



Health
Western Sydney
Local Health Network



Improving the management of urinary incontinence for men undergoing radical prostatectomy

An NHMRC Translating Research Into Practice (TRIP) Fellowship project

Andrew Hirschhorn^{1,2} Gregory Kolt¹, Andrew Brooks³

¹School of Science and Health, University of Western Sydney

²Westmead Private Physiotherapy Services, Sydney

³Department of Urology, Westmead Hospital, Sydney

YouTube

Abena Abri-Man Male Pad

KCKmedical + Subscribe 21 videos



Abri-Man (Formula 1 and 2) 8x12 450ml and 700ml

0:32 / 0:54

Like Add to Share 4,023

Uploaded by KCKmedical on May 16, 2011

Abri-Man male pad can be used for male incontinence following prostate surgery.

2 likes, 1 dislike



Presentation outline

1. Background to the project
2. Baseline audit
3. Barrier analysis
4. Development/implementation of strategies
5. Assessment of outcomes
6. Lessons learnt

1. Background to the project

- > 6,000 radical prostatectomies in Australia per annum
- 87% of men experience early postprostatectomy urinary incontinence (PPUI)
- Strong evidence for preoperative pelvic floor muscle training (PFMT)
- Provision/receipt of preoperative PFMT is suboptimal

Figure 1: Availability and access of physiotherapy including pelvic floor muscle training for men undergoing radical prostatectomy in SWAHS.

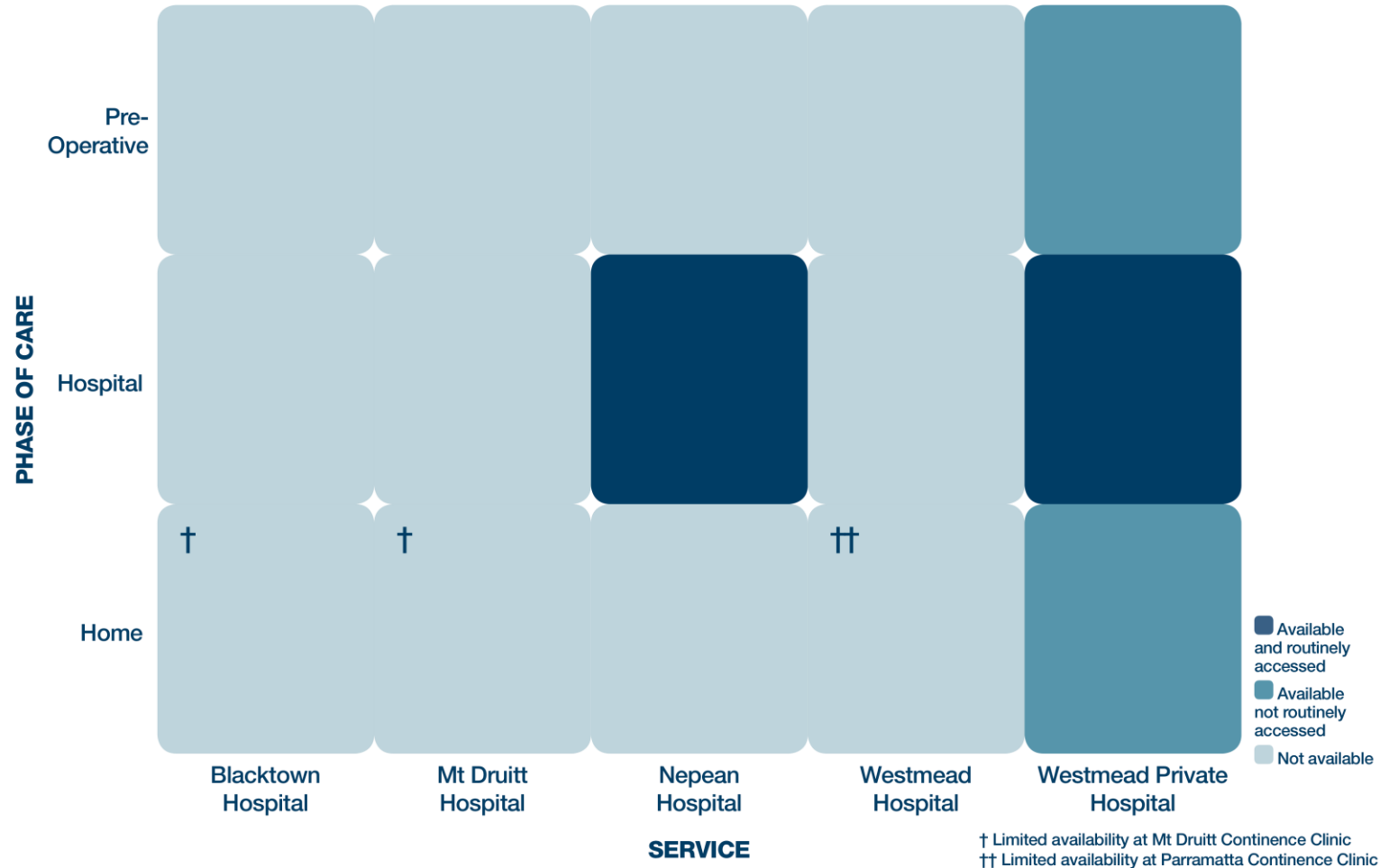
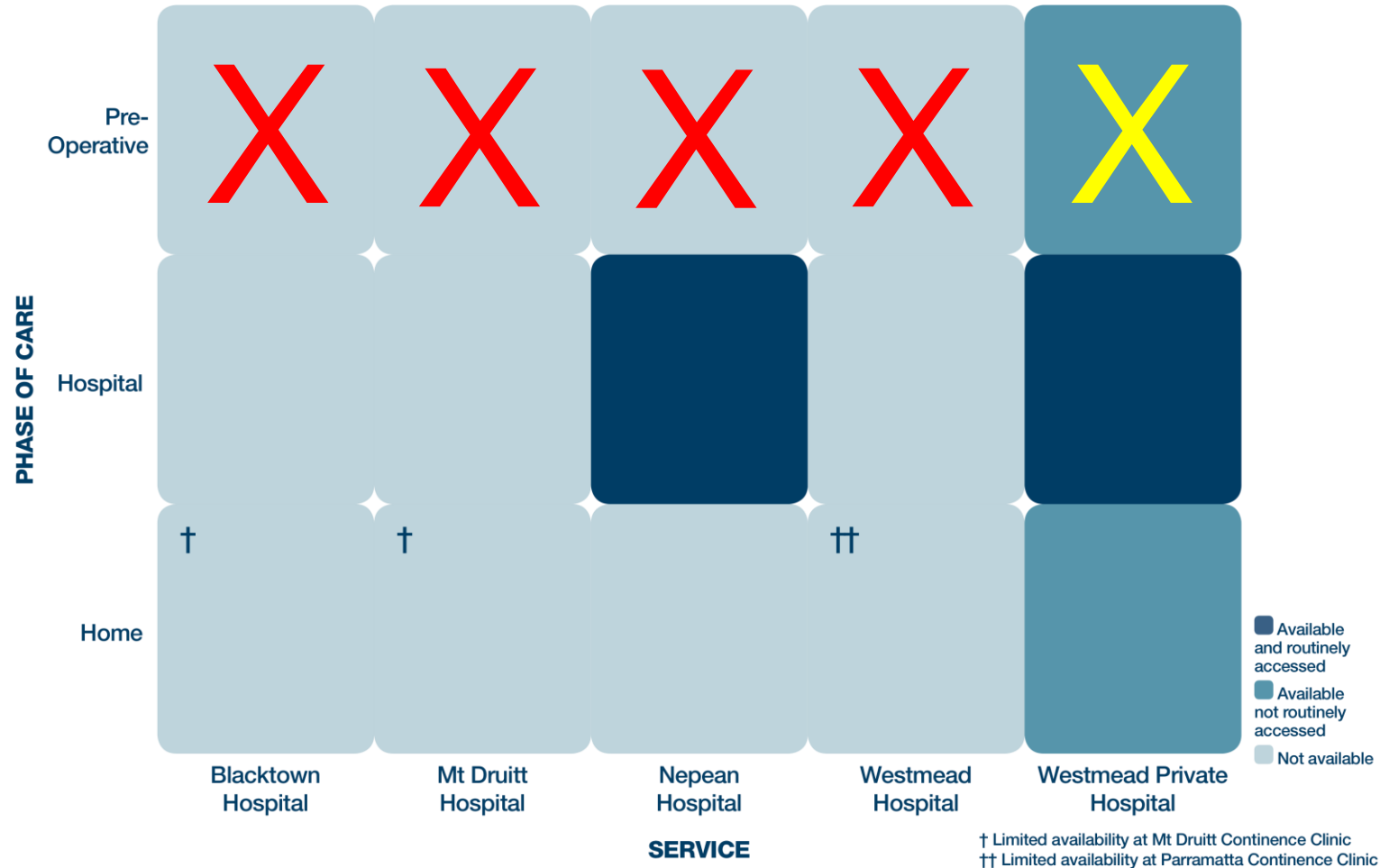


Figure 1: Availability and access of physiotherapy including pelvic floor muscle training for men undergoing radical prostatectomy in SWAHS.



1. Background to the project

Aims:

- To increase receipt of preoperative PFMT in our clinical setting
- To assess (with scientific rigour) the effectiveness of an (unspecified) intervention on receipt of PFMT

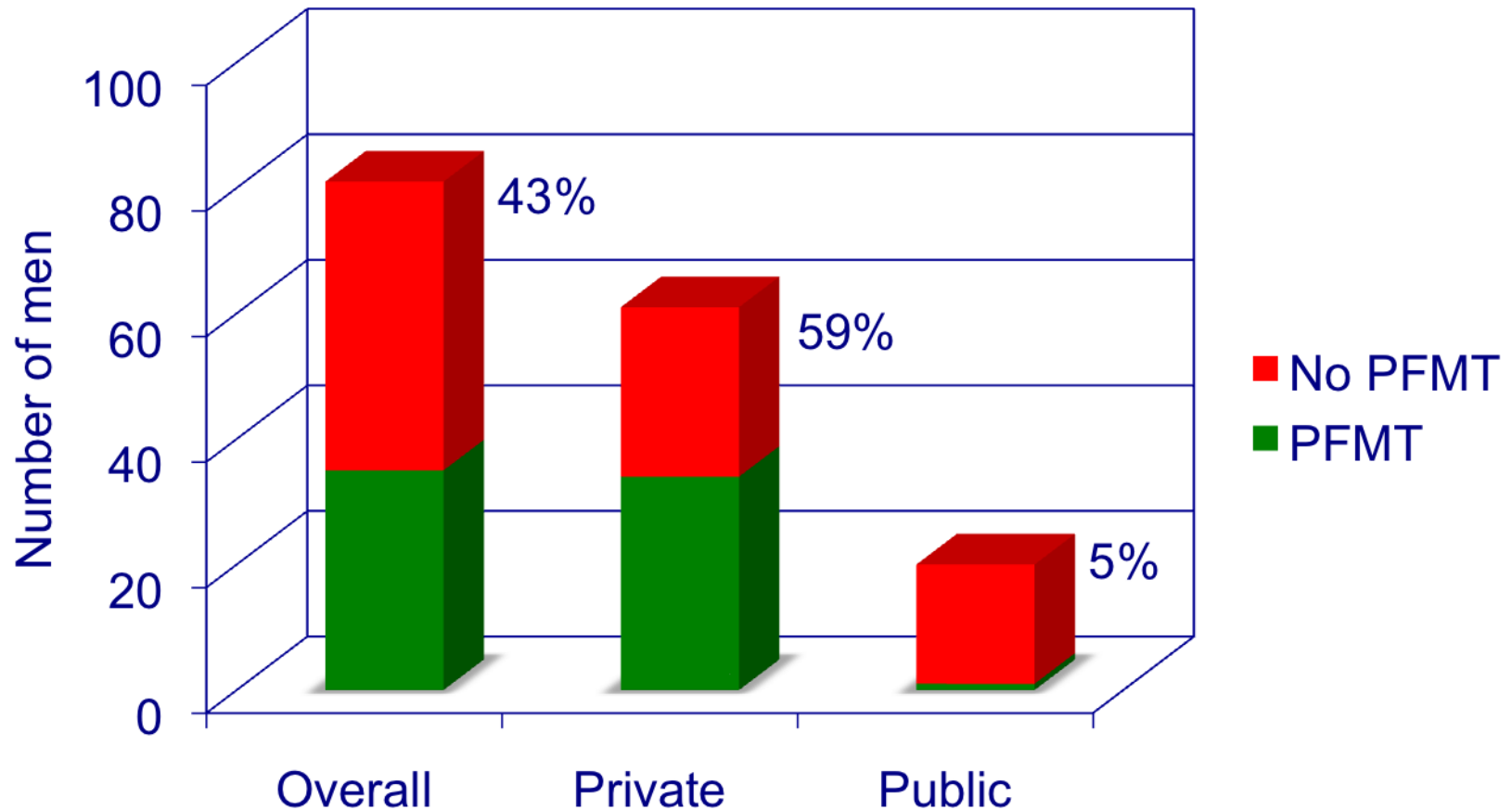
2. Baseline audit – part one: patient audit

- 9-month period
- One public and one (two) private hospital(s)
- Recruitment by 3rd parties
- Anonymous questionnaires, posted at 3 months
- Two main questions:

Did you receive preoperative PFMT?

Current continence status? (ICIQ-SF)

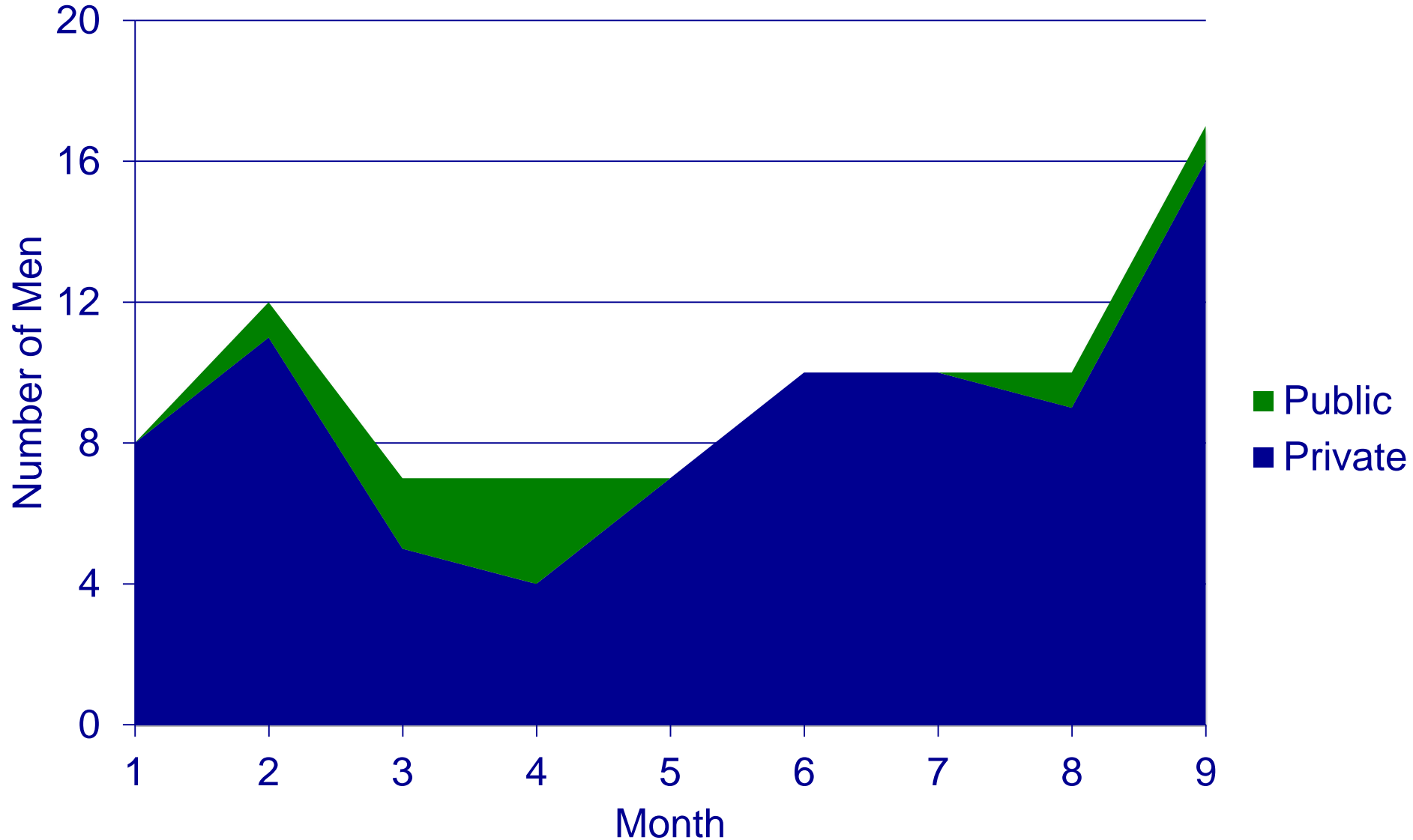
Number of men reporting receiving PFMT (9 mo)



2. Baseline audit – part two: provider audit

- 9-month period
- Five (~~six~~) public and private providers
- Three main questions:
 - Number of patients (public vs private)
 - Number of referrers
 - Number of providers

Number of men reported receiving PFMT (9 months)





Summary of points 1 and 2

- Large evidence-practice gap
- Differential private vs public gap
- Likely different (additional) barriers to preoperative PFMT in public sector

3. Barrier analysis

- Qualitative study design
- Informed by Michie's theoretical domains



**Making psychological theory useful for
implementing evidence based practice: a
consensus approach**

S Michie, M Johnston, C Abraham, et al.

Qual Saf Health Care 2005 14: 26-33
doi: 10.1136/qshc.2004.011155

- 38 semi-structured one-on-one interviews
 - 11 referrers
 - 14 providers
 - 13 patients

3. Barrier analysis

Barriers to Preoperative Pelvic Floor Muscle Training for Men Undergoing Radical Prostatectomy: A Qualitative Study

Andrew Hirschhorn¹, Gregory Kolt¹, Andrew Brooks¹

¹School of Science and Health, University of Western Sydney, ²Clinical Research Institute, Westmead, Sydney, ³Western Urology, Westmead, Sydney

Introduction

• There is strong evidence to support formal preoperative pelvic floor muscle training (PFMT) to reduce the severity and duration of urinary incontinence after radical prostatectomy.^{1,2}

• Uptake of preoperative PFMT amongst men having radical prostatectomy in Western Sydney, Australia, however, is suboptimal (50% of men in the private sector, < 10% of men in the public sector).

• This study was undertaken to investigate local barriers to, and enablers of, preoperative PFMT, from patient, provider, and referer perspectives.

Methods

Semi-structured, one-on-one interviews were conducted with participants from three groups:

- Patients:** men having undergone radical prostatectomy at a public and a private hospital in Western Sydney (n=13)
- Providers:** current and potential providers of PFMT including physiotherapists, and urology and continence nurses (n=19)
- Referrers:** current and potential referrers to PFMT, including urological surgeons and general practitioners (n=8).

Interview schedules were developed using Michie's theoretical domains for investigating the implementation of evidence-based practice,³ and allowed participants to identify potential and actual barriers to, as well as enablers of, preoperative PFMT.

Results

Perceived barriers to, and enablers of, preoperative PFMT varied considerably across participant groups and private versus public sector settings.



A directive from the urologist to attend preoperative PFMT is the key enabler...
'(PFMT) was suggested by (my urologist) as part of the overall package ... it was part of everything that was presented. "You're going to do this (have surgery), therefore you have to do this beforehand".'

...particularly if accompanied by a referral to a specific provider.

'(my urologist) said this (PFMT) is a good thing to do. Here's the name of a person who I think is good at doing it. Make an appointment and go and see him.'

For those men not attending PFMT, a lack of knowledge was a common barrier.

'I never thought about leaky bladder, you know, or incontinence, never thought about that, it was never brought up.'

Cost of preoperative PFMT was a consideration for some, but was most often outweighed by the perceived potential burden of urinary incontinence.

'There is a cost factor. I mean I've only taken medical insurance at the highest level for hospital cover.'

'It (cost) wasn't a consideration. I mean, I would have paid the earth provided I could get some guarantees that, you know, I'm going to come out as well as possible.'



There was a strong belief in the effectiveness of preoperative PFMT.

'The benefit of (PFMT) is it will reduce the impact of the surgery on their (men's) symptoms, and the time course of their symptoms.'

...but some contrast in the ability to provide PFMT between private and public sectors.

'We've invested in new technologies, we have biofeedback units if you need them ... we've got the real-time ultrasound, we've got private rooms in which to conduct this...'

'... we've been busy enough just trying to see the women, to then, for me to turn around and think, "Oh what am I going to do with these men?"'

Discussion

- The urologist is the only consistent point of contact with the patient prior to surgery, therefore the urologist's recommendation to attend preoperative PFMT is essential to uptake.



Urologists were aware of the evidence supporting preoperative PFMT...

'I think all the evidence points to preoperative (pelvic floor muscle training) being useful in reducing postoperative incontinence.'

...and routinely recommended preoperative PFMT.

'(referral for PFMT) routinely occurs for every patient, private and public, preoperatively.'

A lack of established relationships with public sector providers of PFMT mitigated against referrals.

'... we've never really developed a relationship with the continence nurses who act in the public sector in regards to pelvic floor exercises.'

And it was perceived that patients were often focused solely on the removal of the cancer.

'... and so things like pelvic floor exercises may not be seen to be as important, given that the patient's absolutely obsessed with the cancer diagnosis.'

- The urologist's recommendation to attend preoperative PFMT should be accompanied by a direct referral to a recommended provider.
- It is incumbent on providers of PFMT, in both private and public sectors, to form working partnerships with urologists to facilitate referrals.
- Urologists and providers of PFMT should make the process of referral, and uptake of that referral, simple and straightforward for patients.

- GPs sidelined
- Urologists only consistent (timely) patient contact – their referral is key
- Referral delegated to receptionists
- Knowledge an issue (patients) of PFMT (urologists) of public providers*
- Public providers 'flying under the radar' or unavailable*

Who needs to do what differently, when?


- Urologists need to recommend (mandate?) preoperative PFMT
- Patients need this information reinforced somehow
- Receptionists need to provide patients with provider details (at a suitable price-point)
- Providers need to form teams with urologists (clinical and geographical)

**SPECIFIC STRATEGIES IMPLEMENTED TO
FACILITATE THIS**

4. Development/implementation of strategies

- Patient information guides – ALL
 - Provider directories - PUBLIC
 - Evidence summary - ALL
 - Audit and feedback – ALL – PUBLIC
- + Provider training - PUBLIC

A GUIDE FOR: Men having a radical prostatectomy Partners of men having a radical prostatectomy Friends and family of men having a radical prostatectomy




What is the pelvic floor?
Most men having prostate surgery have never heard of the pelvic floor before. In fact, when they hear the words 'pelvic floor training' for the first time, many men think they are being asked to get down on the floor to do exercises.

The pelvic floor is actually a group of muscles that sits at the bottom of your pelvis. The pelvic floor muscles act like a sling to support the bladder and urethra (where urine is stored and passed). The pelvic floor muscles are very important in helping control the flow of urine and stopping it leaking.

Most of the time, you don't have to think about the pelvic floor muscles – they just do their job automatically. When you cough, sneeze or laugh, the pelvic floor muscles automatically contract (switch on) to 'kink off' the urethra and to stop urine leaking (much like kinking a hose will stop water from flowing).

For men having prostate surgery the pelvic floor muscles need to be taught to work a little bit differently. After prostate surgery, you need the pelvic floor muscles to work both automatically and voluntarily both in response to a sudden action (like coughing) and to everyday actions (like standing up and walking).

Westmead Private Physiotherapy Services, Westmead



Address: Suite 6, Westmead Specialist Centre
16 to 18 Minto Road, Westmead, NSW 2145

Telephone: (02) 9633-1035

Fax: (02) 9633-1641

Email: admin@westmeadphysio.com.au

Website: www.westmeadphysio.com.au

Providers of Pelvic Floor Muscle Training

- Sean Mungovan *supervisor, physio, senior, female*
Principal Physiotherapist
- Daniel Valocchi *supervisor, physio, male, female*
Physiotherapist
- Justin Walsh *supervisor, physio, male, female, senior, female*
Physiotherapist

Referral process:
Westmead Private Physiotherapy Services accepts referrals from:
• Urologists
• General practitioners, and
• Self-referrals from patients.
No written referral is specifically required.
Patients can contact Westmead Private Physiotherapy Services in person or by telephone for an appointment. There is no waiting list for appointments.

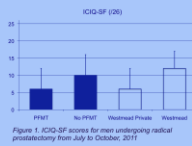
Additional notes:
For patients with private health insurance including extras cover, Westmead Private Physiotherapy Services offers HICAPS, HICAPS is an electronic health claims and payments system that allows members of participating health funds to claim their rebate at the time of consultation.

What is pelvic floor muscle training?

Study	Population	Intervention	Control	Primary endpoints	Time of measurement	Results	Authors' conclusions
Tierney et al. 2012	n=102 Radical prostatectomy Men age: 65 years (range 42 to 74 years)	PFMT: Single preoperative session with both feedback, and self-written instructions	No preoperative PFMT	ICIQ-SF score of zero	1, 3, 6 and 8 months postoperatively	At 1 month: Continence rate: intervention group: 6/16 patients (38%) vs control group: 0/16 patients (0%), p<0.01. At 3 months: Continence rate: intervention group: 6/16 patients (38%) vs control group: 1/16 patients (6%), p<0.01. At 6 months: Continence rate: intervention group: 10/16 patients (63%) vs control group: 1/16 patients (6%), p<0.001.	PFMT may improve continence rate after radical prostatectomy
Cantarella et al. 2010	n=118 Radical prostatectomy Men age: 69 years (range 45 to 85 years)	PFMT: Commenced 30 days preoperatively before the week of surgery, 50 minutes, guided by a physiotherapist.	No preoperative PFMT	Self-reported continence (from bladder diary) ICIQ-SF	1 and 3 months postoperatively	At 1 month: Continence rate: intervention group: 105/108 patients (97%) vs control group: 105/108 (97%), p=0.98. At 3 months: Continence rate: intervention group: 104/108 (96%) vs control group: 104/108 (96%), p=0.98. At 6 months: Continence rate: intervention group: 105/108 (97%) vs control group: 104/108 (96%), p=0.98.	The use of preoperative PFMT may improve continence and quality of life outcomes after radical prostatectomy.
Burgio et al. 2008	n=103 Radical prostatectomy Mean age: 61.2 years	PFMT: Single preoperative session of biofeedback-assisted pelvic floor training plus daily home practice.	No pre-operative PFMT	Time to continence (from bladder diary) Proportion of patients reaching goals	8 months postoperatively	Median time to continence: Intervention group: 5.5 months vs control group: > 6 months, p<0.04. At 8 months: Proportion of patients reaching goals: Intervention group: 32% vs control group: 52%, p<0.05.	Preoperative PFMT can reduce the recovery of time to continence and decrease the severity of continence following radical prostatectomy.
Finelli et al. 2003	n=68 Radical prostatectomy Mean age: 65 years, control group: 66 years	PFMT: Two pre-operative treatment sessions, taught with individualizing verbal cues, adaptation and 9 biofeedback. Guided by a physiotherapist. Postoperative assistance every 2 weeks for 3 months.	No formal education or PFMT	Time to continence (in 1 pad/day)		Median time to continence: Intervention group: 12 weeks vs control group: 16 weeks, p<0.05.	Recovery of urinary control can be achieved sooner with educational/physical therapy.
Sussman et al. 2001	n=10 Radical prostatectomy Mean age: 65 years (range 46 to 85 years)	PFMT: Instructions received 4 weeks prior to surgery. Two preoperative sessions of biofeedback-assisted PFMT.	No pre-operative PFMT	1-hour pad-free interval	8 weeks and 1 year postoperatively	Results presented descriptively – no statistical analysis. At 8 weeks: 1-hour pad-free interval: mean 15.7 gm. At 1 year: 1-hour pad-free interval: intervention group: mean 2.8 gm, vs control group: mean 33.3 gm.	Starting biofeedback sessions with pelvic floor muscle exercises prior to radical prostatectomy improved patient outcomes.

PELVIC FLOOR MUSCLE TRAINING

NHMRC Fellowship Update Men's Health - Issue 3 February 2012



This is the third issue of a series of newsletters describing the progress of the Implementation Research Project, entitled, 'Improving the Management of Urinary Incontinence for Men Undergoing Radical Prostatectomy in Westmead'.

In this issue, I outline some early data from the research studies comprising the Project, and the direction for the project through 2012.

Progress to date

Study 1: Pelvic floor muscle training for urinary incontinence in men undergoing radical prostatectomy. A time-series analysis of treatment uptake and patient outcomes

From July to October, 2011, 43 men having had radical prostatectomy at Westmead Hospital and Westmead Private Hospital consented to receive non-identifiable questionnaire surveys from the study researchers at three months postoperatively.

Twenty-seven men (mean age 63 ± 7 years, 5 Westmead Hospital, 22 Westmead Private Hospital), or 63% of recipients, completed and returned questionnaire surveys.

Of these 27 men, 14 (52%) reported receiving gold-standard pelvic floor muscle training (PFMT), i.e. pelvic floor muscle training commenced preoperatively, under the guidance of an appropriately trained physiotherapist or continence nurse specialist, with visual and/or biofeedback.

Notably, not one man having had surgery at Westmead Hospital reported receiving this 'gold standard' PFMT.

These early questionnaire survey data are largely corroborated by audit data on PFMT provision, as reported by key local providers across public and private sectors.

Continence outcomes

In the questionnaire surveys, men were asked to score continence symptoms, at three months postoperatively, using the ICIQ-SF questionnaire. Scores on the ICIQ-SF range from 0, reflecting no urinary incontinence and related bother, to 26, reflecting severe urinary incontinence and related bother.

Men who reported receiving PFMT showed a trend to lower mean ICIQ-SF score than men who did not (P = 0.101), see figure 1 below.

Similarly, there was a strong trend towards a lower mean ICIQ-SF score for men who had surgery at Westmead Private Hospital (P = 0.076).

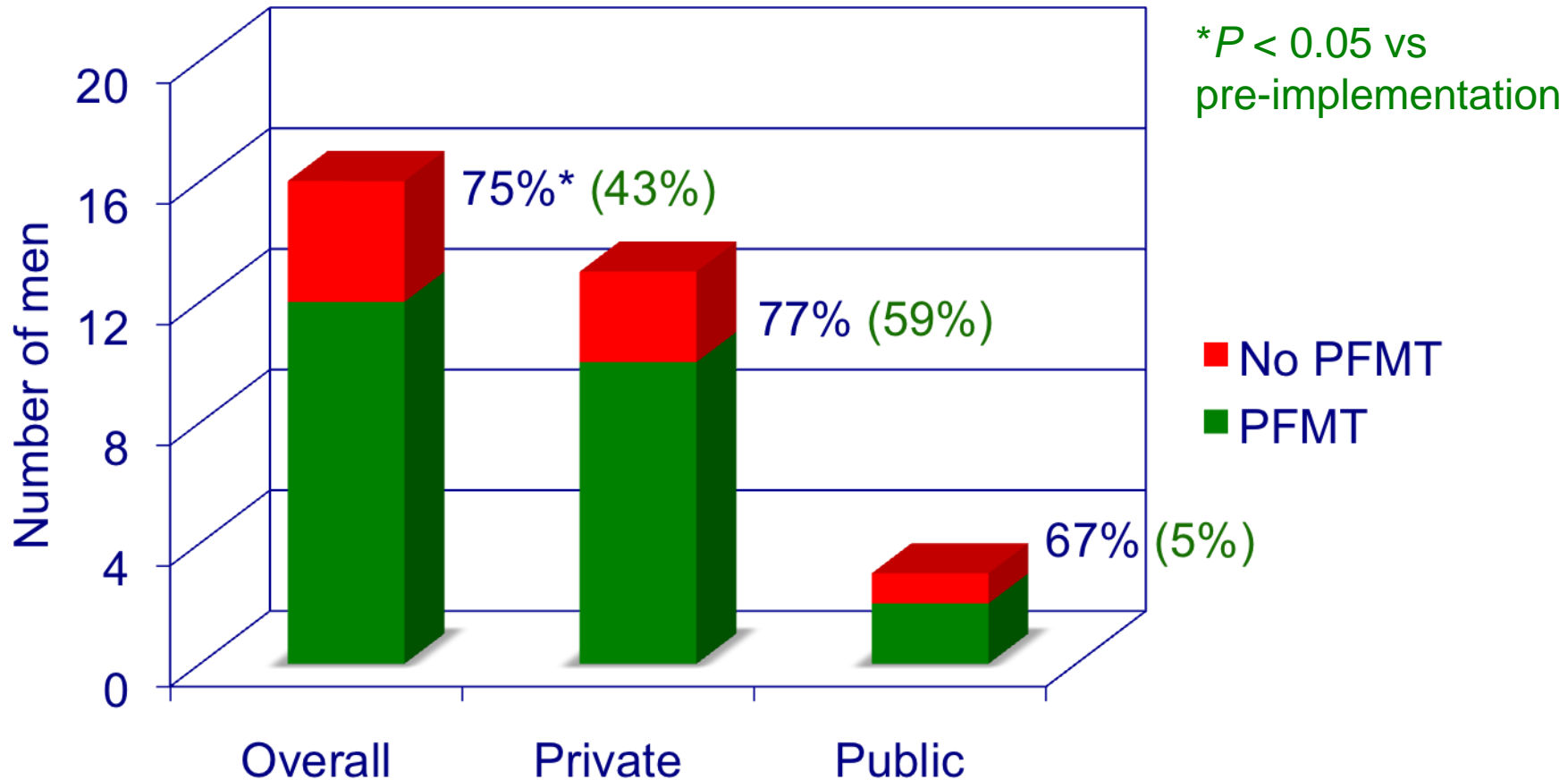
Andrew Hirschhorn, PhD
NHMRC TRIP Fellow
Research Fellow, School of Science and Health,
University of Western Sydney
Senior Associate Physiotherapist, Westmead Private Physiotherapy Services
M. 9633 1035
E. a.hirschhorn@uws.edu.au



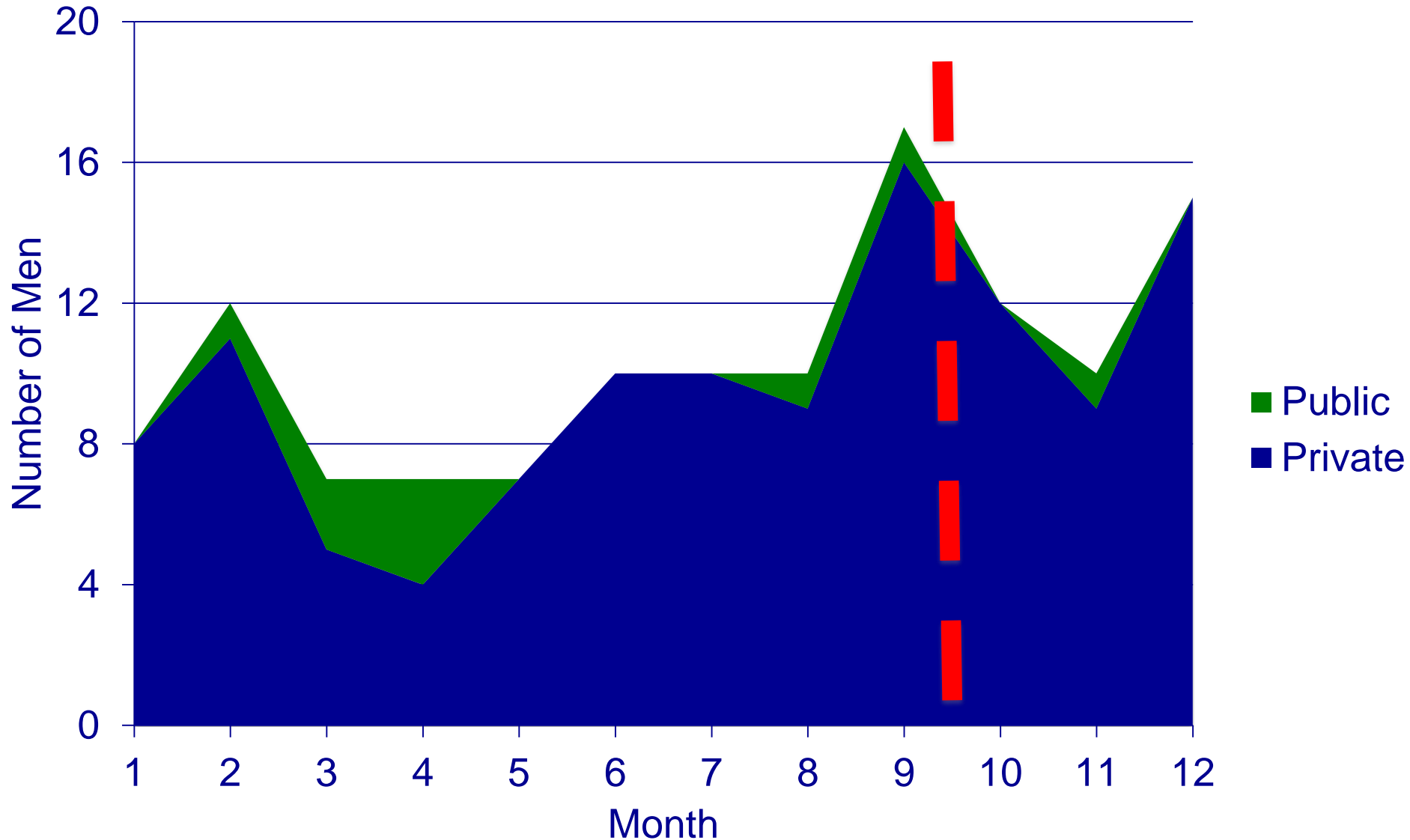
Pre- and post-implementation cohort study

- Does a multi-faceted intervention strategy improve receipt of preoperative PFMT in men having radical prostatectomy?

5. Assessment of outcomes (3 mo completed)



Number of men reported receiving PFMT (9 + 3 months)



6. Lessons learnt (*in conducting implementation research*)

- Ensure evidence is implementation-ready
- Clinical settings can be a ‘moving feast’
- Need to consider barriers to measurement of behaviour change as well as the behavior itself



NHMRC TRANSLATING RESEARCH INTO PRACTICE (TRIP)
FELLOW 2010



The National Institute
of Clinical Studies (NICS)

Dr Andrew Hirschhorn

Physiotherapist

School of Biomedical and Health Sciences,
University of Western Sydney

Westmead Private Physiotherapy Services



Implementation Project:
*Improving the management of urinary
incontinence for men undergoing
radical prostatectomy*



Knowledge is power, moustache is king!
Please support a 'Mo Bro' this Movember