Australian Government

Department of Infrastructure, Regional Development and Cities

# Norfolk Island Health Service
# Public Discussion Paper

Norfolk Island Health and Residential Aged Care Services — facilities replacement project

# What is this discussion paper about?

The Australian Government provided funding in the 2018-19 Budget to develop a business case for the redevelopment of the health and aged care facilities of the Norfolk Island Hospital and Residential Aged Care Service.

This discussion paper is aimed at providing information to the community to inform discussions on the type of health and aged care services that may be needed and provided in the future. This will inform the type of facilities required.

The input of the community is required so that the expressed needs for the community are understood.

This co-designed approach in collaboration with the community is being used to inform decisions on the type of health and aged care services that could be provided.

Please take some time to consider the information and provide us with some of your thoughts.

This discussion paper can be found at www.regional.gov.au/NI-MPS-project.

# What is a Health Service Plan?

The health service plan aims to describe the most effective use of available and future health resources to:

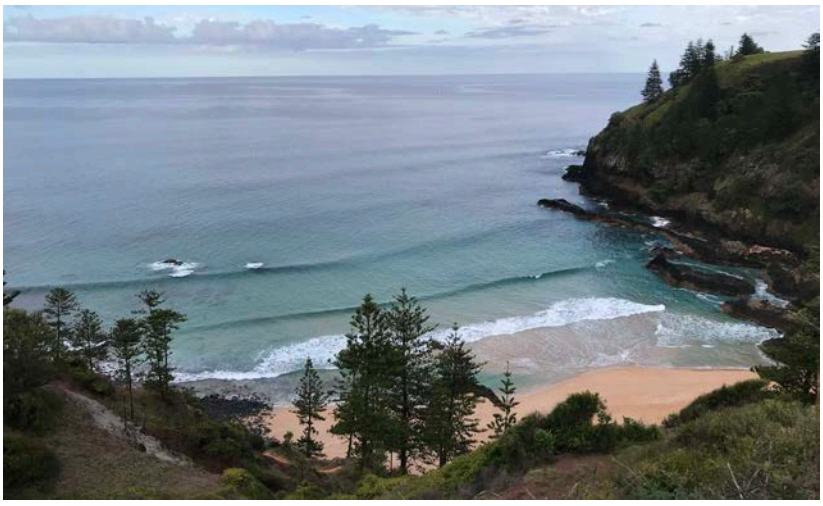
- improve the health of the community
- improve access to appropriate health care services which are targeted to the changing needs of the community
- improve the sustainability of service delivery
- continue to provide a skilled and well supported workforce.

## Why is it needed?

To ensure the health services on Norfolk Island can meet the needs of the community now and into the future, planning and investment in infrastructure, facilities, service design and workforce is required.

The development of a health service plan is designed to respond to current and future challenges facing the community to ensure safe, high quality health services are provided now and into the future.

Consultation with the community and understanding local experiences is central to the design and development of this service plan. Understanding and capturing the unique context and culture of Norfolk Island, along with documenting the key health factors and challenges facing the Norfolk Island community is paramount to this health service plan.



## The Planning Process

The delivery of new infrastructure requires a careful and deliberate approach to planning. This is required to ensure that the:

- built facilities are tailored to the specific needs of the community
- budget is appropriate for the scope of the project and local conditions
- timeline is set to account for the expected duration of the project inclusive of the unique logistical challenges of construction on Norfolk Island.

The planning process is defined in the Commonwealth Property Framework, involves a two-stage capital works approval process by government. This is a methodical approach to developing the scope and cost estimate associated with the project, whilst reducing risk and increasing cost certainty.

In addition to the two-stage government approval process, parliamentary approval will also be required prior to undertaking any construction works.

The Department of Infrastructure, Regional Development and Cities is currently working to prepare a submission to government for the first stage of the capital works approval process – an Initial Business Case. Once approved by government, major infrastructure projects typically take two years of further consultation and design before a second submission to government is completed – a detailed business case. Subsequent to this, Parliament will consider the works, giving the final approval for construction. Once construction commences, the construction phase can be expected to take 2-3 years.

Further information on the planning process including Commonwealth policies and processes can be obtained at the relevant links below:

**Commonwealth Procurement Rules**
https://www.finance.gov.au/procurement/commonwealth-procurement-rules/

**RMG 500 – Commonwealth Property Management Framework**
https://www.finance.gov.au/property-management-framework/

**Parliamentary Standing Committee on Public Works**
https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Public_Works

## Your Community

**Discussion questions:**

- How do you see the Norfolk Island population changing over time?
- What are the most highly valued characteristics of the Norfolk Island community?

Norfolk Island is an external Australian territory in the Pacific Ocean about 1,600 km northeast of Sydney. Norfolk Island is one of Australia's most isolated communities and one of its oldest territories, having been settled six weeks after Australia's founding settlement at Sydney, New South Wales.

Norfolk Island has a population of 1,748 (ABS 2016), with approximately 20 per cent identifying as having Pitcairn ancestry. This compares with a population of 1,796 in 2011 (Norfolk Island Government Census) and 2,601 in 2001.

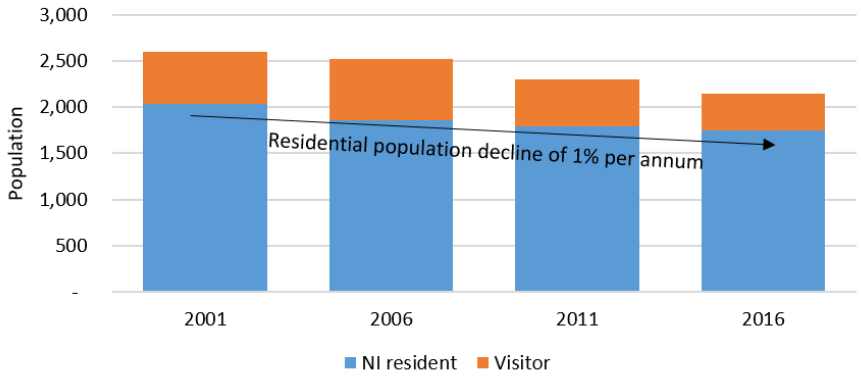
The main language on Norfolk Island is English, but many Norfolk Islanders speak the local language Norf'k which is a mix of Tahitian and Old English from the Bounty descendants.

## Population

The 2016 Census recorded a total population of 2,140 people, comprising a residential population of 1,748 people (82 per cent) and a visitor population of 392 people (18 per cent).

This is a decline in the residential population of 289 people (16 per cent) since 2001 at a rate of 1 per cent per annum (Figure 1).

**Figure 1: Norfolk Island resident and visitor population 2001-2016 (Source: NI Census 2001-2011, ABS Census 2016)**




## Age profile

The age profile of Norfolk Island residents has some significant differences to the average Australian population with:

- a larger proportion of adults aged 55 years and older, 41 per cent compared with 27 per cent of the Australian population
- a smaller proportion of people aged 15-34 years, 13 per cent with compared with 27 per cent of the Australian population (Figure 2)
- the proportion of residents in older age groups is increasing with 45 per cent of residents aged over 50 years in 2016 compared to 38 per cent in 2006 (Figure 3).

The higher proportion of residents in older age groups is an important factor to consider when planning for future health services, as health service usage typically increases as age advances.

**Figure 2: Population distribution by age group, Australia and Norfolk Island 2016 (Source: ABS Census 2016)**

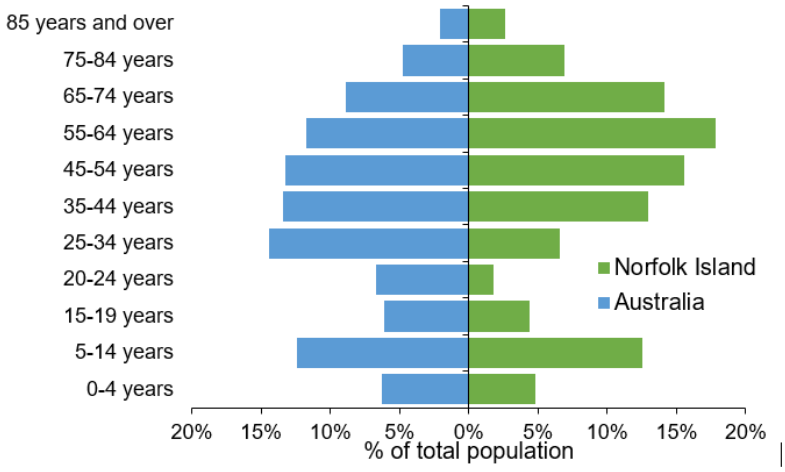
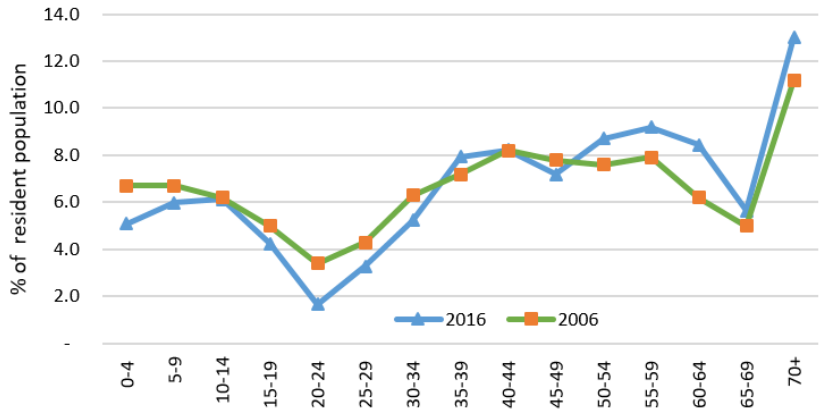


**Figure 3: Proportion of Norfolk Island residential population by age group 2006 and 2016. (Source: ABS Census 2016, Norfolk Island: Census of Population and Housing – 2006)**




## Other community characteristics

The Norfolk Island community reflects several of the characteristics of other isolated communities. Some of the census data can be used to measure some of these:

- There is a low proportion of Norfolk Island residents across all age groups that report requiring assistance with core activities of living. This includes assistance with self-care, mobility or communication because of a disability, long-term health condition (lasting six months or more) or old age. In particular only 22 per cent of residents aged 85 years or older, compared with 47 per cent for all Australians (Figure 4).
- There are high rates of community involvement with a higher proportion of the population providing unpaid assistance to a person with a disability - 13 per cent compared with 11 per cent for the Australian population (Figure 5).
- A high proportion of the population that provides Voluntary Work for an Organisation or Group – 35 per cent compared with 19 per cent for the Australian population (Figure 6).

These measures reflect the high level of community involvement and support that is available.

**Figure 4: Proportion of the population by age that has a Core Activity Need for Assistance by Age (Source: ABS Census 2016)**

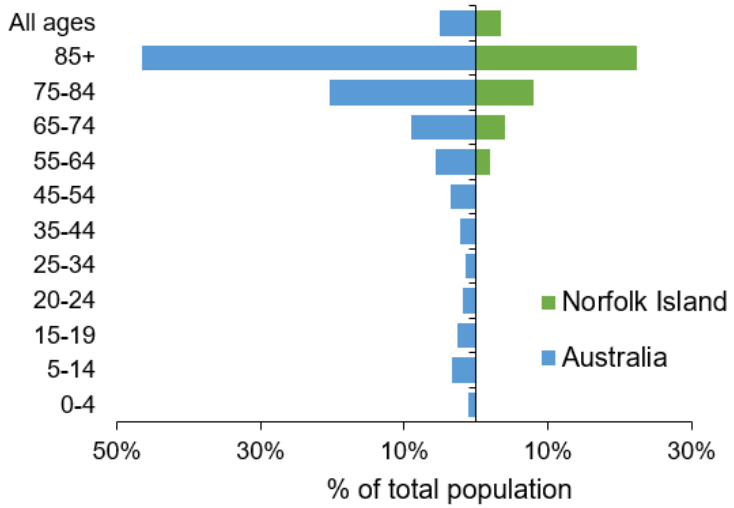


**Figure 5: Proportion of population aged 15 years or older by age that provides Unpaid Assistance to a Person with a Disability (Source: ABS Census 2016)**

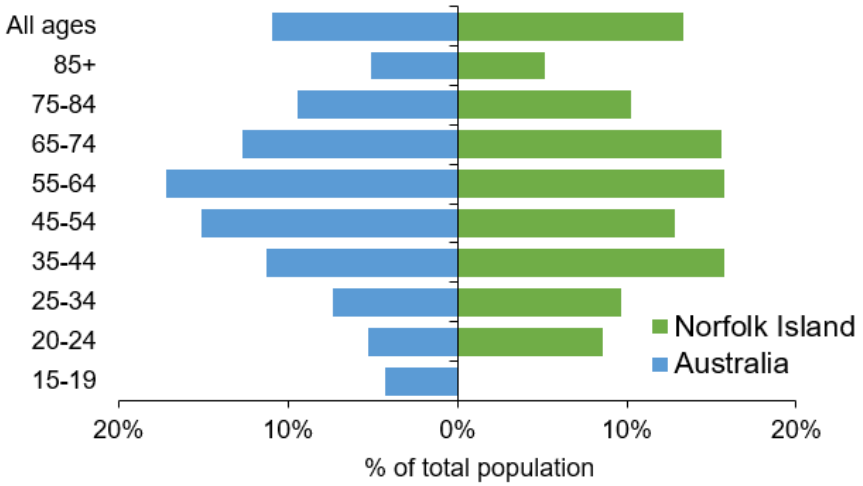
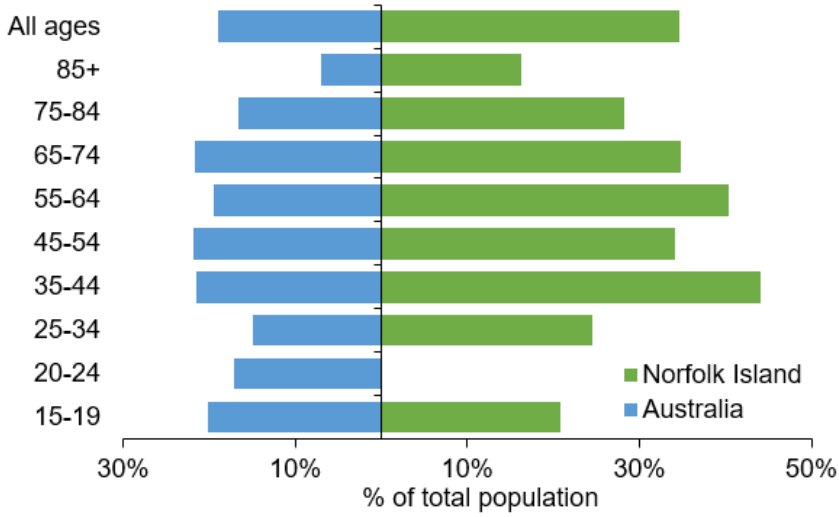



**Figure 6: Proportion of the population aged 15 years or older by age that Voluntary Work for an Organisation or Group (Source: ABS Census 2016)**




## Future population

There has been an historical decline in the Norfolk Island population, with the residential population declining from 2,037 in 2001 to 1,743 in 2016, a decline of 1 per cent per annum.

Forecasting a future population is a complex task. It requires an understanding of social, environment and economic factors and an estimation as to how these may change in the future.

The extension of mainland social security, immigration, customs and health arrangements to Norfolk Island in 2016 are aimed at improving the access to these services and provide services comparable to regional communities on mainland Australia and Australians in external territories.

The impact of these and other factors on the overall population number since 2016 is unclear, however some indicators can inform this:

- airline passenger arrivals have increased 4.1 per cent per annum since 2013 with an increase of 5,700 visitors, and the proportion of passenger arrivals that are visitors has remained stable at 84 to 86 per cent. (Figure 7)
- this increase is despite the cessation of Air New Zealand flights from Auckland in mid-2017
- Norfolk Island Central School enrolments have remained stable at approximately 300 students per year (Figure 8)
- the number of residential building approvals has remained stable at between 10 and 20 per year.

**Figure 7: Airline arrivals by year and visitor status 2013-2018 (Source: NIRC Annual Report 2017/18)**

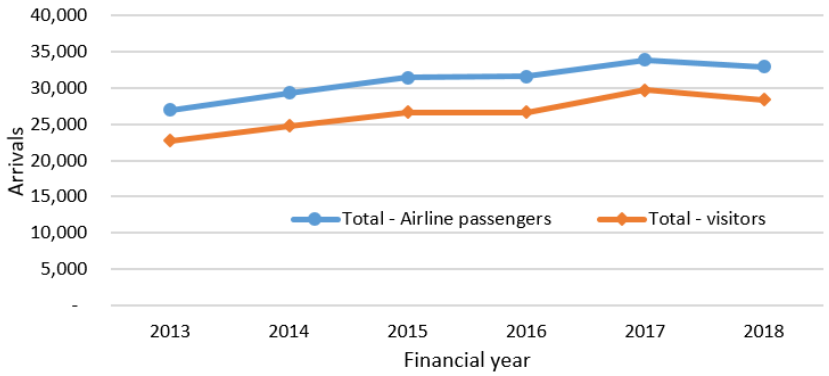
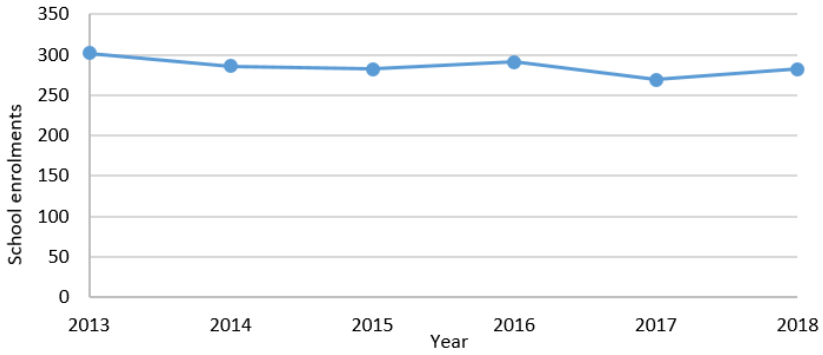


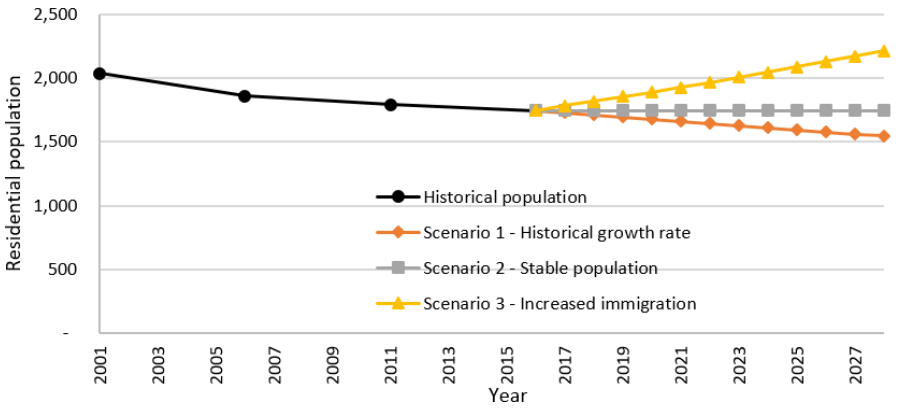

**Figure 8: Norfolk Island Central School enrolments 2013-2018 (Source: NICS, NSW Min of Education)**



To inform the planning of services, three population scenarios have been developed to understand the impact on services under a range of conditions:

- scenario 1: a continuation of the historical growth rate with a decline in the residential population of 1 per cent per annum
- scenario 2: a continuation of the current residential population size of a 1,748 people
- scenario 3: a high growth scenario with a 2 per cent increase in residential population through migration and natural increases. A 2 per cent per annum increase is used as this is consistent with the current growth of metropolitan Sydney and Brisbane.

**Figure 9: Population growth scenarios**




# Health of the community

**Discussion questions:**

- What does 'healthy living' mean to you?
- What does 'healthy ageing' mean to you?
- What can be done to improve a person's health or experience of illness?

## What is health?

What does it mean when we say a person is 'healthy' or 'unhealthy'?

At a simple level, one can view the concept of health by focusing on the individual and on the presence, or absence, of disease and medically measured risk factors.

A broader and more widely accepted view sees health as multidimensional: defining health 'as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (World Health Organisation 1946).

Influences on the health status of an individual or communities include:

- genetic, lifestyle and environmental factors
- cultural influences
- socioeconomic conditions
- provision of, access to and use of health care services and programs.

## Community networks and resilience

A healthy, thriving community is one in which members enjoy optimal health in an environment that actively promotes productive, rewarding and socially inclusive lives.

Good health and wellbeing requires conditions which allow all residents to pursue important personal goals, enjoy fulfilling relationships, and take part in their community:

- A person's social networks can have a significant impact on their health. One large scale international study showed that over seven years, those with adequate social relationships had a 50 per cent greater survival rate compared with individuals with poor social relationships.
- Social networks have been shown to be as powerful predictors of mortality as common lifestyle and clinical risks such as moderate smoking, excessive alcohol consumption, obesity and high cholesterol and blood pressure.
- Social support is particularly important in increasing resilience and promoting recovery from illness. Strong social capital can also improve the chances of avoiding lifestyle risks such as smoking.
- Lack of social networks and support, and chronic loneliness, produce long-term damage to physiological health via raised stress hormones, poorer immune function and cardiovascular health. Loneliness also makes it harder to self-regulate behaviour and build willpower and resilience over time, leading to unhealthy behaviours.[1]

The self-reported health status of the Norfolk Island population was reported as "good' to 'very good' by 83 per cent of the population in 2015 compared with 82 per cent of the NSW population.[2]

## Prevalence of illness

Table 1 below outlines the levels of several of the risk factors for cardiovascular disease within the Norfolk Island population and comparisons to the Australian community. These data indicate a higher level of some cardiovascular risk factors including family history of heart disease, and current heart disease. In contrast, fewer Norfolk Islanders reported sedentary lifestyles compared with the general Australian population.

**Table 1: Prevalence of cardiovascular disease factors in Norfolk Island and Australian populations (Source: Reproduced from Bellis (2009) Griffith University)**

| Risk factor | Factors leading to increased cardiovascular disease risk | Proportion of Norfolk Island with increased risk | Proportion of Australian population with increased risk |
|---|---|---|---|
| Body Mass Index | > 25 | 57% | 60% |
| High Blood Pressure | Diagnosed hypertension | 17% | 30% |
| Smoker | Current smoker | 22% | 24% |
| Sedentary | Exercise < once per week | 20% | 54% |
| Heart disease | Existing or experienced | 7% | 4% |
| Genetic predisposition | Family history of heart disease | 61% | 52% |
| Cholesterol: HDL ratio | > 4 | 49% | 50% |

[1] The Kings Fund (www.kingsfund.org.uk/projects/improving-publics-health/strong-communities-wellbeing-and-resilience).

[2] The NSW HealthStats data has been used as the primary comparator as this is the most recently reported high quality data.

The Norfolk Island community has participated in a number of studies investigating the genetic determinants of disease given that a large proportion of the population have common genetic heritage as descendants of The Bounty mutineers and from Polynesian islanders. Many of the studies have been undertaken through Griffith University and have documented that:

- The proportion of Polynesian ancestry in the present-day individuals was found to significantly influence total triglycerides, body mass index, systolic blood pressure and diastolic blood pressure. For various cholesterol traits, the influence of ancestry was less marked but overall the direction of effect for all CVD-related traits was consistent with Polynesian ancestry conferring greater CVD risk.[3]
- Up to 17 per cent of the population had a previous diagnosis of hypertension, with 25 per cent of those sampled recording hypertensive blood pressure levels. Additionally, 40 per cent of the population reported a family history of hypertension.
- The known prevalence of diabetes was reported at similar levels to the Australian community, but a high number of undiagnosed cases were identified in the sampled population.[4]
- The prevalence of blindness and visual impairment in the Norfolk Island population is low, especially amongst those with Pitcairn Island ancestry.[5]

# Health system

**Discussion questions:**

- What are the highly valued features of the current health care system? How should this change and evolve?
- What are your expectations of your local health service?
- Do you consider any types of services essential to be performed off the island? For what reasons?
- How can services gain greater community involvement to improve service delivery?

The World Health Organization describes a good health system as one that 'delivers quality services to all people, when and where they need them' (WHO 2018).

The Norfolk Island health system is a complex mix of health professionals and service providers from a range of organisations- from government and the non-government sector. Collectively, they work to meet the health care needs of the community. Health services are delivered in numerous ways and settings, including through health promotion and education programs, diagnosis, treatment and preventive services in the community, treatment and care in hospitals, rehabilitation in hospitals and the community, and palliative care.

## Service Provision

The key health services delivered to the community are via the Norfolk Island Health and Residential Aged Care Service (NIHRACS). Analysis has been undertaken on activity data and compared to benchmarks to develop an understanding of the relative use of services by the Norfolk Island community.

[3] John Blangero, Peter M. Visscher, Hannah Cox, Lyn R. Griffiths, Rod A. Lea, Tom Dyer, Stuart Macgregor, Claire Bellis (2009): Legacy of mutiny on the bounty: Founder effect and admixture on Norfolk Island. Nature Publishing Group. http://dx.doi.org/10.1038/ejhg.2009.111.

[4] Bellis (2009) Griffith University

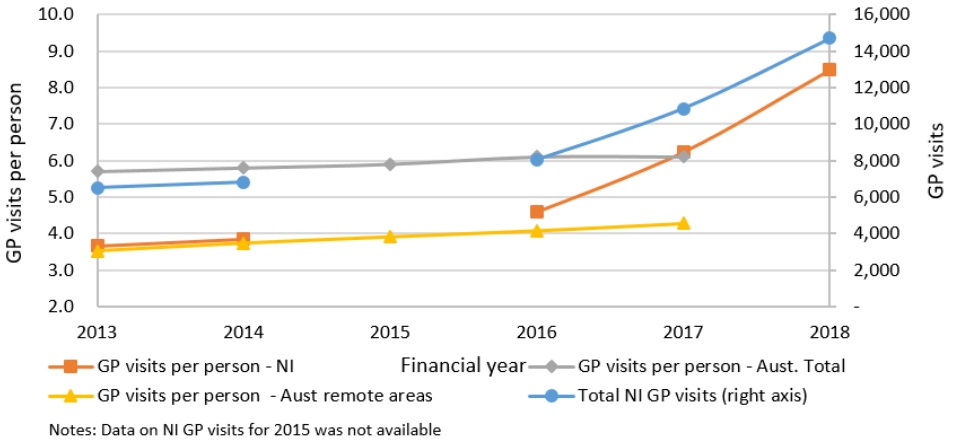
[5] Prevalence of Chronic Ocular Diseases in a Genetic Isolate: The Norfolk Island Eye Study (NIES) (2011)

### *Use of general practice clinic*

There were over 14,000 general practice attendances in 2017/18, an increase from 8,000 attendances in 2015/16 (98 per cent). This equates to approximately 8.5 attendances per person per year in 2018, an increase from 4.6 attendances per person per year in 2015/16. This increase has been associated with the availability of bulk-billing in 2016.

In comparison to other Australian areas, the Norfolk Island community has currently a higher utilisation than the average Australian rate (6.1 per person) and remote communities (4.3 per person) (Figure 10).

**Figure 2: Use of GP services on Norfolk Island 2013-2018 — number of attendances and per capita rates for NI, Australia and Australian remote areas. (Source: NIHE, NIHRACS, AIHW)**




### *Aged care services*

NIHRACS provides the only residential aged care service on the island. An average of 12.5 high care beds were occupied in 2017/18, an increase from 5.6 beds in 2013/14 (Table 2).

This demand has been increasing in recent years and equates to 43.3 beds per 1,000 people aged 70 years or older, lower than the typical planning ratio of 80 beds per 1,000 people. The reasons for the lower demand for bed based services is unclear but is likely to include the high resilience of the local community, high level of local community supports, and the aged infrastructure of the existing facility.

A retirement village development was previously proposed for the Island but did not progress due to local planning regulations prohibiting strata subdivision of property.

**Table 2: Per capita rates of acute hospital and aged care beds**

| Type | 2013/14 activity | 2017/18 activity | NI rate per 1,000 people (2017/18) | Comparator rate |
|---|---|---|---|---|
| Acute hospital services: average occupied beds/ average length of stay | 3.4 beds / 4.5 days | 2.2 beds / 3.9 days | 460 | 1,171 bed days per 1,000 people[6] |
| Residential aged care beds - average occupied | 5.6 beds | 12.5 beds | 43.3 | 80 beds per 1,000 people aged 70+[7] |

[6] Australian Institute of Health and Welfare 2018. Admitted patient care 2016–17: Australian hospital statistics. Health services series No. 60. Cat. No. HSE 156. Canberra: AIHW.

[7] http://guides.dss.gov.au/guide-aged-care-law/3/3/2

The planning scenarios have been used to estimate the future demand for residential services, with a range of 15-28 beds required by 2028 based on the existing utilisation or the Australian government planning benchmark (Table 6).
A level of home support programs is provided by NIHRACS and non-government agencies. These are listed in Table 3. Care Norfolk Inc. is the main non-government agencies providing home support services.

**Table 3: Availability of home support programs on Norfolk Island**

| Service | Comments |
|---|---|
| Domestic Assistance | Provided by Care Norfolk Inc. |
| Home Maintenance | Provided by Care Norfolk Inc. |
| Home Modifications | Provided by Care Norfolk Inc. |
| Personal Care | Provided by Care Norfolk Inc. |
| Social Support-Individual and Group | No organised service. Periodic service provided by NGO and service clubs. |
| Community Nursing | Limited service from NIHRACS |
| Allied Health and Therapy Services | Physiotherapy service through NIHRACS. Visiting occupational therapy, podiatry and speech pathology. |
| Wettls on Wheels | Managed by Care Norfolk Inc. Prepared by NIHRACS. Delivered by volunteers. |
| Community transport | No organised service. Periodic service provided by NGO and service clubs. |
| Goods, Equipment and Assistive Technology | The physiotherapy service through NIHRACS provides mobility aids and basic equipment. Care Norfolk has services through NDIS to provide services to clients. |
| Flexible Respite | Not available |
| Centre-Based Respite | Service provided by NIHRACS |

## Visiting Services

Acute and subacute non-admitted services are provided from NIHRACS or in the community. These are provided in conjunction with specialist practitioners from mainland Australia, who visit periodically and provide some telephone or video-based support outside of these visits. Table 4 provides a summary of the type of specialty service available in 2018/19.

**Table 4: Specialty medical and allied services provided on a fly-in/fly-out basis 2018/19**

| **Specialty** |
| --- |
| Allied Health<br>• Podiatry<br>• Child and adult Speech Pathology<br>• Child and adult Occupational Therapist<br>• Audiologist<br>• Residential aged care Dietician<br>• Sonographer (generalist and cardiac)<br>• Mammography<br>• Optometry |
| Medical specialists<br>• Endocrinologist<br>• Orthopaedic surgeon<br>• Paediatrician to commence in early 2019<br>• Psychiatrist<br>• Geriatric medicine<br>• Nephrologist<br>• Cardiologist<br>• Urologist<br>• Orthodontist |

## Health promotion and community health

The initial consultations have identified a number of current and emerging service gaps. In particular:

- Greater strength required in the health promotion program to increase the availability of primary and secondary prevention activities. This focus would offer to provide the community with increased resources and focus on the improvement of health status, prevention of ill health and the early detection of disease or illness.
- A chronic disease management model to minimise the impact of non-communicable disease. Chronic disease management models typically include a range of targeted interventions on defined cohorts of patients. The unique characteristics of the Norfolk Island health service in it being the sole provider of primary care means that the whole population could be aware of the services available to them. A prospective and proactive approach to management of chronic disease requires the following elements:
  - Self-management support: Collaboratively helping patients and their families to acquire the skills and confidence to manage their condition. Provide self-management tools, referrals to other resources, routinely assessing progress.
  - Decision support: integration of evidence based clinical guidelines into practice and reminder systems. Guidelines reinforced by clinical ‘champions’ providing education to other health professionals.
  - Community resources: Linkages with patient education classes or home care agencies to provide case managers. Linkages with community-based resources – exercise programs, self-help groups, and senior centres.

### Healthy children and families

The promotion of a vibrant and dynamic childhood and families is integral to high functioning communities.

Many challenges in adult society have their roots in the early years of life, including major public health problems such as obesity, heart disease, and mental health problems. Experiences in early childhood are also related to criminality, problems in literacy and numeracy, and economic participation.

There is a growing evidence that the biological processes and environmental characteristics that shape development during the first 1,000 days, and the impact these have over the life span.[8]

The availability of suitable birthing services has been a long-standing issue for the Norfolk Island community, with high value placed on the opportunity to birth on the island and continue the strong heritage of the community.

For rural and remote communities, accessing appropriate maternity services raises particular issues. What exacerbates this is the need for ongoing care throughout the pregnancy and, for higher risk pregnancies, the requirement for a significant period of hospitalisation prior to and sometimes after the birth. Even in a low-risk pregnancy, a woman still has to travel to the mainland in anticipation of the birth or for some aspects of her antenatal or postnatal care. Supports and services, including travel and communication, are required to cater for the needs of all women and their families.

Internationally and nationally, maternity care has become increasingly complex with efforts to reduce the prevalence of adverse outcome for mother and baby. This has been concurrent with the decline in the availability of midwives and General Practitioners that are suitability skilled and willing to provide birthing services to small rural communities, and the high cost of obtaining insurance coverage.

**Discussion questions:**

- What can be done to improve the experience of mothers and families during pregnancy and child birth?
- What is required to improve the early years of children, so that they have the best start to life?

## What services are required?

### Challenges in providing services to isolated communities

The Norfolk Island location has other unique characteristics when compared to mainland remote communities in that external assistance is only available through commercial or charter flights, with a medical retrieval team available approximately 6-8 hours after dispatch. Poor local weather conditions can further delay this support.

The remoteness and separation from the mainland health care system has led to a greater tendency to self-reliance than would normally be found in mainland communities and a requirement to plan for a range of low probability contingencies.

[8] The Royal Children's Hospital Melbourne, Centre for Community Child Health (2017). The First Thousand Days: An Evidence Paper

These issues are compounded by the known complexities in the planning, managing and delivering of health services in rural and remote locations, in that rural health services:

- have high fixed costs of operation
- are less able to achieve the economies of scale experienced in larger hospitals
- have a reliance on the public sector as the default service provider in the absence of private sector options
- consistently struggle to attract and retain a sustainable skilled clinical workforce.[9]

Additionally, the professional and quality imperatives of health care practice has led to a progressive decline in the availability of general practitioners that are capable and willing to undertake procedural activities, including birthing, in remote areas.

Other Australian island communities have similar challenges in providing health services to their communities.

There are some initiatives that are aimed at addressing this need, including the NSW Rural Generalist Medical Training Program (RGTP). It provides a supported training pathway for junior doctors wishing to pursue a career as a rural general practitioner. It enables them to provide primary care in a community general practice setting as well as advanced services and/or procedural skills within a rural hospital. [10]Table 5 provides an overview of the general type and mix of services available on Australian island communities. This comparative analysis of similar communities has been undertaken to provide a description on the types of health care services that are typically available to small remote communities. The other island communities have been identified as they have the key characteristics of:

- consumers have significant cost and inconvenience in accessing other services, as air transport is the only feasible transport to another health service location
- transport of patients for urgent care at a secondary or tertiary centre is delayed due to the requirement of a commercial or the mobilisation of a charter flight.

The analysis of these services has identified that Norfolk Island has the oldest community of the comparison sites and is most similar to King Island, in the size of the population and age profile (Table 5).

[9] Australian Health Ministers' Advisory Council's (AHMAC), Rural Health Standing Committee (RHSC), (2012) National Strategic Framework for Rural and Remote Health

[10] https://www.heti.nsw.gov.au/education-and-training/courses-and-programs/nsw-rural-generalist-medical-training-program

**Table 5: Comparative health services in other remote communities**

| | **Norfolk Island** | **Christmas Island - IOT** | **King Island - Tasmania** | **Lord Howe Island - NSW** |
|---|---|---|---|---|
| Resident population (2016) | 1,748 | 1,843 | 1,585 | 382 |
| Median age (2016) | 49 | 38 | 47 | 44 |
| % population over 65 years (2016) | 23.8% | 9.7% | 22.4% | 19.3% |
| Distance to major health services | Bris. 1,475km<br>Sydney 1,700km | Perth 2,600km<br>Jakarta 490km | Burnie 212km | Sydney 780km |
| General practice | Yes<br>3.0 FTE | Yes<br>3.0 FTE | Yes<br>2 FTE contracted | Yes – private<br>1 FTE |
| Acute care | Yes – 6 beds, with an average of 3 occupied | Yes - 8 beds | Yes - 6 beds | Yes - 3 beds |
| Aged care | Yes – 14 bed residential facility. Home and Community Care Services provided by Care Norfolk Inc. | No residential service. | Yes: 14 bed RACS Home and Community Care Services provided by council and THS. | No residential or home-based service. |
| Surgery | Referral to mainland services. | Referral to mainland services. | Referral to mainland services. | Referral to mainland services. |
| Birthing | Antenatal and postnatal services.<br>Coordination with mainland hospitals for birth. | Antenatal and postnatal services.<br>Coordination with mainland hospitals for birth. | Antenatal and postnatal services.<br>Coordination with mainland hospitals for birth. | Antenatal and postnatal services.<br>Coordination with mainland hospitals for birth. |
| Dental | Yes – on island | Visiting service | Visiting service | No service |
| Allied health | Permanent physiotherapist, social worker.<br>See Table 4 | Visiting physiotherapist, occupational therapist, dietitian. | Physiotherapist.<br>Visiting dietitian, optometrist, diabetes education, podiatrist. | No |
| Mental health | Permanent clinical psychologist, child and adolescent counsellor and visiting psychiatrist. | Visiting counsellor. | Visiting psychiatrist and psychologist. | No |

## Procedural services

Advances in procedural and diagnostic services in the past decades has provided many benefits to society with additional options for care and improved outcomes from surgery.

In conjunction with this has been continued subspecialisation of surgeons, with fewer general surgeons available to undertake a wide range of services, and the continued difficulty in recruitment of general practitioners with anaesthetic and surgical skills, has resulted in difficulty in providing a permanent surgical service for many remote areas.

To inform this discussion, some estimates have been made of the possible demand for common elective surgery and procedures (Table 6). This indicates that even for the most common elective procedures, endoscopy and cataract extraction, the estimated demand is less than 20 or 10 procedures per year respectively.

The lifestyle and occupational risks associated with rural communities make it likely that trauma and other emergencies will occur periodically, requiring a capacity to undertake emergency stabilisation of patients prior to transfer to a secondary or tertiary care provider. The level of procedures available will depend on the skill and credentialing of the workforce available at the time and the level of telemedicine support available from another centre.

## Opportunities through telemedicine

There has been a large expansion in the availability of credible, authoritative information and advice on health care issues. A range of telephone and internet-based support services have been developed that provide consumers with expert assistance, as an alternative or supplement to face-to face services. These may be particularly valuable in small communities with challenges in providing privacy for consultation on complex issues.

Telemedicine applications have developed to provide a range of remote health care services. The telephone-based support services are one example, but they extend to the provision of specialist support and advice to clinicians and direct patient consultations.

There are a range of technologies that permit communications between patient and medical staff, as well as the transmission of medical, imaging and health informatics data from one site to another.

These services are broadly grouped in the following categories:

- store-and-forward: capture of data (like medical images) and then transmitting this data to a doctor or medical specialist at a convenient time for assessment offline
- remote monitoring: enables medical professionals to monitor a patient remotely using various technological devices
- interactive services: real-time interactions between patient and provider, to include phone conversations, online communication and home visits. Many activities such as history review, physical examination, psychiatric evaluations and ophthalmology assessments can be conducted comparably to those done in traditional face-to-face visits.

**Discussion questions:**

- How could procedural services be planned to improve the experience for Norfolk Islanders?
- How could telemedicine be better used to provide a better service to the community?

**Table 6: Modelled demand for selected procedures and bed types**

This table has been developed to estimate the demand for some typical services. It has been constructed using the population scenarios described in Figure 9 and application of Australian average utilisation rates.

| **Year** | **2018** | | | **2028** | | | **Notes** |
|---|---|---|---|---|---|---|---|
| **Population Scenario** | **1 (low)** | **2 (med)** | **3 (high)** | **1 (low)** | **2 (med)** | **3 (high)** | |
| **Estimated demand for acute beds** | | | | | | | |
| Acute hospital beds | 3.3 | 3.4 | 3.5 | 3.0 | 3.4 | 4.3 | Based on 1,171 bed days per 1,000 people; 45% self-sufficiency and 75% occupancy |
| **Estimated number of births for the Norfolk Island community** | | | | | | | |
| Births - caesarean birth | 5.1 | 5.2 | 5.4 | 4.6 | 5.2 | 6.5 | Based on the Australian age specific birth rate per 1,000 people, and 34% caesarean rate (AIHW 2016/17) |
| Births - vaginal birth | 9.0 | 9.2 | 9.6 | 8.2 | 9.2 | 11.7 | |
| Births - total | 14.1 | 14.4 | 15.0 | 12.7 | 14.4 | 18.2 | |
| **Estimated annual demand for common procedural activity (No. of episodes)** | | | | | | | |
| Gastroscopy | 4 | 4 | 4 | 3 | 4 | 5 | Based on 2,088 separations per 1,000 people (AIHW 2016/17) |
| Colonoscopy | 5 | 6 | 6 | 5 | 6 | 7 | Based on 3,161 separations per 1,000 people (AIHW 2016/17) |
| Total endoscopy | 9 | 9 | 10 | 8 | 9 | 12 | Note: totals are affected by rounding |
| Cataract extraction | 2.7 | 2.8 | 2.9 | 2.4 | 2.8 | 3.5 | Based on 2,254 separations per 100k aged 40+ (AIHW 2016/17) |
| Elective surgery - all cases | 163 | 167 | 174 | 148 | 167 | 212 | Based on 92 cases per 1,000 people (AIHW 2016/17) |
| **Estimated demand for residential aged care beds** | | | | | | | |
| At existing supply ratio | 11.8 | 12.0 | 12.5 | 10.6 | 12.0 | 15.2 | Based on 43.3 beds per 1,000 people aged 70+ (2018) |
| At Commonwealth planning benchmark | 21.7 | 22.2 | 23.1 | 19.6 | 22.2 | 28.1 | Based on 80 beds per 1,000 people aged 70+ (DSS) |

# How can I be involved?

Your voice is important, there are several ways to provide input and be involved:

## Written feedback

Please submit written comments to the discussion questions to the Department of Infrastructure, Regional Development and Cities:

By email: territories_projects@infrastructure.gov.au

(note the underscore between 'territories' and 'projects')

By mail: PO Box 201, Norfolk Island 2899

## Drop in

To organise a meeting with the project team, contact the Administrators office: Office.Administrator@infrastructure.gov.au

Meetings will be held on:

- 2:00-6:00pm Tuesday 5th February 2019
- 2:00-6:00pm Wednesday 6th February 2019

## Community meeting

We welcome you to attend the community information session at:

Paradise Hotel & Resort, Queen Elizabeth Ave, 2899, Norfolk Island

6:00-7:30 pm

Thursday 7th February 2019

RSVP to: Office.Administrator@infrastructure.gov.au

# Community Feedback Form – Discussion Questions

**About you:**

**Sex (please select one box):**

❑ Male

❑ Female

❑ Other, please specify _____

**Age group (please select one box):**

❑ Less than 20 years

❑ 20 to 39 years

❑ 40 to 59 years

❑ 60 to 70 years

❑ Older than 70 years

Please provide some comments on the questions below:

**How do you see the Norfolk Island population changing overtime?**

**What are the most highly valued characteristics of the Norfolk Island community?**

**What does 'healthy living' mean to you?**

**What does 'healthy ageing' mean to you?**

**What can be done to improve a person's health or experience of illness?**

**What are the highly valued features of current health care system?**
**How should this change and evolve?**

**What are your expectations of your local health service?**

**Do you consider any types of services essential to be performed off the island?**
**For what reasons?**

**How can services gain greater community involvement to improve service delivery?**

**What can be done to improve the experience of mothers and families during pregnancy and child birth?**

**What is required to improve the early years of children, so that they have the best start to life?**

**How could procedural services be planned to improve the experience for Norfolk Islanders?**

**How could telemedicine be better used to provide a better service to the community?**

**Do you have any further comments that you wish to add?**

## Australian Privacy Principle 5 Notice

## Norfolk Island Health Services Public Discussion Paper

Your submission is being collected by the Department of Infrastructure Regional Development and Cities for the purpose of informing the Norfolk Island Health Services Public discussion.

Personal information is not being sought as part of your submission, although any received will be collected in accordance with the *Privacy Act 1988* (the Privacy Act).

If supplied, your personal information will be stored securely by the Department. It may be used by the Department to make further contact with you about the consultation process. Your personal information will not be disclosed to any other third parties, except in the circumstances outlined below.

Submissions, in part or full, may be published on the Department's website or in the Government's response, unless the submission is confidential. Confidential submissions will not be published.

Submissions will only be treated as confidential if they are expressly stated to be confidential. Automatically generated confidentiality statements or disclaimers appended to an email do not suffice for this purpose. If you wish you make a confidential submission, you should indicate this by ensuring your submission is marked confidential.

Confidential submissions will be kept securely and will only be disclosed in the following circumstances:

- in response to a request by a Commonwealth Minister;
- where required by a House or a Committee of the Parliament of the Commonwealth of Australia; or
- where required by law.

The Department may also disclose confidential submissions within the Commonwealth of Australia, including with other Commonwealth agencies, where necessary in the public interest.

Please note that in order to protect the personal privacy of individuals in accordance with the Privacy Act any submissions containing sensitive information, personal information or information which may reasonably be used to identify a person or group of people may not be published, even if not marked as confidential.

The Department's privacy policy contains information regarding complaint handling processes and how to access and/or seek correction of personal information held by the Department. The Privacy Officer can be contacted on (02) 6274 6495.