

## **Appendix 15**

### **Costing Analysis Methods**

A cost analysis was undertaken to describe the estimated costs associated with the development and integration of risk factor management approaches into routine practice for the pilot teams. This provided an estimate of time and costs involved for other teams who wish to integrate risk factor management into routine service provision. The costing analysis is for service development and support activities and does not include research activities associated with the pilot or the time involved in clinicians undertaking screening and intervention for lifestyle risk factors as part of routine practice.

The cost analysis involved estimating:

1. **Personnel Costs:** This included time spent by project officers, team managers, senior community health managers and Area Health Service (AHS) CHIME managers in developing risk factor management models and supporting implementation (full description of project phase and associated activities provided below).
2. **Materials and Resources costs:**
  - Provision of risk factor management training (room hire, catering and payment of external presenters, travel for external presenters where applicable)
  - Provision of risk factor management resources (clinician resource folders, printing of SNAP clinician guide, adaptation and printing of lifescrpt resources for team 3)
  - Other costs associated with development/ implementation phase (office equipment such as laptop, phone, printer if this was not provided 'in kind').

**Core Project Activities:** The time spent by project officers and team/service staff have been estimated for the following four core project activities, reflecting the key components of the project:

- ***Project Establishment Activities*** – these included orientation for the project officer, introductory meetings with team/services to provide an overview of the project, an audit of available risk factor resources (undertaken by the project officer) and the establishment of a local advisory committee.
- ***Model Development Activities*** – these included consultation with teams/service to develop an appropriate model of risk factor management (working party meetings, individual consultation with clinicians where required and feedback sessions with each team), sourcing and development of resources (client education materials, local referral directory), integrating risk factor management into service protocols and procedures (eg assessment forms, service information brochures, development of standard letters for GPs) and organising and attending training sessions.
- ***Supporting Model Implementation Activities*** – these included liaison and support of clinicians as required, project officer attendance at team meetings to discuss risk factor management and generation of CHIME data reports.
- ***Partnerships and Communication Activities***- these included management and attendance of local advisory committees (including secretariat time), writing and disseminating project newsletters and communicating with key stakeholders.

**Exclusions:**

There were a number of activities that were excluded from the costing analysis as these activities did not reflect what would be required of a service to develop and implement risk factor management. These included:

- Initial meetings with AHS staff to select pilot sites for the study.
- Any research activities associated with the pilot such as conducting surveys, audits, focus groups or interviews.
- Attendance at the State Advisory Committee for the pilot study.
- Training facilitated by AHS staff such as drug and alcohol services, dietetic services, health promotion services etc which was provided as 'in kind' support.
- Attendance by AHS staff such as drug and alcohol services, dietetic services, health promotion services at local advisory committees ('in kind' support).
- Clinician time in undertaking risk factor management activities (see below).
- Project Leader (UNSW) time in supporting service development activities (see below).

**Clinician Time in Undertaking Risk Factor Management Activities:**

The time taken by clinicians to screen and provide intervention for lifestyle risk factors has not been included in this costing analysis. The aim of the service development phase was to integrate these activities into routine practice. Interviews with clinicians as part of the project evaluation indicated that the time required to undertake risk factor management activities was highly variable depending on the clinician. Some clinicians indicated that it did not take a lot of extra time as addressing risk factors has always been part of practice. In contrast others discussed that it could add up to 30 minutes to an initial assessment with a client. This suggests that the time taken depends largely on the clinician approach and previous practice. Due to the high variability and limited information obtained on time taken by clinicians to implement risk factor management as part of the evaluation it was not possible to accurately include this component in the costing analysis.

**Project Leader (UNSW) Time in Supporting Service Development Activities:**

The UNSW project leader coordinated the service development activities across the three pilot teams. This included assisting with the organisation of consultation with teams/service, contribution to the development and delivery of training programs. This took approximately two days a week for six months. This has not been included in the costing analysis as these activities occurred across the three teams and was part of the action research process.

## **AHS 1 – One Project Officer working with one community health team in a metropolitan area**

### **Description:**

This area health service employed one project officer to work with one community health team consisting of 35 generalist community nurses (approx 20 registered nurses and 10 enrolled nurses) located across 4 sites within a metropolitan area. The project officer was seconded from an existing position and hence there were no recruitment costs. The project officer was not a clinician and hence worked closely with the Nursing Unit Manager in undertaking model development activities. The project officer resigned from the position during the model development phase and there was a 2 month gap before another project officer was recruited. The Nursing Unit Manager undertook additional activities during this period.

### **1) Personnel Costs**

Time spent (hours) by Project Officer and Team/Service Staff and estimated costs

	<b>Project Start up Phase</b>	<b>Model Development</b>	<b>Supporting Implementation</b>	<b>Local partnerships and communication</b>	<b>TOTAL Hours</b>	<b>Estimated Cost</b>
Clinicians (n=35)	35	394 <sup>1</sup>	0	22	451 (12.9 hours per clinician)	\$12,794.86 <sup>2</sup>
Project Officer	24	28	15	57	124	\$4232.32 <sup>3</sup>
Team manager	6	50	18	22	96	\$3934.23 <sup>4</sup>
Senior CH manager	2	13	0	22	37	\$2055.90 <sup>5</sup>
AHS CHIME manager	1	5	0	3	9	\$335.76 <sup>6</sup>
<b>Total Cost</b>	<b>2206.38</b>	<b>15091.78</b>	<b>1249.55</b>	<b>4805.36</b>		<b>\$23,353.07</b>

<sup>1</sup> This represents total time spent by clinicians across the team. 350 hours of clinician time were spent on attending training and 44 clinician hours were spent consulting on RFM models.

<sup>2</sup> Based on 10 out of 35 clinicians being enrolled nurses (total of 128.9 hours of EN time costed at Public Health System Nurses' & Midwives' (State) award for >4<sup>th</sup> year EN 1.7.06 - \$810.10 per week, \$21.32 per hour based on 38 hour week) and 25/35 clinicians being registered nurses (total of 322.1 hours of RN time costed at Public Health System Nurses' & Midwives' (State) award for >=8<sup>th</sup> year RN 1.7.06 - \$1185.20 per week, \$31.19 per hour based on 38 hour week)

<sup>3</sup> Based on Health Managers (State) Award (Level 2 – 1.7.06, \$67,444 pa, \$34.13 per hour based on a 38 hour week)

<sup>4</sup> Based on Public Health System Nurses' & Midwives' (State) award for NUM 2 1.7.06 - \$1557.30 per week, \$40.98 per hour based on 38 hour week).

<sup>5</sup> Based on Health Managers (State) Award (Level 5 mid range – 1.7.06, \$109796 pa, \$55.56 per hour based on a 38 hour week)

<sup>6</sup> Based on Health Managers (State) Award (Level 2 – 1.7.06, mid range \$73,719 pa, \$37.31 per hour based on a 38 hour week)

### **2) Materials and Resources**

	Costs
Project Officer recruitment <sup>1</sup>	0
Risk factor resource material <sup>2</sup>	\$957
Training Costs <sup>3</sup>	\$6360
Travel Costs for Project Officer	In Kind
Laptop / Office Equipment	In Kind
<b>Total</b>	<b>\$7317</b>

<sup>1</sup>No recruitment costs as Project Officer seconded from existing position

<sup>2</sup>This included portable clinician resource folders, printing of clinician SNAP guide, client education materials (most were free of charge from existing sources)

<sup>3</sup>This included catering costs for 4 workshops (\$2757), room hire (\$603) and payment of an external facilitator who undertook motivational interviewing training (\$3000)

#### **Total Cost (Personnel and Resources)**

	<b>Service Development<sup>1</sup></b>	<b>Implementation<sup>2</sup></b>	<b>Total</b>
<b>Personnel Costs</b>	\$17 298.16	\$6054.91	\$23 353.07
<b>Materials and Resources</b>	\$7317	-	\$7317
<b>Total</b>	24615.16	\$6054.91	\$30 670.07

<sup>1</sup> Service development includes the project establishment and model development activities

<sup>2</sup> Implementation includes 'supporting model implementation activities' and 'partnership and communication' activities.

**Description:**

This AHS employed one project officer to work with two community health teams. The project officer worked part time as a nurse within one of the teams and was located on site. The other community health team the project officer worked with consisted of 10 clinicians located across 7 community health centres in rural areas.

**1) Personnel Costs****Time spent (hours) by Project Officer and Team/Service Staff**

	<b>Project Start up Phase</b>	<b>Model Development</b>	<b>Supporting Implementation</b>	<b>Local partnerships and communication</b>	<b>TOTAL</b>	<b>Estimated Cost</b>
Clinicians (team 1, n=15)	7.5	144 <sup>1</sup>	0	18	169.5 (11.3 hours per clinician)	\$5286.71 <sup>2</sup>
Clinicians (team 2, n=10)	5	97 <sup>3</sup>	0	18	120 (12 hours per clinician)	\$3742.80 <sup>4</sup>
Project Officer	68	226	38	53	385	\$13140.66 <sup>5</sup>
Team manager (team 1)	17.5	15.5	0	18	51	\$2090.06 <sup>6</sup>
Team manager (team 2)	2	14	0	18	34	\$1393.37 <sup>6</sup>
Senior CH manager	4.5	6	0	18	28.5	\$1583.60 <sup>7</sup>
Service Manager	4.5	5	0	9	18.5	\$942.95 <sup>8</sup>
AHS CHIME manager	3	10	0	9	22	\$820.76 <sup>9</sup>
<b>Total Cost</b>	<b>4101.15</b>	<b>17 401.21</b>	<b>1296.94</b>	<b>6201.61</b>		<b>\$29, 000.91</b>

<sup>1</sup> This represents total time spent by clinicians across the team. 112.5 hours of clinician time were spent on attending training and 31.5 clinician hours were spent consulting on RFM models.

<sup>2</sup> Based on Public Health System Nurses' & Midwives' (State) award for >=8<sup>th</sup> year RN 1.7.06 -\$1185.20 per week, \$31.19 per hour based on 38 hour week). Although this team also had 3 allied health staff who participated in the project, Allied health hours have not been costed separately as the hourly rate was within \$1 of the registered nurse rate used.

<sup>3</sup> This represents total time spent by clinicians across the team. 40 hours of clinician time were spent on attending training and 57 clinician hours were spent consulting on RFM models.

<sup>4</sup> Based on Public Health System Nurses' & Midwives' (State) award for >=8<sup>th</sup> year RN 1.7.06 -\$1185.20 per week, \$31.19 per hour based on 38 hour week). Although this team also had a counsellor, primary health care worker and Aboriginal Health Worker, it was impossible to calculate the time spent by these individuals. Hence all clinician costs have been calculated at the registered nursing rate which we believe would be approximately equivalent or greater than the costing for these clinicians.

<sup>5</sup> Based on Health Managers (State) Award (Level 2 – 1.7.06, \$67,444 pa, \$34.13 per hour based on a 38 hour week)

<sup>6</sup> Based on Public Health System Nurses' & Midwives' (State) award for NUM 2 1.7.06 - \$1557.30 per week, \$40.98 per hour based on 38 hour week).

<sup>7</sup> Based on Health Managers (State) Award (Level 5 mid range – 1.7.06, \$109796 pa, \$55.56 per hour based on a 38 hour week)

<sup>8</sup> Based on Public Health System Nurses' & Midwives' (State) award for Nurse/Midwifery Manager Grade 6 2<sup>nd</sup> year – 1.7.06, \$1936.70 per week, \$50.97 per hour based on 38 hour week)

<sup>9</sup> Based on Health Managers (State) Award (Level 2 – 1.7.06, mid range \$73,719 pa, \$37.31 per hour based on a 38 hour week)

## 2) Materials and Resources

	Team 1	Team 2
Project Officer recruitment	In kind	
Risk factor resource material	\$357.42 <sup>1</sup>	\$2207.29 <sup>2</sup>
Training Costs	\$3139.63 <sup>3</sup>	\$564.81 <sup>4</sup>
Travel Costs for Project Officer	\$0 (in kind)	
Heartmoves (leader training and launch)	\$2315 <sup>5</sup>	N/A
Laptop / Office Equipment / Mobile phone	\$6298.93	
<b>Total</b>	<b>\$14883.08</b>	

<sup>1</sup> This included portable clinician resource folders, printing of clinician SNAP guide, client education materials (most were free of charge from existing sources)

<sup>2</sup> In addition to the resource materials provided to team 1, team 2 were also provided with adapted Lifescript resources to pilot. The printing of these resources cost \$1991.00

<sup>3</sup> This included catering costs for 3 workshops (\$661.45) and travel costs for UNSW training facilitators (\$1698) and payment of external facilitators (\$300) and actors for motivational interviewing training (\$480)

<sup>4</sup> This included catering cost for 1 workshop (\$150) and travel costs for UNSW training facilitators (\$414.81)

<sup>5</sup> Costs covered the establishment of a new Heartmoves class including training for 2 exercise leaders (\$1040) and travel and accommodation to attend the training (\$1275)

## Total Cost (Personnel and Resources)

	Service Development <sup>1</sup>	Implementation <sup>2</sup>	Total
<b>Personnel Costs</b>	\$21 502.36	\$7498.55	\$29 000.91
<b>Materials and Resources</b>	\$14 883.08	-	\$14 883.08
<b>Total</b>	\$36 385.44	\$7498.55	\$43 883.9

<sup>1</sup> Service development includes the project establishment and model development activities

<sup>2</sup> Implementation includes 'supporting model implementation activities' and 'partnership and communication' activities.