SOWING THE SEEDS OF FARMER HEALTH

An evaluation of the impact of practice nurse (PN) Pap testing initiatives on cervical screening in Grampians general practices

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An evaluation of the impact of practice nurse (PN) Pap testing initiatives on cervical screening in Grampians general practices

- The Grampians region – a snapshot
- Cervical cancer, incidence, mortality, rurality and screening
- PN Pap initiatives
- Evaluation methods
- General practice context and mechanisms
- What was found, what was said
- What was learnt
Background

The Grampians region of Victoria (9)

Remoteness classification ASGC-RA:
- Outer regional
- Remote

Cancer Council 2008
Why Cervical Screening?

- Cervical cancer is preventable particularly if women are screened for precancerous cervical changes. (1,2)
- Worldwide cervical cancer second most common cancer in females. (3-4)
- As a result of a coordinated screening program - Australia has one of the lowest incidence of cervical cancer globally. (5)
- Two yearly Pap testing maximises early detection and treatment of cancer and premalignant abnormalities and is recommended for all HPV vaccinated and unvaccinated Australian women (6)
  - Vaccine only covers 70% HPV virus
  - Reach of vaccination program variable
  - Vaccination program does not included women outside the school based program or GP catch up program. (6,7)
Cervical Cancer Incidence and Mortality

- 2216 new cases of in-situ cervical cancer diagnosed in 2009 across Victoria. \(^{(8)}\)
- 48 Victorian women died of cancer of the cervix in 2009. \(^{(8)}\)
- Incidence of cervical cancer in rural Australia is almost 20% greater than incidence of cervical cancer in metropolitan areas of Australia. \(^{(8)}\)
Cervical Cancer Incidence and Rurality

BACKGROUND

Canstat 2011

Incidence of cervical cancer by geographical area

- **Major cities**: 10.5 cases per 100,000 women (1997-2001), 10.9 cases per 100,000 women (2002-2006)
- **Inner and outer regional**: 8.8 cases per 100,000 women (1997-2001), 9.1 cases per 100,000 women (2002-2006)
- **Remote and very remote**: 13.3 cases per 100,000 women (1997-2001), 11.2 cases per 100,000 women (2002-2006)

Canstat 2011
Cervical screening in Victoria

- Since establishment NCSP in 1991, cervical screening (2 yearly participation) rates for Victorian women aged between 18-69 has settled at around 61%. (10)

- Participation rates in the western Grampians region in 2008-9 was 54% the lowest recorded participation rate across Victoria. (10)

- The highest 2 yearly screening rate over same period is 70% of targeted women (Inner Melbourne - Bayside GP Network). (10)
Cervical screening in Victoria

Pap participation by GP Networks (2 yearly screening) (10)

<table>
<thead>
<tr>
<th>Region</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grampians region (Div330)</td>
<td>54.2</td>
<td>54.1</td>
</tr>
<tr>
<td>Victoria (average)</td>
<td>60.7</td>
<td>60.2</td>
</tr>
<tr>
<td>Bayside GP Network</td>
<td>70.3</td>
<td>69.2</td>
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BACKGROUND
Cervical Screening Barriers

- Cervical screening activity impediments correlate with:
  - individual decision-making barriers;
  - obstructions that specifically relate to GP access and GP capacity. (11,12)

- In an attempt to address these general practice barriers, policy makers developed Commonwealth Government funded initiatives to support nurses to undertake Papanicolaou (Pap) tests in the general practice setting.
General Practice Nurse Initiatives

- These significant general practice initiatives facilitated the development of the role of the practice nurse and capacity building of PN workforce.

- Capacity building included areas such as:
  - increase numbers of PNs;
  - increase uptake of the Pap training course by PNs;
  - increase number of pap smears provided by credentialed PNs.
• Initiatives
  - General practice nurse initiative (rural general practices) \cite{13,14}
    - $123.9$ million 2001-02
    - $150.3$ million 2005-06
  - Coordinated cervical screening program \cite{15,16}
    - $71.9$ million 2001-02
    - $92.2$ million 2006-07
  - Screening undertaken by general practice nurses \cite{14,16}
    - $17.8$ million 2005-06 (rural, urban workforce shortage → metro).

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Cervical Screening Activity Practice Nurses 2005 -10; 2009-10

Percent of total (95% CI) PN Pap MBS items claimed 2005-10

Percent of total (95% CI) PN Pap MBS items claimed 2009-10

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Medicare Australia 2011
So where have all the Pap tests gone?....

Mixed method evaluation: focus on mechanisms embedded in general practice (HREC-Low Risk).

1. Clarificative
   - Literature review (incorporating realist principles)
   - Data set analysis (VCCR; General Practice Activity; Cancer Series).
   - Early theory development and program logic mapping (Test assumption validity).

2. Summative
   - Key informant interviews N=14 (Semi structured - guided by script).
   - Data (quantitative & qualitative) scrutinised for anomalies, flawed assumptions and unintended outcomes.
   - Theory alignment – looking for emergent and repeating themes.
PROGRAM LOGIC MODEL

GOALS

The use of the Nurse in General Practice will increase Pap screen uptake in General Practice in females between the ages of 18-69 years.

SITUATION

- Since the implementation of the National Cervical Screening Program in 1991 screening participation rates have remained static (61% of female population between 20-69 years).
- Barriers to cervical screening in General Practice include General Practitioner accessibility; GP workforce; General Practitioner capacity; gender preference; age of practitioner preferences, culture and language.
- Incentives to promote the use of the Practice Nurse to perform Pap screening in General Practice were initiated in 2004.

Inputs

- Practice nurses (PNs) employed in General Practice.
- General Practitioners (GPs) in General Practice.
- Pap PN mentor.
- Commonwealth Government funds for:
  - PN scholarships for training;
  - MBS PN item number allocation;
  - Practice incentive payments (PIP).
- Educational and training organisations:
  - University of Melbourne;
  - Family Planning Victoria.
  - Pap Screen Victoria.
  - APNA, RCNA.
- Divisions of General Practice
- Consumers

Activities

- Pap nurses undertake credentialed Pap nurse training.
- Practice nurse access Pap PN mentor to support development of clinical skills.
- Pap nurses maintain qualification (re-credentialing) by performing a minimal number of Pap tests per annum.
- Scholarship access and utilisation is facilitated via PN peak body APNA and RCNA.
- GPs, Practice Managers and PN are utilizing PN Pap nurse item numbers.
- Education and training maintain Pap PN training program (Post Grad diploma in Women Health).
- PAP screens Victoria maintain records of PN credentialing status.
- Public awareness campaign to inform consumers of opportunities for Pap screening undertaken by a practice nurse.
- Divisions of GP promote GP and PN knowledge of Pap nurse activity in General Practice.

Outputs

- Increase in the number of credential PN Pap nurses working in General Practice.
- Enhanced General Practitioner perception of benefits of utilizing Pap PN in General Practice.
- Increased consumer knowledge of the role of the Pap PN in General Practice.

Short-term

- Increase in PN Pap cervical screening activity rates in General Practice.
- Increased number of General Practitioner driving the Pap PN role in General Practice.
- Increased consumer demand for PN Pap provider.
- Decreased GP Pap item activity in General Practice.

Medium-term

- Increase in the number of women between the age of 18-69 participating in routine Pap screening in Australia.

Long-term

- Decrease in the incidence of cervical cancer in Australia.

Assumptions:

1. GPs will freely allocate health care activities to practice nurses working in general practice if they have been educated and demonstrate competence in that activity.
2. GPs will support Commonwealth Government policy driven incentives by embracing the PN Pap nurse program regardless of MBS rebate for the Pap PN activity.

External Influences:

- General Practice is a small business. Activities and actions undertaken by GPs will be driven by a sound business case.
- Medical and professional indemnity insurance varies with GP, General Practice and PN cover.
- Extra costs to General Practice for infrastructure changes and equipment.
- Changes to government funding will alter access to the resources and organisations that facilitate and drive the Pap PN program.
- Historical perspectives and cultural norms determine the allocation of activities by GPs to PN in General Practice.

* APNA-Australian Practice Nurse Association; RCNA-Royal College Nursing Australia
Context…

• General Practitioners:
  - engage in private practice;
  - access Commonwealth Government funds for the provision of health care services.

• Commonwealth Government:
  - funds the ‘business of general practice’ by remunerating GPs through MBS item access, grants and incentive payments;
  - seeks to influence GP activity by deploying policy that determines how GPs do their work within the constraints of the funding arrangements.

• Policy has been delivered through general practice in the form of rapidly changing macro and micro general practice reforms.
  - Reforms have not always delivered the outcomes that policy makers have anticipated…
What was found...mechanisms

• Lower incentive remuneration compared to other activities (19)
  ➢ Cervical smear without/with check (item 23/36) - $34.30 /$65.20
  ➢ Over 75 health check (item 703/705) – $132.70/$183.05
  ➢ Care plan (item 721/723) - $138.72/109.95

• Poor business case to support task transfer
  ➢ Medical Benefit Schedule (MBS) rebates (19)
    – PN Pap test (Item 10998) - $11.25 *
    – GP rebate (Item 23) - $34.30
    – PN Pap test with check (Item 10994) - $23.10 *
    – GP rebate (Item 36) - $65.20
  ➢ PN Pap activity claimed using GP item numbers ( GP rebate greater).

• Infrastructure organisational constraints
  ➢ Room availability

* PN MBS items for Pap activity removed in January 2012 and replaced with PNIP block grant
What was found...

- Consumer preference
  - Female provider, GP, Same provider
  - Consumer complacency due to HPV program

- Liability concerns
  - Pathology red tape

- PN credentialing requirements
  - Minimum number of tests per annum

- PN education
  - Complex/comprehensive
  - Melbourne based
  - Costly
  - Mentoring preceptorship requirements
What was found…

• General practitioner characteristics - Grampians region
  - GP autonomy, clinical sovereignty, holistic approach to patient care
  - Less female GPs (24% female, Metro Vic. – 64% female) (20)
  - Higher concentration of International Medical Graduates(40% GP- IMG) (20)

• GP capacity
  - BoD rural communities (21,22)
    - Elderly – People aged over 65 (20.1% vs. total population-13.5%)
    - Chronic disease – Increases with increasing rurality
    - Consumer vs. GP prompting
  - GP to patient ratio (23)
    - 1: 892 in inner metro Melbourne
    - 1:1250 in Grampians region
What they said...

Remuneration

• ...a lot of doctors are just as happy to do a Pap smear themselves. At the end of the day, private practice still has to make a profit to pay for the staff salaries, wages, equipment, building and etcetera...if we look purely on a financial exercise, we'd stop it tomorrow.  

PP1114

• I mean, currently we bulk bill all our cervical smears...They all get charged a [GP item] 23 and the doctor will go in and discuss what's going on with the patient. Then the [nurse item] 10994 is also claimed..... Whereas if you ran that just off the 10994, there wouldn't be enough in it to make it justified.  

PP1109

• ...the doctors have done the quick sums...make $46 an hour from a nurse doing a couple of Pap smears, why on earth would you bother to do it? We'll do a mental health plan or we'll do a care plan. 

PP1103
What they said…

Consumers

• …they don't like to go to the ‘community’ nurses because they know them...they are part of their social network and they like to come to the [GP] clinic.  

• Doctor is still God, particularly in the country…we now have got a female doctor who comes here. But people are choosing to go to her over me, because they just believe their education is probably better I guess.

Infrastructure

• Well the immunisation and wound care is undertaken in a GP’s room or in a procedure room as opposed to your pap smears or health checks being undertaken in a separate room… There is no space for procedure paps.

• …because a nurse will need a separate room for Pap so they might take up space… whereas immunisations can be in the treatment room.
What they said…

Indemnity - Red tape

• Most GPs do the recall on their own patients. So the nurse would be involved in the Pap smears and follow up on the overdue Pap smears. Whereas for the results, the doctors would send out the tear off sheet at the bottom of the histology forms for their patients we do need to cover [ourselves], so you're paying two wages while that happens. PP1114

PN Re-Credentialing

• I have talked to pap screen about that, and it has been a concern of mine that I have to perform so many pap tests per six months. When I first trained I had to do 6, every 6 months um but I haven’t done any for 12 months. PP1106

• We probably will wind the Pap clinics down… [she won’t keep the tests up]. She'll probably do more work in the general nursing department. PP1114

• Well it's a concern whether I'm maintaining standards that are high enough…because there's [a required] minimum number... shame for us and our skills. PP1102
What they said...

PN Education

• It's time, money. That means back to the classroom also the time factor in doing their placement. Because of our isolation - or my isolation, I find that I have to travel everywhere, regardless of what education I do. I had to go to Melbourne to do the course.  
  PP1102

• It's more cost for the practice to send the nurses away and pay them while they're having that training and preceptorship...so it's that additional time and cost and for us in a rural area, having numerous other nurses to then step in too is quite difficult.  
  PP1111

• I...preceptored a nurse from another practice and we just negotiated it amongst ourselves. The reason we were uncomfortable asking is because she works for an opposing practice which is an opposing business.  
  PP1106

Autonomy

• What I'm more concerned about is the other things that might be missed, that might come up in the discussion while the Pap smear was being done, or other things that the doctor might notice, skin rashes or other sorts of things about the patient that might be missed by a nurse who's concentrating on a particular procedure to be done.  
  PP1103
So what does this tell us about PN Pap activity in rural general practices?

- Rural GPs business case via bulk billing of MBS items – less opportunity for funds via gap payments.
- Less female Pap providers compared to metropolitan areas.
- PN re-credentialing challenges – task transfer not always guaranteed.
- Costs associated with infrastructure – minimal return on capital improvement.
- GP characteristics include more IMGs and older GPs.
- PN education access difficult due to long distances from home, economic constraints and family commitments.
- Preceptorship for PNs difficult to access – less preceptors, preceptors in opposing practices.
GPs are generally the owners of the business and GPs are the individuals who mostly determine what is done, who does what, and when it is done in the general practice arena.

For incentives to act as triggers for activity they need to be:

1. meaningful to the GP within the context his/her rural general practice
2. deliver utility to the rural GP and the GP organisation…

…this understanding needs to be embedded into heath care policy to improve primary health care services, prevent the wastage of funds and resources, improve population health outcomes and decrease unnecessary deaths in rural Victoria.
References


4. World health Organisation (WHO) 2012, Prevention of cervical cancer through screening using visual inspection with acetice acid (VIA) and treatment with cryotherapy, 1-40


References


15. Department of Health and Ageing (DoHA) 2001b, Medicare-Even Stronger Now, Department of Health and Ageing, Australian Government

16. Department of Health and Ageing (DoHA) 2006a, Cervical Cancer Screening Incentives for General Practitioners – Continue funding, Department of Health and Ageing, Australian Government

17. Department of Health and Ageing (DOHA) 2006b, MBS items (10998, 10999) for Pap smears taken by a practice nurse on behalf of a medical practitioner


21. ABS 2010, Population by Age and Sex, Regions of Australia, 2010 , CAT NO. 3235.0


Thank you

Question:

What is the ‘butterfly effect’ of low cervical screening rates on farmer family health?