August 2025).*

Assistance with navigating the health and social care system, for example by providing information, helping with completing forms, assembling documentation, and transport to obtain medication and equipment, is highly valued by older people. Such assistance was provided by the community workers listed above, and by volunteers from some NGOs. A need for more case workers, and integrated information systems across agencies to facilitate coherent service responses and appropriate care packages was identified. Transport to medical appointments is supported by the insurance coverage of some older people, but only if they use specified providers and pay some of the costs (Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025).

NGOs and volunteers play major roles in providing community-based care. Activity center personnel provide emotional support both during sessions at the centers and in their interactions with older people in the community. Many of the people running activity centers also assist elders informally with transport to the centers and to assist them with medical appointments, accessing insurance and shopping. Some provide older people with meals. It was noted that some elders are house-bound and rely heavily on these volunteer services, alongside what may be provided by formal social care services.

Capacity is limited among all these services, and stakeholders agree that some older people are left without the support they need. The insurance system will only pay for care and transport from certain providers. People volunteering by using their own cars are not compensated. Many of the people providing activity center services are older people themselves. While they find the work fulfilling, they note that many of them are also on low incomes and may have health challenges.

Formal and voluntary carers highlighted the long waiting lists for the elderly and disability care, assisted living and social housing facilities, which leave many older people without the safety and services they need. It was indicated that some people suspect that places in these

facilities are not fairly allocated. Recommendations were made to increase the number of places and the transparency of allocation procedures (Focus group discussion with social care professionals, 27 August 2025).

The high cost of living, limited-service availability, and restricted access to support, especially for migrants with lower insurance coverage, were highlighted by many people consulted. It was said that many old people live in poor, hazardous housing conditions and do not have sufficient food to maintain their health.

Participants in the current assessment called for attitudes to older people to be addressed. Experiences of elderly patients being neglected or mistreated in health care facilities were recounted, which were attributed to a lack of proper training and attitude among some staff. There were calls for workforce training to address the growing number of older people with complex healthcare needs in Sint Maarten. Training retired nurses and licensed healthcare professionals to provide care at home for seniors was suggested. Education of children and adults on ageing and how to support older people was suggested, indicating that this may help ease the burden on the limited number of health care professionals.

Legislation to protect the rights and freedom from abuse of older persons reportedly does not exist in Sint Maarten. It was recommended that such legislation includes requirements to make services and facilities more accessible to people with impaired functional abilities (as is being done in the draft Housing Policy). Elders should be consulted and more involved in the policymaking process.

Related to this is a lack of knowledge among many older people about their entitlements in the current health and social care system and how to navigate it. There were calls for greater communication and support for older people in optimizing their use of the system. This will require specialized communication with the differently able and language services for some migrants (Focus group discussion with social care professionals, 27 August 2025; Focus group discussion with health and social care professionals from the WYCCF, 25 August 2025)

Informal care

Demographic factors, such as population ageing and high rates of emigration and immigration detailed above, increase the number of isolated people. Economic and social pressures also impel some people, especially women, into employment, who otherwise would have been more available to provide informal care to their parents. Within families, the burden of care can also be carried unevenly:

> *Some children of older people, they might still be in their careers and maybe they wouldn't have time or feel they don't have time. That happens all the time. And you can have ten children and it's usually only one who will care for you. Only one. (Focus group discussion with informal carers, 20 August 2025)*

Isolation and lack of care from family and friends is especially prevalent among people who migrated to Sint Maarten without their families, and elders whose near relatives are abroad or who have died. Isolation is especially likely among the oldest elders, most of whom are women. Older men are also prone to isolation as a result of loss of social support in earlier life (Rawlins, 2014a, 2014b). Both physical and mental health are at risk through isolation.

Informal care for older people at home is provided by family members and mostly by women. No specific government support or assistance is provided for informal caregivers (Interview with representatives of the Department of Social Development, 6 July 2025). It was said that there was a cultural assumption that elders would be cared for at home, but that people generally discuss the needs of older people.

> *Culturally, it is almost looked down upon when you put your parents in an elderly home. So, you're expected to, the senior is expected to stay within the household or stay within the family. And it's the responsibility of the family to take care of that person until they move on to the next life…. I think as a community, we don't know what persons deal with seniors within their own units have to do, because it's something we just don't talk about because every family is responsible for their own senior within their household. Whereas, and I don't want to say that it's a taboo topic because we all get old, but it's kind of like, the same kind of thing, like mental health, right? Like it's something you don't talk about unless you're impacted by it. (Interview with representative of Collective Prevention Services, 21 August 2025)*

This stakeholder noted that the lack of public discussion of elder needs left people, and Sint Maarten as a whole, somewhat unprepared for taking care of elders.

> *You don't realize how much the infrastructure or community lacks until you have a senior within your household that might need support, that might need services…. And then you realize, okay, oh my gosh, well, we don't have access to a recreational center, or we don't have a space where seniors can meet.* (Interview with representative of Collective Prevention Services, 21 August 2025).

A focus group discussion with informal and voluntary carers conducted as part of the current assessment indicated that many of them enjoyed learning from older people and gained emotional and spiritual satisfaction from providing them with support (see the section on ability to contribute to society, below). Voluntary carers, such as those from the activity centers, often provided practical and voluntary help.

> *Sometimes we take baskets for them or, you know, things that they would want, and we stay a while with them. (Focus group discussion with informal carers, 20 August 2025)*

Informal carers responsible for a person with Alzheimer's appreciated the emotional support they got from being part of the WYCCF Alzheimer's support group. Carers also indicated that volunteers from activity centers sometimes assisted the relatives of carers, and that being able to leave them at activity centers provided some respite and time when they could focus on themselves. However, informal carers indicated that they face difficulties and frustrations, including:

- Lack of any systematic financial support for carers, such as a Carer's Allowance, to make it easier to meet the costs of looking after an elder.

- Caring for an older person can take a toll on the carer's physical and emotional health, especially if they are also elders.

- Some older people have challenging and unsafe behaviors, especially people with Alzheimer's.

- Some are ungrateful and verbally abusive, making it difficult to keep motivated.

  > *It's hard because sometimes they say negative things directly at you. It feels that way, directly at you, and you have your moments where you break down and everything, but you have to just always remember that person is not in the right senses and they're not really, they're not directing it to you. But if you're looking for that thankful or gratefulness, you won't receive it from them. (Focus group discussion with informal carers, 20 August 2025)*

- There is a lack of accessible and affordable support services for carers. This includes respite care, which would allow carers to take breaks and attend to their own needs. Waiting lists for daycare services are long, and private care costs are generally prohibitive.

- There is no general program of guidance or training on how to provide care. The Alzheimer's Support Group at the WYCCF has provided training on how to care for people with dementia. Professionals provide some advice, but there is no system for doing so,

- The stress of providing care can take a toll on health.

My health was affected. My heart. Palpitation, palpitation all the time. So, I've been by the doctor from April and now it's doing better. So the caretaker has to be careful. (Focus group discussion with informal carers, 20 August 2025)

- There is no legislation to protect the right to work of people who need time off to care for a relative who is unwell.

- Hours of availability for day care are not long enough to cover the hours that working carers need if they have full-time jobs.

It was noted that not all family members provide care for elders; some are abusive. One carer cited instances of financial and verbal abuse.

The old people cannot go] to check their budgets, their accounts, their stuff. And when they ask for help, they get shut down, right. And from there, they decline, because they don't want their children in their business. Because the minute the children know their PIN code, that's the end of their account. (Focus group discussion with informal carers, 20 August 2025)

Older people also feel that the attention and respect they used to receive from people in the community is being eroded, especially with the rise in automation and digitization.

They still feel that if I walk into the bank, the bank should help me. If I walk into the government building, they should help me. I shouldn't have to go online. And then I have to wait a whole six months for an appointment to come just to get a paper that you can print out in one minute. Some institutions are not helping older people and taking account of the special needs, especially in in terms of technology, yeah. (Focus group discussion with informal carers, 20 August 2025)

There is also disregard for their special needs when they attend institutions.

Especially when you go to the doctor, elderlies are sitting there and most of the time there are some people that are able to go ahead of them. Sometimes they're there from 8 o'clock until maybe 2 or 3. The doctors in their offices should have the insight to see that this person is not able. To say, "We will allow that person to go ahead of the others and ask permission from the other people because it's not right for them to sit there that long." (Focus group discussion with informal carers, 20 August 2025)

Intrinsic capacities

The WHO framework on healthy ageing, shown in **Figure 1** above, indicates that the components of intrinsic capacity that should be the focus of action for older people are locomotor capacity (physical movement); sensory capacity (such as vision and hearing); vitality (energy and equilibrium); cognition; and psychological capacity. An instrument was developed as part of the current assessment to collect data on what is provided to support

these capacities by the health, social care and social security system. Data was provided mostly by representatives of SZV and WYCCF and is summarized in Table 15. This information was supplemented with that from interviews with professionals from these and other care organizations.

The results make clear that intrinsic capacities are unevenly covered by the system. Table 15 shows that some areas are addressed, e.g., there is provision for insured people of assistive devices, footwear, compression stockings and physical therapy for people with mobility difficulties. People without insurance, such as unregistered, undocumented migrants, do not have access to these benefits.

Gaps and variations in coverage include the following.

Locomotor capacity

- There is a lack of dedicated policy or funding for enhancing physical access to public buildings for people with disabilities and limited accessibility features. Many buildings do not have parking spots for people with disabilities and no special access ramps etc. Public roads are not well equipped with unobstructed sidewalks, making it almost impossible to maneuver in a wheelchair.

- AVBZ provides insurance that covers assistive devices such as wheelchairs and prostheses. Regular insurance schemes such as ZV, OZR, and FZOG cover smaller items such as potty chairs for people living at home. Residents of the WYCCF are provided with assistive devices such as canes, tripods, and walkers.

- Physical therapy is covered by insurance on referral by a doctor, for limited time periods. If a person has a chronic condition covered by AVBZ, insurance coverage has to be renewed periodically. WYCCF provides physical therapy as part of its services covered by fees to residents in the St. Martin Home.

- Prostheses are provided by Curacao Orthotics and Prosthetics, an agency from Curacao whose instrument maker visits Sint Maarten once a month. This reflects the periodic availability of several types of specialists who can attend to the needs of older people.

- Accessible Ventures is a company that offers stretcher and wheelchair transportation. On referral by a GP or medical specialist (for example for transportation to and from dialysis), this is paid for by the insurance funds managed by the SZV. Transport by other providers, such as Helping Hands (which provides a service to take older people to run errands and shopping), is not covered by insurance. Transport for the general public is provided by private operators of minibuses and taxis. While the minibus service is inexpensive, it is not designed to accommodate the needs of people with disabilities.

Sensory capacity

- There is a lack of financial support for maintaining eyesight and supporting the visually impaired. Glasses are only covered by insurance in exceptional cases, when medically indicated[2]. Communication in braille, guide dogs and large print communication are not covered or provided.

- There is a lack of sign language interpretation for people with auditory impairment.

[2] See SZV entitlements at https://www.szv.sx/publicfiles/868/documents/Check-Lists/SZV%20-

Table 14: Arrangements for the support of the intrinsic capacities of older people in Sint Maarten

Capacity/ items	Available? Yes/No	Which entity supplies them?	Financial or other schemes to facilitate access
1) Locomotor capacity (physical movement)			
a. Assistive devices (e.g. wheelchairs, walker, walking sticks, grab rails, chair lifts)	Y	Christian Cares Trading	AVBZ, ZV, FZOG, OZR
b. Access to public buildings and facilities (e.g. wheelchair ramps, lifts)	N		
c. Footwear and compression stockings	Y	Christian Cares Trading Curacao Orthotics & Prosthetics	AVBZ, ZV, FZOG, OZR
d. Prostheses	Y	Curacao Orthotics & Prosthetics	AVBZ
e. Physical therapy	Y	Physical therapists	ZV, FZOG, OZR. After 90 days treatment, if physical therapy continues to be recommended and prescribed by a doctor, AVBZ will provide coverage under their chronic illness insurance.
f. Transport	Y	Accessible Ventures	ZV, OZR, FZOG, on medical referral.

Capacity/ items	Available? Yes/No	Which entity supplies them?	Financial or other schemes to facilitate access
2) Sensory capacity (such as vision and hearing)			
a. Hearing aids	Y	Centre de Sudite	ZV, FZOG, OZR hearing loss < 60db and AVBZ hearing loss ≥ 60db
b. Sign language interpretation	N		
c. Spectacles	N		
d. Communication in braille	N		
e. Large print communication	N		
f. Guide dogs	N		
3) Vitality (energy and equilibrium)			
a. Exercise classes for older persons	Y	Physical therapists	ZV, FZOG, OZR
b. Medication for chronic diseases	Y	Pharmacies	ZV, FZOG, OZR
c. Healthy diet, including fruit and vegetables	Y	Dietician	ZV, FZOG, OZR
d. Incontinence supplies	Y	Martijn Trading	ZV, FZOG, OZR
e. Vaccination and treatment of communicable diseases	Y	SMMC, GPs, CPS	ZV, OZR, FZOG
f. Dental care	Y	Dentists for very limited sorts of treatment.	OZR, FZOG, OV, ZV
g. Medical treatment not available in Sint Maarten	Y	Suppliers in countries within SZV's approved network	SZV supports travel and treatment on referrals by SMMC

Capacity/ items	Available? Yes/No	Which entity supplies them?	Financial or other schemes to facilitate access
4) Cognition			
a. Involvement of older persons in intellectual activities	Y	SMMC: Neurologist WYCCF: Psychiatrist and Neuropsychologist	SMMC: ZV, OZR, FZOG MHF: AVBZ
b. Diagnosis and treatment of dementia	Y	SMMC, GP, WYCCF	SMMC/GP: ZV, OZR, FZOG WYCCF: ZV/OZR, FZOG, AVBZ
c. Diagnosis and treatment of Parkinson's disease	Y	SMMC, GP, WYCCF	SMMC/GP: ZV, OZR, FZOG WYCCF: ZV, OZR, FZOG, AVBZ
5) Psychological capacity a. Psychological support services	Y	Psychologists, MHF	FZOG, OZR, ZV
b. Support groups	Y	Alzheimer's support group	
c. Crisis care	Y		Crisis care falls under social services general budget and is managed by that department. , not any of the health insurance managed by the SZV.. They liaise with other providers, including the MHF.
d. Diagnosis and treatment of depression	Y	MHF, GP	GP: ZV, OZR, FZOG MHF: ZV, OZR, FZOG, AVBZ
e. Diagnosis and treatment of other mental health challenges	Y	MHF	ZV, OZR, FZOG, AVBZ

Source: Information provided by representatives of SZV and WYCCF

Vitality

- Physical therapy is available at clinics on referral by a GP or medical specialist. Therefore, it tends to be restricted to people with pre-existing health conditions. Some practitioners provide this service via at-home visits. . It is capped at a maximum number of sessions, which varies per diagnosis. Clients of the WYCCF receive physical therapy and exercise classes as part of their care, paid via fees to the WYCCF which themselves are paid from insurance funds.

- Treatment by Paramedical Health Professionals registered with SZV is covered by insurance - Dietician, Physical Therapist, Occupational Therapist, Speech Therapist, Psychologist. – but only for specified periods.

  Exercise classes and dietary support are only financially supported in referral to professionals by a medical practitioner who is treating someone for a pre-existing condition. There is currently no scheme that supports older people without a pre-existing, medically confirmed condition who wish to exercise and adopt healthy diets to prevent NCDs and improve their mental and physical health. However as mentioned previously, a pilot scheme examining the feasibility of supporting lifestyle programs for people with known NCD risk factors such as obesity is currently underway.
- Some vitamin supplements are covered by ZV insurance (Social and Health Insurances (SZV), 2022). There are small numbers of physical therapists and dietitians to meet current needs. Alternative medicine, such as homeopathy and acupuncture, is not covered.

- As indicated in the section on economic context, almost all food is imported and expensive. The section on health risk and protective factors showed that more than 90% of people in Sint Maarten eat less than the recommended five servings of fruit and vegetables per day. There is a “meals on wheels” service provided by a foundation, but it reaches a limited number of people. There are also some charitable soup kitchens and food distribution initiatives for people living in poverty. Residents of the WYCCF St. Martin’s Home are provided with nutritious meals, covered by the daily rates of their care products.

- Incontinence products are available for purchase and may be covered by insurance on medical referral. WYCCF daily rates for intramural clients cover nursing materials including incontinence supplies.

- Vaccination and treatment of communicable diseases are covered by all insurance funds.

- Dental care is only covered by insurance in exceptional cases, when medically indicated. Dental check-ups and care are only partially covered by OZR and FZOG. Dental treatment is covered by OV (Accident Insurance) if the dental damage is caused by an occupational accident. ZV covers dental treatment to cure an oral disease that cannot be traced back to caries.

- If specialist treatment is not available locally, treatment abroad may be supported by SZV once a medical specialist from the SMMC provides a referral letter. Certain providers in a limited range of countries are supported by this scheme (Social and Health Insurances (SZV), 2022).

Cognition

- Professional psychiatric and psychological treatment are supported by insurance. This applies to residents/ inpatients of care facilities and to people living at home. However, the support provided by activity centers and support groups for intellectual activities and emotional wellbeing is not funded by insurance or by government. To become members of activity centers, people must pay a fee. There is also a fee for meals. The activity centers are open on up to three days a week.

- SMMC and MHF have designed a new diagnostic model for people with dementia. This is executed by the neurologist and supported by a psychologist. However, as there is no longer a residential full-time neurologist on Sint Maarten, there are long waiting times to be seen and examined.

- People with Parkinson's Disease also have long waiting times before they can see the neurologist (Interview with representattive of WYCCF, 20 August 2025).

Psychological capacity

- There are not enough psychologists practicing in Sint Maarten. Key informants noted that some of those who are registered do not practice full time or no longer practice. There is a 3-month waiting time for the first intake.

- WYCCF chairs and hosts the Alzheimer Support Group, for people with dementia and their families. They currently have around 75 members (Focus group discussion with informal carers, 20 August 2025), They meet six times a year. WYCCF is also starting the "Unforgettable Cooking Club". People with dementia and their families will meet six times a year to cook and eat together -focusing on the abilities of the client, and not on what is lost.

- Crisis Care is coordinated by the Department of Social Services. There is a psychological first aid team at the WYCCF, including psychology, social work and behavioral therapy skills. WYCCF also has a contract with MHF to provide psychiatric services for ten hours weekly (Interview with representattive of WYCCF, 20 August 2025).

A cross-cutting issue that affects access is the complicated and time-consuming process of application for each of the items that are available in the system. Older people who have diminished capacities are at a special disadvantage in navigating such processes, While

assistance is available, for example from SZV staff, NGO volunteers, WYCCF District Nurses, Social Workers from various institutions and CDFHA outreach workers, representatives from all these agencies indicated that they are unable to meet all the needs, The capacities of many older people are negatively affected by this, especially given their low incomes and price inflation.

The SZV has a well-designed online information and application portal, but many elders find it difficult to use. The digital literacy education provided by CDFHA is an important initiative to address this but only reaches a few elders. Some seniors perceive that personal customer service has been withdrawn by SZV and other agencies in favor of digitization.

Sint Maarten has no specific a case management system for older people, where attending to the complex needs of an individual elder is the responsibility of a designated professional. Professionals currently have caseloads, but attend to older persons only within the purview of the responsibilities of their agencies. Case managers should collaborate with multidisciplinary teams to attend to complex needs and help navigate the system in partnership with older people themselves.

Functional abilities

According to the WHO framework on healthy ageing (World Health Organization, 2020), the goal of strategies on ageing should be to maximize functional abilities, from the most basic to the most aspirational. In this section we examine evidence from this assessment on the functional abilities of older people and what may facilitate and constrain them. In this we draw upon findings from previous sections and especially on the perspectives of older people and their carers, as revealed in focus group discussions conducted as part of this project.

Ability to meet basic needs

The ability of older people in Sint Maarten to ensure they have an adequate standard of living is challenged in several ways, detailed in previous section. In summary, these include:

- Macro-economic, geographic and demographic factors, such as land availability, economic structure focused on tourism, and population growth and ageing, which limit physical resources, inflate prices for necessities and limit funds available for pensions. Such features are shared by other SIDSs; Sint Maarten demonstrates extreme vulnerability in terms of factors such as population density.
- Institutional factors, such as limited and variable health, social care and social security coverage, with the income of many elders being insufficient to meet their needs. Undocumented migrants are especially vulnerable to poverty, but it affects those with insurance and pension coverage as well.

Focus group discussion participants stated that many seniors face financial difficulties, with pensions insufficient to cover basic needs like food, especially specialized diets for medical conditions. They emphasized that AOV pensions are insufficient to be able to afford any care payments.

> *If you look at the measly pension they get, it won't even get them through the month. (Focus group discussion with informal carers, 20 August 2025)*

> *Food is expensive, so sometimes you may want to eat a certain way, but you are unable to eat that way, you just have to eat what is there. I work so hard in my young age, but now….I am still paying rent. By the time you take off all the rent money there is nothing left. (Focus group discussion with elders 2, 21 August 2025)*

Most older people already had enough clothing, and it was noted that the Salvation Army and Red Cross provided clothing on a charitable basis.

Most elders live in rented accommodation, and rents are unaffordable for many of them. There are long waiting lists for social housing provided by the SMHDF and the sheltered housing provided by CFHDA, Many seniors are in poor quality housing.

> *Some people, their roof is leaking since Hurricane Irma, and when a breeze blow it sounds frup, frup, frup. This happened to my friend, and he has one foot, and he cannot do it. He is on dialysis. He had two or three strokes already. Red Cross say they will help him. (Focus group discussion with elders 1, 20 Aug 2025)*

Accessing medication can be difficult due to transportation issues and bureaucratic processes, such as needing approval from the SZV for certain supplies. Cards are provided by SZV or social welfare to provide access to medication for people who are insured. Some perceived that admissions procedures for care facilities are unfair.

> *It is who you are, because I know of people who got in whose name was not on the list. (Focus group discussion with informal carers, 20 August 2025)*

Ability to learn, grow and make decisions

The question, “Are there ways that older people are facilitated in making their own decisions?” was not easily understood by assessment participants. This was usually answered with information about how services provided elders with opportunities to enjoy their lives, for example through recreation and prayer. There was also awareness that different approaches need to be taken to facilitate the needs of older people and their protection from abuse. Greater roles for Community Help Desks and Legal Aid were envisaged. The Community Help Desks were perceived to have moved away from their former focus on elders (Focus group discussion with informal carers, 20 August 2025). It was recommended that primary care services should set aside time and facilities to ensure the needs of older persons are attended to and allow them to express their views.

It was said that elders sometimes struggle to make their own healthcare decisions, feeling pressured to conform to others' opinions. They asserted a need for greater respect and understanding of the needs and preferences of older adults in healthcare settings.

> *It is frustrating. You have to let them know to treat me with respect. (Focus group discussion with elders 2, 21 August 2025).*

While they did not indicate that they were facilitated in making decisions, they believed they had more freedom to make choices and decisions than they did when they were younger. They were freed of some responsibilities for children, partners and employers and had more time for themselves. They viewed ageing is viewed as a privilege and a gift, with an emphasis on ageing with dignity and grace, and admiring oneself. Gratitude was expressed for sound mind and body, and the ability to enjoy each day.

On the other hand, participants indicated that exploitation, abuse and addiction exist and can impair the decision-making capacities of older adults and their opportunities for personal growth. They cited instances of verbal and financial abuse by family members. Casinos were regarded as preying on seniors, especially men, enticing them with false hopes and leading to financial ruin. The government's reliance on casino revenue was criticized, as it perpetuates the exploitation of vulnerable seniors. Focus group participants suggested regulating casinos and banning seniors as measures to protect the ageing population from financial harm (Focus group discussion with elders 1, 20 Aug 2025).

There is a lack of awareness among seniors regarding available services and support, such as home adjustments for accessibility. Heightening awareness of available services and the ageing process was said to be crucial, especially concerning mental health issues like dementia and Alzheimer's. Educational initiatives with seniors, such as those of the CDFHA and WYCCF, are important but do not reach enough people.

Continued academic education initiatives for older adults do not appear to be available. Older people would have to take their own initiative to seek these opportunities (Focus group discussion with elders 2, 21 August 2025)

Ability to be mobile

Mobility was seen as critical, not only for physical and mental health, but to enable participation in society and in opportunities such as meeting up with peers at activity centers.

Public buildings often lack proper accessibility features like ramps, posing challenges for seniors with mobility issues. Public transportation is unreliable and overcrowded, with buses frequently passing by seniors waiting at bus stops. Informal taxi (“gypsy”) services are expensive and not always safe, further complicating transportation for older people. Sidewalks are poorly maintained and there are very few that can be safely used by people with mobility challenges, and practically none that are appropriate for wheelchair users.

Clients/ members of care facilities and activity centers are sometimes taken on excursions and participate in fun physical activities. There are long waiting lists for the facilities and centers (Focus group discussion with informal carers, 20 August 2025).

Exercise classes for elders are provided to clients of the WYCCF St. Martin’s Home and activity centers. Physical therapy is also provided at the Sint Maarten’s home and to old people in the community on referral. Physical therapy professionals have formed a walking and exercise group for elders, and also offer exercise classes in swimming pools (Interview with health and social care professionals 2, 25 August 2025). People consulted emphasized

that the coverage of these initiatives is low. Older people noted that exercise has become commercialized.

> *Older people have to pay to exercise, but long ago we didn't need any gyms or so. (Focus group discussion with elders 2, 21 August 2025)*

Ability to build and maintain relationships

Sint Maarten is viewed as generally a friendly place for older people. An elder recounted going into Phillipsburg to run some errands and being greeted by many people she knew before. They saw she now has a slight disability and offered to help. She continued:

> *I remember coming out of one of the banks to go to the bus stop to wait for a friend of mine, and a gentleman said, "Do you need some help?" I thought, since he asked, I said OK, and he took my hand and took me over to the bus stop. So sometimes you do meet people like that. (Focus group discussion with elders 2, 21 August 2025)*

It was noted, however, that it is rarer now than before for neighbors and community members to visit older people to check how they are and offer assistance. Family members visit elders in residential care, but young people do so more on special occasions such as birthdays, rather than more frequently.

> *We are living in a different time. Once upon a time you would have younger persons to help take care of you but that is no longer so. That was the old Sint Maarten. Now everyone has their life to live. (Focus group discussion with elders 2, 21 August 2025)*

It was also stated that some people can be very rude, indicating wide variation in social attitudes (Focus group discussion with elders 2, 21 August 2025). Some men do not want to provide companionship and love to their women peers, preferring younger company. Only a few men were said to be interested in working to improve the situation of older people. Active efforts to involve men in peer group activities should be made (Focus group discussion with elders 1, 20 Aug 2025).

> *You form a choir, a hundred women will join. But men, they fall by the wayside. Unlike in Curacao, there's an area of Otrobanda where a lot of men gather, and they're sitting and they're talking to each other. A large group of men. I don't see that nowhere in Sint Maarten. This is where government need to have a nice park, with some nice benches, and at least at a weekend have some entertainment, where it allows the men to gather, to exchange, to interact. (Focus group discussion with elders 1, 20 Aug 2025)*

Relationships between the generations were seen as challenged by social and economic pressures. Younger generations are often unable to spend as much time with their elders due to work obligations and migration, leading to loneliness among seniors.

An important intergenerational program by the Hearts United Holistic Care Foundation, 'Adopt a Grandparent', bridges the gap between younger and older generations, fostering

mutual learning and support. Young people, including some without grandparents of their own since they had migrated to Sint Maarten, meet up with older people, with the generations providing mutual companionship, support and education. This provides opportunities for young people to learn from the experiences of seniors, while seniors gain knowledge of technology and other contemporary skills. The CDFHA also has a "Bridging the Gap" program to connect youth and seniors.

Community organizations and foundations play a vital role in providing support and combating loneliness through activities and companionship. Activity centers, faith-based organizations and NGOs are especially important in reaching out to provide support. Care workers and social workers are also important sources of company.

Elders greatly valued these opportunities to socialize and receive emotional support. They also expressed their personal gratitude to be able to participate, as they were aware that many older people are not so lucky and are suffering alone. Active engagement is necessary for them to maintain a sense of belonging and purpose (Focus group discussion with elders 2, 21 August 2025).

Mental health is a significant concern, with perceived increasing rates of depression, dementia and Alzheimer's, highlighting the need for community support and awareness.

Ability to contribute to society

Seniors were viewed as critical to society in passing in their knowledge and values. They play a crucial role in preserving and promoting cultural activities, but face challenges in engageing younger generations. They indicated a need to encourage young people to get involved in cultural activities and to value the knowledge and experience of their elders. Awareness and education programs about healthy ageing were suggested to provide information to younger people, develop greater respect and to prepare them for the ageing process (Focus group discussion with elders 1, 20 Aug 2025).

Elders also felt they had earned the respect of society through the contributions they had made throughout their lives. They believed this respect should be manifested through having a decent standard of living, which many of them did not have (Focus group discussion with elders 2, 21 August 2025).

Older people provide care to family members and people in need as part of their contribution to society. They often serve as a safety net for families, becoming guardians or caregivers when primary family structures break down or when parents are overburdened with multiple jobs (Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) 6 July 2025). Informal and voluntary carers indicated that benefits of providing such care included gaining experience and wisdom from the people they looked after, especially elders.

> *I get information, advice, experience, wisdom. I get a lot of experience from their childhood... All the things that they did... Knowledge of it... That makes*

my life easier, right? (Focus group discussion with informal carers, 20 August 2025)

Carers indicated that they felt joy and fulfilment from assisting older people because they put themselves in the older person's situation and believed that the care they give will return to them in the future. They believed providing care instilled virtues such as patience. This was especially true in caring for someone with dementia. Some felt they were fulfilling spiritual and moral duties in caring for older people.

It's a joy to assist because I always put myself into that, into their situation... later on. That care can also return to me because the Bible said do good and good for you all the days of your life... I do it with a passion, knowing that one day I can be there as well and I will need that care. (Focus group discussion with informal carers, 20 August 2025)

There are few initiatives that actively involve older people as educators. An exception is the CDFHA Senior Smart Tech initiative, where successful graduates become trainers for new participants, passing on digital skills to their peers.

Some older people want to continue or resume formal employment. They felt that the taxes they would face provided a disincentive (Focus group discussion with elders 1, 20 Aug 2025). On the other hand, it was said that some elders are working past their retirement age due to inadequate pensions rather than because they want to. This sometimes had negative impacts on their health (Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) 6 July 2025).

Discussion and recommendations: a roadmap for healthy ageing in Sint Maarten

The older people, they need help. The pensioners, they need help. They're crying. (Focus group discussion with elders 1, 20 Aug 2025)

Meeting the complex needs of older people requires an integrated, coherent approach. There are good and promising practices in assisting older people in Sint Maarten. However, there is a lack of coherence and uneven coverage, making the situation highly inequitable. Poverty among the elderly is in urgent need of attention.

Sint Maarten, like most other Caribbean nations, must urgently confront the reality of an ageing population as a central focus of policy. Measures should be taken and institutional reforms made to support older people, which will benefit the country as a whole.

The sections that follow seek to chart ways forward to enhance each of the functional abilities of older people; ability to meet basic needs, etc. Current challenges and examples of good and promising practices are identified under each. Recommendations are informed by guiding principles:

1. **The right to health.** This includes the right to prevention, treatment, and control of diseases. It extends beyond this to include underlying determinants of health such as safe food and water; adequate nutrition and housing; healthy working and environmental conditions; education and information. It also includes rights to participate in health-related decision-making (Office of the United Nations High Commissioner for Human Rights and World Health Organization, 2008).
2. **Universal health and social care coverage.** This entails access to health and social care for all and is necessary to ensure good public health and wellbeing and prevent social inequity and conflict.
3. **Equity-based approach.** This means enabling access to equal opportunities for people in situations of disadvantage, for example because of different abilities or social discrimination such as ageism.
4. **Life course approach.** Intrinsic capacities and functional abilities in old age are affected by conditions and behaviors throughout the life course. The healthy ageing approach must include health promotion for all age groups (World Health Organization, 2002).
5. **Evidence-based strategies.** Strengthening information systems, monitoring and evaluation and actively using results to determine strategies will help develop effective, efficient and coherent policies, procedures and initiatives.
6. **Multi-agency collaboration.** The complex needs of older people require collaboration across ministries of government, agencies and between professionals, guided by a spirit of collaboration and shared goals.

The recommendations also consider the building blocks of the health system: service delivery, access to technologies and medical products, workforce, financing, information systems, and leadership and governance (World Health Organization, 2010).

Enhancing ability to meet basic needs

The evidence if this assessment indicates that many, and probably most, elders in Sint Maarten face significant challenges in meeting their basic needs. Main challenges include:

- Most older people rely on AOV pensions as their main or sole source of income, but it is set at a level below minimum wage, which is insufficient for basic needs at existing price and inflation levels. Most do not qualify for the full pension amount.
- Most people have not accumulated sufficient wealth and personal pension contributions to live comfortably in old age.
- Eligibility for insurance varies according to complex rules that mean that many do not receive health, social care and social security coverage. Most receive only partial coverage of their needs.

1: Social security and labor market reforms to enhance economic development

Promising practices

The Country Package of social security and labor market reforms (see table 14) is expected to generate additional national income and cost savings. The largest savings will come from indexing AOV eligibility age to life expectancy. Minimum wage, financial assistance and AOV will be automatically indexed to inflation, so they will not lose their purchasing power when prices rise. Financial assistance for people with incomplete AOV will be formalized. Work and residence permit procedures will be streamlined and accelerated to increase efficiency and reduce the proportion of workers who are undocumented (Van Buiren & Van Vuuren, 2022).

Recommendations

- Use a substantial portion of the cost savings, especially from the increase in AOV age eligibility, to increase AOV payment amounts beyond keeping pace with inflation.
- End the automatic indexation of AOV to a proportion of the minimum wage, to enable AOV to cover the basic needs of older people. Use census data and conduct further economic studies to estimate average costs of living for older people. These costs should include food, housing (including maintenance), transport and any medical and social care and assistive technology not covered by the social security system. Peg the AOV amount to the average cost of living for people aged 65 and over.
- Ensure that financial assistance for older people with incomplete AOV covers the difference between their AOV amount and the recommended AOV amount pegged to the cost of living for people aged 65+.
- Assist older people who wish to remain in or return to employment by providing tax breaks from age 60.
- Consider provision of free health care beyond a certain age, such as 75 years old. The threshold may be indexed to life expectancy.
- Enhance access to health and social care by undocumented persons by developing streamlined and efficient financial assistance and care payment mechanisms. Educate providers on their responsibilities to provide these without discrimination.

- Enhance financial literacy throughout society, through educational programs and communication programs for all age groups. This will help increase savings and pension provision for retirement.
- Strengthen the capacities and resources of charitable organizations to provide access to care and material support for people living in poverty, such as faith-based organizations, the Red Cross and Salvation Army. Consider formalizing organizations who provide these services.

2: Integration of health promotion and preventive health care in the social security system

Promising practices

The Country Package of social security and labor market reforms (see table 14) includes differentiating ZV and OV employer premiums to stimulate sickness prevention. As they will be obliged to support more of the costs of sick leave, it is expected that they will have incentives to develop health promotion programs and preventive health and social care initiatives (Van Buiren & Van Vuuren, 2022).

SZV and VSA have started a pilot project with people with NCD risk factors. The objective is to test the feasibility and costs of providing insurance coverage for lifestyle modification and other preventive measures to assist people in their efforts to avoid developing non-communicable diseases (see the section prevention and health promotion.

Recommendations

- Support and training should be provided for employers in developing employee health programs, including preventive medicine and health promotion for healthy diet and exercise and addiction reduction.
- The SZV and VSA project should be complemented by measures to decrease the costs of and demand for healthy foods, especially fruit and vegetables. This includes fiscal incentives to buy them in preference to highly processed foods, advertising their health benefits, and promotion of small-scale agriculture/ backyard farming.
- The SZV and VSA project should also be complemented by measures to encourage exercise, such as developing and promoting free or reduced cost exercise facilities, classes and opportunities. Organizations such as the Paramedical Association of Sint Maarten may be involved in developing exercise programs. The feasibility of insurance coverage of preventive exercise programs should also be explored.

These proposals should help decrease levels of risk of NCDs and mental illness reported in the Sint Maarten STEPS survey (Ministry of Public Health Social Development and Labour & Pan American Health Organization, 2024).

3: Health promotion across the life course

Promising practices

The Department of Collective Prevention conducts prevention (such as immunization), outreach and health education activities for all age groups. Its health observance calendar includes dedicated months and days for specific health issues, during which campaigns are conducted, including fairs, media and outreach events.

The *National Multisectoral Action Plan (MAP) for the Prevention and Control of NCDs in Sint Maarten, 2021-'30* has been developed and is being rolled out. Activities to date include the development of clinical protocols for diabetes and hypertension management, surveillance strengthening, completion of the WHO STEPS risk factor survey, and implementation of the SZV and VSA pilot project with people with NCD risk factors.

The STEPS risk factor survey showed high levels of NCD risk related to dietary and physical activity and high levels of pre-disposing conditions such as overweight and obesity.

Recommendations

- Review, revise and implement the School Nutrition and Physical Education Policy developed in 2009, involving all schoolchildren in Sint Maarten in an integrated strategy to improve diets and physical activity levels and address other risk factors for NCDs and mental health.
- Increase the focus of CPS on health conditions affecting the elderly and involve more elders in designing and delivering their health initiatives.
- Consult and involve elders in developing intergenerational and intragenerational health promotion programs.
- Design health promotion methodologies that can be delivered by professionals and NGOs to elders with mobility difficulties who cannot attend in-person public events.
- Use traditional and social media to increase awareness of health conditions affecting the elderly, how people can maintain their intrinsic capacities and functional abilities, and how communities can better support elders.
- Include routine dental care in insurance plans and/ or provide public funds for it.
- Build collaboration across Ministries to address commercial determinants of health by fiscal measures to encourage healthy consumption relating to diet, alcohol and tobacco use (Foster N, Thow AM, Unwin N, Alvarado M, & Samuels TA, 2018).

4: Initiatives to assist people in navigating the health, social care and social security systems

Promising practices

Sint Maarten's social security system is extremely complex. Government, NGOs and informal carers play critical roles in helping older people navigate the system and thus enhance their access and promote greater coverage of the population. Helpful initiatives and work include:

- Social workers employed by Social Services and care organizations such as WYCCF and SMMC help elders access services and benefits and educate them about their entitlements.

- The CDFHA Help Desks provide community-based assistance to vulnerable populations, including seniors.
- The CDFHA Senior Income Tax Assistance Program helps elders enhance their access to government benefits.
- The CDFHA Senior Smart Tech Program and "Bridging the Gap" program connecting youth and elders both enhance elders' digital literacy and ability to access digital services, including the SZV portal.
- Volunteers from activity centers help elders with practical tasks such as taking them to pick up medicine and assistive equipment.

Recommendations

- Increase the number of government personnel with social work skills.
- Increase the number of SZV staff trained in supportive orientation to the SZV system for people with special needs.
- Develop an elderly case management system with assigned staff providing coordination across services for older individuals.
- Develop multidisciplinary team approaches and arrangements to enhance coordination and responsiveness to elders' complex care needs.
- Ensure the Social Registry has timely, up-to-date information on social programs, including eligibility and timelines, to enhance its service catalogue and improve access for people in need
- Provide orientation sessions for care professionals on how to use the SZV system efficiently, providing updates on changes.
- Develop a Senior Empowerment Center where elders can come for specialized advice and orientation services (Focus group discussion with informal carers, 20 August 2025).
- Staff and resources for the CDFHA Help Desks and "Bridging the Gap" programs should be increased to provide additional support to elders at community level.
- The CDFHA Senior Income Tax Assistance Program, Senior Smart Tech Program should be expanded to enhance coverage. They could be included in the services of the proposed Senior Empowerment Center.
- Practical and financial support and training should be provided to activity center leaders to enhance their skills and capacities in supporting older people.
- Offer language services to enhance access amongst migrants.

5: Social housing and residential options for older people

Promising practices

The SMHDF provides dedicated housing for older people on low incomes, with rents adjusted to their income levels. The SMHDF facility is for elders with high intrinsic capacities. The CDFHA facility is designed for seniors to maintain independence while receiving necessary support. Staff are present 24/7 working in shifts, in partnership with the Hearts United NGO. The SMHDF and CDFHA facilities are fitted with assistive devices such as grab rails, once this

is supported by medical prescription and AVBZ funding. The SMHDF cross-subsidizes its social housing through commercial housing projects.

The WYCCF provides residential care to elders with various and complex health and social care needs at its St. Martin's Home. A wide range of professional services and forms of support are provided. Insurance from SZV pays the main residential, care and dietary costs, but there are small fees for some services.

Most SMHDF, CDFHA and WYCCF facilities are fitted with accessibility features such as ramps and lifts.

The WYCCF also provides a District Nursing service, enabling people to live in their homes while receiving nursing and light domestic care. SZV insurance, is available to pay most costs of this service.

Application processes for these facilities involve proof of income, health status and medical referral. Health and social care and social insurance professionals are critical to the system.

There are plans to acquire automated software to help ensure a fair and allocation process for the SMHDF facility.

Recommendations

- Waiting lists for all these facilities are extremely long. The number of units and places should be expanded to enable older people to live with health and dignity.
- The allocation process should be made more systematic and transparent, such as by means of software. Care professionals should be involved in designing a rationalized system.
- Following initiatives to repair and reconstruct buildings following Hurricane Irma, there should be a major public program of repair and maintenance of housing, focusing on housing occupied by older people.
- The quality of housing and public health conditions in informal settlements must be addressed, while enabling access to decent housing for occupants.
- Implement and enforce VROMI's proposals for zoning regulations requiring affordable housing components in residential areas and requiring developers to dedicate a certain percentage of new developments to social or affordable housing.
- As indicated above, AOV levels and financial assistance should be increased to enable housing affordability for older people.

6: Health promoting infrastructure and environments

Promising practices

A new Housing Policy, awaiting approval, addresses the needs of vulnerable populations, including older people. It also aims to improve environmental management and responsiveness to population needs by updating zoning regulations, planning for housing needs of the population, requiring construction to conform with hurricane resistant standards, and sustainable energy integration.

Following Hurricane Irma, building codes were updated to include more hurricane-proof and earthquake-proof standards to improve resilience against extreme weather events. Some emergency shelters have been strengthened since Hurricane Irma, and two new shelters are planned to be built. Recent building code updates by VROMI include accessibility standards for public buildings, but not yet for private housing. There are also initiatives to increase green spaces for exercise and leisure and to build in accessibility features to environmental conservation areas.

Recommendations

- The needs of older people should be prioritized in plans for implementation of the Housing Policy.
- Consider the needs of older people in disaster preparedness and response, including evacuation plans, access to medication and designated facilities in emergency shelters.
- Develop initiatives to make housing purchase accessible to middle-income earners, to improve their housing situation as they age and prevent migration of skilled workers from the country.
- Preserve and enhance the physical accessibility of green spaces and promote their use by older people. This will have physical and mental health benefits and contribute to cooling the environment and enhancing air quality.
- Increase the use of sustainable energy in infrastructure and transport.
- Develop sustainable waste management systems, incorporating recycling.

7: Health and social care workforce capacity-building

Promising practices

The Ministry of VSA conducts workforce audits to indicate needs for registered practitioners in various specialties. It monitors quality standards and registration processes. As part of the pilot project targeting people with NCD risk factors, Nurse Practitioners recruited from Curacao are working with patients of these clinics to assist them with maintaining healthy lifestyles

Sint Maarten has a workforce with relevant skills, relying on higher education abroad for most senior medical staff. NIPA and Associations such as the Paramedical Association of Sint Maarten play important roles in supporting their members and contributing to workforce development. However, the health of older people is often affected by the infrequent availability of people with the skills needed to address their needs, as some specialists are based abroad or have high workloads. Waiting lists are long for some services.

CDFHA builds capacity in emergency response by providing shelter management training, mental health first aid training for staff and training for community council members

Recommendations

- Develop a cadre of Nurse Practitioners based in Sint Maarten with skills in working with elder people.
- Enhance employment and training opportunities for people with low levels of education, who are especially likely to be outside the labor force (neither employed nor registered unemployed). Provide decent working conditions and pay to domestic workers and others who assist older people with activities of daily living.
- Enhance training in health aide, nursing assistance and social work roles, to increase the workforce able to care for older people. Encourage the participation of all age groups and genders in this capacity building.
- Provide health care training and helplines to informal carers and volunteers at Activity Centers to manage geriatric conditions, such as mobility disorders, instability and falls, sarcopenia, frailty, anorexia, visual and auditory impairment, depression, cognitive impairment, urinary incontinence and stool incontinence.
- Develop case management and multidisciplinary team systems (see section 4).
- Enhance training in geriatric conditions and palliative care in the health and social care workforce as a whole, from junior to senior levels.
- Restricting access to SZV insurance to those working 5 or 6 days a week tends to be unfavorable to women and older employees. Provide access to those working part-time or less than this amount for one employer.
- Develop public and employer sensitization programs to increase the acceptability of employing older people.
- Increase pensions and other support to older people so that they are not forced to work beyond the age when they are able and willing to do so (see Promising practice 1).
- Encourage the participation of men in the care workforce, especially to assist in care for men.
- Work with NIPA and seek the collaboration of the AUC and University of Sint Maarten in developing requisite skills locally.
- Develop telemedicine and empower older people with skills to use remote services.
- Increase community skills building such as that provided by CDFHA.
- Strengthen language services and employ care workers who speak foreign languages, to facilitate access to care by migrants and visitors.
- Develop a Carer's Allowance to support people who are unable to engage in full-time, paid employment and are providing informal care to people with impaired intrinsic capacities.

Enhancing ability to be mobile

8. Mobility initiatives

Promising practices

There are transport services designed to assist people with disabilities and the elderly, such as Accessible Ventures (medical transport) and Helping Hands (transport for errands and

shopping). Community members, NGO volunteers and some professionals assist older people with transport.

Most devices to support mobility are covered by the social insurance system but must be prescribed by a doctor to obtain coverage. Institutions providing residential facilities to older people equip them with accessibility features such as ramps, lifts and grab rails.

VROMI is working on zoning and building regulations and environmental projects to enhance accessibility in public spaces.

Exercise programs and physical therapy for older people are offered by care providers (e.g. WYCCF), NGOs and concerned citizens (e.g. members of the Paramedical Association of Sint Maarten).

Recommendations

- Decrease the costs or increase insurance coverage of transport provided by Accessible Ventures and Helping Hands.
- Improve the quality of infrastructure for walking and wheelchair use.
- Incorporate accessibility features in public buildings.
- Create lanes and other facilities for cyclists.
- Provide insurance coverage for sensory disabilities, especially visual and auditory impairment, as these limit mobility and safety.
- Include elderly-specific zoning in updated zoning plans.
- Expand and reduce the costs of exercise initiatives and access to exercise facilities for older people.

Enhancing ability to learn, grow and make decisions

9. Educational and empowerment initiatives with older people

Promising Practices: The CDFHA has several initiatives to enhance practical skills among older people, including its Senior Income Tax Assistance Program, its Senior Smart Tech Program, Community Help Desks and the “Bridging the Gap” intergenerational program. The 'Adopt a Grandparent' program of the Hearts United Holistic Care Foundation also assists in mutual learning and has won a Dutch prize[3] (Focus group discussion with elders 1, 20 Aug 2025). The peer education component of the Senior Smart Tech Program is important in empowerment of older people.

Activity Centers and the WYCCF home also provide educational sessions to older people and their carers, enhancing their knowledge and skills.

[3] St. Martin News Network - Adopt A Grandparent Experience (AGE)” from Hearts United Holistic Care Foundation has a chance to win an Appeltje van Oranje 2024.

Recommendations

- Increase opportunities for older adult learning and intellectual development through partnership with educational institutions, including vocational and academic qualifications.
- Support and expand practical training in life skills that can enhance abilities to function in current society, such as financial literacy, digital skills and how to access insurance and benefits.
- Integrate access to education and help desks in the recommended Senior Empowerment Center.
- Develop legislation to protect the human rights of older people, including penalties for elder abuse. Ensure mechanisms for implementation.
- Develop communications campaigns celebrating older people and their contributions, to enhance their power to make decisions in Sint Maarten.
- Involve older people in education provision, policy development processes, decision-making and positions of responsibility.
- Offer language services to enhance learning amongst migrants.

Enhancing ability to build and maintain relationships

10. Initiatives for companionship and elder support

Promising practices

Two intergenerational initiatives, the CDFHA "Bridging the Gap" program and the Hearts United Holistic Care Foundation's "Adopt a Grandparent" initiative are helping reduce loneliness among the older people involved. People from younger and older generations provide support and companionship to each other. This is especially useful for people separated from their families through migration or bereavement.

Foundations and other NGOs providing activity centers, support groups and outreach provide important social contacts and personal support to older people. Health and social workers often provide personal support.

Recommendations

- Increase resources for and coverage of intergenerational friendship programs, activity centers, support groups and outreach to isolated older people.
- Include comfortable spaces to socialize at the recommended Senior Empowerment Centre.
- Actively involve older men in designing spaces and events where they would like to socialize, such as park areas with benches as in Otrobanda, Curacao (Focus group discussion with elders 1, 20 Aug 2025).
- Develop digital access and skills among older people, so that they can communicate with the "digital generation."
- Support the mental and emotional health of older people by enhancing access to psychological and psychiatric care, in partnership with the MHF.

Enhancing ability to contribute to society

11. Initiatives to enhance elders' contributions and meaningful involvement in society

Promising practices

The CDFHA Senior Smart Tech Program actively involves elders in teaching their peers.

NGOs provide opportunities for elders to volunteer and share their knowledge and values with others.

Recommendations

1. Support intergenerational and intragenerational programs and the involvement of elders in education to enhance the transmission of knowledge, skills, culture, and values.
2. Develop care, support and outreach for elderly caregivers who look after their spouses, grandchildren and people with impaired intrinsic capacities.
3. Develop programs to encourage elders to continue or resume workforce activity, including tax breaks and programs with employers to increase the acceptability of employing older people and reduce discrimination against them.
4. Host cultural events at which older people can present and perform.
5. Develop a major public education and communication campaign highlighting the contributions and value of elders in Sint Maarten society.
6. Provide education in schools on healthy ageing and positive older role models, inviting elders to provide sessions.

Roadmap for Healthy Aging in Sint Maarten

Following completion of this baseline assessment, the findings were presented to a multisectoral group of key stakeholders representing government, health and social services, civil society, and community partners. The purpose of this consultation was to validate the results, discuss their implications, and identify priority actions for implementation.

Through this process, stakeholders reviewed the full set of recommendations emerging from the assessment and collectively determined which actions should be prioritized in the short to medium term. The resulting roadmap reflects this consensus and represents a pragmatic, context-specific framework for advancing healthy ageing in Sint Maarten.

Positioned before the conclusion of this report, the roadmap translates the evidence and analysis presented in the preceding sections into actionable priorities. It builds on the WHO Healthy Ageing framework and aligns with ongoing national reforms, while taking into account resource constraints and institutional realities. The roadmap therefore serves as a bridge between assessment and implementation, outlining agreed directions to strengthen systems, enhance intrinsic capacities, and support the functional abilities of older persons in Sint Maarten.

Further consultation will be needed with various agencies to determine timelines and activities.

Theme		Recommendation		Outputs	Activities	Responsible
Health and Wellbeing						
	1	Free healthcare for persons over 65, based on evaluated needs	1.1	Complete policy and legislative reform		
			1.2	Design needs-based assessments and (tailored) service design		
			1.3	Restructure financing and insurance needs		
	2	Support for mental and emotional health and addiction reduction including access to care	2.1	Expand and diversify service delivery models		
			2.2	Strengthen workforce capacity and coordination		
			2.3	Redesign access systems and referral pathways		
	3	Access to preventative care through existing systems	3.1	Sensitize GPs to referral mechanisms for existing patients using a life course approach		
			3.2	Determine non-curative pathways to provide preventative referrals		
Social Inclusion and Participation						
	4	Develop spaces for elders to combat isolation, get education and provide outreach	4.1	Identify/Map current available resources and spaces		Social Development

			4.2	Create awareness and information on available services and create a social directory for Elderly	Senior Connect Display of Services for Seniors Feb, 27th followed by the creation of a digital services directory	Social Development
			4.3	Create sustainable partnerships between government and non-government actors with data sharing mechanisms	Partnerships with the USM Social Work program, Business Program for internships at the Social Agencies that are having challenges in reporting, activities. Possible subsidy for the Elderly organizations for activities purposes	Social Development
				Integrate help desks and learning spaces into community centers	Create activities at the Community Centers eg. Exercise programs	Social Development with Internal & External stakeholders
	5	Differentiated gender approach to address isolation	5.1	Identify needs via stakeholder engagement		Social Development
			5.2	Create mechanisms for men and women based on identified needs		VSA Execution Agencies with support from Social Development

	6	Scaling of intergenerational programs with structure and sustainability	6.1	Create connections/partnerships		VSA Execution Agencies with support from Social Development
			6.2	Develop clear roles and responsibilities and M&E		VSA Execution Agencies with support from Social Development
Financial Security						
	7	Tax breaks for persons over 65	7.1	Conduct a cost-of-living and pension adequacy assessment		Min Fin /Tax Dept
			7.2	Design targeted tax relief measures that complement other support systems		Min Fin/Tax Dept
	8	Develop programs for financial literacy education across all age groups	8.1	Integrate comprehensive education programs on financial literacy in education and workplace development	Develop community Based Literacy programs	Collaboration between three Ministries MECYS, MFIN, MVSA specifically CDFHA
				Create accessible and inclusive learning resources		Min Fin /MECYS
				Develop policy and mechanisms for institutional support		Min Fin/MECYS

Respect and Dignity						
	9	Develop legislation to protect the rights of older persons	9.1	Stakeholders Assessment		Social Development
			9.2	Create clear definitions and scope of protection	Consultation session with stakeholders Design an assessment tool Assessment to determine the scope of the problem	Social Development
			9.3	Identify and develop mechanism for mandatory reporting, investigation, and enforcement of penalties		Social Development & Key Stakeholders
	10	Create support mechanisms for caregivers	10.1	Create accessible and coordinated community resources		Social Development & Key Stakeholders
				Develop and implement training programs		Social Development
				Create mechanisms for emotional support where not available		Social Development & Key Stakeholders

	11	Ensure equity and human rights are the center of development of policy and programming	11.1	Develop proposals for financial and legal protections for caregivers?? As		
				Conduct inclusive and participatory stakeholder engagement		
				Conduct equity focused assessments with disaggregated data		
				Ensure accountability, monitoring and sustainability		
Education and Lifelong Learning						
	12	Create partnerships with educational institutions for elder learning	12.1	Conduct assessment to identify needs and gaps		
				Build awareness and advocacy		
				Develop collaborative programs that involve elders		
Infrastructure and Accessibility						
	13	Expand social housing and ensure fair and transparent allocation	13.1	Increase investment and diversify housing supply		VROMI
			13.2	Establish clear and transparent eligibility and allocation criteria		VROMI/Housing Foundation

	14	Accessibility features in public buildings, transport and public spaces for exercise and leisure	14.1	Strengthen governance and community engagement		Social Development & other Governmental Stakeholders
			14.2	Create standards and regulations with clear enforcement mechanisms		VROMI
	15	Ensure disaster preparedness plans that include elder needs	15.1	Conduct needs assessments and use participatory design workshops and accessibility audits		VSA Social Development
			15.2	Create inclusive communication and support networks		DCOMM
			15.3	Ensure accessible infrastructure and mobility assistance		
			15.4	Create tailored emergency planning and supplies		VROMI

Conclusion

The potential contributions of older people to society, and their complex needs, have not historically been a central focus of policy in Sint Maarten. As reflected by stakeholders, *"elderly people have been a bit of a forgotten group,"* and *"the government is not planning or supporting elderly persons."* The current baseline assessment, supported by the Government of Sint Maarten and PAHO, signals an important shift toward recognizing population ageing as a priority for social development, health system sustainability, and national resilience.

When assessed against the WHO healthy ageing framework, Sint Maarten demonstrates partial alignment across the three core components: developing and maintaining intrinsic capacity; creating enabling environments that support functional ability; and delivering integrated, person-centred health and social care. Preventive and clinical services addressing intrinsic capacity are present, including primary care, selected health promotion activities, vaccination, and management of noncommunicable diseases; however, coverage remains uneven, access is constrained for uninsured and vulnerable groups, and prevention is largely condition-driven rather than population-based. Progress toward enabling environments is evident through environmental health functions, housing initiatives, and climate resilience investments, yet persistent gaps in age-friendly infrastructure, accessible housing, transport, and green spaces continue to limit older persons' ability to age safely in place. Integrated care structures exist through SZV, AVBZ, and partnerships with non-governmental organizations, but fragmentation across sectors, workforce constraints, administrative complexity, and limited coordination between health, social, housing, and environmental systems constrain continuity of care and person-centred service delivery.

These patterns of alignment and misalignment are mirrored across the WHO Health Systems Building Blocks. Governance and institutional arrangements are established, yet multisectoral coordination remains limited; financing mechanisms are in place, but do not consistently incentivize prevention or long-term functional ability; service delivery addresses acute needs more effectively than lifelong capacity-building; workforce shortages affect access and quality; information systems are underutilized for integrated planning; and access to essential services and technologies varies by insurance status and socioeconomic position. Together, these gaps highlight the need for a systems-oriented, life-course approach that connects health services with housing, environmental management, social protection, and community support to sustain intrinsic capacity and functional ability throughout ageing.

Population ageing adds to the economic and social challenges facing Sint Maarten, but also presents an opportunity to harness the experience, skills, and social capital of older persons. Older people must be supported in accessing health and social care while optimizing their functional abilities—from meeting basic needs to participating in family, community, and decision-making roles. Achieving this requires a whole-of-society approach that engages people of all ages in health promotion and recognizes ageing as a shared responsibility across government sectors, civil society, and communities.

The roadmap presented in this report should be understood as a strategic investment in Sint Maarten's human capital and social resilience. By strengthening intrinsic capacity across the life course, creating enabling environments through age-friendly housing, infrastructure and environmental governance, and advancing integrated, person-centred health and social care,

Sint Maarten can shift from reactive service provision toward preventive, sustainable systems that support wellbeing in later life. Implementing these actions will require sustained political commitment, multisectoral collaboration, and alignment of financing mechanisms across health, social protection, housing, and environmental sectors. In the context of population ageing and climate vulnerability, advancing healthy ageing is not only a social imperative but also an economic and development priority—essential to safeguarding functional ability, reducing avoidable care costs, and enabling older persons to continue contributing to Sint Maarten's communities and economy.

References

Adogu, P., Ubajaka, C., Emelumadu, O., & Alutu, C. (2015). Epidemiologic Transition of Diseases and Health-Related Events in Developing Countries: A Review. *American Journal of Medicine and Medical Sciences, 5*(4), pg150-157.

Advanced Care Solutions and Insights for Optimization (ACSION). (2010). *CVRM Care Standard St. Maarten 2010-2011*: Curacao.

Advanced Care Solutions and Insights for Optimization (ACSION). (2013). *Proposal: Pilot Implementation of CVRM Care Standard, November 2013- May 2015*. Curacao.

Allen, C. F., West, R. M., Gordon-Strachan, G., Hassan, S., McFarlane, S., Polson-Edwards, K., . . . Dubrow, R. (2024). *Research for action on climate change and health in the Caribbean: a public, private, people's and planetary agenda*. New Haven, USA: Yale Center on Climate Change and Health, Yale School of Public Health

Asin, J., Henry, M., & Arnell, F. (2010). *Cardiovascular Risk Management Program: Final Report August 2010*. Phillipsburg, Sint Maarten: ACSION Group, Sector Volksgezondheid, Sociale Ontwikkeling en Arbeid.

Asin Oostberg, V. (2012). *Planning Workbook: Health Observance Celebration*. Phillipsburg, Sint Maarten: Collective Prevention Services, Ministry of Public Health Social Development and Labour.

Bartoszek, A., Niedorys, B., & Szalast, K. (2019). Geriatric giants among the elderly. *Journal of Education, Health and Sport, 9*(4), 8. doi:10.5281/zenodo.2639371

Campbell, J. D., Taylor, M. A., Stephenson, T. S., Watson, R. A., & Whyte, F. S. (2011). Future climate of the Caribbean from a regional climate model. *International Journal of Climatology, 31*(12), 1866-1878. doi:doi:10.1002/joc.2200

Cangialosi, J. P., Latto, A. S., & Berg, R. (2018). *National Hurricane Center Tropical Cyclone Report: Hurricane Irma*: US National Hurricane Center.

Caribbean Public Health Agency. (2020). *State of Public Health Report 2019: Healthy Ageing*. Port of Spain, Trinidad, and Tobago: CARPHA.

Department of Statistics. (2019). *Labour Force Survey Results Report*. Sint Maarten: Government of Sint Maarten.

Department of Statistics Sint Maarten. (2017). *Statistical Yearbook 2017*. Phillipsburg: Government of Sint Maarten.

Directorate of Public Health Social Development and Labour. (2009). School Nutrition and Physical Education Policy plan. In Directorate of Education (Ed.). Philipsburg, St Maarten: Government of St Maarten.

Focus group discussion with social care professionals. (27 August 2025).

Focus group discussion with elders 1. (20 Aug 2025).

Focus group discussion with elders 2. (21 August 2025).

Focus group discussion with health and social care professionals from the WYCCF. (25 August 2025).

Focus group discussion with informal carers. (20 August 2025).

For a change N.V. (2013). *Results Elderly Research Sint Maarten*. Sint Maarten: Department of Social Development.

Foster N, Thow AM, Unwin N, Alvarado M, & Samuels TA. (2018). Regulatory measures to fight obesity in Small Island Developing States of the Caribbean and Pacific, 2015 – 2017. *Rev Panam Salud Publica, 42*.

Government of Sint Maarten. (Undated-a). Crisis Care Unit. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Crisis-Care-Unit.aspx

Government of Sint Maarten. (Undated-b). Department of Social Services. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Department-of-Social-Services.aspx

Government of Sint Maarten. (Undated-c). Financial aid. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Financial-Aid.aspx

Government of Sint Maarten. (Undated-d). Legal aid. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Legal-Aid.aspx

Government of Sint Maarten. (Undated-e). Medical aid. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Medical-Aid.aspx

Government of Sint Maarten. (Undated-f). Minister of Public Housing, Spatial Planning, Environment and Infrastructure. Retrieved from https://www.sintmaartengov.org/Ministries/Public-Housing,-Spatial-Planning,-Environment-and-Infrastructure/Pages/default.aspx

Government of Sint Maarten. (Undated-g). Social Work. Retrieved from https://www.sintmaartengov.org/Ministries/Departments/Pages/Social-Work.aspx

Government of Sint Maarten, & World Health Organization HEARTS Initiative. (2025). *Sint Maarten Type 2 Diabetes Protocol*. Phillipsburg: Government of Sint Maarten.

Hassan, S., Nguyen, M., Buchanan, M., Grimshaw, A., Adams, O. P., Hassell, T., . . . Nunez-Smith, M. (2020). Management of Chronic Noncommunicable Diseases after Natural Disasters in the Caribbean: A Scoping Review. *Health Aff, 39*(12), 2136-2143. doi:10.1377/hlthaff.2020.01119

Interview with health and social care professionals 2. (25 August 2025).

Interview with representative of Collective Prevention Services. (21 August 2025).

Interview with representative of Community Development Family and Humanitarian Affairs (CDFHA) (6 July 2025).

Interview with representative of Sint Maarten Housing Development Foundation (SMHDF). (29 August 2025).

Interview with representative of Social and Health Insurances (SZV). (5 September 2025).

Interview with representative of VROMI. (27 August 2025).

Interview with representatives of the Department of Social Development. (6 July 2025).

Interview with representatives of the VSA. (9 September 2025).

Interview with representattive of WYCCF. (20 August 2025).

Interview with VSA Noncommunicable Disease Advisor (10 Septenber, 2025).

Joshipura, K. J., Martínez-Lozano, M., Ríos-Jiménez, P. I., Camacho-Monclova, D. M., Noboa-Ramos, C., Alvarado-González, G. A., & Lowe, S. R. (2022). Preparedness, Hurricanes Irma and Maria, and impact on health in Puerto Rico. *Int J Disaster Risk Reduct, 67*. doi:10.1016/j.ijdrr.2021.102657

Kishore, N., Marqués, D., Mahmud, A., Kiang, M. V., Rodriguez, I., Fuller, A., . . . Buckee, C. O. (2018). Mortality in Puerto Rico after Hurricane Maria. *New Engl J Med, 379*(2), 1-9. doi:10.1056/NEJMsa1803972

Kruger, A. K., Jackson, G., & Chobanyan, N. (Undated). *Benefits of Community-Based Screening Events in Sint Maarten (poster).* . Sint Maarten: American University of the Caribbean School of Medicine.

McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Educ Q, 15*(4), 351-377. doi:10.1177/109019818801500401

Mental Health Foundation. (2018). Home page. Retrieved from http://mhf-sxm.com/

Ministry of Health Public Health Social Development and Labor. (2020). *National Multisectoral Action Plan (MAP) for the Prevention and Control of NCDs in Sint Maarten, 2021-'30*. Philipsburg, Sint Maarten

Ministry of Public Health Social Development and Labour. (2013a). Results Elderly Research Sint Maarten. In. Philipsburg, St Maarten: Government of St Maarten.

Ministry of Public Health Social Development and Labour. (2013b). WHO-AIMS Report on Mental Health Systems in St Maarten. In. Philipsburg, St Maarten: Ministry of Public Health Social Development and Labour.

Ministry of Public Health Social Development and Labour. (2014). National Mental Health Plan 2014-2018. In. Philipsburg, St Maarten: Government of St Maarten.

Ministry of Public Health Social Development and Labour, & Pan American Health Organization. (2024). *Sint Maarten STEPS Survey 2023: Fact Sheet*. Phillipsburg: Government of Sint Maarten.

Morley, J. E. (2017). The New Geriatric Giants. *Clnics in Geriatric Medicine, 33*(3), xi-xii.

Neil Henderson, J., & Carson Henderson, L. (2010). Public Health and Ageing. In J. Coreil (Ed.), *Social and Behavioural Foundations of Public Health* (pp. 223-243). Thousand Oaks, California: Sage.

Observatoire Sint Maarten Saint Martin. (2015). *National Health Survey 2015: 'How Healthy is Sint Maarten/Saint Martin?* : University of the Virgin Islands and University of St Martin.

Office of the United Nations High Commissioner for Human Rights and World Health Organization. (2008). *The Right to Health. Fact Sheet 31*. Geneva.

PAHO. (2013a). A Model Policy for SMART Health Facilities. In. Washington DC: Pan American Health Oganisation.

PAHO. (2013b). *A report on the Adolescent Health and Sexuality Survey: Sint Maarten*. Washington DC: PAHO.

PAHO. (2017). Health in the Americas+, 2017 Edition Summary: Regional Outlook and Country Profiles. . In. Washington DC: Pan American Health Organization.

PAHO. (n.d.). Smart Hospitals Toolkit: A practical guide for hospital administrators, health disaster coordinators, health facility designers, engineers and maintenance staff to achieve Smart Health Facilities by conserving resources, cutting costs, increasing efficiency in operations and reducing carbon emissions.

Pan American Health Organization. (2013). *A report on the Adolescent Health and Sexuality Survey: Sint Maarten*. Washington DC: PAHO.

Rawlins, J. M. (2014a). Loneliness and the elderly in Trinidad. In J. M. Rawlins & N. Alea (Eds.), *Ageing in the Caribbean*. West Palm Beach, USA: Lifegate Publishing.

Rawlins, J. M. (2014b). Older women, family relations, support and self-rated health in Trinidad and Tobago. In J. M. Rawlins & N. Alea (Eds.), *Ageing in the Caribbean*. West Palm Beach, Florida: Lifegate Publishing LLC.

Rawlins, J. M., Simeon, D. T., Ramdath, D. D., & Chadee, D. D. (2008). The elderly in Trinidad: health, social and economic status and issues of loneliness. *West Indian Med J, 57*(6), 589-595.

Sector Health Care Affairs. (2002). Building a Healthy Island, Public Health Policy Plan for St Maarten. In. Philipsburg, St Maarten.

Sint Maarten Department of Statistics. (2023). *General findings population census 2022 (presentation)*. Phillipsburg: Government of Sint Maarten.

Sint Maarten Ministry of Public Health Social Development and Labor, & Pan American Health Organization. (2019). *Situational analysis of the prevention and control of noncommunicable diseases: Sint Maarten*. Phillipsburg, Sint Maarten: Ministry of Public Health, Social Development and Labor.

Social and Health Insurances (SZV). (2022). ZV Insurance Benefits Package. Retrieved from https://www.szv.sx/publicfiles/868/documents/Check-Lists/SZV%20-%20ZV%20insurance%20benefits%20package%20-%20June%202022.pdf

Social and Health Insurances (SZV). (Undated-a). *Seniors and Benefits (brochure)*. Phillipsburg: SZV.

Social and Health Insurances (SZV). (Undated-b). White and Yellow Cross Foundation.

Taylor, M. A., Centella, A., Charlery, J., Bezanilla, A., Campbell, J., Borrajero, I., . . . Nurmohamed, R. (2013). The Precis Caribbean Story: Lessons and Legacies. *Bulletin of the American Meteorological Society, 94*(7), 1065-1073. doi:10.1175/bams-d-11-00235.1

Taylor, M. A., Centella, A., Charlery, J., Borrajero, I., Bezanilla, A., Campbell, J., . . . Watson, R. (2007). Glimpses of the Future: A Briefing from the PRECIS Caribbean Climate Change Project. In. Belmopan, Belize: Caribbean Community Climate Change Centre.

Taylor, M. A., Clarke, L. A., Centella, A., Bezanilla, A., Stephenson, T. S., Jones, J. J., & Charlery, J. (2018). Future Caribbean Climates in a World of Rising Temperatures: The 1.5 vs 2.0 Dilemma. *Journal of Climate, 31*(7), 2907-2926. doi:doi:10.1175/jcli-d-17-0074.1

UNICEF. (2013). The Situation of Children and Adolescents in Sint Maarten. Retrieved from https://www.unicef.nl/media/1359112/sint_maarten_sitan_public_version__28english_29.pdf

United Nations. (2025). UN Data Country Profiles: Sint Maarten (Dutch part). Retrieved from http://data.un.org/en/iso/sx.html

United Nations Children's Fund. (2017). *Sint Maarten post-hurricane Irma assessment: .* The Netherlands: UNICEF

University of the Virgin Islands, & University of St Martin. (2015). *How healthy is Sint Maarten Saint-Martin? Health Survey Report*: Univerity of St Martin.

Van Buiren, K., Boerdijk, S., & Mak, M. (2022). *Labor Market Sint Maarten: Analysis, recommendations and implementation*. Amsterdam: Amsterdam Bureau of Economics.

Van Buiren, K., & Van Vuuren, D. (2022). *A balanced, feasible and sustainable approach for reforms in the labor market and the social security system of Sint Maarten*. Amsterdam: Amsterdam Bureau for Economics.

Van Vuuren, D., Van Buiren, K., Donker Van Heel, P., Doeve, T., Mak, M., & Tackling, N. (2022). *Social Security in Sint Maarten: Towards a Strengthened System*. Amsterdam: Amsterdam Bureau of Economics.

VSA. (2018). *Beroepskrachtenplanning update October 2018*. Phillipsburg, Sint Maarten: Ministry of Public Health, Social Development and Labour.

VSA Social Development. (Undated). *Housing Sector on St. Maarten: Overview of Current Situation (presentation)*. Phillipsburg: Ministry of Health, Social Development and Labour.

WHO. (2018). Sint Maarten Country Cooperation Strategy. In. Geneva: World Health Organization.

World Health Organization. (2002). Active Ageing: A Policy Framework. In. Geneva, Switzerland: World Health Organization

World Health Organization. (2015). World Report on Ageing and Health. In. Geneva, Switzerland: World Health Organization.

World Health Organization. (2020). *Decade of Healthy Ageing: Baseline Report* Geneva: WHO.

World Health Organization. (2010). *Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies*. Geneva: World Health Organization.