

The Health and Wellbeing of Asian Elderly - Experience from the Waitemata District Health Board (WDHB)

Yogini Ratnasabapathy
July 2010

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina



North Shore Hospital - Auckland



Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitakare Hospital - Auckland



Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Asians in NZ

- Asians are the fastest growing ethnic group in New Zealand
- Comprises the second largest ethnic group (approximately 14%) in WDHB
- Asian ethnic groups are also very diverse in language, culture, traditions and health needs in WDHB

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Why does Waitemata DHB need to address Asian health needs?

- **To meet legislative and Ministry of Health requirements as well as strategic priorities (national and local)**
- **The health and socioeconomic profiles of Asians at WDHB were noted to be different to Europeans and others when a Health Needs assessment was conducted in 2008**

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Asian Health Needs Assessment

- The following full calendar years 2006 and 2007 of information were used for the Asian Health needs assessment at WDHB
- The following range of years were also used for this report:
 - 2005–07 (hospitalisation data)
 - 2004-06 (fertility rate)
 - 2002- 05 (mortality data) and 2003-05 (mortality data).
- Data from the New Zealand Health Survey 2006/07 were collected from October 2006 to November 2007.
- Data from the New Zealand Health Survey 2002/03 were collected from September 2002 to January 2004.

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Population counts by ethnicity and Gender-2006

Ethnic group	WDHB			NZ		
	Female	Male	Total	Female	Male	Total
Maori	21,945	20,931	42,876	290,469	274,860	565,325
Pacific	17,997	17,193	35,190	134,967	131,010	265,974
Asian	35,589	68,151	68,151	185,178	169,374	354,549
Other	192,360	182,919	375,282	1,636,992	1,558,332	3,195,324

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Population Proportion(%) by ethnicity in Waitemata and NZ

Ethnic group	WDHB	NZ
Maori	9%	14%
Pacific	6%	6%
Asian	14%	9%
Other	71%	71%

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Population counts by Asian ethnic group in WDHB - 2006

Ethnic group	Total
Chinese	27,327
Indian	15,018
Korean	12,207
Filipino	4941
Japanese	1137
Sri Lankan	870
Cambodian	813
Vietnamese	267
Other Asian	1941
Other South East Asian	3717
Total Asian ethnic group	68,148

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Background

- In Waitemata, Chinese were the largest Asian ethnic subgroup, comprising 40% of Asian population.
- Indian was the second largest group (about 22%)
- Korean was the third largest group (approximately 18%).

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Background

- About 35% of the Asian population in Waitemata were under the age of 25
- **Around 11% were 65 years and older**
- There were some differences in the population age structure of the Asian ethnic subgroups (Chinese, Indian, Korean, Other Asian)
- The most common age groups were:
 - 20 - 24 years (among Chinese people)
 - 10 -19 and 35 - 49 years (among Korean people).

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Background

- **Among Asian ethnic groups:**
 - Indian people had the largest proportion born in NZ (20%)
 - Other Asian (excluding Korean) - 18%
 - Chinese (17%) people
 - Korean people had the lowest proportion (7%).
- **By territorial authority (TA), North Shore had the largest proportion of Asian people (55.4% of all WDHB Asians) followed by Waitakere (40.9%).**

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Background

Compared with European/Other in Waitemata Asian people were well educated but with:

- a higher unemployment rate
- lower income
- lower prevalence of regular physical activity
- lower prevalence of 3+ servings of vegetables per day.

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Background

Asian people in WDHB had:

- Higher life expectancy (which may partly reflect the healthy migrant effect)
- Lower use of primary care services
- Lower rates of potentially avoidable hospitalisation and surgical procedures.

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Background

Asian as a whole in Waitemata did better in these important indicators compared with the NZ average of Asian:

- Life expectancy
- Adult potentially avoidable mortality (PAM)
- All cardiovascular disease (combined) mortality rate
- Suicide rate
- Breast screening rate

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Background

- Indian people in WDHB had self-reported higher prevalence of the following compared to Other Asian and Chinese people :
 - High cholesterol
 - High blood pressure
 - Heart disease
 - Diabetes
 - Asthma
- Indian people also had higher use of the following compared to Other Asian and Chinese people:
 - Secondary care services
 - Particularly those related to cardiovascular disease and DM

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Background

Priority areas for action included by WDHB are:

- Asian workforce development (Asian doctors/nurses)
- Improved availability of and access to preventative services (HEHA [Healthy Eating Healthy Action])
- Smoke-free
- Regular health checks especially in the old screening programmes
- Improving PHO [Primary Health Organisation] enrolment)
- Mental health (risk factor control, health education and promotion, early intervention and service access)
- Control of CVD/diabetes in South Asian people.

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Responsibility of DHB's in relation to Health Needs Assessment

- **The New Zealand Public Health and Disability Act 2000 identifies that one of the functions of DHB's is:**
 - *To regularly investigate, assess, and monitor the health status of its resident population, any factors that the DHB believes may adversely affect the health status of the population, and the needs of that population for services (Clause 23(1)(g)).*
- **Health needs assessments are a way for DHB's to carry out this function, and provide them with evidence to ensure that funding decisions maximise health gains for their population.**

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Strategic priorities

- **Reducing inequalities** was identified as a strategic priority in WDHB's District Strategic Plan 2005-2010 (2005)
- Asian people are one of the groups identified as **experiencing a disproportionate burden of health inequalities**

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Commonest condition in the Elderly in WDHB

- Cardiovascular disease (CVD) is the commonest condition in the elderly in WDHB.
- Ischaemic heart disease and Stroke are the two most common conditions of CVD in the elderly in medical admissions.
- Stroke incidence increases with age and 75% of strokes in WDHB are older people.
- Stroke is the 3rd killer disease in NZ and 2nd killer disease in the world.
- **A Rapid Improvement Event (RIE)** was considered by the Ministry of Health and WDHB to improve services and reduce the burden of stroke.

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Rapid Improvement Event at Waitemata DHB

- Rapid improvement events are part of the “Lean Healthcare” set of project tools
- Used to identify waste or non-value, adding task to improve future processes
- The WDHB event took place over 4 days in November 2008
- Over 50 frontline staff, patients and service managers attended, facilitated by the Ministry of Health and the WDHB stroke project team
- 30 day action plans and long-term plans were created



Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Post RIE

- A prospective electronic stroke registry was formulated
- An immediate two month and after twelve months an audit of two months was performed on all stroke admissions at NSH post-RIE
- Data was collected using the United Kingdom National Sentinel Stroke Clinical Audit tool 2006 and 2008 respectively
- Key Performance Indicator and other key outcomes were measured
- Data has been continued to be collected in the stroke registry

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Post RIE

- **There were 765 Stroke patients admitted from Jan to Dec 2009**
- **Certain characteristics have been compared between Asians and European and other ethnicities**

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Definition of 'Asian'

- Consistent with other reports of Asian health needs in New Zealand (Gala, 2008)
- We in WDHB use the Statistics New Zealand (SNZ) definition of 'Asian'.
- According to this definition, 'Asian' includes people with origins in the Asian continent from Afghanistan in the west to Japan in the east, and from China in the north to Indonesia in the south.
- This definition excludes people originating from the Middle East (including Iran and Iraq), Central Asia (except Afghanistan) and Asian Russia.
- Further, this definition is unique to New Zealand and does not necessarily correspond to colloquial usage of the term 'Asian' (Rasanathan, Craig, & Perkins, 2006).

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Lake view - NSH



Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Results

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board

Te Wai Awhina

Characteristics

	Variable	Asian	European & Others
1.	Numbers of Stroke patients	55 (7%)	710 (93%)
2.	Average age*	65.9 years	74.3 years
3.	Average age range	33-99 yrs	17-104 years
4.	Number aged 65+	31 (56%)	563 (79%)
5.	Gender – Male [†]	69%	50%
6.	Stroke types: a. Ischaemic b. Haemorrhagic	a. 35 (67%) b. 14 (25%)	a. 506 (71%) b. 87 (12%)

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Outcomes

	Variable	Asian	European and Others
7.	a. Number received AT&R Rehab b. % aged 65+ and over who received rehab	a. 8 (15%) b. 26%	a. 207 (29%) b. 37%
8.	Length of stay		
	a. entire hospital ALOS	13.4 days	14.9 days
	b. Rehab in AT&R ALOS	18.6 days	22.4 days

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Outcomes

	Variable	Asian	European and Others
9.	Discharge destination		
	a. Home	40 (73%)	476 (67%)
	b. Rest Homes	1 (1%)	32 (5%)
	c. Private Hospital	3 (5%)	67 (8%)
	d. Rehab plus (<65 yrs)	4 (7%)	21 (3.8%)
	e. Other facility	1 (1%)	35 (5%)
	f. Death	6 (11%)	84 (12%)
10	Thrombolysed	0	7 (1%)

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Limitations

- **Prospective Stroke registry data interpretations are limited.**
- **Prospective Audit data interpretations are limited as it is data from specific time points**
- **Data has been collected from those referred to the stroke services and not hospital coded data or from other sources**

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Conclusions

- The average age of an Asian with a stroke at WDHB is almost **10 years younger** than the European and other ethnicities.
- **Close to half of Asian stroke patients (44%) were aged under 65 years (compared to Euro/Other – 21%)**
- There were proportionately **more Asian males** with strokes than European and other ethnicities.

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Conclusions

- Asians have higher proportional rates of haemorrhagic strokes than Europeans and other ethnic groups.
- **Less Asians have had rehabilitation in AT&R (over 65 year old) compared to European and other ethnicities and this may be due to multiple reasons not detailed in this analysis.**

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Conclusions

- **Average length of stay for Asian stroke patients is lower** than European and other ethnicities.
- **More Asians returned to their own home** compared to European and other ethnicities.

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Conclusions

- **None of the Asians received thrombolysis**
- **This benefit needs more education to the Asian community**
- **They need to reach hospital as soon as the onset of symptoms occurs to benefit from thrombolytic treatments.**

Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Waitemata
District Health Board
Te Wai Awhina

Acknowledgements

- **Delwyn Armstrong, Project manager – WDHB.**
- **Lifeng Zhou – Epidemiologist, Funding & Planning at WDHB.**
- **RIE Participants, MoH participants and WDHB management.**
- **Stroke nurse specialists – Binita Prakash, Sue Holden for maintaining the stroke registry.**
- **Dr Stephanie Lowe and Dr Catherine Yan for collecting the stroke audit data.**

Our core values | Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



Auckland - waterfront



Our core values Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'

