## **Healthcare Heroes**

## **Evaluating Pacific Healthcare Heroes** in New Zealand

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AES conference presentation 30<sup>th</sup> August 2012





#### PMA Pacific Health Workforce Pipeline Goal: Improved Pacific Health Outcomes

#### 1. Healthcare Heroes

Pacific Secondary
Students, their schools,
parents and
communities

Pacific students participating, engaging and achieving in NCEA science;

Pacific school leavers choosing health science;

Pacific students successfully entering Health Science degrees;

## 2. Students are Our Future

Pacific Tertiary
Students in Health
Science

Pacific students
entering, progressing
and completing
health science
degrees;

Pacific health science students engaging in professional networks

Increased numbers of Pacific health professionals

## 3. Pacific Health Professional Organisations

PMA & Pacific Health
Professional Organisations

Networking & collaboration amongst Pacific health professional organizations

Increased responsiveness & quality of Pacific health services to Pacific communities

Increased responsiveness & quality of services delivered by Pacific health professionals

Improvement in Pacific health outcomes





#### **Goal: Increased numbers of Pacific Health Professionals**

#### Issues

Pacific students are not participating or achieving in science, this is a barrier for tertiary study and consequently limits the pool of potential health professionals.

Pacific students (their teachers and families) have limited exposure to health careers and Pacific health professionals.

#### **Inputs**

Staff: Healthcare Heroes navigators, mentors, advisors, management

Funding: MOH Pacific Provider Development Fund, ASB Trust, Todd Foundation

Resources: Study skills books,
Health Science Career Pathway
Resources, networks of Pacific
health professionals, Pacific
tertiary students



#### **Goal: Increased numbers of Pacific Health Professionals**

#### **Outputs: ACTIVITIES**

Mentoring, conferences & work experience/career-shadowing

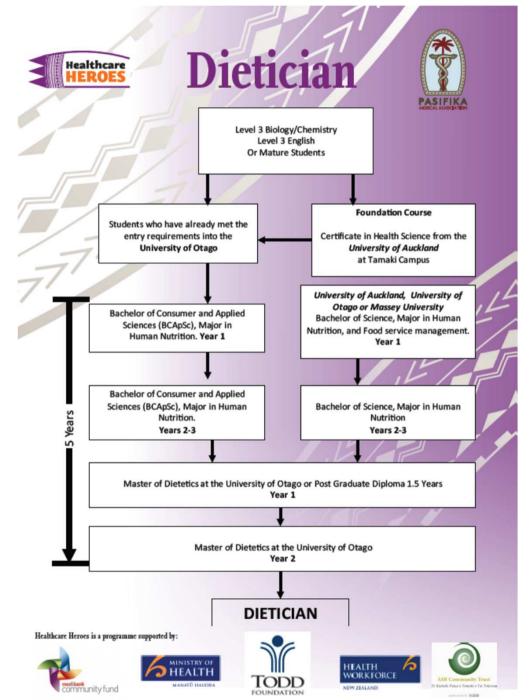
Career & science promotion; and NCEA navigation presentations

Professional development & best practice workshops for science teachers and career advisors

Health Science Academies (at 3 of the 15 schools – 1 PMA – 2 CMDHB) **Outputs: PARTICIPATION** 

Pacific students and their parents and teachers at 15 low decile Auckland Secondary schools

Year 11 and Year 12 Pacific students, their teachers and parents at the Health Science Academy





## HEALTHCARE HEROES OUTCOMES Intermediate

**Short** 

Long term

Increased Pacific

participation in NCEA

Science

Increased numbers of Pacific have the aspiration to study health science and become health professionals

Increased **knowledge** of Health Science careers & Pacific health professionals

Increased Pacific

engagement in NCEA

Science

Increased numbers of Pacific students choose to study health science and to become health professionals

Increased Pacific achievement in NCEA science

Increased numbers of Pacific enrolled and accepted into Health Science Degrees

Increased numbers of Pacific **complete** Health Degrees

Inc. numbers of Pacific health professionals





#### Case study: Health Science Academy PMA school

#### **Outputs: ACTIVITIES**

- Double Science courses at Year
   11
- At Year 12 students take biology, chemistry, physics and two other subjects
- Hospital and university visits
- Professional development for Academy teachers
- Exam, study skills, tutoring workshops for Academy students
- Parent families evenings for Health science Academy parents

#### **Outputs: PARTICIPATION**

- 46 Year 11 and 12 students
- Science Teachers, careers and Principal at College
- Parents and families of the Health Science Academy students
- PMA Mentors, Pacific Health professionals



## Health Science Academy OUTCOMES Intermediate

Long term

Increased participation in Science

**Short** 

- Academy students achieve the credits to progress into level 2 & 3 science
- Academy students are selecting appropriate electives for university study
- Students have aspirations to study health science and become health professionals

- Increased engagement in science
- Students, their families and teachers have increased knowledge of health science careers
- Increased parent engagement in schooling
- Increased teacher collaboration
- Academy students achieve the credits to progress into level 2 & 3 science

- Academy students
   achieve the
   prerequisites
   needed to
   successfully enter
   health science
   degree at a tertiary
   institution
- Increased numbers of ex Academy students successfully complete Health Science Degrees
- Increased numbers of Pacific health professionals

### **Evaluation**

- Questions:
  - How well has the programme achieved its outcomes? (short term)
  - How can the programme improve?
- Methods
  - Mixed methods
    - Including surveys of the programme components, focus groups of students, parents, Interviews with teachers, observations
    - Analysis of national and programme science participation and achievement data
  - Case study: Health Science Academy Decile 1 school, high Pacific population

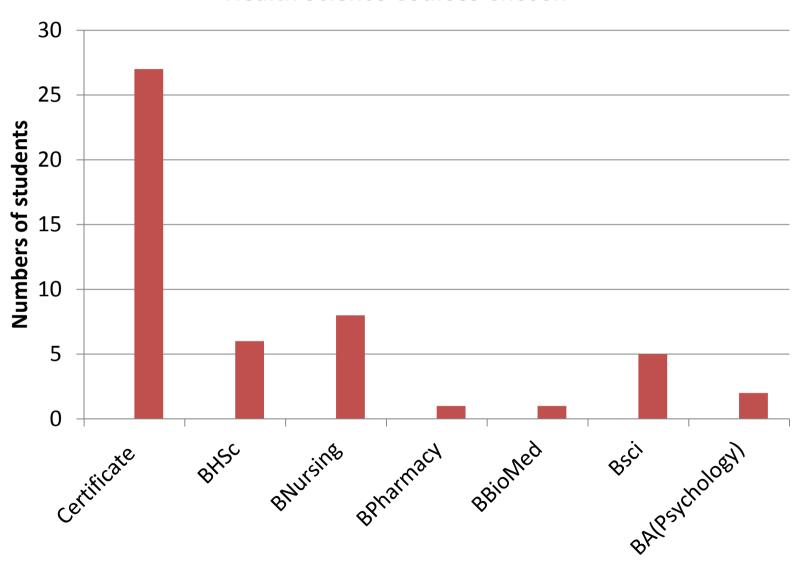


#### **Healthcare Heroes Outcome: Choosing Health Science**

The programme is effective in encouraging students to choose health science.

- Programme components encourage students to choose health science (work experience/career shadowing, mentoring, conference)
- 75% (n=50) of Year 13 students in the School Leavers survey chose to study health science
- however 54% (n=27) of those that choose a Health science course were going to be studying at certificate level.

#### **Health Science Courses Chosen**



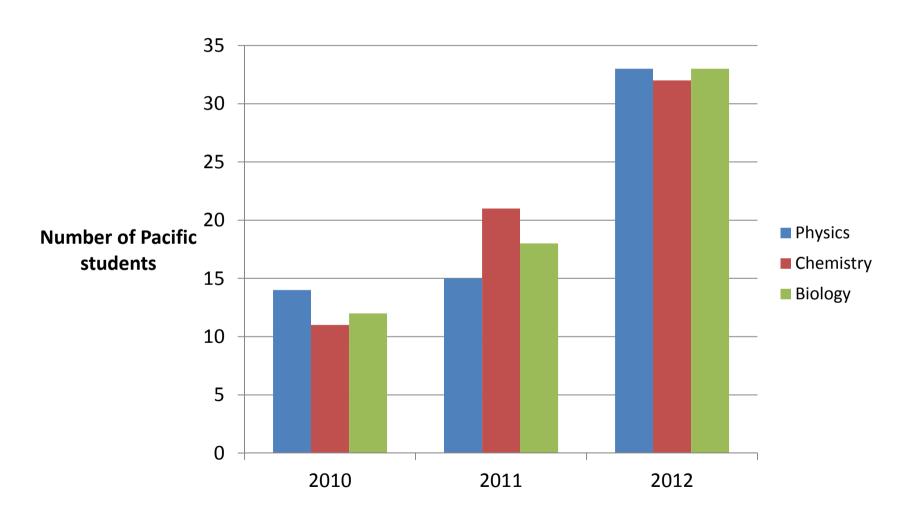


#### **Health Science Academy Results**

The Health Science Academy is effective in increasing participation, engagement and achievement in science. Key factors in supporting this:

- The career focus and connection to real world experiences;
- Leadership, dedication and high expectations of the teachers;
- Increased amount of time learning about science;
- Social cohesiveness of the cohort students, their families and their teachers;
- Parent, teacher, school and community partnership

## Science Participation: National Certificate of Educational Achievement Level 2 (Year 12)



### Science achievement data

#### Method:

- Science achievement data (2011) extraction
- Comparisons to national samples
- Biology, Chemistry, Physics and Science

#### Results:

- 10 out of 11 standards cohort performed better than counterparts
- 3 out of 11 standard cohort performed better than national cohort

Science 90944: Demonstrate understanding of aspects of acids and bases											Externals: 4 credits	
Achievement	Academy		College		Decile 1 (Pasifika)		Decile 1 (Pasifika co-ed)		Pacific National		National	
Grades												
	n	%	n	%	n	%	n	%	n	%	n	%
Not achieved	3	13.0	61	57.5	197	54.1	140	60.1	807	46.9	7223	26.7
Achieved	12	52.2	34	32.1	129	35.4	69	29.6	650	37.8	10422	38.5
Merit	4	17.4	7	6.6	26	7.1	18	7.7	67	3.9	6188	22.9
Excellence	4	17.4	4	3.8	12	3.3	6	2.6	196	11.4	3247	12
Totals	23		106		364		233		1720		27080	

### **Evaluation Results**

- → Healthcare Heroes programme is encouraging Pacific students to choose health science careers and participate in science; importance of lifting achievement to match aspirations
- → Challenges: varying levels of commitment, leadership, expectations not strongly academic
- → Health Science Academy is a strong element of the programme and is effective in supporting Pacific students to participate, engage and achieve in science

# Lessons learnt for the programme

- Academy model working (measuring against the goals)
  - Engagement and partnership with schools community connection and commitment
  - Relationships teachers, students, families
  - Early intervention Y10/Y11
- Challenges internal evaluation
- Strengths Ethnic specific (by the people for the people)
- Exportability partnership model