HEALTH SYSTEM RESPONSES TO POPULATION AGEING IN FIJI

Identifying policy, program and service priorities

April 2022

The George Institute for Global Health

UNSW SYDNEY

FIJI NATIONAL UNIVERSITY

MINISTRY OF HEALTH & MEDICAL SERVICES

Pacific Community
Communauté du Pacifique

Report details

Authors: Anna Palagyi[1,2], Eric Rafai[3], Berlin Kafoa[4], Mai Ling Perman[5], Thomas Lung[1,2], Renu John[1], Anthony Zwi[2], Roslyn Poulos[2], Rebecca Dodd[1,2]

[1]The George Institute for Global Health

[2]UNSW Sydney (University of New South Wales, Sydney Australia)

[3]Fiji Ministry of Health & Medical Services

[4]The Pacific Community

[5]Fiji National University.

Citation: Palagyi A, Rafai E, Kafoa B, Perman ML, Lung T, John R, Zwi A, Poulos R, Dodd R. (2022). Health system responses to population ageing in Fiji: Identifying policy program and service priorities.

Report Design: Jason Dass, Designer, The George Institute for Global Health

Acknowledgement of Country

The George Institute acknowledges the Gadigal People of the Eora Nation as the Traditional Custodians of the land on which our Australia office is built and this report was written. We pay our respect to Elders past, present and emerging.

The George Institute for Global Health
ABN 90 085 953 331

Level 5,
1 King Street
Newtown, Sydney NSW 2042
Australia

T +61 2 8052 4300
info@georgeinstitute.org
www.georgeinstitute.org

We are a registered charity in Australia and the United Kingdom.

Acknowledgements

The research informing this report was a joint effort by study investigators from the Fiji Ministry of Health & Medical Services, The Pacific Community, The George Institute for Global Health, Fiji National University and the University of New South Wales, Sydney Australia.

Ministry of Health & Medical Services Fiji: Represented by Dr Eric Rafai (Head of Research & Innovation, Digital Health, Data Analysis & Management). Dr Rafai made essential contributions to the study design, review and interpretation of study findings, and shaping of policy and service recommendations.

The Pacific Community: Represented by Dr Berlin Kafoa (Team Leader, Clinical Services Program). Dr Kafoa made essential contributions to the study design, review and interpretation of study findings, and shaping of policy and service recommendations.

The George Institute for Global Health: Represented by Dr Anna Palagyi (Senior Research Fellow, Health Systems), Dr Rebecca Dodd (Senior Research Fellow, Health Systems), Dr Thomas Lung (Senior Research Fellow, Health Economics) and Ms Renu John (Research Assistant). Dr Anna Palagyi and Dr Rebecca Dodd made essential contributions to the study design, analyses of data, review and interpretation of study findings, and shaping of policy and service recommendations. Ms John made essential contributions to the study's qualitative fieldwork and qualitative data analysis. Dr Thomas Lung led the interpretation and analyses of health service utilisation and mortality data.

Fiji National University: Represented by Dr Mai Ling Perman (Assistant Professor Internal Medicine, College of Medicine, Nursing and Health Sciences). Dr Perman provided invaluable coordination and administrative support to the implementation of the study, leadership of the study's qualitative fieldwork, review and interpretation of study findings, and shaping of policy and service recommendations.

UNSW Sydney: Represented by Professor Anthony Zwi (Professor of Global Health and Development) and Associate Professor Roslyn Poulos (School of Population Health). Prof Zwi and A/Prof Poulous made essential contributions to the study design, analysis of policy and qualitative data, review and interpretation of study findings, and shaping of policy and service recommendations.

A research team from Fiji National University carried out fieldwork interviews with key stakeholders and focus group discussions with community members and provided critical support to the translation and transcription of audio recordings of these discussions and the interpretation and analysis of qualitative data. The team members were ***Dr Aporosa Robaigau*** (Team Leader & Research Fellow), ***Ms Jimaima Kuruwale, Mr Munir Awasthi*** and ***Mr Manasa Tabuadua.***

The study team is extremely grateful to all individuals who gave their time to take part in discussions and who openly shared their opinions, knowledge and insights with the researchers. We would also like to thank the Fiji Ministry of Health & Medical Services Data Management Unit for their time spent collating relevant health services data.

The study team wishes to acknowledge ***Mrs Dilitiana Baleinabuli*** from the Fiji National Council for Older Persons for her valuable guidance throughout the study and ***The George Institute for Global Health*** who provided funding support for the research.

Contents

List of Figures

List of Tables

Preface

This report presents the findings of a 2019/2020 scoping study that identifies policy, program and service priorities for the Ministry, providing guidance to a future outlook for an effective health system response to an ageing population in Fiji. It enables the impetus to strengthen policies, systems and services to optimise the health and quality of life of older Fijians, their families, and the communities in which they live.

This work sanctioned by the Ministry is a collaborative research effort of colleagues from the Fiji Ministry of Health and Medical Services, Fiji National University, The Pacific Community, The George Institute for Global Health and the University of New South Wales, that utilizes both a quantitative approach analysing demand for and reach of existing services, and a qualitative approach that brings the voices of health workers, older persons themselves and community into the heart of the discussion. The recommendations set out key priorities in the areas of health workforce development, health care delivery, partnerships and policy, along with additional evidence needs.

Our once young population is ageing rapidly – each year the number of older Fijians grows by 3,000 people and our oldest community members (aged 80 years and over) will comprise more than one-sixth of the population by 2050. This imminent change in population structure will undoubtedly have widespread implications for demand for and delivery of health services, and the future of social and economic life in Fiji. It is time we understand the situation and make plans to address this change.

In reference to the United Nations Decade of Healthy Ageing (2021–2030), the Fiji Ministry of Health and Medical Services understand that this responsibility does not belong to it alone but that the Ministry needs to be part of an effective national, multi-sectoral response to population ageing that is led by the National Council for Older Persons (NCOPS). We must, as a first step, look to identify not only the weaknesses in how our health system currently responds to the needs of older adults but also how older persons wish to receive care and the support needs of families and communities to enhance ageing in place.

The recent pandemic has also highlighted the need to focus greater effort and resources on the older population groups vulnerable to COVID-19 infection, especially those with co-morbidities and chronic disease. Sadly, the majority of COVID-19 related deaths in older Fijians have occurred at home, reflecting the possible physical and perceived barriers to health seeking behaviour within this age group. We can no longer ignore the needs of our older people and will use the information presented here to take action with the support of important stakeholders and NCOPS. Our commitment has to be now, mainstreamed into our normative work and the Ministry has commenced efforts through the engagement of a programme assistant with World Health Organization support to assist NCOPS develop the new National Policy on Ageing.

I would like to thank all the partners involved in this work and support future activities to enhance the quality of life for our older population, which is morally and culturally our obligation as Fijians.

Hon. Dr Ifereimi Waqainabete
Minister for Health and Medical Services
Republic of Fiji

Overview

Population ageing presents significant implications for economies, health systems and social protection globally. In Pacific Island countries, the once young populations are ageing rapidly, yet national health systems remain vastly unprepared to cope with the complex needs of a growing number of older persons. The ability of Pacific governments to 're-orient health systems to respond to the needs of older people' (WHO, 2014), is hindered by a lack of knowledge of what's needed and what works for the care of older persons in their context. Limited translatable epidemiological data to underpin predictions of demographic and disease trends, lack of knowledge and coordination of multi-sectoral policies and services for the older population, and poor understanding of the preferences of older persons themselves, present significant barriers to driving evidence-based health policies and programs to enhance healthy ageing.

This report presents the findings of a 2019/2020 scoping study of policy, program and service priorities to guide an effective health system response to population ageing in one of the most rapidly ageing Pacific Island countries, Fiji.

Through analysis of national administrative health data, a policy mapping exercise, and interviews and group discussions with health system planners and end-users (including representatives from government and civil society organisations, health workers, and older persons and caregivers), this report identifies existing health system barriers to healthy ageing in Fiji and opportunities to improve the health and wellbeing of older Fijians.

This work represents the first targeted assessment of health system strengthening needs for older adults in any Pacific Island country. Its findings and recommendations are intended to aid the Fiji Ministry of Health & Medical Services and the Fiji National Council for Older Persons, in their leadership role for the national ageing policy framework, in identifying priority health policy, program and service needs to promote healthy ageing and support the delivery of age-friendly health care for older adults living in the community. It is hoped that recommendations will also provide an important contribution to a broader, national consultation on priorities for a coordinated, multi-sectoral response to population ageing.

Key Findings

Use of Primary and Secondary Health Care Services

In the four-year period from 2014–17:

» Older persons comprised one-fifth of all hospital admissions in Fiji and one-quarter of all outpatient presentations. The hospitalisation rate of those aged 55+ years was 1.4 times greater than persons aged under 55. The outpatient presentation rate for those aged 55+ years was more than double that of those under 55.

» Older men were the most frequent users of facility-based health services – both outpatient and inpatient services. Men aged 55+ years had almost triple the rate of hospital admissions than men aged under 55 years. Older women, particularly those residing in rural areas, experienced the lowest utilisation rates of facility-based health services.

» Older rural and maritime residents comprise just 13% of hospital admissions and 9% of outpatient clinic users aged 55+ years.

» Circulatory system diseases were the most common reason for hospital admissions and outpatient visits, for both older men and older women.

Mortality Trends in Older Adults

In the 10-year period from 2008–17:

» Circulatory system diseases were responsible for the highest age-standardised mortality rates in both older men and women.

» Older men suffered a higher mortality rate than older women for diseases of the circulatory system, respiratory illness, and infectious and parasitic disease.

» Older women experienced a higher burden of neoplasm deaths than older men; neoplasm mortality rates for women in all older age groups also increased significantly each year.

» Women aged 75+ (but not older men) experienced a significant annual increase in mortality rates from endocrine, nutritional and metabolic diseases.

Policies and Strategies for Healthy Ageing

» Fiji has a range of national policy documents which recognize, to some extent, the needs and rights of older persons.

» Significant gaps exist in policy commitments that reflect the recommended State actions of Strategic Objective 3 ('Realigning Health Systems') of the WHO Global Strategy on Ageing and Health (2016–30).

» Existing health and disability policies lack detail, including an absence of resourcing implications, targets or benchmarks, and implementation plans.

» Existing health and disability policies do not incorporate an evidence base underpinning policy commitments.

» Evidence of implementation of many policy commitments relevant to the health of older persons is scarce.

Understanding the Needs of Older Adults, Caregivers and Service Providers

» There is a strong preference for community-based models of care (bringing the services to the people), including a need to ensure comprehensive rural reach.

» Families and carers have a central role in the care of older adults at home but lack access to education, training and resources to provide quality care.

» Health workers generally have limited knowledge and skills related to the health care needs of older adults, reflecting scarce coverage of geriatric health in training curricula.

» There is a need for services that address social needs (in addition to health) and for approaches that empower, include and engage older people.

» Older men and women experience health care differently and are impacted differently by the social aspects of ageing.

» There is a need to strengthen political leadership on population ageing and to develop mechanisms to drive cross-sectoral coordination and implementation of healthy ageing policies, programs and services.

Recommendations

In consideration of the potentially wide-reaching application of the findings of this study, we have structured our recommendations into three categories:

- Recommendations for the Fiji Ministry of Health & Medical Services to strengthen an effective health system response to healthy ageing in Fiji;
- Recommendations for the review of the Fiji National Policy on Ageing; and
- Priority areas for additional evidence generation.

Fiji Ministry of Health & Medical Services

Recommendation 1: Embed context- and resource-appropriate components of clinical and social gerontology into training curricula for doctors, nurses and community health workers, including continuing professional development.

Recommendation 2: Review the acceptability and accessibility of health clinics for older adults, including physical infrastructure, timing of outpatient services, and age-friendly patient care behaviours and attitudes of health care personnel.

Recommendation 3: Establish integrated community-based chronic disease screening, prevention and management services for older adults, incorporating cognitive and functional assessment. Such services should be supported by a digitally enabled monitoring system that permits disaggregation of data to inform planning and improvement of equitable health programs and services for older adults.

Recommendation 4: Explore innovative approaches to empowering community/family and caregivers to monitor and address basic health care needs of older adults living in the community, including easily navigable referral links to available support services.

Recommendation 5: Improve the availability and accessibility of mobility devices and high-demand disposable health care supplies (including dressings, bandages and incontinence products) for older adults living in the community and their caregivers.

Fiji National Policy on Ageing

Recommendation 1: Reinforce political leadership on population ageing, including the reflection of national ageing policy commitments in ministerial strategic planning with specific budget and resource allocation.

Recommendation 2: Develop effective mechanisms to drive multi-sectoral coordination and implementation of healthy ageing policies, programs and services, incorporating strong community partnership to ensure the meaningful engagement of older persons, their families and community.

Recommendation 3: Promote awareness of special initiatives for older persons, especially in rural and remote areas, including social security, social welfare, health care subsidies and programs, non-formal support services and residential aged care facilities.

Recommendation 4: Reduce inequalities in healthy ageing, with a focus on marginalised population groups.

Recommendation 5: Include a monitoring framework, which incorporates the development and evaluation of strategic implementation plans.

Additional Evidence Needs

Research Priority 1: What is driving inequalities and inequities in the uptake of health care services by older Fijians, thereby hindering the attainment of universal health coverage?

Research Priority 2: What resource-appropriate models of integrated health (and social) care for older Fijians are acceptable to patients and their families, and both clinically- and cost-effective?

Research Priority 3: What is the ideal health workforce team composition for the provision of comprehensive care for older Fijians?

Research Priority 4: How can government-NGO partnerships best work in Fiji to provide services and resources for older adults?

Research Priority 5: How can technology be effectively harnessed to improve support for community/family and caregivers of older Fijians living in the community, and strengthen links between communities and health and support services?

I. Introduction

Context of this Study

The Asia-Pacific is ageing more rapidly than any region in history (World Bank 2016). In the Pacific, this trend runs in parallel with a rapidly accelerating epidemic of non-communicable diseases (NCDs), creating a significant challenge for health care delivery systems. NCDs account for 70% of all deaths in the Pacific Islands (World Health Organization 2011) and prevalence rates of hypertension and diabetes are the highest in the world (>20% and 25% respectively in some countries) (Lin et al. 2016). At the same time, the population over 60 years is growing rapidly: in the Solomon Islands, Papua New Guinea and Fiji it is expected to treble between 2000 and 2050 (Hayes 2009). Such rapid older population growth brings with it increasing multi-morbidity, and disability linked to age-related declines in mobility, sensory and cognitive function.

Despite these trends, ageing has received limited attention from Pacific policy makers and the health and social support needs of older persons in the region remain underserved. To-date, just two Pacific Island nations (Cook Islands and Fiji) have formulated a national policy on ageing (Hayes 2009); in Fiji, this policy covered 2011–2015 and in 2021 plans are underway for a revision. As in many low- and middle-income nations, health systems in Pacific Island countries have limited capacity to effectively manage chronic conditions, struggle with integration and continuity of care, and lack a coordinated approach to palliative or end of life care (Spratt 2019). Together, these factors present significant challenges for governments as they move to respond to calls from the World Health Organization (WHO) to 'reorient health systems' to meet the needs of older adults (World Health Organization 2017).

Fiji, with a population of approximately 880,000 people (Fiji Bureau of Statistics 2018), is among the most rapidly ageing Pacific Island countries. In 2017, 14% of the population (122,000 persons) were aged 55 years and over; this proportion is expected to increase to over 19% by 2050 (United Nations Population Fund Pacific Sub-Regional Office 2014). There is notable variation in the geographic distribution of older adults throughout Fiji, with the highest concentration of older persons found in the more remote island provinces: 21% of the Rotuma population and 16% of the Lau population were aged 55+ years in 2017, compared to 13% in the Viti Levu province of Naitasiri (Fiji Bureau of Statistics 2018) ***(Figure 1)***. For these island communities, distance and geography present significant barriers for older persons requiring regular care for chronic conditions and may hinder the uptake of referral for tertiary or specialised health services.

A useful proxy of the likely social and economic impact of older population growth is the "potential support ratio" – a measure of dependency burden produced by the United Nations Population Division (UNDP). This ratio reflects the number of persons aged 15–64 years potentially economically supporting each person aged 65 years and over. Projections for Fiji indicate a reduction in the potential support ratio from 11 in 2015 to under 6 in 2050, at which time it will be one of the lowest in the Pacific region (United Nations Population Fund Pacific Sub-Regional Office 2014). It is worth noting that the UNDP calculations apply a standard age cut-off of 65 years for older adults, which does not necessarily reflect cultural perceptions of 'elders' in many nations or the earlier physiological signs of ageing in populations with a greater burden of disease and shorter average life expectancy (which in Fiji is 67 years [World Bank, 2018]).

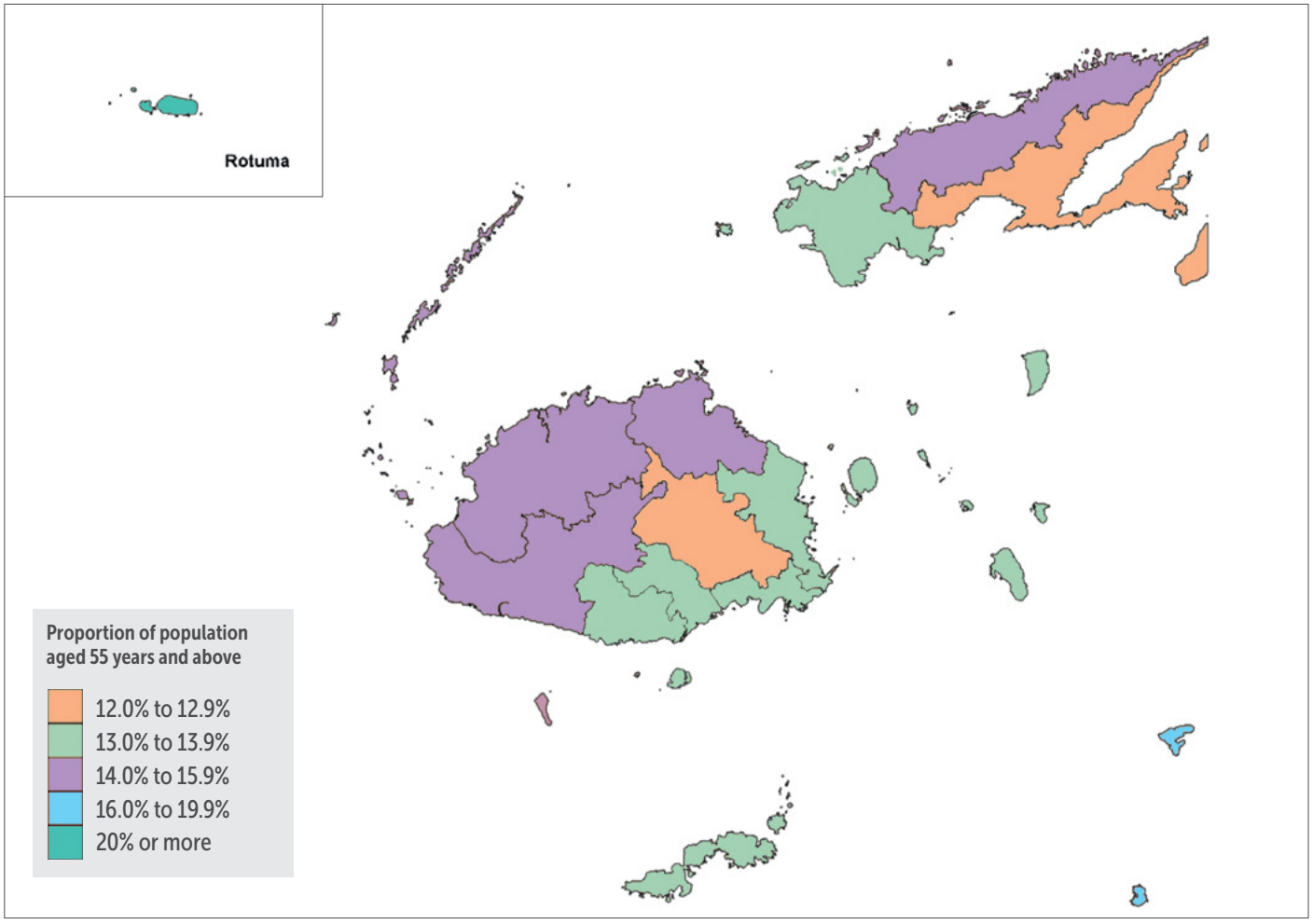
According to the latest Burden of Disease estimates, a Fijian aged 58 years has the same age-related disease burden as the global 'average person' of age 65 (Chang et al. 2019). Further, the reduction in the potential support ratio in Fiji will likely be compounded by the compulsory retirement age of 55 years for public servants, resulting in a greater dependency burden than that predicted by the modelled data.[1]

While Fiji is facing significant challenges in ensuring that the growing older population is enabled the opportunity to optimise their health and wellbeing during their later years of life, current health system structures (both formal and informal) are not well prepared to tackle these challenges.

Cultural tradition combined with the universal desire to 'age in place' sees many older adults returning to their home community during their later years, placing added responsibility on family and carers who are often ill-equipped to support their health care needs. Despite strong efforts to decentralise primary health care, older adults residing in rural and maritime areas of Fiji still face significant barriers to accessing the care they need, when they need, with resource limitations impacting the scope and frequency of outreach health services. Further, many health workers lack the core competencies required to confidently provide appropriate and quality care for older adults: a consequence of limited gerontological content in national medical and nursing training curricula.

1 For these reasons, in the context of the analyses informing this report we have used the broad age group of 55 years and over to represent 'older adults' in Fiji.

Fig 1. Geographic distribution of persons aged 55 years and over, Fiji. Data source: 2017 Population and Housing Census



As a first step towards better aligning the health system with the health care needs of older adults, the Fiji Ministry of Health & Medical Services has recognised older persons within Strategic Priority 2 of its 2020–25 Strategic Plan: ***"Strengthen and decentralise effective clinical services, including rehabilitation, to meet the needs of the population – specially addresses a need to support those with NCD-related mobility and visual impairment, especially older people"*** (Fiji Ministry of Health & Medical Services 2020). They have established a specific 2025 goal of providing ***"a more integrated service for rehabilitative care across the different levels of the health system and strengthened services for children and the elderly."*** Despite this political intention, the Ministry's ability to guide appropriate and effective models of care to support healthy ageing remains hindered by a lack of knowledge of what's needed and what works for the care of older persons in the Fijian context.

To support the Ministry of Health & Medical Services and the Fiji National Council for Older Persons, in their leadership role for the national ageing policy framework, to identify opportunities to improve the health and wellbeing of older Fijians, the investigator team undertook a mixed-methods assessment of national health policy, programs and services strengthening needs to support healthy ageing – the Healthy Ageing Fiji study.

Aim of the Study

The **primary aim** of Healthy Ageing Fiji was to generate translatable evidence to inform priorities for developing older-person-centred and integrated health care services in Fiji.

The objectives of this study were to:

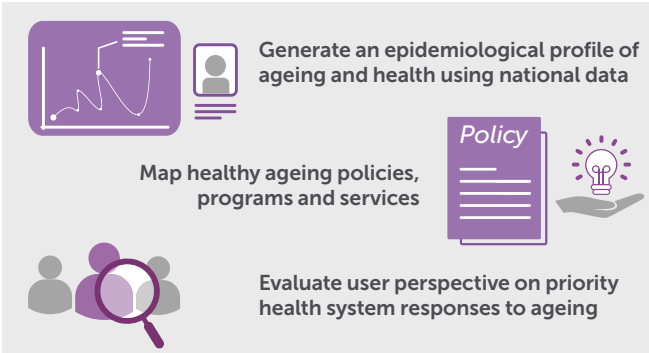
1. Generate new statistical insights into the health of older adults and their utilisation of health services;
2. Examine current patterns and trends of mortality among older adults in Fiji;
3. Map national policies and strategies supporting opportunities for healthy ageing within Fiji against Objective 3 (Health System Strengthening) of the World Health Organization (WHO) Global Strategy and Action Plan on Ageing and Health (2016–30), to identify strengths, weaknesses and gaps;
4. Gather community, provider and policy maker perspectives on appropriateness, acceptability and usability of health system responses to ageing to identify user preferences and areas of unmet need;
5. Based on the study findings, make recommendations to strengthen Fiji's health system response to support opportunities for healthy population ageing.

The recommendations of this project are intended to aid the Ministry of Health & Medical Services in identifying priority health policy, program and service needs to promote healthy ageing and support the delivery of age-friendly health care in Fiji, in alignment with the vision, goals and principles of the national ageing policy framework. This includes the effective implementation of the 2025 National Health Strategy. The investigator team intends for the project recommendations to also form the basis of broader national consultation and contribute to informing priorities for a coordinated, multi-sectoral response to population ageing. Being the first targeted assessment of health system strengthening needs for older adults in any Pacific Island country, we hope that both the study findings and methodology may have future application elsewhere in the region.

II. An Overview of Study Methods

The study comprised three complementary components *(Figure 2)* and applied a mixed methods approach. Data collection was undertaken between June 2018 and March 2020.

Fig 2. Three components of the Healthy Ageing Fiji study methodology



Component 1:

Generate an epidemiological profile of ageing and health in Fiji

Data from national administrative health datasets were analysed to i) generate new statistical insights into the health of older adults and their utilisation of health services, and ii) describe current patterns and trends of mortality among older adults in Fiji.

Relevant information sources made available for these analyses were:

- Fiji Ministry of Health & Medical Services Patient Information System (PATISPlus) inpatient and outpatient data, 2014–2017
- Fiji Ministry of Health & Medical Services Public Health Information System (PHIS) aggregated service data, 2014–2017
- Civil Registration and Vital Statistics mortality data, 2008–2017
- National Census 2017 – publicly accessible reports

A series of analyses were undertaken with the PATISPlus datasets to identify trends in the use of hospital inpatient and outpatient services by the older population (defined as persons aged 55 years and over), including population groups more and less likely to access available services (with a focus on health equity factors for which there were available data, including age, gender and urban/rural domicile). Age- and sex-aggregated primary health care (PHC) service summary data from PHIS were used to assess trends in PHC clinic presentations in provinces with the smallest proportion of older residents (Quartile 1) versus those with the largest proportion of older residents (Quartile 4). These health service utilisation analyses were complemented by an ecological time-series study of mortality trends in Fijians aged 55 years and over for the ten-year period 2008–2017.

Component 2:

Map existing healthy ageing policies and strategies

A review of national policies and strategies was undertaken to identify documents underpinning Fiji's health system response to population ageing to-date, with a focus on: health workforce development; provision of health services for older adults; aged care; gender; disability; financial protection; social security and pensions. Relevant policy content was mapped to an analytical framework informed by Strategic Objective 3 'Aligning Health Systems to the Needs of Older Populations' of the WHO Global Strategy and Action Plan on Ageing and Health (2016–2030) (World Health Organization 2017): a document adopted by all WHO member states which outlines key indicators against which to assess progress on the development and implementation of national policies and priority interventions for healthy ageing.

The following three key actions have been recommended by WHO to guide progress towards meeting Strategic Objective 3:

1. Orienting health systems around intrinsic capacity and functional ability
2. Developing and ensuring affordable access to quality older person-centred and integrated clinical care
3. Ensuring a sustainable and appropriately trained, deployed, and managed health workforce

Strengths, gaps and intersections of current policy initiatives were identified in order to highlight areas of best practice and requirements for policy-strengthening to more effectively address the health care needs of older adults, both now and into the future. Additional relevant information relating to the implementation of policy commitments was identified from peer reviewed and grey literature. A full list of policy and strategy documents included in this exercise is provided in ***Annex 1.***

Component 3:

Evaluate user perspectives on the health system response

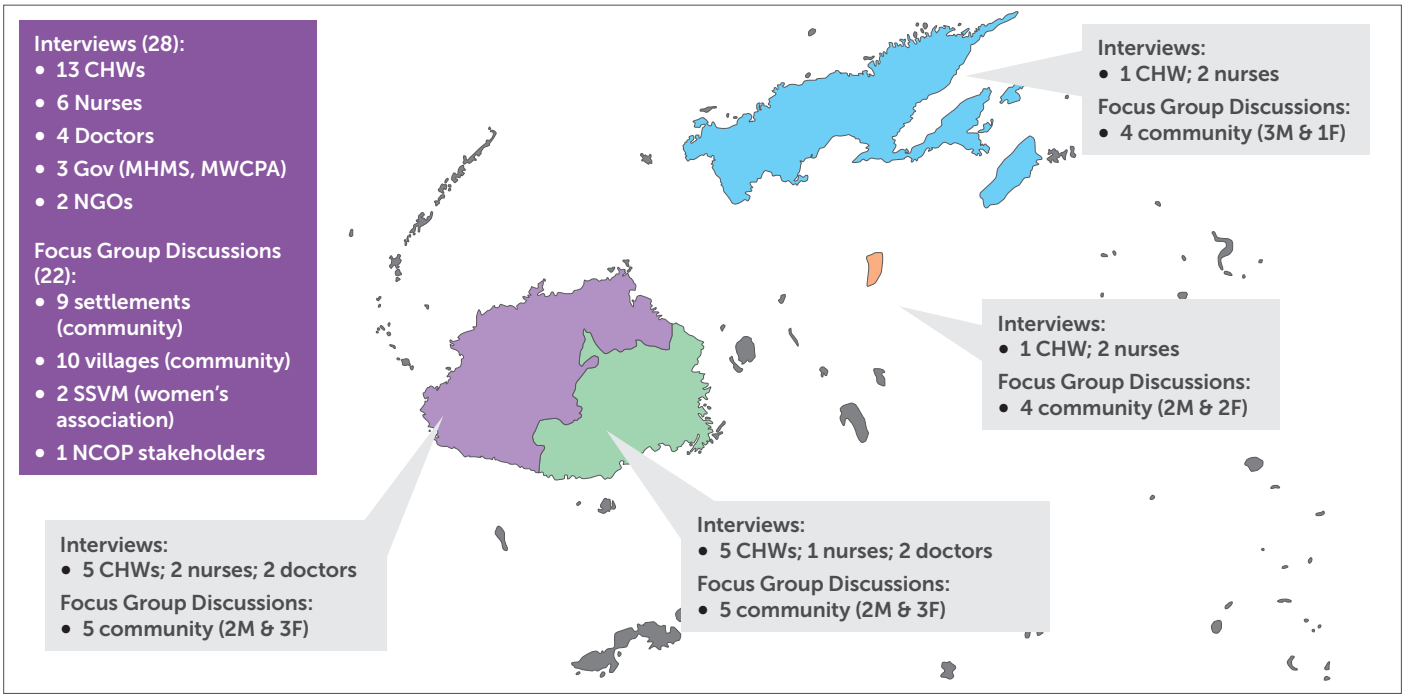
Qualitative methods were used to gather community, provider and policy-maker perspectives on the appropriateness and acceptability of health system responses to ageing, to identify user preferences and areas of unmet need. Twenty-two focus groups and 28 semi-structured interviews were conducted with policy makers, civil society organisations, health workers, and older persons and their carers across all four divisions of Fiji ***(Figure 3).*** These discussions explored the broader implications of morbidity and disability (for providers, patients and family); current structures for health, social and financial support; awareness and acceptability of available services for healthy ageing; barriers to an older person achieving the type of care they would like, where they would like; and health workforce capacity to meet the care needs of older adults.

The COM-B (Capability, Opportunity, Motivation, Behaviour) model – the central hub of the broader Behaviour Change Wheel (Michie et al. 2011) – was applied as a framework for the thematic analysis of discussion transcripts, to facilitate the systematic and transparent identification of policy categories and intervention functions that may support behaviours to promote healthy ageing. A gender lens was also applied to the analysis of discussion transcripts to assess the impact of current health care and social support structures for older adults on women and girls more specifically.

Ethical considerations

Ethics approval for the research was granted by the Fiji National Health Research and Ethics Review Committee (2019.65.NW) and the University of New South Wales Human Research Ethics Committee (HC190054). Approval for village-based community consultation was granted by the Ministry of iTaukei Affairs, Fiji.

Fig 3. Stakeholder consultations undertaken within the Healthy Ageing Fiji study



CHW, community health worker; F, female; M, male; MHMS, Ministry of Health & Medical Services; MWCPA, Ministry of Women, Children & Poverty Alleviation; NCOP, National Council for Older Persons; SSVM, Soqosoqo Vakamarama iTaukei.

III. Key Study Findings

1. Epidemiological profile of ageing and health

KEY FINDINGS

- Older persons comprised one-fifth of all hospital admissions in Fiji from 2014–2017 and one-quarter of all outpatient presentations. The hospitalisation rate of those aged 55+ years was 1.4 times greater than persons aged under 55. The outpatient presentation rate for those aged 55+ years was more than double that of those under 55
- Older men were the most frequent users of facility-based health services – both outpatient and inpatient services. Men aged 55+ years had almost triple the rate of hospital admissions than men aged under 55 years
- Older women, particularly those residing in rural areas, experienced the lowest rates of facility-based health service utilisation
- Older rural and maritime residents comprise just 13% of hospital admissions and 9% of outpatient clinic users aged 55+ years
- Circulatory system diseases were the most common reason for hospital admissions and outpatient visits, for both older men and older women

Trends in the hospitalisation of older adults in Fiji, 2014–17

Between 2014 and 2017, there were a total of 39,414 hospital admissions for persons aged 55+ years in Fiji *(see Annex 2 for full data)*. Older adults comprised 21% of all admissions nationally. Over this four-year period, hospital admissions for persons aged 55+ years increased by 17% overall – or by 5.6% on average each year. Just under half (49%, 5189) of older adult admissions occurred at CWM Divisional Hospital, 29% (3046) at Lautoka Divisional Hospital and 16% (1743) at Labasa Divisional Hospital *(Table 1)*.

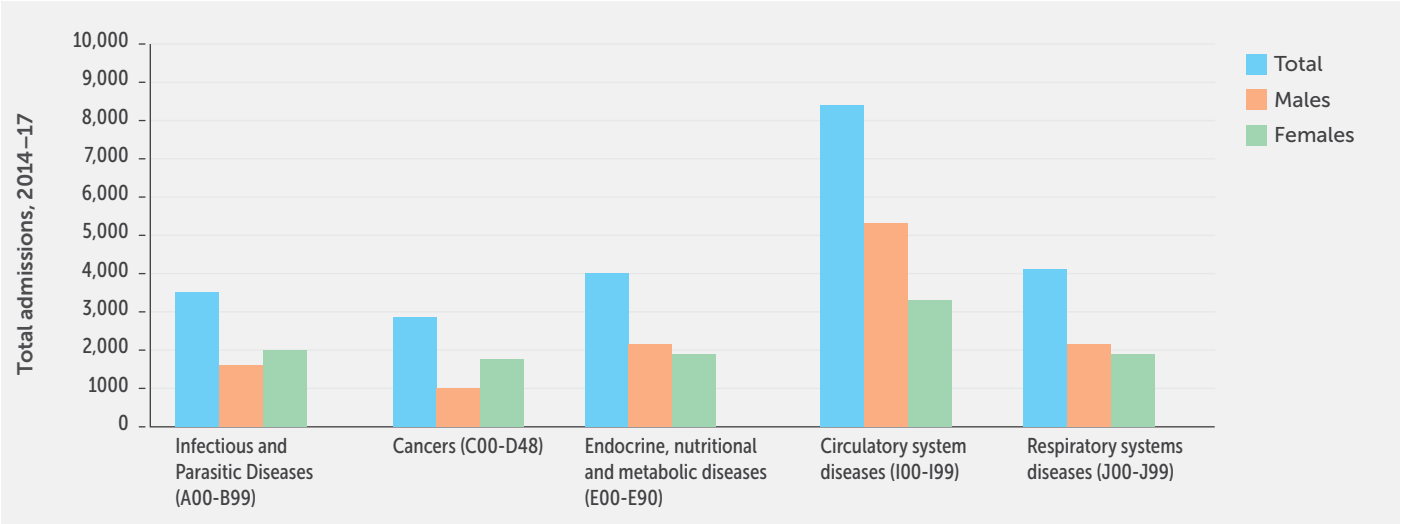
One-fifth (21%) of all admissions for persons aged 55+ years during 2014–17 were due to circulatory system diseases (ICD-10 coding I00-I99). Respiratory system diseases (J00-J99) and Endocrine, nutritional and metabolic diseases (E00-E90) each comprised 10% of admissions. *Circulatory system diseases accounted for a higher proportion of male admissions than female admissions* (24% versus 18%); while *cancers accounted for a higher proportion of female admissions than male admissions* (10% versus 5%).

Table 1. Total admissions by hospital facility, persons aged 55 years and over, Fiji, 2014–17

					Change (%), Average	
Admissions, persons aged 55+ years	**2014**	**2015**	**2016**	**2017**	**Since 2014**	**Since 2016**
CWM Divisional Hospital	4315	4752	5057	5189	6.8	2.6
Lautoka Divisional Hospital	2674	2735	2964	3046	4.6	2.8
Labasa Divisional Hospital	1533	1366	1668	1743	4.6	4.5
Nadi Sub-Divisional Hospital	483	267	746	566	5.7	-24.1
Total admissions*	9112	9129	10489	10684	5.6	1.9

*** Total admissions includes additional hospitalisations at Nabouwalu Sub Divisional Hospital, Rakiraki Sub Divisional Hospital, Savusavu Sub Divisional Hospital, Sigatoka Sub Divisional Hospital, St Giles Psychiatric Hospital, Taveuni Sub Divisional Hospital, and Vunidawa Sub Divisional Hospital**

Fig 4. Total hospitalisations for persons aged 55 years and over, by ICD-10 diagnosis, 2014–17



Males aged 55–64 years with cardiovascular conditions comprised the largest group of older admitted patients (7% of all age 55+ admissions over the four-year period). Hospital admissions for cardiovascular conditions in persons aged 55+ years increased by 8.1% on average each year from 2014–17: a 7.4% increase per year in men and 10.2% increase per year in women. Hospital admissions for cancers in persons aged 55+ years increased by 12.7% on average each year during the same period: a 17.0% increase per year in men and 11.8% increase per year in women.

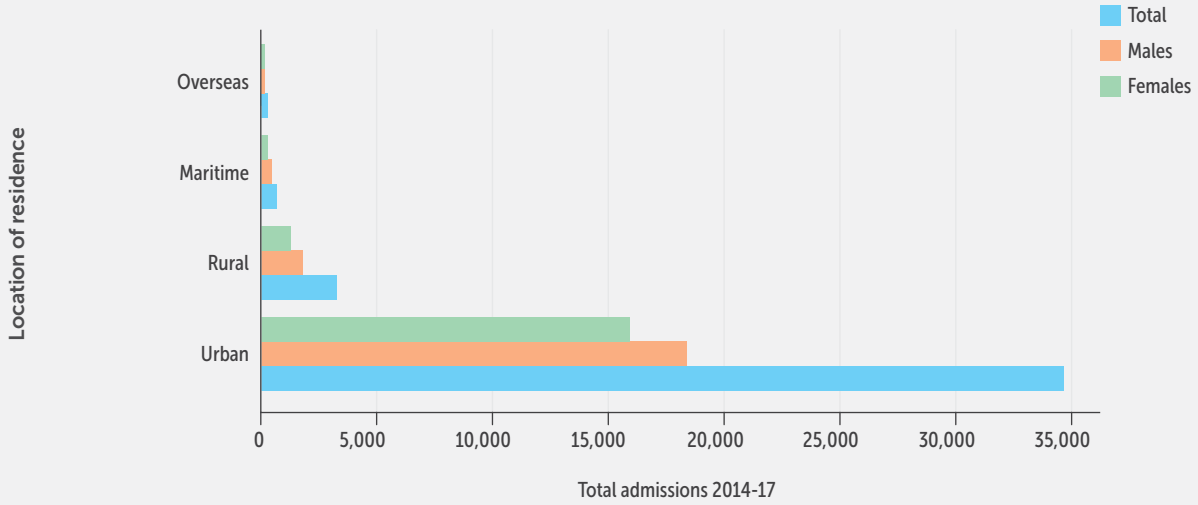
Urban residents accounted for 87% of all hospitalisations of persons aged 55+ years between 2014–17. Rural (10%), maritime (2%) and overseas (1%) residents comprised the remaining age 55+ years hospital admissions.

Table 2. Total hospitalisations for persons aged 55 years and over, by ICD-10 diagnosis and age group, 2014–17

	55–64 years			65–74 years			75+ years		
	Total N (%)*	Male n (%)	Female n (%)	Total N (%)	Male n (%)	Female n (%)	Total N (%)	Male n (%)	Female n (%)
Infectious & Parasitic Diseases (A00-B99)	1595 (4)	752 (2)	843 (2)	1246 (3)	543 (1)	703 (2)	753 (2)	311 (1)	442 (1)
Cancers (C00-D48)	1600 (4)	558 (1)	1042 (3)	987 (3)	356 (1)	631 (2)	332 (1)	157 (<1)	175 (<1)
Endocrine, nutritional and metabolic diseases (E00-E90)	2301 (6)	1216 (3)	1085 (3)	1360 (3)	717 (2)	643 (2)	352 (1)	175 (<1)	177 (<1)
Circulatory system diseases (I00-I99)	4149 (11)	2859 (7)	1290 (3)	3024 (8)	1759 (4)	1265 (3)	1266 (3)	580 (1)	686 (2)
Respiratory system diseases (J00-J99)	1821 (5)	1034 (3)	787 (2)	1484 (4)	776 (2)	708 (2)	776 (2)	378 (1)	398 (1)

*** All % represent proportion of total hospitalisations for persons aged 55+ years during 2014–17**

Fig 5. Total hospitalisations for persons aged 55 years and over, by geographic location of residence, 2014–17



Hospitalisation rates for older adults, 2017

In 2017 alone, there were 10,684 hospital admissions for persons aged 55+ years – or an average of 29 hospitalisations per day. ***Just 13% of older adults admitted to hospital (1324 persons) resided in a rural or maritime setting.*** Data from the 2017 Census indicate that rural dwellers represent approximately 46% of the Fijian population.

In 2017, the rate of hospitalisation for those aged 55+ years was 1.4 times greater than those aged <55 years. Older women had an almost 20% lower rate of hospitalisation than older men (81 admissions per 1,000 population compared to 98 per 1,000 population).

Men aged 55+ years had triple the rate of admissions than men aged <55 years (98 admissions per 1,000 population compared to 34 per 1,000 population). The hospitalisation rate was highest in men aged 65–74 and ≥75 years (114 and 136 per 1,000 population respectively). ***Older women (55+ years) had more than double the rate of hospitalisations than females aged <55 years*** (81 admissions per 1,000 population compared to 34 per 1,000 population, excluding hospitalisations associated with pregnancy and birth).

Fig 6. Hospitalisations per 1,000 population, by age group, Fiji, 2017

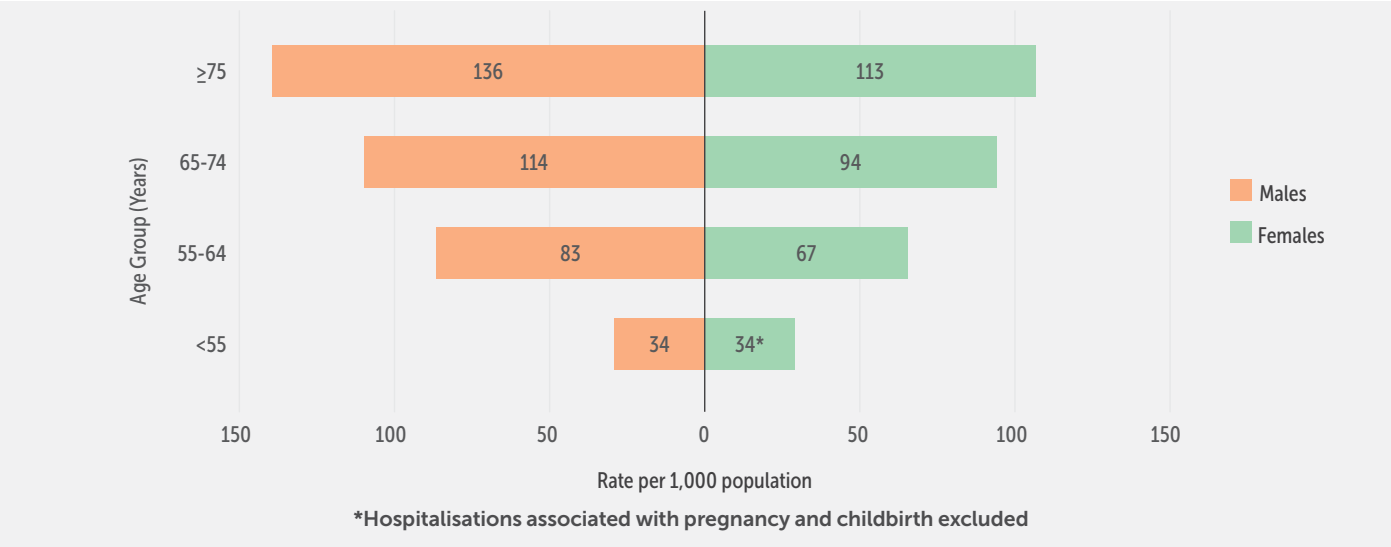
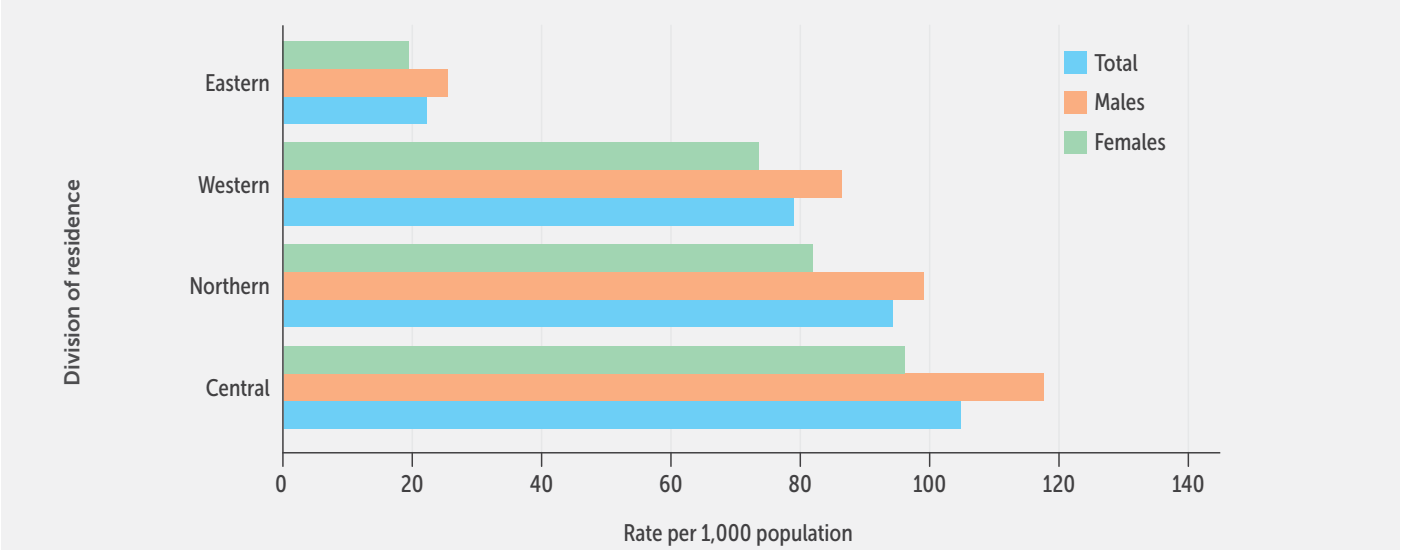


Fig 7. Hospitalisations per 1,000 population, persons aged 55 years and older, by division of residence, 2017



Older adults residing in Central Division had the highest rate of hospitalisations nationally (117 per 1,000 population for men, 96 per 1,000 population for women). Those residing in Eastern Division had the lowest hospitalisation rates (28 per 1,000 population for men, 20 per 1,000 population for women). Older adults residing in urban areas had a hospitalisation rate approximately six-times higher than that of older adults living in a rural area (141 per 1,000 population compared to 23 per 1,000 population). *Older women residing in rural areas had the lowest rate of hospitalisation overall (19 per 1,000 population).*

Hospital outpatient service use by older adults, 2017

During 2017, there were 39,414 hospital outpatient presentations by persons aged 55+ years, comprising one-quarter of all outpatient presentations nationally *(see Annex 2 for full data).* In this older age group, females accounted for just over half (51%) of presentations and 35% of presentations occurred at Labasa Divisional Hospital. *91% of older adults presenting to hospital outpatient clinics resided in an urban setting.*

Fig 8. Hospitalisations per 1,000 population, persons aged 55 years and over, by rural-urban residence, 2017

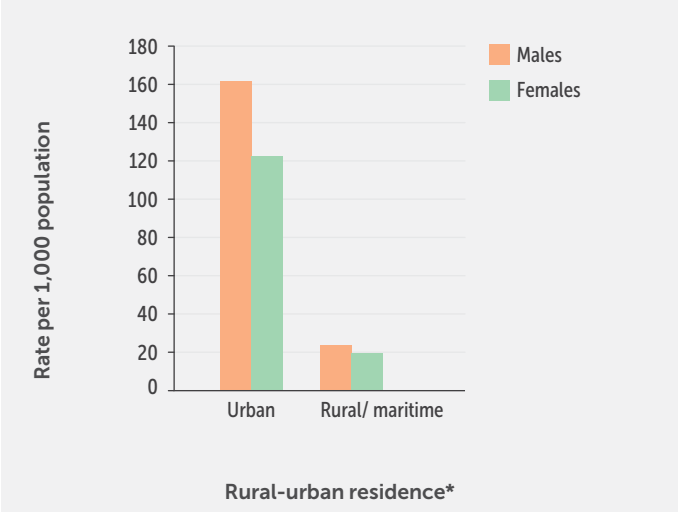
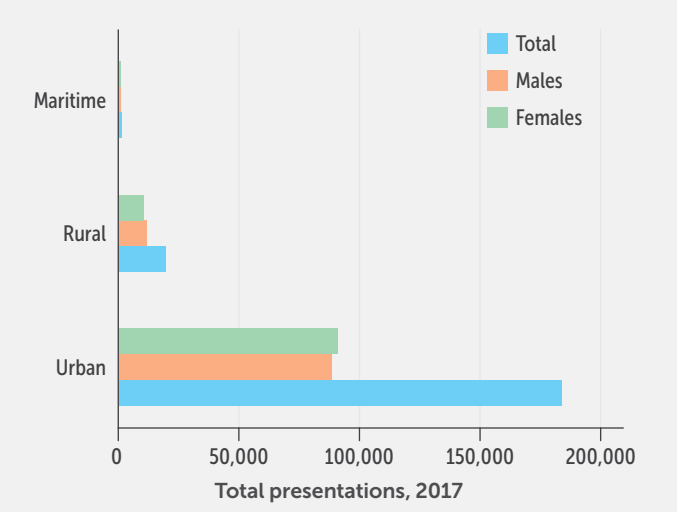


Fig 9: Total outpatient presentations for persons aged 55 years and over, by geographic location of residence, 2017. Data source: PATIS+ Outpatients



*Urban-rural categorisation applied to the province of a patient's residence

Just under one-fifth (19%) of all outpatient presentations for persons aged 55+ years during 2017 were to a General Outpatient Department (GOPD) clinic; 12% of presentations were to Accident & Emergency (A&E). Specific circulatory system related clinics[1] accounted for 6% of presentations overall (5% of male presentations and 6% of female presentations). Specific diabetes-related clinics[2] accounted for 4% of presentations overall (3% of male presentations and 5% of female presentations). *Males aged 65–74 years presenting to a GOPD clinic comprised the largest hospital outpatient user group* (6% of all presentations in 2017).

In 2017, *the outpatient presentation rate for those aged 55+ years was more than double (2.1 times) that of persons aged <55 years.* Similar presentation rates were seen for men and women (1678 presentations per 1,000 population compared to 1648 per 1,000 population). *The outpatient presentation rate was highest in men aged 65–74 and 75+ years* (1952 and 2236 per 1,000 population respectively).

1 Comprising Cardiac (Rheumatic – Follow Up, Cardiac (Rheumatic) – New Cases, Diabetes/Hypertension, ECG, ECG GOPD, ECG A&E, Echogram, Hypertension, and Hypertension – New Cases clinics

2 Comprising Diabetes, Diabetes Wellness, Diabetes – New Cases, Diabetic Foot Clinic, and Diabetes/Hypertension clinics.

Fig 10. Total outpatient presentations for persons aged 55 years and over, by specialty clinic, 2017

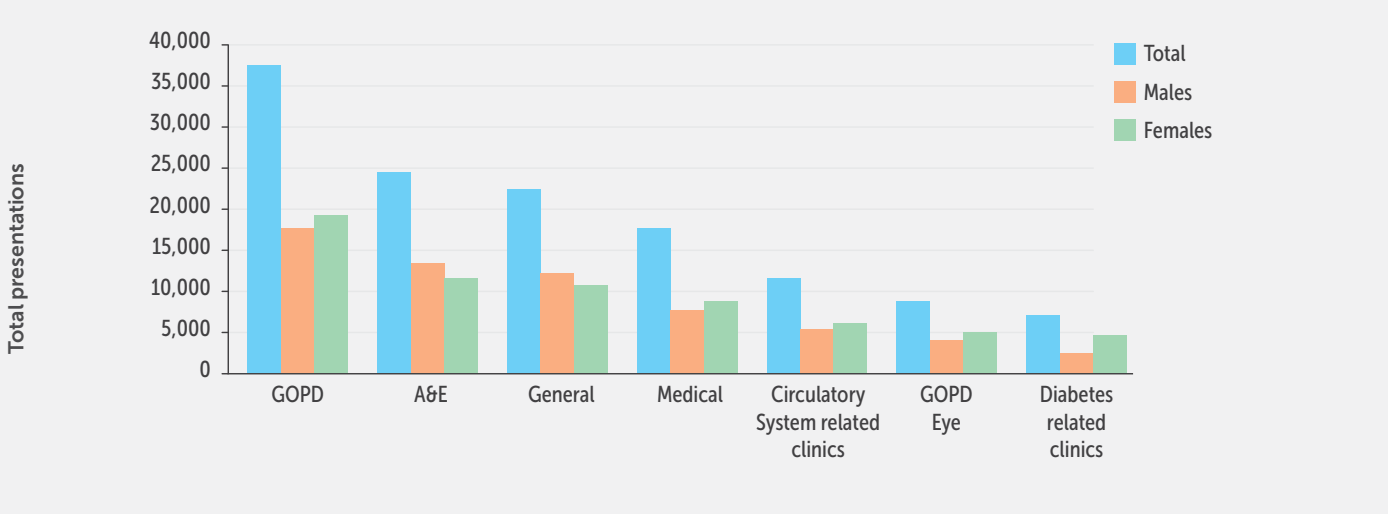
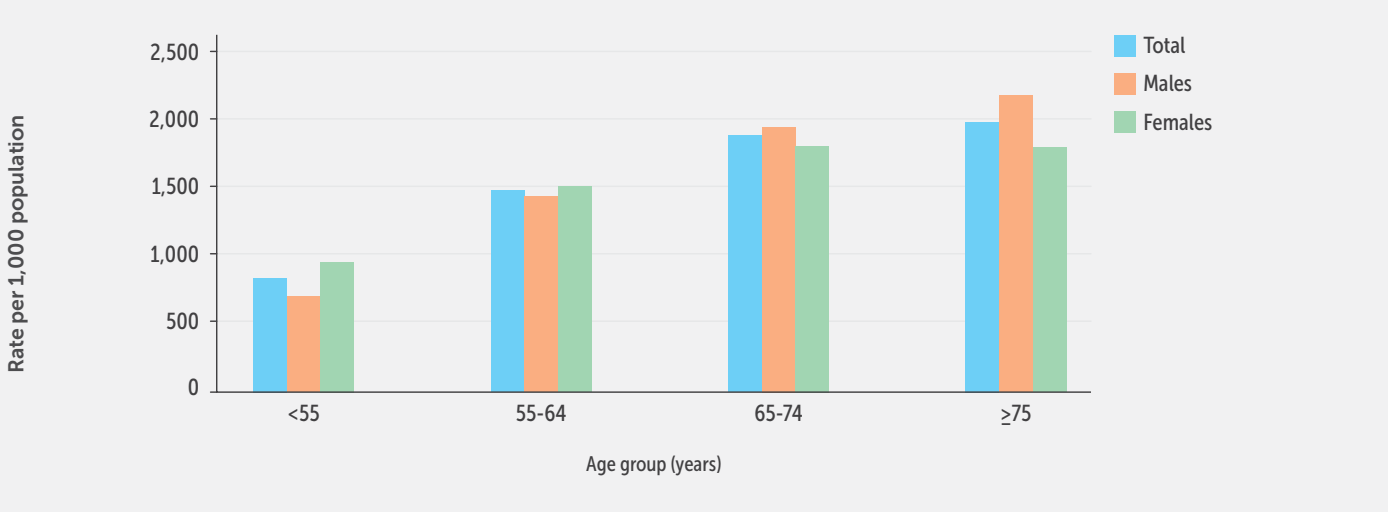
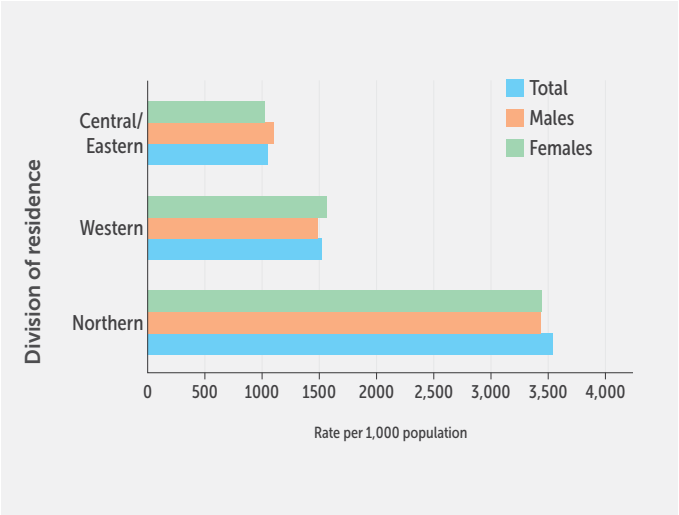


Fig 11. Outpatient presentations per 1,000 population, by age group, Fiji, 2017



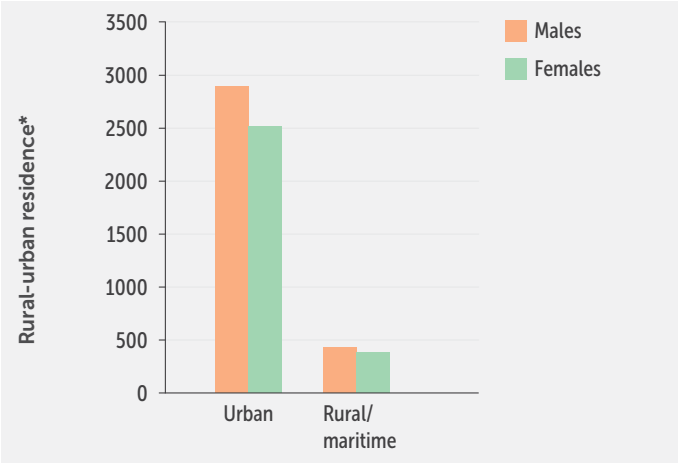
Older adults residing in Northern Division had the highest rate of outpatient presentations nationally (3410 per 1,000 population for men, 3415 per 1,000 population for women). Those residing in Central/Eastern Divisions had the lowest outpatient presentation rates (1125 per 1,000 population for men, 1030 per 1,000 population for women).

Fig 12. Outpatient presentations per 1,000 population, persons aged 55 years and older, by division of residence, 2017



Older adults residing in urban areas had an outpatient presentation rate approximately seven-times higher than that of older adults living in a rural area (2694 per 1,000 population compared to 374 per 1,000 population). *Older women residing in rural areas had the lowest rate of outpatient presentations overall* (354 per 1,000 population).

Fig 13. Outpatient presentations per 1,000 population, persons aged 55 years and over, by rural-urban residence, Fiji, 2017

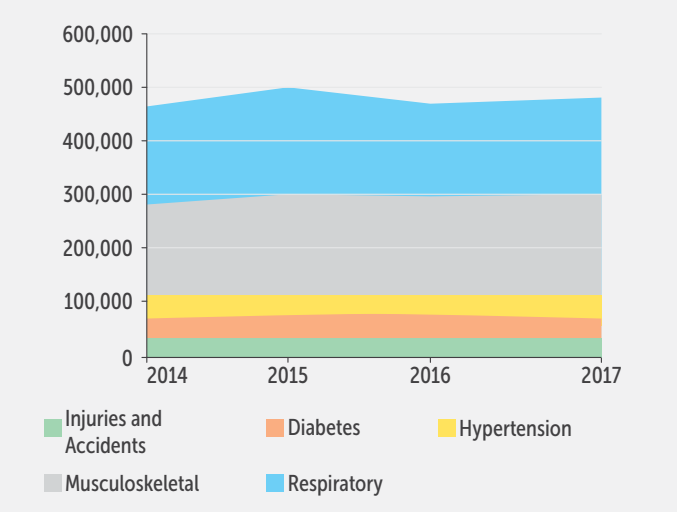


*Urban-rural categorisation applied to the province of patients' residence

Trends in the use of primary health care clinics by older adults, 2014–2017

Between 2014–17 there were 2,254,129 recorded presentations to primary care clinics in Fiji (PHIS dataset), 85% of which were attributed to five disease categories: musculoskeletal issues (32%), respiratory conditions (32%), hypertension (10%), diabetes (6%), and injuries and accidents (5%).

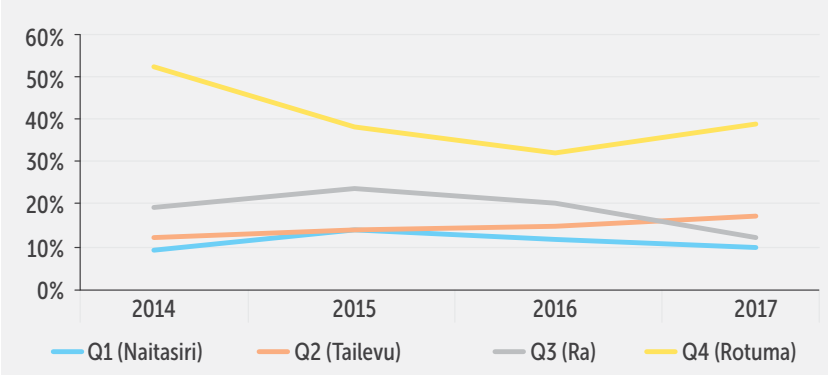
Fig 14. Total primary care clinic presentations for the top five disease categories, Fiji, 2014–17. Data source: Public Health Information System (PHIS)



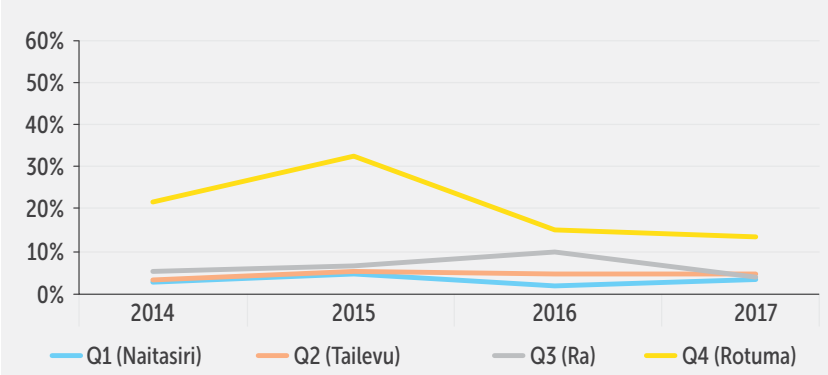
Although data available from the PHIS system are aggregated (i.e. all ages and both sexes combined), an analysis of trends in clinic presentations for four provinces representing the four quartiles (Q) of older population density (Q1 Naitasiri = lowest concentration of adults aged 55+, Q2 Tailevu, Q3 Ra, Q4 Rotuma = highest concentration of adults aged 55+; *see Annex 3*) showed a higher proportion of presentations for hypertension and diabetes in 'older' provinces compared to the 'younger' provinces (37% and 13% of all presentations in Q4 Rotuma in 2017, compared to 12% and 4% of all presentations in Q1 Ra in the same year).

Fig 15. Primary care clinic presentations for hypertension, diabetes, respiratory conditions and injuries and accidents, Fiji, 2014–17.

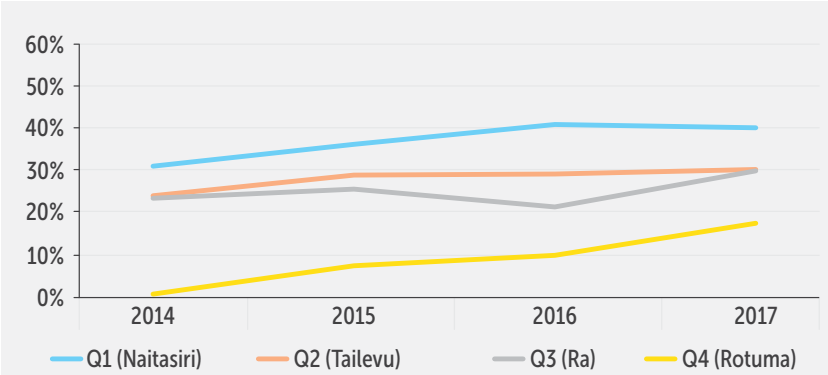
Data presented for four provinces representing quartiles (Q) 1 to 4 of older population density (Q1 Naitasiri = lowest proportion of population aged ≥55 years, Q4 Rotuma = highest proportion of population aged ≥55 years)



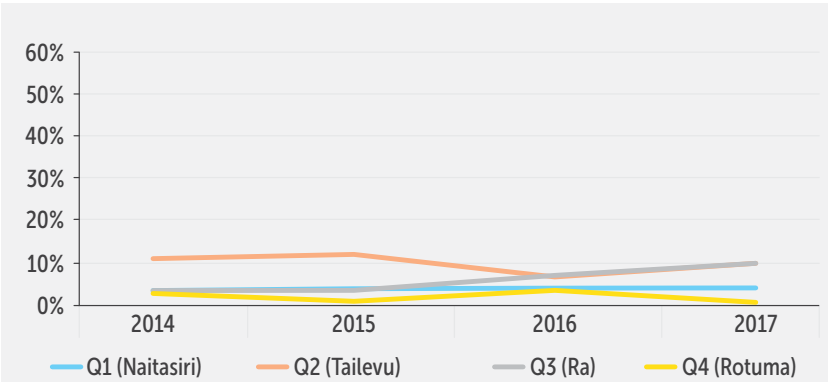
Primary care presentations for ***hypertension*** as a % of total presentations, 2014–2017



Primary care presentations for ***diabetes*** as a % of total presentations, 2014–2017



Primary care presentations for ***respiratory*** conditions as a % of total presentations, 2014–2017



Primary care presentations for ***injuries and accidents*** as a % of total presentations, 2014–2017

Mortality trends among older adults in Fiji, 2008–17

KEY FINDINGS

- Circulatory system diseases were responsible for the highest age-standardised mortality rates in both older men and women in the 10-year period from 2008–2017
- Older men suffered a higher mortality rate than older women for diseases of the circulatory system, respiratory illness, and infectious and parasitic disease
- Older women experienced a higher burden of neoplasm deaths than older men in each year from 2008–2017; neoplasm mortality rates for women in all older age groups also increased significantly each year
- Women aged 75+ (but not older men) experienced a significant annual increase in mortality rates from endocrine, nutritional and metabolic diseases from 2008–2017

From 2008 to 2017, there were 43,783 recorded deaths from all causes in the Fijian adult population aged 55+ years ***(Table 3).*** The following six leading causes of death were the same irrespective of age group, and accounted for 88% to 91% of all deaths in males and females ***(Figure 16)***:

1) Diseases of the circulatory system;
2) Endocrine, nutritional and metabolic diseases;
3) Neoplasms;
4) Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified;
5) Diseases of the respiratory system; and
6) Certain infectious and parasitic diseases.

The three leading causes of death (all NCDs) disproportionately represented approximately 80% of all deaths in males and females aged 55–64 and 65–74 years, respectively. In adults aged 75+ years, the three leading causes accounted for 65% of all deaths.

Circulatory system diseases were responsible for the highest age-standardised mortality rates (ASMRs) over the 10-year period for males (peaking at 2,023 per 100,000 population in 2016) and females (peaking at 1,485 per 100,000 population in 2010). ASMRs for circulatory system diseases were consistently higher in males than females. ASMRs for the top six causes of death in older Fijian adults for 2008–17 are presented in *Figure 16*; full data are provided in *Annex 4*.

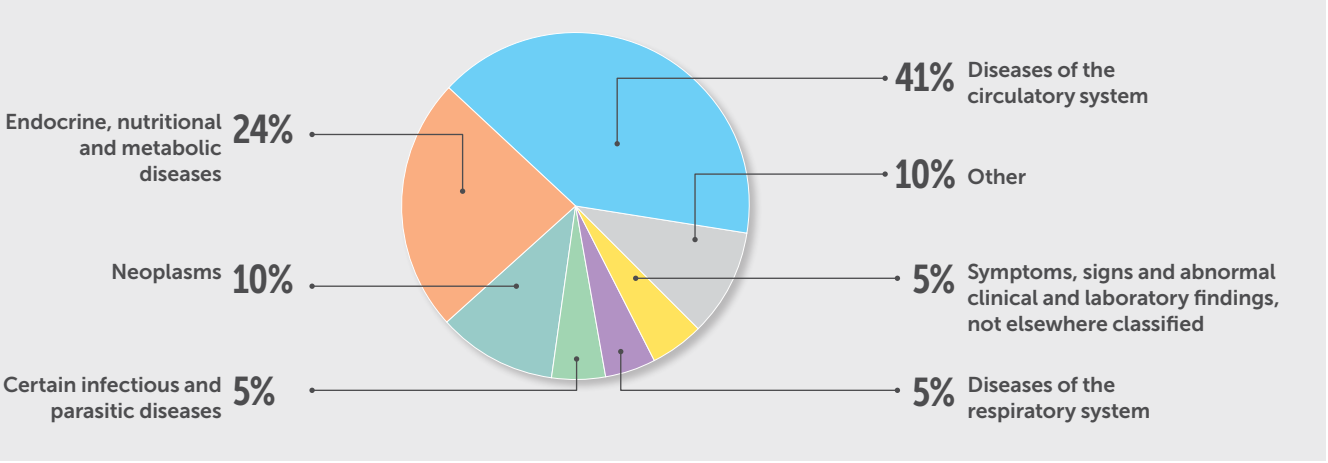
There was a ***significant annual percent increase in ASMR from endocrine, nutritional and metabolic diseases for women aged 75+ years,*** rising 6.6% per year between 2008–17. ***Neoplasm ASMRs also increased significantly each year during the 10-year period for women in all older age groups*** (4.2% per year for those aged 55–64 years; 3.1% per year for those aged 65–74 years; and 5.1% per year for those aged 75+), and for men aged 65–64 years (5.8% per year) and 75+ (4.4% per year).

Table 3. Six leading causes of death in Fijian adults aged 55 years and over, by age group, 2008–2017

	55 – 64 years		65 – 74 years		75+ years	
	Males	Females	Males	Females	Males	Females
Total deaths, n	**8657**	**6408**	**8129**	**6903**	**6394**	**7292**
Diseases of the circulatory system	3962 (46%)	1962 (31%)	3611 (44%)	2616 (38%)	2731 (43%)	3059 (42%)
Endocrine, nutritional and metabolic diseases	2148 (25%)	2055 (32%)	1848 (23%)	2069 (30%)	1031 (16%)	1290 (18%)
Neoplasms	743 (9%)	1250 (20%)	689 (8%)	835 (12%)	384 (6%)	413 (6%)
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	93 (1%)	57 (1%)	228 (3%)	196 (3%)	658 (10%)	998 (14%)
Diseases of the respiratory system	439 (5%)	192 (3%)	482 (6%)	242 (4%)	458 (7%)	318 (4%)
Certain infectious and parasitic diseases	334 (4%)	290 (5%)	365 (4%)	301 (4%)	341 (5%)	432 (6%)

All data are n (% of total deaths by sex and age group) unless stated otherwise.

Fig 16. Cause of death profile for Fijian adults aged 55 years and over, 2008–17. Data source: National Civil Registration & Vital Statistics



Significant annual percent reductions in ASMRs were seen between 2008–17 for infectious and parasitic diseases in men aged 55–64 years (-3.2% per year), for diseases of the respiratory system in women aged 55–64 years (-1.5% per year), and overall for the coding 'symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified' (likely due to improvements in the standardisation and accuracy of cause of death coding during the 2008–17 time period).

Figures 18a–c show trends in mortality rates by sex and age group for the three leading causes of death in those aged 55+ years for 2008–17, highlighting significant annual percent changes. Full data are provided in *Annex 4.*

Fig 17. Age-standardised mortality rates per 100,000 population for the top six causes of death for Fijian adults aged 55 years and over, by sex, 2008–17.

Data source: National Civil Registration & Vital Statistics. 55 years and over, 2008–17. Data source: National Civil Registration & Vital Statistics

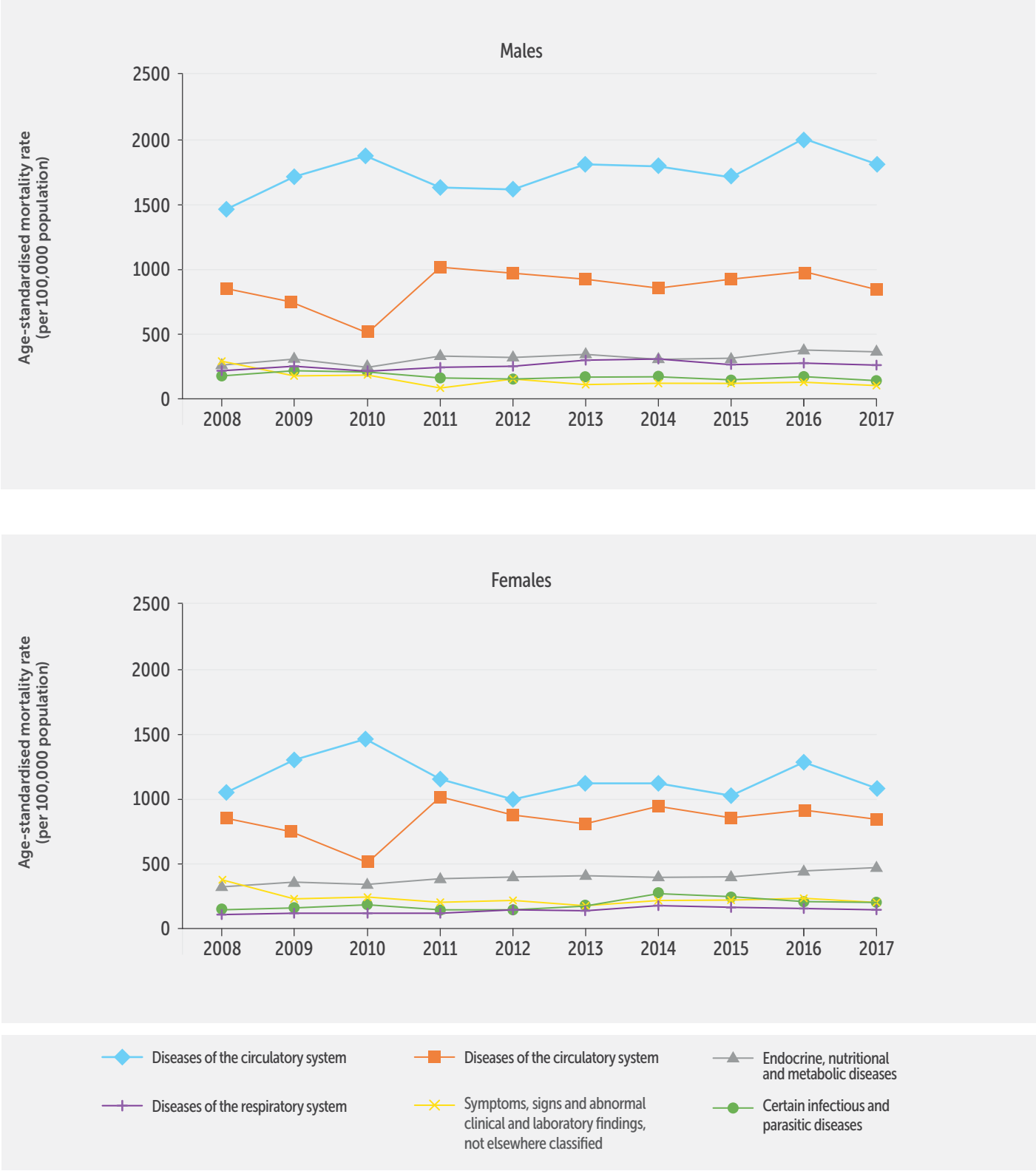


Fig 18a. Level and trends of age-standardised mortality rates by sex and age group for diseases of the circulatory system in persons aged 55 years and over in Fiji, 2008–17.

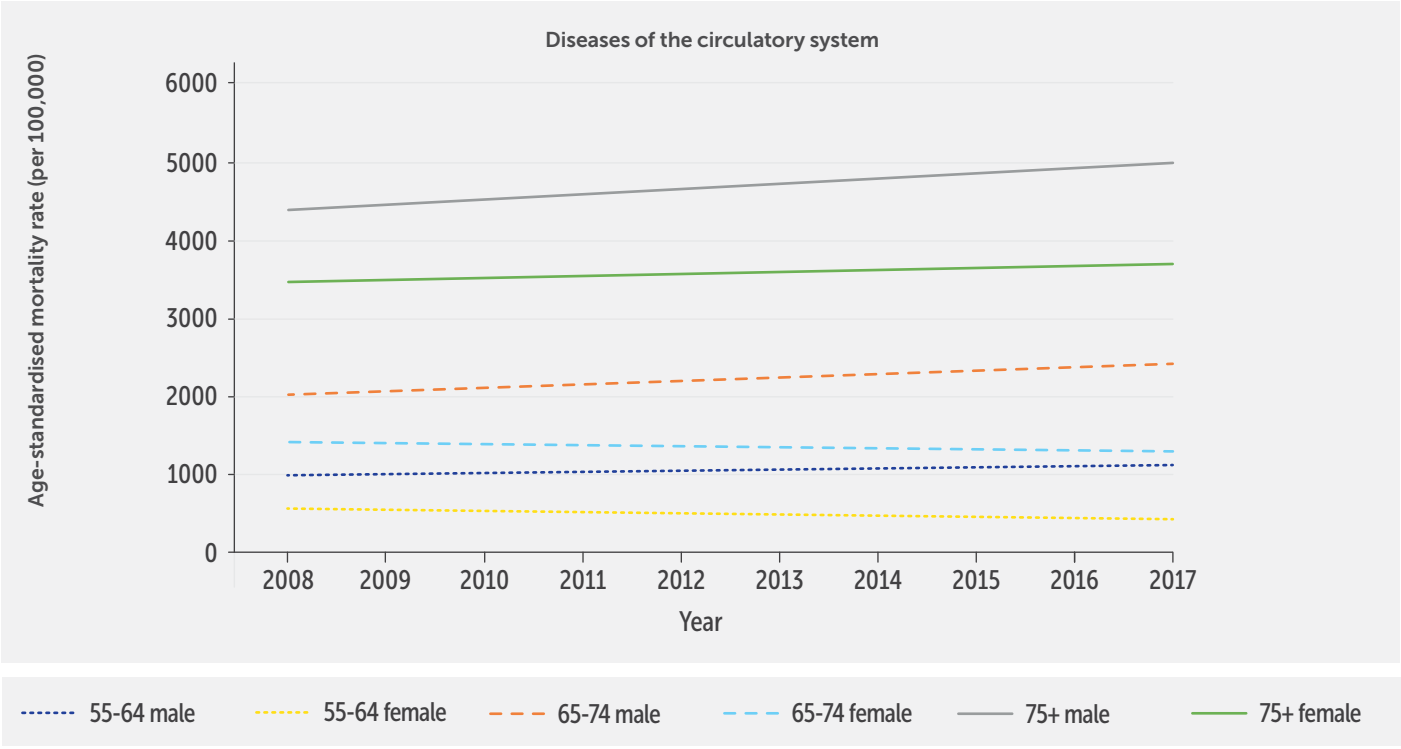


Fig 18b. Level and trends of age-standardised mortality rates by sex and age group for endocrine, nutritional and metabolic diseases in persons aged 55 years and over in Fiji, 2008–17.

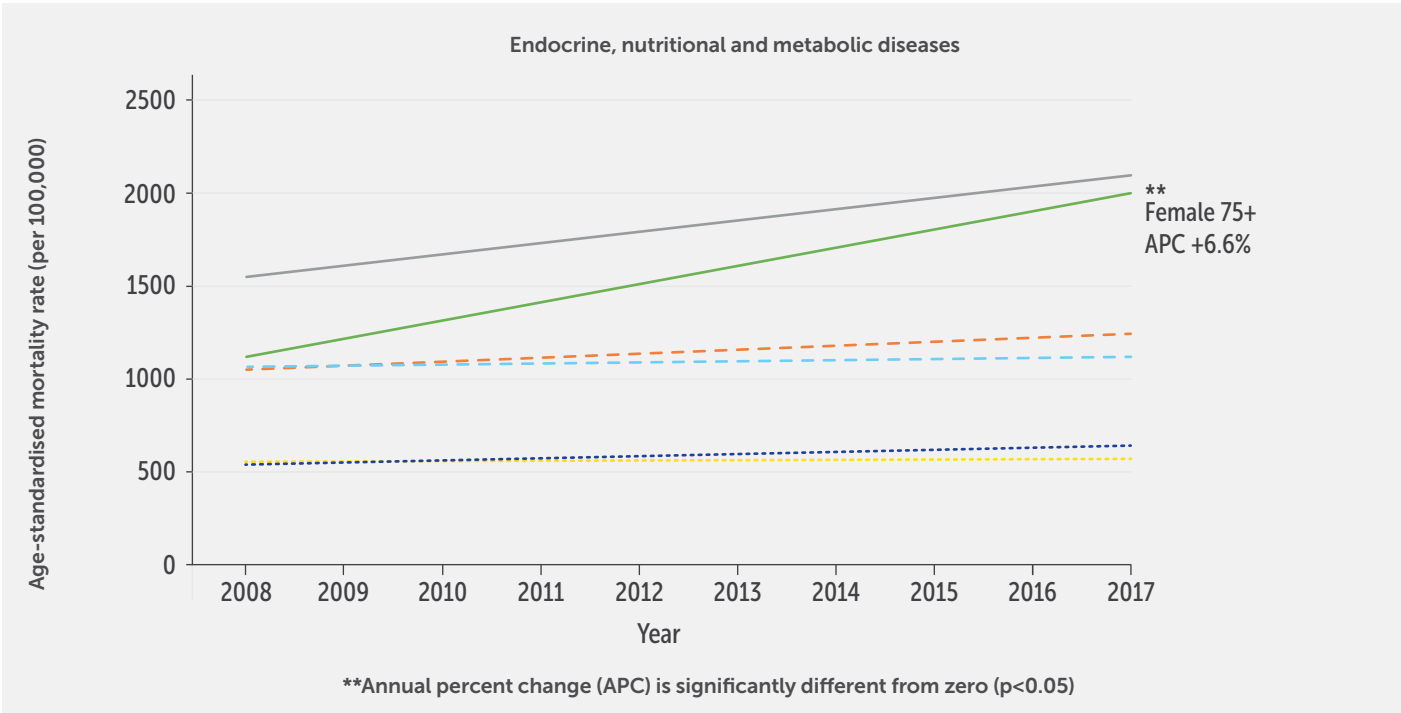
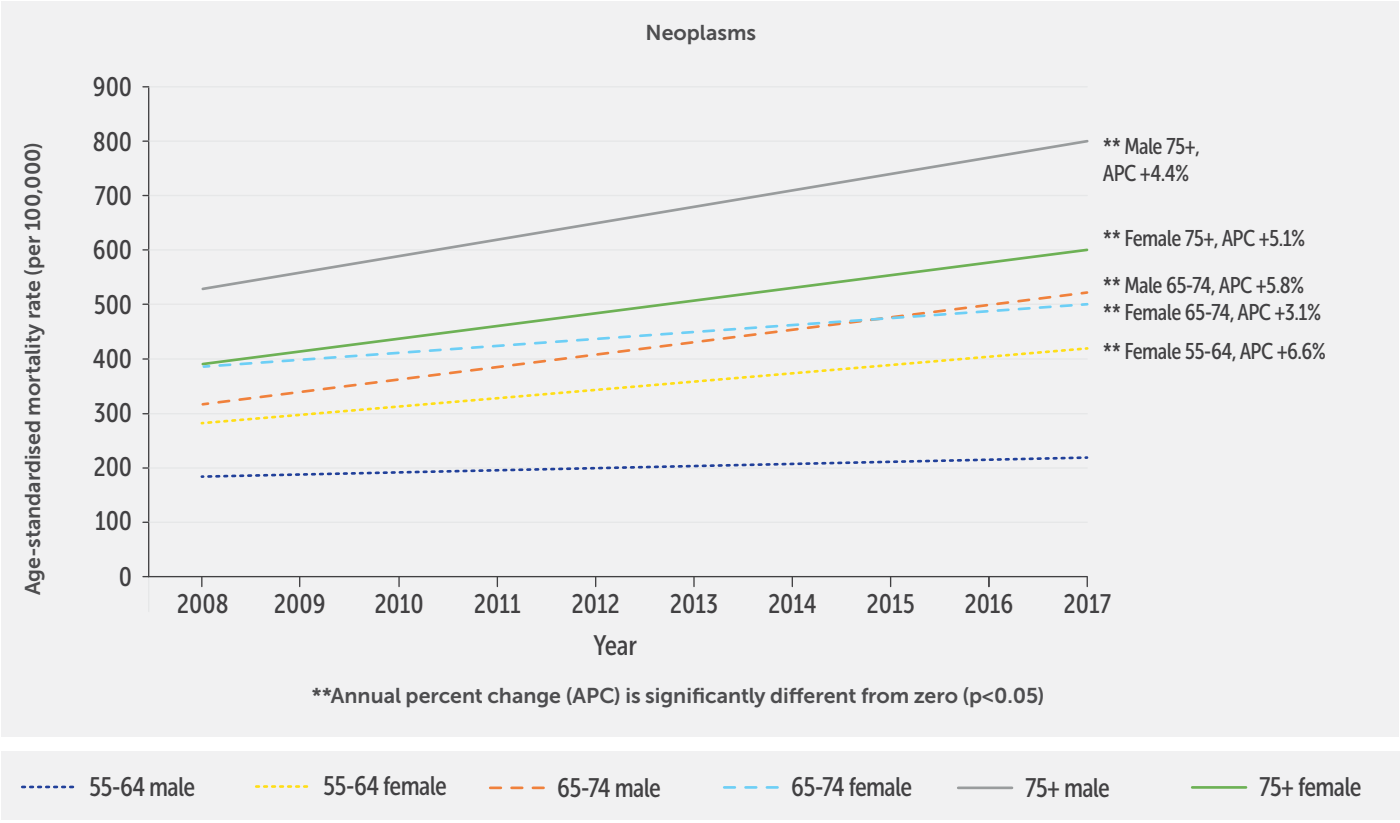


Fig 18c. Level and trends of age-standardised mortality rates by sex and age group for neoplasms in persons aged 55 years and over in Fiji, 2008–17.



2. Mapping health policies and strategies

KEY FINDINGS

- ➔ Fiji has a range of national policy documents which recognize, to some extent, the needs and rights of older persons
- ➔ Significant gaps exist in policy commitments that reflect the recommended State actions of Strategic Objective 3 ('Realigning Health Systems') of the WHO Global Strategy and Action Plan on Ageing and Health (2016–30)
- ➔ Existing health and disability policies lack detail, including an absence of resourcing implications, targets or benchmarks, and implementation plans
- ➔ Existing health and disability policies do not incorporate an evidence base underpinning policy commitment
- ➔ Evidence of implementation of many policy commitments relevant to the health of older persons is scarce (possibly due to a lack of monitoring frameworks)

A total of 13 government policies, plans or strategies were identified as encompassing issues potentially relevant to the health and social care needs of older persons ***(Annex 1).*** These documents were reviewed for content relevant to WHO's recommended State actions required to meet the components of Strategic Objective 3 'Aligning Health Systems to the Needs of Older Populations' of the WHO Global Strategy and Action Plan on Ageing and Health (2016–2030) (WHO, 2017).

The degree to which each of the WHO recommended State actions were reflected in national policies was allocated a status ("Not reflected", "Partially reflected", "Comprehensively reflected") and the specific policy and its relevant content documented. A "Comprehensively reflected") status indicated the presence of a clearly articulated national policy or strategy addressing the recommended action. "Partially reflected" indicated that policy(s) included some content relevant to the specific recommended action but lacked key elements or a plan for implementation. Finally, a "Not reflected" status indicated that no policy or strategy was found that addressed the recommended action. The policy mapping results are presented in ***Table 4.***

Policy and strategy strengths

A range of national policy documents recognized, to some extent, the needs and rights of older persons. These included the National Health Strategy (2016–20); National Development Plan (2017–36); and national policies or strategies on Gender (2014), Disability (2008–18) and Financial Inclusion (2016–20). Policy commitments relevant to each of the three components of the WHO global strategy's Strategic Objective 3 were noted, and 11 of the 19 more specific WHO recommended State actions were partially reflected within these policy commitments.

Despite having lapsed, Fiji's standalone ***National Policy on Ageing (2011–15)*** provided the ***most thorough consideration of healthy ageing issues*** reflecting the alignment of the health system to the needs of the older population. It also resulted in the establishing of the National Council for Older Persons, which remains active and has a mandate to co-ordinate across government on ageing issues. ***Gender dimensions of ageing were also well recognized within a number of policy documents.***

The National Policy on Ageing (2011–15) explicitly recognized that women make up a larger proportion of the older population and that they are more likely than men to be disadvantaged, particularly in rural areas. Similarly, the Fiji National Gender Policy (2014) mentioned older women in relation to a single, specific issue – security. By contrast the Ministry of Health's Annual Corporate Plan (2017–18) encompassed older women in a broad statement on gender equality, and on tailoring services to the needs of vulnerable groups.

Policy and strategy weaknesses and gaps

None of the WHO recommended actions for Strategic Objective 3 were comprehensively reflected within existing national policy or strategy frameworks.

Recommended actions with a notable absence of policy support included:

- Sustainably finance the programmes, services and systems realignment necessary to foster Healthy Ageing.
- Ensure availability of medical products, vaccines and technologies necessary to optimize older people's intrinsic capacities and functional abilities.
- Identify and implement evidence-based models of integrated care.
- Deliver community-based interventions to prevent functional decline and care dependency.
- Adopt and implement WHO guidelines on integrated care for older people.
- Ensure competencies in ageing (including those required for comprehensive Healthy Ageing assessments and integrated management of complex health care needs) of existing health professionals through pre- and in-service training.
- Ensure capacity of training institutions to establish/expand geriatric education.
- Ensure balanced distribution of workforce within countries and development of workforce to match demand for services.
- Provide opportunities for extending the roles of existing staff for delivering care for older people.

Where recommended actions were partially reflected in policy, the ***policy commitment was (in most cases) relatively broad***, simply noting "the elderly" as one of a number of "vulnerable groups" whose needs need to be addressed. ***Factors such as resourcing and targets/benchmarks were absent from the identified policy documents, as were implementation plans.*** Health policies lacked inclusion of an evidence base, such as: the specific health needs of older adults; their access to care; and provision (or gaps) in appropriate health services. Equally, the National Disability Policy (2008–18) did not include reference to prevalence and types of disability in older persons or their access to assistive devices.

Evidence of implementation of policy commitments

The following information relating to the implementation of policy commitments was identified from the peer reviewed and grey literature.

Action 3.1 Orient health systems around intrinsic capacity and functional ability

» Fiji Council of Social Services (FCOSS) has run a national forum on care for older persons (Chand et al. 2010)

» Variable availability of medicines in the private sector. No seasonal influenza vaccination; assistive devices not available outside Suva, and where available, are often unaffordable (World Health Organization 2016).

» National Council for Older Persons established in 2013, with primary function: "advise the Government on all aspects of ageing and the welfare of older persons." Provided a budget of 200,000 FJD per year (95,000 USD) (Anderson et al. 2017).

» FCOSS runs the 'HelpAge' programme on caring for older persons, health promotion and community needs assessment (Chand et al. 2010).

Action 3.2 Develop and ensure affordable access to quality older person centred and integrated clinical care

» Social Pension Scheme: monthly payment of 50 FJD (24 USD) for >66 years; less than one third of those eligible are enrolled (Anderson et al. 2017).

» 20% of those eligible for the Family Assistance Program are not enrolled; Fiji National Provident Fund payments are low, many opt for lump-sum over annuity including to pay for health care (Naidu et al. 2016).

» Residential facilities for older persons: 3 Government funded (Suva, Lautoka, Labasa, 50 people each) and 2 Church funded (with Government grant, Suva). All residents receive free routine medical checks (including eye and dental) and government-funded facilities include a doctor and nurses.

» Older persons eligible for 'Free Medicine Program', and subsidized services such as cancer screening and dialysis (Fiji Women's Rights Movement 2019).

» Fiji Cancer Society (FCS) and Kidney Foundation of Fiji both provide palliative care. FCS is piloting 'nurse Maude' approach that includes working with families and communities. Australasian Palliative Link International also provides some support (Spratt 2019).

Action 3.3 Ensure a sustainable and appropriately trained, deployed and managed health workforce

» Health staff trained in use of assistive devices (World Health Organization 2016).

» Essential Pain Management module taught at Fiji National University medical school. One-off training on Palliative Care also provided in 2016 by International Atomic Energy Agency (Spratt 2019).

» No specialized training for nurses in gerontology but Fiji National University provides certificate level training on caring for older adults (Anderson et al. 2017). One palliative Care Nurse employed by Ministry of Health and Medical Services (Spratt 2019). No trained gerontologists in Fiji (Anderson et al. 2017).

» Overall distribution of health workers versus need more equitable than many other low- and middle-income countries, however Eastern division has fewer nurses and doctors (Wiseman et al. 2017).

Table 4. Mapping national policies and strategies to the WHO Global Strategy and Action Plan on Ageing & Health (2016–2030), Strategic Objective 3

✗ Not reflected	✓ Partially reflected	✓ Comprehensively reflected

STRATEGIC OBJECTIVE & STATE ACTION	STATUS	WHERE REFLECTED IN POLICY / STRATEGY
3.1 Orient health systems around intrinsic capacity and functional ability		
Assess national health system responses to ageing populations and develop plans for realignment	✓	• NPA: Integrate provisions for older persons in all health sector planning and programming.
Sustainably finance the programmes, services and systems realignment necessary to foster Healthy Ageing	✗	
Adapt information systems to collect, analyse and report data on intrinsic capacity and trends in capacity	✓	• NPA: Improve understanding of the health status and needs of the older persons. • FNDP: Compile national data on all persons with disabilities. • NDP: Strengthen data gathering for baseline studies and analyses of the needs of children, elderly, people with disabilities and assessments of poverty • NCOPD: undertake research on the lifestyle and the needs of older persons in Fiji; and provide advice based on research findings to those involved in the development and implementation of policies on to the health, wellbeing and autonomy of older persons.
Ensure availability of medical products, vaccines and technologies necessary to optimize older people's intrinsic capacities and functional abilities	✗	• EML: includes medicines for common NCDs in older persons, but does not include essential medicines required for osteoporosis, dementia and macular degeneration.
Ensure collaboration between sectors, most importantly between health and social services, to address the needs of older people including those arising from mental disorders, dementia and cognitive declines and geriatric syndromes such as frailty, urinary incontinence, delirium and falls	✓	• NPA: Establish a National Council for Older Persons [for] coordinating both government and community programmes as well as providing a means to undertake research and address new and emerging issues [...]. • NDP: Targeted assistance will be provided to the vulnerable, including children living in poverty, children in orphanages and foster care, people with disabilities and special needs, and the elderly. • FNDP: Coordination between FNCDP and Ministry of Social Welfare to ensure community support, housing and social welfare for persons with a disability (older persons not specifically mentioned). • FNDP: Ensure development programs are inclusive of actions to assist elderly women, widows, and single mothers who are highly vulnerable to social economic pressures or disasters and who may have a high risk of poverty related diseases.
3.2 Develop and ensure affordable access to quality older person centred and integrated care		
Ensure that older people are provided with comprehensive assessments at the time of their engagement with the health system and periodically thereafter	✓	• ACP/AOP: Provide quality preventive, curative and rehabilitative health services responding to the needs of the Fijian population including vulnerable groups such as... elderly, those with disabilities and the disadvantaged.
Design systems to foster the self-management of older people	✓	• NPA: Develop awareness raising programmes on independent living principles including accessible housing and community facilities; Support the care-giving role of older persons, particularly older women. Greater integration and participation of older persons in decision -making, community affairs. • Three means of financial support for older persons: Fiji National Provident Fund (formal sector workers); Family Assistance Program (disability-related); Social Pension Scheme (poorer people). • Support schemes for people with disabilities: Food voucher; bus fare concession; taxi fare concession (20%); Housing assistance. • National Employment Centre Bill amended (2016) to facilitate skills training and job search support for unemployed, including retired persons.
Identify and implement evidence-based models of integrated care	✗	

Establish age-friendly infrastructure, service designs and processes	✓	• NPA: Review the extent and quality of institutional care provisions for older persons and develop standards. • FNGP: Recognise the special security requirements of women and girls including the young and the elderly. Ensure safe, equipped, confidential facilities for the provision of health care services which have adequate lighting, safe pathways, and protective infrastructure are available and maintained.
Develop services as close as possible to where older people live	✓	• NPA: Strengthen primary health care services to meet needs of older persons. • SP: Improve accessibility of primary health care services in urban, rural and remote areas.
Implement universal health coverage strategies to reduce out-of-pocket payments, wherever possible by extending population coverage, and widening the package of services that older people often need	✓	• EML: Medicines on Essential Medicines List (2015) provided free in public facilities • FMP: Allows specific disadvantaged groups to access essential medicines for free at private pharmacies.
Deliver community-based interventions to prevent functional decline and care dependency	✗	
Adopt and implement WHO guidelines on integrated care for older people	✗	
Ensure the continuum of care, including linkages with sexual health programmes, and availability of acute care, rehabilitation and palliative care	✓	• SP: Strengthen primary care and improve continuum of care for patients. • AOP: An increase in primary health care outcomes by expanding outreach programmes, improving continuum of care and improving quality and safety standards at health facilities.
3.3 Ensure a sustainable and appropriately trained, deployed and managed health workforce		
Ensure competencies on ageing and health are included in the curricula of all health professionals	✓	• NPA: Review training programmes for health professionals (including those working in psychiatric services) on the care and support of older persons. • NMPP: discusses upskilling of pharmacist in line with delivery of the essential medicines list.
Ensure competencies in ageing (including those required for comprehensive Healthy Ageing assessments and integrated management of complex health care needs) of existing health professionals through pre- and in-service training	✗	
Ensure capacity of training institutions to establish/expand geriatric education	✗	
Ensure balanced distribution of workforce within countries and development of workforce to match demand for services	✗	
Promote new workforce cadres (such as care coordinators, case managers, and community care workers)	✓	• NPA: Strengthen and promote training programmes for carers.
Provide opportunities for extending the roles of existing staff for delivering care for older people	✗	

ACP, Fiji Ministry of Health & Medical Services Annual Corporate Plan (2017–18); AOP, Fiji Ministry of Health & Medical Services Annual Operating Plan (2018–19); EML, Essential Medicines List (2015); FNDP, Fiji National Disability Policy (2008–18); FNGP, Fiji National Gender Policy (2014); NCDs, non-communicable disease; NCOPD, Fiji National Council of Older Persons Decree (2012); NDP, Fiji National Development Plan (2017–36); NMPP, Fiji National Medicinal Products Policy (2013); NPA, Fiji National Policy on Ageing (2011–15); SP, Fiji Ministry of Health & Medical Services National Strategic Plan (2016–20)

3. Evaluating user perspectives on priority health system responses to ageing

KEY FINDINGS

- There is a strong preference for community-based models of care (bringing the services to the people), including a need to ensure comprehensive rural reach
- Families and carers have a central role in the care of older adults at home, but lack the skills and resources to provide quality care
- Health workers generally have limited knowledge and skills related to the health care needs of older adults, reflecting scarce coverage of geriatric health in training curricula
- There is a need to strengthen political leadership on population ageing and to develop mechanisms to drive cross-sectoral coordination and implementation of healthy ageing policies, programs and services
- There is a need for services that address social needs (in addition to health) and for approaches that empower, include and engage older people
- Older men and women experience health care differently and are impacted differently by the social aspects of ageing

Common themes emerging from discussions

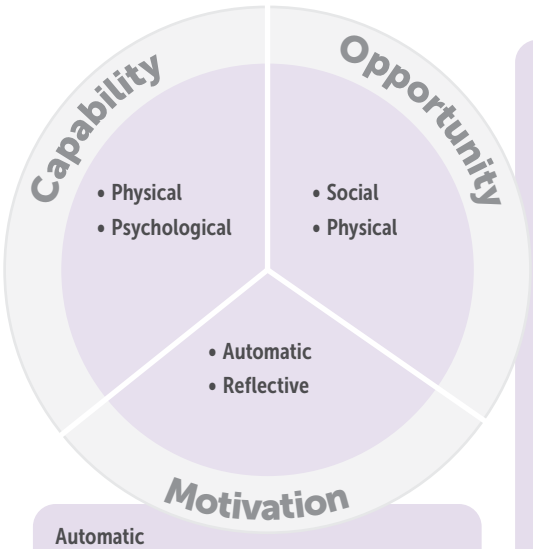
A total of 21 themes relating to health system barriers and facilitators to ageing well, and the unmet needs of older persons, caregivers and service providers, emerged from stakeholder discussions *(Figure 19).* The greatest number of themes related to the physical opportunity to achieve healthy ageing, followed by aspects of psychological capability to enact behaviours to support healthy ageing and reflective motivation (incorporating facets of optimism, beliefs and social identify).

Discussions revealed that ***poor health and disability impaired older adults' ability to seek health care, to socialise and to actively contribute to income generation.*** Older adults voiced preference for the ***provision of health and social services at village-level:*** accessibility issues (transport, roads, distance) were cited as barriers to seeking care, particularly in rural and maritime areas. ***An ill-equipped health workforce and under-resourced clinics*** influenced older adults' reluctance to use services, with many citing ***poor health worker attitudes*** and ***long wait times*** as deterrents.

Health workers and caregivers expressed ***limited knowledge and skills related to the health care needs of older adults*** and emphasised the need to ***better equip caregivers with the tools required to support older adults ageing at home.*** Older adults ***feared loneliness, loss of independence and family abandonment*** as they become more vulnerable with age.

Stakeholders from government and civil society organisations reflected on the ***absence of mechanisms to drive the cross-sectoral coordination and implementation of ageing-related policies.*** There was general recognition that ***existing health facilities and services were not adequately meeting the needs of older adults,*** and that ***health workers lacked the necessary training, education and resources*** to meet the broad spectrum of care health and social care needs of older adults. The themes that generated the most discussion within each of the three main stakeholder groups are outlined in *Table 5.*

Fig 19. Themes relating to health system barriers and facilitators to achieving healthy ageing in Fiji, identified during stakeholder discussions



Physical
- Disability/ill-health impedes access to care for older adults
- Disability/ill-health restricts older adults' ability to work and socialise

Psychological
- Mental health affects well-being and care-seeking of older adults
- Health worker knowledge and skills on health care needs of older adults
- Family and carers' knowledge/capacity to provide care for older adults
- Older persons' knowledge of available social and health services

Social
- Health worker attitudes and interactions with older adults
- Family attitudes and behaviour towards older relatives

Physical
- Preference for community-based services that target the health care needs of older adults
- Accessible transportas a key to obtaining appropriate care
- Poor access to essential medicines, mobility devices and health products
- Health care facilities and services not responsive to the needs of older adults
- Equipping carers to enhance healthy ageing
- The link between age-friendly environments & good health
- Impact of social welfare schemes on the quality of life of older adults and their families
- Policy environment lacks leadership, cross-sectoral coordination

Automatic
- Older adults' not seeing the need for health care; acceptance of dealth
- Family values and respect for older relatives directly influences quality of care received at home
- Health worker altriusm linked to proactive health care and social support

Reflection
- Older adults' fear of ageing: loneliness, independent, financial and carer support
- Dissatisfaction with care due to health worker attitudes and long facility wait time

Table 5. Themes generating most discussion within each of the three main stakeholder groups

Older persons & caregivers	Health workers	Government and CSO
1. Health worker attitudes and interactions with older adults	1. Family/ carer knowledge and capacity to provide care for older adults	1. Policy environment lacks leadership and mechanisms to drive cross-sectoral coordination and implementation
2. Older persons knowledge of available health & social services	2. Health worker knowledge and skills to manage the health care needs of older adults	2. Older persons knowledge of available health & social services
3. Accessible transport as key to obtaining appropriate care	3. Family/community attitudes and behaviour towards older adults	3. Family/carer knowledge and capacity to provide care for older adults
4. Older adults' fear of ageing, including loneliness, loss of independence, and financial and carer burden	4. Accessible transport as key to obtaining appropriate carex	4. Preference for community-based services that target the health care needs of older adults
5. Family/community attitudes and behaviour towards older adults	5. Health worker altruism linked to proactive health care and social support	5. Health care facilities and services not responsive to the needs of older adults
6. Impact of social welfare schemes on the quality of life of older adults and their families	6. Health care facilities and services not responsive to the needs of older adults	6. Health worker knowledge and skills to manage the health care needs of older adults
7. Preference for community-based services that target the health care needs of older adults	7. Family values and respect for older relatives directly influences quality of home-based care	7. Equipping carers to enhance ageing
8. Poor access to essential medicines, mobility devices and health products	8. Poor access to essential medicines, mobility devices and health products	8. Impact of social welfare schemes on the quality of life of older adults and their families

CSO, Civil Society Organisation

Discussion excerpts

Below are selected excerpts from discussions which highlight some of the key stakeholder reflections

Disability/ill-health restricts older adults' ability to work and socialise

I used to go frequently to the farm, but I cannot do that now because I get short of breath whenever I do rigorous work. I thought it was asthma, but the doctor says my heart is weak. (M, Indo-Fijian, 68)

Like before I could walk and go for a stroll, do some work and some gardening, now I cannot do these things. (F, iTaukei, 69)

Family and carers' knowledge and capacity to provide care for older adults

Taking care of older people is not an easy task. We need perseverance and a good heart... There isn't a lot of assistance by Government. It is left to us to care for our older family members. (F, iTaukei, 45).

Things such as first aid kits and diapers that would assist relatives in bathing and caring for the elderly. (F, Nurse, 34).

Sometimes, our families go through a lot of challenges and give up easily. So, their older family members become neglected. There should be support such as counselling and training offered to families caring for their relatives.

Family and community attitudes and behaviour towards older persons

It's how we think of the elderly today. Most of us perceive them to be burdensome and taking up a lot of our time to care for them. Before we didn't used to see disabled older people in the streets but now, we do. (F, Fijian, 63)

I think some of our children have become frustrated with the responsibility of caring for us and they don't consider our opinions now. They speak rudely and harshly to us. (M, Indo-Fijian, 70)

Policy environment lacks leadership and mechanisms to drive cross-sectoral coordination and implementation

I don't think there's been much evidence generated actually because I know about the last plan in policy it was just developed out of something drawn on an international convention, I can't remember which one. They drafted it that way. (F, Gov, 42) ... its [MHMS] strategies are quite general through the adult population and children. But it's very specific in children in different age levels; under one, under five. The strategies are quite specific there. Then adolescent strategy. But to the older persons, there's no health strategy. (M, Gov, 49)

We don't really, at the moment, have special packages targeting older people because we are looking at pure disease.... It is not only diseases that mostly affect older people and what is the scope of services we offer within that, you know? From prevention, providing secondary care and providing them the whole range of tertiary care that they're going to need as complications develop and looking after them in their home sand visiting them. (F, Gov, 42)

Older adults' fear of ageing: loneliness, loss of independence, financial and carer support

I fear that, as time passes, our children will not be able to look after us well and we might have to move to a nursing home. I do not like the idea... My wife and I will not be able to look after each other. I do not like it, but I fear that if it comes to that time, I will agree. (M, Indo-Fijian, 64)

Their biggest fear is facing this world alone. One time my mother asked us: if she grows older, are we going to take her to the home? So, their biggest fear is being alone. (F, iTaukei, 38)

IV. Learnings and Recommendations

Older Fijians are accounting for an increasing proportion of the national population. Undoubtedly, this demographic shift will present significant challenges for the health system. Older adults are more likely to have more complex health requirements than younger adults, including multiple chronic health conditions, and are therefore much more likely to need health care services. Population ageing is expected to result in an increase in the number of persons with disability, simply because disability becomes more common with age. In turn, we can expect to see a growing number of older persons with severe or profound activity limitation who require daily assistance with self-care, mobility or communication, and increased care responsibilities of family and other caregivers.

This scoping study reinforces that older Fijians experience higher rates of health service use than younger Fijians, including hospital admissions, emergency department presentations and use of outpatient clinics. The number of hospitalisations in older adults increased by 5.6% per year on average between 2014–2017. Admissions for cardiovascular conditions alone increased by 8.1% each year over the same period – a 7.4% annual increase in men and 10.2% annual increase in women. The most common underlying reasons for older Fijians being admitted to hospital were linked to the most prevalent chronic conditions (Vos et al. 2020): diabetes, cardiovascular diseases and respiratory conditions. Two of these three chronic conditions – diabetes and cardiovascular diseases – also comprised the leading causes of mortality in older adults. Cancer, the third leading cause of death among older Fijians, was the only condition for which mortality rates had increased significantly each year between 2008–2017 in all older persons, male and female, excepting males in the 55–74 years age group.

Despite the clearly high (and growing) demand for health services in the older Fijian population overall, significant inequities in access to health care among older adults were evident.

Older men in Fiji used health services notably more often than older women, although women experience higher rates of certain non-communicable diseases than men, including diabetes (Morrell et al. 2016) and cancers (Global Cancer Observatory: Cancer Today 2020), and only marginally lower rates of hypertension (Linhart et al. 2016). Older adults residing in urban areas exhibited more frequent use of facility-based health care than those in rural and maritime locations in 2017; older women living rurally were the least frequent users of facility-based health services. Although communities in rural and maritime locations are more likely to be served by nurse-led outreach clinics, an understanding of the reach of such services among older adults is hindered by an absence of electronic patient screening and management data. A lack of routinely collected ethnicity data in health records, along with disaggregated primary health care clinic data, further prevents more detailed analysis of health equity among older Fijians. However, the geographic and gender-based inequities identified here signal the presence of strong barriers to care for older adults within more marginalised population groups.

Consultation with government representatives, health care providers (both government and non-government), older adults living in the community and their family provides some insight into how Fiji's health system can better meet the needs of older adults. There was recognition of need to strengthen requisite geriatric health care skills and knowledge of the health workforce, both current and future. Notably, this extended to the community health workforce – the first line of contact with the health system for much of the of the community – who felt both under-skilled and under-resourced to address the basic health care needs of older adults living in the community.

Informal family and community caregivers of older adults expressed a need for improved access to educational resources, training and basic health supplies to support their provision of care at home, and clearer pathways to referral and support services.

Participating older adults questioned the age-friendliness of facility-based health services, included physical infrastructure, timing of outpatient services and, in some situations, patient care behaviours and attitudes of health care personnel. While integrated care models and other initiatives specifically addressing the health care needs of older adults were scarce overall (including a notable absence of programs to prevent functional decline and care dependence), where these were available – for example, the Free Medicines Program – community awareness was limited, and accessibility barriers hindered their use.

The integral role of non-government organisations (NGOs) and civil society groups in the provision of social support and mobility aids for older Fijians was highlighted. Certain NGOs (including Fiji Red Cross Society), church-based groups and women's groups were identified as offering mobility aids, peer support/home visits, food packages and transport services for some older adults living in the community. However, resource limitations meant that these services were delivered on an ad hoc basis and in selected geographic locations only. Despite NGOs and civil society groups having the potential to fill recognised service-delivery gaps, limited coordination with public sector health services restricted their ability to systematically engage with older adults and communities with pre-identified care requirements.

At the foundation of this misalignment was a noted absence of mechanisms to effectively drive a multi-sectoral response to population ageing. Although the Fiji National Council for Older Persons (active since 2012) holds a remit of strengthening multisectoral partnership and collaboration to enhance opportunities for healthy ageing for all Fijians, their impact has been hindered by limited political leadership on ageing policy issues, availability of practical context-appropriate models, tools and accountability frameworks to support implementation of multisectoral action, and an inability to mobilise the required financial and other resources to operationalise the national ageing policy framework. While a diversity of national policy documents recognized the needs and rights of older persons in some regard, significant policy-implementation gaps were evident and exacerbated by a lack of strategic implementation plans and monitoring frameworks.

Key Recommendations

In consideration of the potentially wide-reaching application of the findings of this study, we have structured our recommendations into three categories:

- Recommendations for the Fiji Ministry of Health & Medical Services to strengthen an effective health system response to healthy ageing in Fiji;
- Recommendations for the review of the Fiji National Policy on Ageing; and
- Priority areas for additional evidence generation.

To shape and lead an effective health system response to healthy ageing in Fiji, we recommend that the *Ministry of Health & Medical Services* take action in the following areas:

1) *Embed context- and resource-appropriate components of clinical and social gerontology into training curricula* for doctors, nurses and community health workers, including continuing professional development.
2) *Review the acceptability and accessibility of health clinics for older adults*, including physical infrastructure, timing of outpatient services, and age-friendly patient care behaviours and attitudes of health care personnel.
3) *Establish integrated community-based chronic disease screening, prevention and management services for older adults*, incorporating cognitive and functional assessment. Such services should be supported by a digitally enabled monitoring system that permits disaggregation of data to inform planning and improvement of equitable health programs and services for older adults.
4) *Explore innovative approaches to empowering community/family and caregivers* to monitor and address basic health care needs of older adults living in the community, including easily navigable referral links to available support services.
5) *Improve the availability and accessibility of mobility devices and high-demand disposable health care supplies* (including dressings, bandages and incontinence products) for older adults living in the community and their caregivers.

To promote a coordinated, multi-sectoral response to population ageing, a comprehensive *National Policy on Ageing* should incorporate the following key focus areas:

1) *Reinforce political leadership on population ageing,* including the reflection of national ageing policy commitments in ministerial strategic planning with budget and resource allocation.
2) *Develop effective mechanisms to drive multi-sectoral coordination and implementation of healthy ageing policies, programs and services,* incorporating strong community partnership to ensure the meaningful engagement of older persons, their families and community.
3) *Promote awareness of special initiatives for older persons, especially in rural and remote areas,* including social security, social welfare, health care subsidies and programs, non-formal support services and residential aged care facilities.
4) *Reduce inequalities in healthy ageing,* with a focus on marginalised population groups.
5) *Include a monitoring framework,* which incorporates the development and evaluation of strategic implementation plans.

Significant evidence gaps relating to the population experience of ageing and models of health and social care in the Pacific Islands context remain. Direct evidence for such responses in low- and middle-income settings (including small island nations) is limited and generalization from higher income settings may not be appropriate. We recommend the following ***priorities for future research*** in Fiji to aid the planning, implementation, and evaluation of context-relevant health system interventions to support healthy ageing:

1) What is driving inequalities and inequities in the uptake of health care services by older adults, thereby hindering the attainment of universal health coverage?
2) What resource-appropriate models of integrated health (and social) care for older Fijians are acceptable to patients and their families, and both clinically - and cost-effective?
3) What is the ideal health workforce team composition for the provision of comprehensive care for older adults?
4) How can government-NGO partnerships best work in Fiji to provide services and resources for older adults?
5) How can technology be harnessed to improve support for family and caregivers of older adults living in the community, and strengthen links between communities and health and support services?

References

Anderson, I. and Irava, W. (2017). "The Implications of Aging on the Health Systems of the Pacific Islands: Challenges and Opportunities." Health Syst Reform 3(3): 191-202.

Chand, A. and Naidu, S. (2010). "The Role of the Fiji Council of Social Services in Service Delivery in Fiji : Some thoughts." Fijian Studies 8(1): 129-143.

Chang, A. Y., Skirbekk, V. F. S., Tyrovolas, S., Kassebaum, N. J. and Dieleman, J. L. (2019). "Measuring population ageing: an analysis of the Global Burden of Disease Study 2017." The Lancet Public Health 4(3): e159-e167.

Fiji Bureau of Statistics. (2018). "2017 Fiji Population and Housing Census: Release 1." from www.statsfiji.gov.fj.

Fiji Ministry of Health & Medical Services (2020). Strategic Plan 2020–2025. Suva, MHMS.

Fiji Women's Rights Movement (2019). Factsheet One: Social Protection Schemes in Fiji. Suva, Fiji, Fiji Women's Rights movement.

Global Cancer Observatory: Cancer Today (2020). Lyon, France, International Agency for Research on Cancer.

Hayes, G. (2009). Population Ageing in the Pacific Islands: A Situation Analysis, UNFPA Sub-Regional Office Suva, Fiji.

Lin, S., Tukana, I., Linhart, C., Morrell, S., Taylor, R., Vatucawaqa, P., Magliano, D. J. and Zimmet, P. (2016). "Diabetes and obesity trends in Fiji over 30years." J Diabetes 8(4): 533-543.

Linhart, C., Tukana, I., Lin, S., Taylor, R., Morrell, S., Vatucawaqa, P., Magliano, D. J. and Zimmet, P. (2016). "Continued increases in hypertension over three decades in Fiji, and the influence of obesity." Journal of hypertension 34(3): 402-409.

Michie, S., van Stralen, M. M. and West, R. (2011). "The behaviour change wheel: a new method for characterising and designing behaviour change interventions." Implement Sci 6: 42.

Morrell, S., Lin, S., Tukana, I., Linhart, C., Taylor, R., Vatucawaqa, P., Magliano, D. J. and Zimmet, P. (2016). "Diabetes incidence and projections from prevalence surveys in Fiji." Population Health Metrics 14(1): 45.

Naidu, V., Plange, N.-K. and Axhary, P. (2016). Income Security for Older Persons in Fiji. Bangkok, UN-ESCAP Social Development Division.

Spratt, J. (2019). Palliative Care in the Pacific: initial research.

United Nations Population Fund Pacific Sub-Regional Office (2014). Population and Development Profiles: Pacific Island Countries. Suva, Fiji, United Nations Population Fund.

GBD 2019 Diseases and Injuries Collaborators. (2020). Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet 396(10258):1204-1222.

Wiseman, V., Lagarde, M., Batura, N., Lin, S., Irava, W. and Roberts G. (2017). "Measuring inequalities in the distribution of the Fiji Health Workforce." Int J Equity Health 16(1): 115.

World Bank (2016). Live Long and Prosper: Aging in East Asia and Pacific. Washington, DC, World Bank.

World Health Organization (2011). Global status reporton noncommunicable diseases 2010. Geneva, World Health Organization.

World Health Organization (2016). Older people's access to medicines and assistive devices in the Western Pacific Region. Manila, WHO Regional Office for the Western Pacific.

World Health Organization (2017). Global strategy and action plan on ageing and health. Geneva, World Health Organization.

Annexes

Annex 1: List of documents included in the policy review

Policy or strategy document	
Fiji National Disability Policy (2008–18)	Fiji National Financial Inclusion Strategy (2016–20)
Fiji National Policy on Ageing (2011–15)	Fiji Ministry of Health & Medical Services National Strategic Plan (2016–20)
Fiji National Provident Fund Decree (2011)	Fiji National Development Plan (2017–36)
Fiji National Council for Older Persons Decree (2012)	Fiji Ministry of Health & Medical Services Annual Corporate Plan (2017–18)
Fiji Constitution (2013)	Fiji Ministry of Health & Medical Services Annual Operating Plan (2018–19)
Fiji National Medicinal Products Policy (2013)	
Fiji National Gender Policy (2014)	
Fiji Free Medicines Program Standard Operating Procedure (2015)	

Annex 2: Data on hospital admissions and outpatient presentations

Table. Hospital admissions for persons aged 55 years and over, Fiji, 2014–2017

	Total, n (%)	Male, n (%)	Female, n (%)
Admissions*	**39,414 (21)#**	**21,308 (30)#**	**18,107 (15)#**
55–64 years	19,678 (50)	11,062 (52)	8615 (48)
65–74 years	13,820 (35)	7358 (35)	6462 (36)
≥75 years	5916 (15)	2886 (14)	3030 (17)
Facility			
CWM Divisional Hospital	19,313 (49)	8792 (41)	10,520 (58)
Labasa Divisional Hospital	6310 (16)	2776 (13)	3534 (20)
Lautoka Divisional Hospital	11,419 (29)	5507 (26)	5912 (33)
Nabouwalu Sub Divisional Hospital	118 (0.3)	44 (0.2)	74 (0.4)
Nadi Sub Divisional Hospital	2062 (5)	892 (4)	1170 (7)
Rakiraki Sub Divisional Hospital	11 (<0.0)	3 (<0.0)	8 (<0.0)
Savusavu Sub Divisional Hospital	10 (<0.0)	2 (<0.0)	8 (<0.0)
Sigatoka Sub Divisional Hospital	44 (0.1)	31 (0.1)	13 (0.1)
St Giles Psychiatric Hospital	106 (0.3)	53 (0.2)	53 (0.3)
Taveuni Sub Divisional Hospital	19 (<0.0)	7 (<0.0)	12 (0.1)
Vunidawa Sub Divisional Hospital	2 (<0.0)	-	2 (<0.0)
Rurality of residence			
Urban	34,486 (87)	18,421 (86)	16,064 (87)
Rural	4137 (10)	2414 (11)	1723 (9)
Maritime	589 (1)	352 (2)	237 (1)
Overseas	202 (1)	119 (1)	83 (0.5)
Principal diagnosis (ICD-10)			
Infectious & Parasitic Diseases (A00-B99)	3594 (9)	1606 (8)	1988 (11)
Cancers (C00-D48)	2919 (7)	1071 (5)	1848 (10)
Endocrine, nutritional and metabolic diseases (E00-E90)	4013 (10)	2108 (10)	1905 (11)
Circulatory system diseases (I00-I99)	8439 (21)	5198 (24)	3241 (18)
Respiratory system diseases (J00-J99)	4081 (10)	2188 (10)	1893 (10)

Column percentages reported, i.e. proportion of total, male and female admissions.

*Sex data missing for four presentations.

#Proportion of total (all ages) admissions (total, male and female) for the period 2014–17 (N = 192,001).

Table. Hospitalisation rate (age-standardised) per 1,000 population, persons aged 55 years and over, Fiji, 2017

	Hospital admissions, n			Per 1,000 population		
	Total	Male	Female	Total	Male	Female
Age group						
55–64 years	5274	2933	2340	76	83	67
65–74 years	3732	1957	1775	104	114	94
≥75 years	1678	814	864	123	136	113
All ≥55 years	10684	5704	4979	89	98	81
Division of residence						
Central	4885	2589	2296	106	117	96
Northern	1908	1044	864	94	99	83
Western	3658	1921	1737	79	86	73
Eastern	157	95	62	24	28	20
Rurality of residence						
Urban	9,284	4871	4413	141	162	123
Rural/Maritime	1,324	778	546	23	27	19

Table. Outpatient clinic presentations for persons aged 55 years and over, Fiji, 2017.

	Total, n (%)	Male, n (%)	Female, n (%)
Outpatient visits	**199,056 (25)#**	**98,023 (28)#**	**101,029 (22)#**
55–64 years	103,511* (52)	51,225 (52)	52,282 (52)
65–74 years	68,315 (34)	33,389 (34)	34,926 (35)
≥75 years	27,230 (14)	13,409 (14)	13,821 (14)
Facility			
CWM Divisional Hospital	50,245 (25)	25,449 (26	24,792 (25)
Labasa Divisional Hospital	69,702 (35)	34,807 (36)	34,895 (35)
Labasa Health Center	1 (<0.0)	1 (<0.0)	-
Lautoka Divisional Hospital	52,029 (26)	24,712 (25)	27,317 (27)
Ministry of Health Headquarters	1 (<0.0)	-	1 (<0.0)
Nabouwalu Sub Divisional Hospital	244 (0.1)	151 (0.2)	93 (0.1)
Nadi Sub Divisional Hospital	11,221 (6)	4757 (5)	6464 (6)
Nausori Health Centre	1622 (0.8)	941 (1)	681 (1)
Savusavu Sub Divisional Hospital	70 (<0.0)	48 (<0.0)	22 (<0.0)
Seaqaqa Health Centre	1884 (1)	926 (1)	958 (1)
Sigatoka Sub Divisional Hospital	6857 (3)	3496 (4)	3361 (3)
St Giles Psychiatric Hospital	819 (0.4)	341 (0.3)	478 (0.5)
Taveuni Sub Divisional Hospital	1618 (1)	871 (1)	747 (1)
Vunidawa Sub Divisional Hospital	69 (<0.0)	40 (<0.0)	29 (<0.0)
Vunisea Sub Divisional Hospital	2 (<0.0)	-	2 (<0.0)
Wainibokasi Sub Divisional Hospital	2672 (1)	1483 (2)	1189 (1)
Rurality of residence			
Urban	181,373 (91)	88,738 (91)	92,631 (92)
Rural	16,781 (8)	8737 (9)	8044 (8)
Maritime	598 (0.3)	339 (0.3)	259 (0.3)
Overseas	304 (0.2)	209 (0.2)	95 (0.1)
Specialty clinic			
GOPD	37,635 (19)	18,095 (18)	19,540 (19)
A&E	24,728 (12)	13,805 (14)	10,923 (11)
General*	9383 (11)	4205 (12)	5178 (10)
Medical	17,706 (9)	8386 (9)	9320 (9)
Circulatory system related clinics	11,384 (6)	5351 (5)	6033 (6)
Diabetes related clinics	7524 (4)	2730 (3)	4794 (5)
GOPD -Eye	22,327 (5)	11,915 (4)	10,411 (5)

Column percentages reported, i.e. proportion of total, male and female presentations.

*Sex data missing for one presentation.

#Proportion of total (all ages) presentations (total, male and female) in 2017 (N = 807,780).

Table: Outpatient presentation rate (age-standardised) per 1,000 population, by age group, Fiji, 2017

	Outpatient presentations, n			Per 1,000 population		
Age group	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
<55 years	608,724	256,340	352,371	797	657	947
55–64 years	103,511	51,225	52,282	1484	1451	1501
65–74 years	68,315	33,389	34,926	1899	1952	1852
≥75 years	27,230	13,409	13,821	1993	2236	1813
All ≥55 years	199,056	98,023	101,029	1667	1678	1648

Annex 3: Proportion of population aged 55 years and older, by province, Fiji

Table: Proportion of population aged 55 years and older, by province and quartile. Data source: 2017 Population and Housing Census.

Province	Population aged ≥55 years (%)	Quartile
Naitasiri	12.7	Q1
Cakaudrove	13.0	Q1
Rewa	13.1	Q2
Serua/Namosi	13.1	Q2
Lomaiviti	13.4	Q2
Tailevu	13.6	Q2
Bua	13.8	Q2
Kadavu	13.9	Q2
Nadroga/Navosa	14.4	Q3
Ba	14.4	Q3
Ra	14.7	Q3
Macuata	15.7	Q3
Lau	16.4	Q4
Rotuma	21.2	Q4

Annex 4: Age-standardised mortality rates, 55 years and older, Fiji (2008–17)

Table: Age-Standardised mortality rates for Fijian men and women aged 55 year and older, for top six causes of death. Data source: Fiji Civil Registration and Vital Statistics

	Age-standardised mortality rates (95 CI)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Diseases of the circulatory system										
Male	1483 (1386 – 1585)	1793 (1686 – 1905)	1934 (1823 – 2050)	1622 (1520 – 1729)	1637 (1535 – 1745)	1809 (1701 – 1921)	1814 (1706 – 1926)	1720 (1615 – 1829)	2023 (1909 – 2142)	1814 (1706 – 1926)
Female	1051 (973 – 1134)	1303 (1216 – 1394)	1485 (1392 – 1582)	1173 (1091 – 1260)	1030 (952 – 1111)	1179 (1097 – 1266)	1182 (1100 – 1270)	1073 (995 – 1157)	1307 (1220 – 1399)	1129 (1049 – 1215)
Endocrine, nutritional and metabolic diseases										
Male	812 (740 – 888)	721 (654 – 793)	498 (443 – 559)	978 (899 – 1062)	993 (914 – 1078)	966 (888 – 1049)	886 (811 – 965)	937 (860 – 1019)	983 (904 – 1067)	836 (763 – 913)
Female	831 (762 – 905)	721 (656 – 789)	502 (449 – 560)	1003 (927 – 1084)	925 (852 – 1003)	825 (756 – 899)	962 (888 – 1042)	891 (819 – 967)	919 (846 – 996)	866 (795 – 941)
Neoplasms										
Male	253 (214 – 298)	283 (241 – 329)	243 (205 – 287)	329 (284 – 379)	303 (260 – 351)	327 (282 – 377)	307 (263 – 355)	324 (279 – 373)	375 (327 – 428)	367 (319 – 419)
Female	328 (285 – 375)	346 (302 – 395)	323 (280 – 370)	373 (327 – 423)	393 (346 – 445)	406 (358 – 458)	393 (346 – 445)	424 (375 – 478)	441 (392 – 496)	470 (418 – 526)
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified										
Male	281 (240 – 327)	168 (136 – 205)	192 (158 – 231)	104 (80 – 134)	183 (150 – 221)	135 (107 – 169)	154 (124 – 189)	149 (119 – 184)	170 (138 – 206)	140 (112 – 174)
Female	363 (318 – 413)	206 (172 – 244)	220 (185 – 259)	147 (118 – 179)	198 (165 – 236)	153 (124 – 186)	165 (135 – 200)	151 (123 – 185)	184 (152 – 220)	164 (134 – 198)
Diseases of the respiratory system										
Male	183 (150 – 221)	221 (184 – 263)	197 (163 – 236)	219 (183 – 261)	218 (181 – 259)	255 (216 – 300)	298 (255 – 346)	284 (243 – 331)	257 (217 – 301)	230 (192 – 272)
Female	103 (80 – 131)	112 (88 – 141)	112 (88 – 141)	101 (78 – 129)	140 (113 – 173)	106 (82 – 134)	133 (106 – 164)	114 (89 – 143)	131 (105 – 162)	120 (95 – 150)
Certain infectious and parasitic diseases										
Male	144 (115 – 178)	185 (152 – 223)	199 (164 – 238)	168 (136 – 205)	168 (136 – 205)	166 (135 – 203)	190 (156 – 229)	176 (144 – 214)	209 (174 – 249)	176 (144 – 214)
Female	145 (117 – 178)	151 (123 – 185)	168 (138 – 203)	140 (113 – 173)	144 (116 – 176)	142 (114 – 174)	198 (165 – 236)	175 (144 – 210)	164 (134 – 198)	168 (138 – 203)

CI: Confidence Interval

HEALTH SYSTEM RESPONSES TO POPULATION AGEING IN FIJI

Identifying policy, program and service priorities

April 2022

The George Institute for Global Health
UNSW SYDNEY
FIJI NATIONAL UNIVERSITY
MINISTRY OF HEALTH & MEDICAL SERVICES
Pacific Community
Communauté du Pacifique