

Nursing in General Practice Business Case Study

Practice Model #2 *The Large, Rural Practice Model*

Model Practice Description:

Practice Background:

- The model practice is in a rural town with a population of about 15,000, which also has three other, smaller practices.
- The practice is located in an older style, well-equipped facility with rooms for visiting specialist and allied health staff.
- There is a public hospital staffed by the 12 local GPs, who work a collaborative after-hours roster.
- The practice is fully accredited and receives most of the PIP potentially available.
- The practice opens 8.00am to 6.00pm Monday to Friday, with late opening to 8.00pm on Thursdays and from 8.00am to 2.00pm Saturday and 9.00am to 12.00pm on Sundays and public holidays.

Medical Staff:

- 3 full-time partners & 6 part-time associates, providing 5 FTE GPs altogether.
- All are procedural GPs and all are vocationally registered.

Other Staff:

- The practice employs three full-time and four part-time reception staff (5.0 FTE) as well as a full-time business manager and part-time accounts manager (1.5 FTE), but no nursing staff.

Summary of Large, Rural Practice Model *

	Income	Expenses	Net Practice Income	Profit change from baseline	Profit as % Income
Financial Statement	\$1,399,800	\$560,550	\$839,250	-	60.0%
Special Session Model	\$1,490,006	\$598,550	\$891,456	6.2%	59.8%
Generalist PN Model	\$1,579,612	\$633,790	\$945,822	12.7%	59.9%
Advanced PN Model	\$1,656,064	\$700,550	\$955,514	13.9%	57.7%

* An explanation of these figures appears on the following pages

Practice Financial Statement:

Financial Issues:

- The practice is private billing with a standard fee of \$40 (bulk-billing or concessionary billing rates are about 30%). Average billing rate is \$36 per patient.
- The HIC records the practice SWPE at 5,000, with 350 patients at over 75.
- There are about 250 diabetic patients known (about 5% of the practice population) and another 250 patients have complex chronic illnesses (and hence merit multidisciplinary care plans).
- The GPs each work 46 weeks per year and provide internal cover.
- The practice is very busy and has more demand than can be satisfied.
- The town is deemed RRMA 4 and so the practice receives 20% PIP rural loading and qualifies for the Practice Nurse Incentive.
- The practice utilises few EPC items (only opportunistic Health Assessments) and has enrolled for the chronic disease PIP but not yet billed any SIP items.

Fee for service income (FFS):

- Average billing rate = \$36 / patient / consultation
- GP consultation rate = 4 consultations / hour
- Available GP consulting hours = 200 / week for 46 weeks / year
- Total FFS income per year = \$1,324,800 (36 x 4 x 200 x 46)

Lump sum income (PIP):

- PIP = \$15.00 / SWPE - \$75,000 / year
(*\$7 / SWPE for IM/IT incentive, \$4 for a/hours care, \$1.50 for other initiatives & 20% rural loading*) *These were average estimates of the PIP in 2003 when the models were developed; they may not reflect current PIP

Total Practice Income = \$1,399,800 / year (Benchmark for this practice = \$1,350,000)

Staff costs: -

- Reception = 5.0 FTE = \$168,000 / year (base salary \$28,000 x 5.0 + 20% on-costs)
- Practice Manager = 1.5 FTE = \$63,000 / year (base salary \$35,000 x 1.5 + 20% on-costs)
- Total = \$231,000 / year (benchmark for this practice = \$236,880 / year)

Practice non-staff costs = \$234,800 / year (entirely based on benchmark estimates)

Professional costs = \$94,750 / year (entirely based on benchmark estimates)

Total Practice Costs = \$560,550 / year (benchmark for this practice = \$571,930 / year)

Net Practice Income = \$839,250 / year (Benchmark for this practice = \$778,070 / year)

Financial Implications of Practice Nurse Models

The Special Session Model

In this model, the special sessions are: - a nurse to undertake home health assessments for 8 hours / week (6 assessments) a nurse educator for two diabetes session per week and one asthma session per week. The nurse educator(s) sees two patients / hour during the four-hour sessions and the GPs see each patient for 20 minutes at the end to review the findings. These sessions increase practice access to chronic disease initiative payments but do not include sufficient hours to qualify the practice for the special nurse initiative payments.

Income Adjustment:

- Insufficient nursing hours to qualify for PIP incentive.

(Only 20 hours per week. The PIP regulations would require a minimum of 40 hours per week for this practice to qualify for the incentive payments)

- On average, the nurses see 24 chronic disease patients per week. This releases the GPs to consult an additional 16 patients per week.

(By reducing a potential 30-minute consultation to 20 minutes, releasing 10 minutes of GP time per patient or 240 minutes altogether. As the GPs see 4 patients per hour, this translates to 16 additional patients).

- At an average of \$36 / patient, this equates to \$576 / week or \$26,496 / year (46 weeks).
- Increased use of diabetes & asthma SIPs = \$300 / week or \$13,800 / year (46 weeks).

(This assumes 5 diabetes SIPs / week at \$40 each = \$200 and one asthma SIP /week at \$100. There would also be access to diabetes outcomes payments, not included here for simplicity)

- Increased EPC and CDM item number access with Home Health Assessments x 6 / week @ \$232 each, GPMP x 2 / week @ \$122 each, and TCA x 1 / week @ \$97 = \$1,733 less \$648 for GP time (see notes below) = \$1,085 per week or \$49,910 / year (46 weeks).

(This practice has 350 patients that qualify for health assessments. It is assumed that 300 of these patients consent to home based, nurse conducted assessments. GP time spent completing the health assessments after the nurse has undertaken some of the necessary components 30 minutes each (RACGP guidelines suggest approximately 30 minutes), and 30 minutes each for each GPMP and TCA. Thus in this model, GP time lost is 270 minutes (6 x 30 + 2 x 30 + 1 x 30) which equates to eighteen 15-minute consultations at \$36 totalling \$648 which is subtracted from the income from the EPC/CDM items).*

**Estimate only, time will vary according to complexity.*

- **Total increased income = \$90,206 / year.** ($\$26,496 + \$13,800 + \$49,910 = \$90,206$).

Costs Adjustment:

- Additional staff costs of 20 hours / week at \$35.00 / hour including on-costs = \$700 / week = \$35,000 / year (50 weeks).

(\$35/hour is the average estimated casual rate paid to sessional nurses in GP and includes 25% on-costs to cover superannuation, annual, sick and long-service leave and workers compensation)

The Special Session Model cont.

Capital costs of one additional computer with appropriate software, one additional telephone and some low level building alterations = \$3,000 / year.

(Based on \$4,000 for computer & networking, \$2,000 for software & telephone costs and an allowance of \$3,000 for building and fit out costs, based on information from site visits conducted to practices using this model of practice nurse utilisation and information from the validation workshop and NSC. This total of \$9,000 is amortised over 3 years).

- **Total increased costs = \$38,000 / year.** ($\$35,000 + \$3,000 = \$38,000$).

Overall Adjustment:

- **Net gain to practice = \$52,206.** ($\$90,206$ less $\$38,000 = \$52,206$).
- This increases overall net profit to \$891,456 an increase of 6.2%.

The Generalist Practice Nurse Model

In this model, the practice employs a full-time practice nurse (or more likely, two part-time nurses) for 10 sessions or 40 hours / week, maximising access to the PIP incentive. The nurse works 8.30am to 5.30pm Monday to Friday and mainly has a clinical support role, undertaking tasks delegated by the GPs (such as dressings, ECGs, immunisations, spirometry). In free time the nurse undertakes a file audit to identify >75 year olds for home based health assessments (which she then performs x 6 / week during 'quiet' times, taking 8 hours out from her regular duties). She also reviews all diabetic patients to create a register and undertake a clinical audit and begin to access chronic disease initiative payments.

Income Adjustment:

- Additional nursing hours qualify practice for PIP incentive = \$40,000 / year.
- Nurse provides care to an average of 112 patients / week.

(In clinical support role, nurse sees each patient for 15 minutes thus providing 112 consultations in 28 hours. This leaves 4 hours for administrative and non-patient based clinical activities and 8 hours for providing home based health assessments).

- By liberating an average of 5 minutes of GP time per patient contact, this releases GPs to consult an additional 37 patients / week (assuming 15 minute consultations) at \$36 / patient = \$1,332 / week = \$61,272 / year (46 weeks)

(The figure of 5 minutes of GP time liberated for each patient seen by the practice nurse was estimated from interviews with a number of GPs that employ nurses and may well be a significant underestimate. The GP gains 5 minutes for each of the 112 patients seen by the nurse, which equates to 560 minutes of additional time, in which the GP can provide a further 37, 15-minute consultations, assuming patient demand is present (as is the case in this particular model). This model does not focus on chronic disease management therefore no factor is included for GP time liberated by nurse activity in this area. However, it would be likely that some benefit would be apparent, though less than for the first model).

Access to practice nurse MBS items

- Average number of immunisations undertaken by the nurse per week is 15, this equates to *\$156/ week or \$7,176 / year (46 weeks).
- Average number of wound care services undertaken by the nurse per week is 10, this equates to *\$104 / week or \$4,784 / year (46 weeks).
- Average number of Pap smears undertaken by the nurse per week is 6, this equates to *\$62.40 / week or \$2,870/ year (46 weeks).

*100% Medicare rebate fee of \$10.40 per item. Some of these attendances may also attract the additional bulk billing payment for concessional patients and children aged under 16 years (Item 10991 \$9.20). If for example 50% of the above attendances attracted the additional bulk billing payment income would be increased by an additional \$6,560. This information has not been included in the financial data.

- Increased access to SIP incentives also adds \$300 / week or \$13,800 / year (46 weeks).

(This assumes 5 diabetes SIPs / week at \$40 each = \$200 and one asthma SIP /week at \$100. There would also be access to diabetes outcomes payments, not included here for simplicity)

- Increased EPC and CDM item number access with Home Health Assessments x 6 / week @ \$232 each, GPMP x 2 / week @ \$122, and TCA X 1 / week @ \$97 = \$1,733 less \$648 for GP time (see notes below) = \$1,085 per week or \$49,910 / year (46 weeks).
- *This practice has 350 patients that qualify for health assessments. It is assumed that 300 of these patients consent to home based, nurse conducted assessments. GP time spent completing the health assessments after the nurse has undertaken some of the necessary components 30 minutes each (RACGP guidelines suggest approximately 30 minutes), and 30 minutes each for each GPMP and TCA*. Thus in this model, GP time lost is 270 minutes (6 x 30 + 2 x 30 + 1 x 30) which equates to eighteen 15-minute consultations at \$36 totalling \$648 which is subtracted from the income from the EPC/CDM items).*

*Estimate only, time will vary according to complexity.

The Generalist Practice Nurse Model cont.

Practices involved in the study reported that having a practice nurse involved in health assessments increased the uptake well beyond the national level, however this information should be used with caution and practices considering the adoption of the model should apply the model to their own situation

- **Total increased income = \$179,812 / year.** ($\$40,000 + \$61,272 + \$7,176 + \$4,784 + \$2,870 + \$13,800 + \$49,910 = \$179,812$).

Costs Adjustment:

- Additional staff costs of 40 hours per week at \$28 / hour including on-costs = \$1,120 / week = \$58,240 per year – 52 weeks full time employee (see previous model for explanation of on-costs).

(This item uses \$28 / hr including on-costs, as the appropriate rate for a PN employed on permanent part-time basis & is thus less than the \$35 per hour estimate for the more specialised nurse undertaking isolated 4-hour sessions in the first model. These figures are based on industrial award rates and actual rates being paid in a number of practices consulted during this study)

- Capital costs of one additional computer with appropriate software, one additional telephone and some low level building alterations = \$5,000 / year.

(Based on \$4,000 for computer & networking, \$2,000 for software & telephone costs and an allowance of \$9,000 for building and fit out costs, based on information from site visits conducted to practices using this model of practice nurse utilisation and information from the validation workshop and NSC. This total of \$15,000 is amortised over 3 years).

- Additional stock and other supplies - \$200 / week = \$10,000 / year.

(Based on information from site visits conducted to practices using this model of practice nurse utilisation).

- **Total increased costs = \$73,240 / year.** ($\$58,240 + \$5,000 + \$10,000 = \$73,240$).

Overall Adjustment:

- **Net gain to practice = \$106,572.** ($\$179,812$ less $\$73,240 = \$106,572$).
- This increases net profit to \$945,822 an increase of 12.7%.

The Advanced Practice Nurse Model

In this model, practice nurses are employed for a total of 20 sessions per week and operate a series of half-day clinics in diabetes, asthma, woman's health (including Pap smears and family planning advice) and health promotion (smoking cessation and weight loss). The nursing role would probably be split between 3 or more part-time nurses to allow range of skills / qualifications required and ensure backfill cover for annual, sick and study leave. One nurse manages the EPC program and identifies patients that would benefit from a GPMP and/or TCA, and conducts 6 home health assessments per week. Nurses employed have certificates in woman's health and as Diabetes Nurse Educators and Asthma Nurse Educators.

This model involves a significant amount of GP time involved in undertaking GPMPs or TCAs. It is provided as a good quality example of team-based management of a patient's complex care needs

Income Adjustment:

- Additional nursing hours (80 / week) qualify practice for PIP incentive = \$40,000 / year.
- The nurse provides 36 hours direct clinical support, 12 hours administration (including accreditation), 16 hours chronic disease management and 16 hours of EPC / week.
- The clinical support role liberates 5 minutes of GP time per patient seen. *(See previous models)*
- Patients seen in 36 hours allocated to clinical support time = 144 / week. *(See previous models)*
- By liberating an average of 5 minutes of GP time per patient contact, this releases GPs to consult an additional 48 patients / week at \$36 / patient = \$1,728 / week = \$79,488 / year – 46 weeks.

(GP gains 5 minutes for each of 144 patients seen by nurse, equating to 720 minutes of additional time, in which the GP can provide an estimated 48, 15-minute consultations, assuming demand is available in this particular model).

- The chronic disease management role reduces GP time spent with complex patients from 30 minutes to 20 minutes and liberates 10 minutes of GP time per complex patient seen by the nurse. The nurse sees 2 patients per hour during 16 hours per week allocated to role, totalling 32 patients seen by nurse. This liberates 320 minutes GP time during which GP can potentially see further 21 patients, at average \$36 / patient, equating to \$756 / week or \$34,776 / year- 46 weeks.

Access to practice nurse MBS items

- Average number of immunisations undertaken by the nurse per week is 15, this equates to *\$156/ week or \$7,176 / year (46 weeks).
- Average number of wound care services undertaken by the nurse per week is 10, this equates to *\$104 / week or \$4,784 / year (46 weeks).
- Average number of Pap smears undertaken by the nurse per week is 6, this equates to *\$62.40 / week or \$2,870/ year (46 weeks).

*100% Medicare rebate fee of \$10.40 per item. Some of these attendances may also attract the additional bulk billing payment for concessional patients and children aged under 16 years (Item 10991 \$9.20). If for example 50% of the above attendances attracted the additional bulk billing payment income would be increased by an additional \$6,560. This information has not been included in the financial data.

- Increased access to diabetes, asthma and cervical screening SIP incentives adds \$435 / week or \$20,010 / year.

(Based on \$40 / diabetes SIP @ 5 / week, \$100 / asthma SIP @ 2 / week & \$35 / cervical screening SIP @ 1 / week. Diabetes and cervical screening outcomes payments are not included for simplicity)

The Advanced Practice Nurse Model cont.

- Increased EPC and CDM item number access with Home Health Assessments x 6 / week @ \$232 each, GPMPs x 8 / week @ 122 each, and TCA x 4 / week @ \$97 each = totalling \$2,756 (less GP time factor of \$1,296 as below) = \$1,460 / week or **\$67,160** / year (46 weeks).

(As in previous models, the GP loses 30 minutes of consulting time per health assessment and 30 minutes per GPMP and TCA. Thus in this model, GP time lost is 540 minutes (6 x 30 + 8 x 30 + 4 x 30)) which equates to thirty six 15-minute consultations at \$36 or \$1,296, which is subtracted from the income from the EPC items)*

Practices involved in the study reported that having a practice nurse involved in health assessments increased the uptake well beyond the national level, however this information should be used with caution and practices considering the adoption of the model should apply the model to their own situation.

*Estimate only, time will vary according to complexity.

- **Total increased income = \$256,264 / year.** (\$40,000+\$79,488+\$34,776+\$7,176+\$4,784+\$2,870+\$20,010+\$67,160 = \$256,264)

Costs Adjustment:

- Additional staff costs of 80 hours / week at \$28.00 / hour including on-costs = \$2,240 / week = **\$112,000** per year – 50 weeks.

(Pay rates used and on-costs are explained in the previous models).

- Capital costs of one additional computer & software, one additional telephone and some moderate building alterations = **\$8,000** / year.

(Based on \$4,000 computer & networking, \$2,000 software & telephone and allowance of \$18,000 for building / fit out costs. This total of \$24,000 is amortised over 3 years).

- Additional stock and equipment - \$400 / week = **\$20,000** / year. *(See previous models)*
- **Total increased costs = \$140,000 / year.** (\$112,000 + \$8,000 + \$20,000 = \$140,000).

Overall Adjustment:

- **Net gain to practice = \$116,264.** (\$256,264 less \$140,000 = \$116,264).
- This increases net profit to \$955,514 an increase of 13.9%.