Thank you all for coming. My name is Vicky Totikidis and I am a research officer from the Australian Community Centre for Diabetes (ACCD) at Victoria University. The title of my presentation is Diabetes School Based Prevention in a Vietnamese Community: Lessons and Future Directions and is based on research undertaken with my colleagues at ACCD.
This research is part of a broader project titled: Developing workforce capacity in agencies working on the social determinants of health with culturally and linguistically diverse (CALD) communities to contribute to the prevention and management of diabetes.

The project was funded by the Department of Health and Ageing, Mental Health and Chronic Disease Division, for the period July 2009 to May 2010
The guiding theoretical framework for our work is the Expanded Chronic Care Model which encompasses Ottawa charter principles and outlines the components needed to strengthen the capacity not only of the health system workforce but the broader community as well. Our dual aim in light of this model was to engage both the CALD workforce and CALD community members in diabetes prevention and management education and research.
The Vietnamese project described in this presentation was the first in a series of programs with various CALD groups and represents the pilot program for our overall study which we have called the Diabetes and Your Community (DAYC) Program. I will not be discussing the work with other CALD communities or the CALD Advisory Committee.
The program as shown on the invitation originally consisted of four sessions but this expanded to five weeks in consultation with the Vietnamese community including a goal setting session with plans for a follow up progress session after 12 weeks.
Ms Tina Nguyen was our key person and the star of this program as she was proactive and instrumental in engaging ACCD in health promotion for her community. Tina also did all the ground work such as setting up the venue, inviting participants and organizing kitchen helpers, food and child minding. We could not have undertaken this work without Tina’s leadership.
ACCD consists of a multidisciplinary team of researchers as shown in this slide. The program was also greatly enhanced with the support of a skilled interpreter Ms Thinh Hoang who has many years of experience in education.
The aim of the program was to engage adult members of the Vietnamese community in diabetes education, prevention and planned physical activity to reduce their risk of type 2 diabetes and diabetes complications.

The program comprised five two-hour education and research sessions in the school hall with 40-70 people each week followed by a 12-week self-modification and management program.

Participants included parents and elderly citizens associated with Nang Hong Cultural Association and/or St Albans East Primary School which is located in the Brimbank local government area in the western suburbs of Melbourne.
A small amount of funding was donated to the school to cover the costs involved in running the program and providing a nutritious lunch for participants, some of whom travelled from the Northern suburbs to attend the sessions.
The diabetes status of the group included 10 with diabetes, 23 who had family members with diabetes and 5 who had had gestational diabetes
A presentation on the Diabetes Epidemic in the West by our research director Professor Kerry Bennett formed an important part of the first session. The blue squares in the graph above shows that there are many suburbs in the Brimbank and Hobsons bay LGAs that have diabetes rates at 15% or more (using NDSS registrations as an indicator). This is a stark comparison to the Victorian average which is less than 5%.
We also distributed many forms to participants in the first session including consent and information forms and a demographic questionnaire consisting of 11 questions.

**Demographic Questionnaire**

- The demographic questionnaire administered to the Vietnamese community participants consisted of 11 questions on age, gender, country of birth, years in Australia, language spoken at home, country or countries of ancestors (e.g. Grandparents), main faith, (e.g. Christian, Muslim, Hinduism, etc.), employment status, job title, level of education, internet access.
37 participants aged between 24 and 87 attended the first session and completed the demographic questionnaire. All were born in Vietnam and most spoke Vietnamese and had Vietnamese ancestry.
The main religion was Buddhist and the average years in Australia was 16.
Many of the participants were not employed or looking for work and many had secondary education levels.
The second week involved a presentation by Dr Rizwana Kousar, who is also a Medical Practitioner. Her presentation covered the biology of diabetes as well as information on risk factors and complications. Questionnaires on diabetes knowledge and risk were also conducted but are not discussed in this presentation.
The third week consisted of a presentation by Dr Bhensri Naemiratch, who is also a Nutritionist. The presentation covered healthy eating, risk factors, reading food labels and explaining the Glycaemic Index. Oriole Paul, a diabetes educator from Isis Primary Care also presented as a guest speaker during this session.
An interactive demonstration of the Glycaemic Index of various grains proved to be very successful. The cooked rice above consisted of basmati rice, jasmine rice, brown rice, quinoa, barley and red beans.
Week 4 consisted of discussion on the importance of physical activity for the prevention and management of diabetes. Two guests were invited to present on the day including Keimi Lei, from the Western Bulldogs and Nang van Nguyen who can be seen demonstrating Tai Chi to the group. Participants tried out some Tai Chi and other light exercises including a laughing exercise led by the Tai Chi demonstrator Nang above.
The fourth week also consisted of a risk assessment using various biometric/anthropometric measures including height, weight, BMI (body mass index), waist and systolic/diastolic blood pressure measurements. Anthropometric data was used to calculate participant Body Mass Index (BMI). The International Obesity Task Force of World Health Organisation (WHO) proposed a system of classification of fatness based on Body Mass Index (BMI is calculated from simple measurements (BMI = weight (kg)/ [height (m)]²). The WHO Obesity Task Force and the National Health and Medical Research Council of Australia have accepted that BMI is a better marker of risk factors for type 2 diabetes.
A healthy BMI for an adult according to the Better Health Channel can range between 20 and 25, while 26-30 is overweight, over 30 is obese and under 18 is underweight.
There are also some exceptions, including that Asian populations may need to have a BMI of under 23 because of their smaller build.
During the session we distributed and explained the concept of BMI to the participants.
We also set up weighing and measuring stations at the back of the hall and put posters up on the wall. Each person carried their personal biometric card to the four areas and were quite enthusiastic about seeing their results.
The average BMI for the Vietnamese community was calculated as 23.49 which is within the normal range according to the chart above.
Although the average BMI, waist and blood pressure were all close to normal, BMI ranged between 17 and 30 which earlier indicated malnourishment and very close to obesity. The weights ranged from a very low 36 to a quite high 75 and waist ranged from a low of 59 to a very high risk of 99. The systolic blood pressure ranged from a very low 87 to a very high 127 while the diastolic ranged from a very low 54 to a very high 101. So, within the sample there were a number of individuals who were at quite a high risk of illness and disease.
This chart shows the biometrics for each of the 50 individuals who participated. The blue column on the left is age, red is height, green is weight, purple is BMI, aqua is waist, orange is systolic blood pressure and the last blue on the right is diastolic blood pressure.
Week 5 consisted of goal setting activities with the group. Each participant was given a pedometer and a planning booklet called the Healthy Lifestyle Contract. The ACCD team are soon to do a follow up of this session. The photo above shows a small but dedicated team of walkers from the group. Tina took this photo, so I have had to add her in later.
As shown in the slide above, a number of strategies appear to be key to engaging the Vietnamese community in successful health promotion activities.

Summary of Results

- A number of strategies appear to be key to engaging the Vietnamese community. These include:
- involvement of key respected community individuals and interpreter with experience in education and health
- providing opportunities for audience participation
- awareness of the level of understanding by participants
- in-community site rather than in a more formal health or academic based site
- cultural additions such as rice cooking demonstrations
- consideration of needs (seating, child-minding, breaks, lunch & refreshments)
- attendance with friends/familiar others
A comprehensive package of education and research materials for a six week program have since been developed and are currently being used in various CALD communities. This includes the addition of a mental health and well being component which recognises the relationships between diabetes and mental health and wellbeing, quality of life issues and stages of change to prevent and manage diabetes.