



THE SCOTTISH COLLABORATION FOR PUBLIC  
HEALTH RESEARCH AND POLICY (SCPHRP)

# Bulletin

news update from SCPHRP

Spring 2012

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*How does it work in practice?*

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When preventive health care does  
more harm than good  
*The case of PSA screening for Prostate Cancer*

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# COMMENT FROM PROFESSOR JOHN FRANK, DIRECTOR



*“Spring Greetings from the Collaboration, as we ramp up our activities for the coming year”*

## ***This issue of the Bulletin***

contains details of a number of upcoming events, as well as updates on several of our current projects, including those in which our four Career Development Fellows are co-leads. And there is an introduction to John McAteer, the newly recruited Fellow for our Adolescence/Early Adulthood Working Group, who is replacing Caroline Jackson. Caroline has just taken up an epidemiology research position in Brisbane, Australia, she's settled in well and is enjoying Aussie life.

In late May, we are hosting our first-ever ***Joint Working Groups Meeting***, in Edinburgh, with a keynote by Michael Matheson, MSP, Minister for Public Health. This will be a special opportunity for public health researchers and decision-makers/professionals from across Scotland to experience a SCPHRP Working Group (WG) discussion, and join a Working Group if they like what they hear. It is also coming at a critical time, in that the Collaboration is about to write its Renewal Bid to its funders, CSO and MRC, for its second five years of operations (2013-18.)

Therefore Working Group members will be asked to indicate:

- their priorities for pressing public health topics to be tackled in the next five years, in the life-course stage which is the focus of each of our four Working Groups (Early Life; Adolescence and Young Adulthood; Working Life; and Later Life);
- how they would like to tackle those priorities together;
- what resources they can bring to the table, or would need from a renewed SCPHRP, to move that agenda forward.

This meeting will be the first formal interaction of our Working Groups since they each held a series of four separate meetings over two years, ending in late 2010. In the interim, we have used a deliberate hiatus to allow for two key developments at the Collaboration: 1) the submission, peer-review and competitive awarding of a second wave of eight 2011-13 SCPHRP Pilot/Development Grants, to Working Group members and their affiliates; and 2) the hosting of the “REFLECTIONS and NEXT STEPS” planning event for more than 80 of our stakeholders, held in November 2011. Participants at that event specifically recommended that

SCPHRP continue to support its Working Groups, but seek new models for further integrating their work -- to develop and robustly test novel public health and community-based interventions/approaches to, first, improve Scottish health and reduce inequalities, over the life-course, and secondly, directly inform policies, programmes and practice.

This meeting welcomes potential new Working Group members, and is therefore open not only to previous WG members, as well as our grantees and other collaborators, but also to other public health researchers and professionals involved in the delivery of services, and policy makers interested in the determinants of health, throughout Scotland.

So, we are in the midst of a busy spring season -- and we look forward to hearing from you about your interest in attending any or all of these upcoming events.

Best wishes,  
John

*If you would like to attend the Joint Working Group meeting in late May, please contact Sam Bain at [samantha.bain@scphrp.ac.uk](mailto:samantha.bain@scphrp.ac.uk).*

# News

## Welcome to SCPHRP Dr John McAteer



John joined SCPHRP in January this year, taking over from Dr Caroline Jackson to work as the research fellow for the Adolescent and Young Adult Working Group.

After graduating with honours in Psychology from the University of Stirling, John was awarded a scholarship by the London School of Economics and Political Science, to study for an MSc in Social Psychology. John developed an interest in the application of psychology to health behaviour, focusing upon perceptions of HIV/AIDS and how these influence risky sexual behaviour.

Prior to John joining the Collaboration, he worked in the private sector, designing, implementing and evaluating programmes to support patients with chronic illness. John has presented research findings at both national and international conferences, and to a variety of audiences.

John has settled into SCPHRP life very well - having a great sense of humour has helped and so has his willingness to sing Karaoke with John Frank when no one else will.

Thanks for that John.

## Launch of the new Scottish Schools of Public Health Research (SSPHR)

John Frank has participated in the launch of the new Scottish Schools of Public Health Research (SSPHR), based at the five Scottish Universities with medical schools, and recently funded by the Scottish Funding Council. This model of knowledge transfer and exchange for public health in Scotland is different from that pursued over the last four years, by this Collaboration. It has more of a direct-grant character to researchers, but helpfully spanning the usual institutional boundaries that can hinder the kind of collaborative and truly trans-disciplinary research that is often key to solving applied public health problems. And, in contrast to the Collaboration's organisational principle for its four Working Groups, the SSPHR will have Working Groups focussed on particular major health problems (tobacco, alcohol, obesity and violence) whereas SCPHRP Working Groups are centred on a particular stage in life-course, and can select whatever major health problem they like, which may well change over time.

The two models are complementary, and the two organisations are committed to closely working together.

*John said 'We are already in detailed discussion about melding our future activities around Knowledge Transfer and Exchange in Public Health'.*

## Facilitating evidence- informed public health decision making: lessons learned from a Canadian - Maureen Dobbins

In late 2011, we co-sponsored, with NHS Health Scotland a very well attended colloquium at the Iris Murdoch Building at the University of Stirling - with live webstreaming to a number of remote and rural sites across Scotland, on selected aspects of knowledge transfer. We found the venue to be the best we have experienced for distance-transmission of our special events, and plan to hold more of them in the future.

## Adolescent Health and Risk Behaviours Symposium

On Wednesday 29 February, SCPHRP co-sponsored another event with Health Scotland - this was a half day symposium on Adolescent Health and Risk Behaviours. Taking place at the Royal Society in Edinburgh, the event played to a full-house, including many front-line programme managers and professionals. Presentations were given from a range of speakers focusing on policy, research and practice.

**All presentations and talks from any of SCPHRP's conferences or seminars are available on the website [www.scpgrp.ac.uk](http://www.scpgrp.ac.uk)**

**SCPGRP has joined twitter and facebook**



***"They're a great way to keep up to date with the latest research and events in public health"***

# Gill Westthorp



*SCPHRP recently held a public lecture 'Realist Evaluation' with Dr Gill Westthorp, Director of Community Matters, a consultancy business based in South Australia, as our Keynote speaker.*

**How did you first get involved in undertaking realist reviews and evaluations?**

It was through my work in crime prevention that I met Professor Nick Tilley, co-author of *Realistic Evaluation*, with whom I did a PhD in Social Research Methods. I investigated two issues - the development of realist methods for community based services with poor outcomes data, and a theory to explain how and why some early years programs that 'worked' for some disadvantaged families could generate worse outcomes for children in the most disadvantaged families.

**What has surprised you most in using this approach?**

How much policy makers and program managers like it! Despite rumours to the contrary,

the approach makes 'instant sense' to most of them, and they value the evaluation product they get from it.

**What do find most challenging about the realist approach?**

There are different challenges in different projects. One regular struggle is to work out the right level of abstraction at which to work - how to find the right level for the "middle level theory". The principle is easy enough - "close enough to the data to generate testable hypothesis, and to be explanatory in the particular case, but abstract enough to be portable across different contexts".

**What's your personal philosophy on how policy makers and researchers can impact on population health inequalities?**

We have different but complementary roles to play. I continue to believe that better informed policies are better than ill-informed or uninformed ones.

**What do you think are the most effective ways to break down the divide between academic and policy activities?**

I'm a great believer in walking in the other Indian's moccasins. I think greater mobility across academic and policy roles would help.

**What do you do when you aren't working?**

Gardening, walking, spending time with friends and family, sleep...

## What is realist evaluation?

A realistic approach assumes that programs are "theories incarnate". That is, whenever a programme is implemented, it is testing a theory about what 'might cause change', even though that theory may not be explicit. One of the tasks of a realist evaluation is therefore to make the theories within a program explicit, by developing clear hypothesis about how programs might 'work'.

## The impact of parole on offending: a realist inspired evaluation

Liz Levy, Scottish Government, presented on how the work of Pawson and Tilley inspired her to abandon a quasi-experimental evaluation of the impact of the parole licence to instead attempt a realist evaluation. She set out the mechanisms of change tested via interviews conducted over a period of two years with around 30 prisoners released on parole, the context in which some of these parolees succeeded (avoiding re offending) and what this context revealed about what was driving success. The key aim of the research (which was conducted for her PhD in the late 90s) was to explore whether the realist approach would reveal anything more about the impact of parole than had decades of experimental research.

## A realist evaluation of Alcohol Brief Interventions (ABIs) in the antenatal setting

Lawrence Doi, Stirling University, presented on how there is strong evidence that there are benefits of screening and ABIs in reducing hazardous and harmful drinking - for example, among the primary care population. However, evidence of its effectiveness with the antenatal care population is limited. Nevertheless, in an effort to protect the health and safety of the unborn child and improve subsequent health and developmental outcomes, the Scottish Government is incorporating screening and ABI programmes as part of the routine antenatal care. The study, utilising realistic evaluation methodology, seeks to generate greater understanding of the factors that are likely to influence the effectiveness of this recently implemented programme.



*“The walks have been fun with great companionship and a way to keep healthy.”*

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# TAKE 5 minutes

**to update your knowledge on walking as a treatment for depression - Ruth Jepson provides an overview of policy, research and practice**

## Background

Depression causes a level of morbidity comparable to other common chronic diseases such as asthma and diabetes. The efficacy of anti-depressants for mild depression has been questioned and they are not recommended to be used routinely by people with persistent sub-threshold depressive symptoms or mild depression. Consequently, for many years there has been interest in physical activity (and other non-pharmacological therapies) as a stand-alone or adjunctive treatments.

Physical activity in the treatment of depression is an attractive option for several reasons. Exercise has relatively few adverse effects compared with many drug treatments. It is also cost effective since it is relatively cheap to provide. Additionally, those who suffer from mental illness also have greater risk of, and higher rates of, heart disease, diabetes, respiratory disease, all of which can be improved by increased physical activity.

Walking is a form of physical activity that has the potential to

alleviate depression over and above the effects from being physical active primarily because of the additional therapeutic opportunities it provides. They include observing or experiencing an attractive natural environment which has been shown to have a restorative effect by decreasing levels of stress; the benefits of vitamin D gained from being outdoors; and the opportunity to socialise and connect with other people in the local area. Walking also has the advantages of being easily undertaken by most people, incurring little or no financial cost, having minimal risk of adverse effects. Consequently, walking is promoted in many developed countries throughout the world.

## Relevant policy and guidelines

A range of policies and guidelines are acknowledging the benefits of physical activity for depression. ‘*Increasing physical activity*’ has been added as a national indicator to aid in the achievement of the Scottish Government’s National Outcomes, part of the **National Performance Framework**. In

**Delivering for Mental Health**, the Scottish Government is clear that there should be early intervention in the management of physical health problems of those with mental illness, and also recognise that : ‘*There is also emerging evidence that physical activity delivers better outcomes for mild depression that prescribed medication.*’

**Let’s Make Scotland more active** is also specific about the benefits of physical activity for preventing and treating depression and mood disorders.

For patients with persistent sub-threshold or mild to moderate depression, current **NICE guidelines** recommend structured physical activity programmes as a treatment choice. It is recommended that the physical activity programmes are group based and led by a trained practitioner thrice weekly for 45 minutes to one hour for a period of 10 to 14 weeks.

## Research on effectiveness

Several systematic reviews have reported that physical activity appears to improve symptoms of depression, but that the methodological quality of available trials is often too poor to reach a robust conclusion. Researchers at the Universities of Stirling and Edinburgh (including members of SCPHRP) have just published a systematic review of randomised trials evaluating the effectiveness of walking as an intervention for alleviating depression in adults <http://dx.doi.org/10.1016/j.mhpa.2012.03.002>. Eight trials met the inclusion criteria. The pooled standardised mean difference (effect size) was -0.86 (-1.12, -0.61) showing that walking has a statistically significant large effect on symptoms of depression compared with control.

This systematic review was undertaken as part of larger PhD examining the effects of walking for depression. The PhD also undertook research evaluating the feasibility of led health walks from a GP practice, in partnership with the CHANGES project. Contact Roma Robertson for more details of the research ([Roma.robertson@stir.ac.uk](mailto:Roma.robertson@stir.ac.uk))

**How does it work in practice?**

## **CHANGES Wellbeing Walks**



**CHANGES** is a Community Health Project which promotes the positive wellbeing of people living in East Lothian, Scotland. It runs volunteer led Wellbeing Walks, 45 minutes to over an hour long, aimed at improving people's mental and physical health. Participants are supported to walk at their own pace, with the emphasis on everyone enjoying walking outdoors in their local area. There is also the option of being matched with a Volunteer Buddy Walker for one to one walks, providing additional support for someone to start walking or walk more.

One of the aims of CHANGES Wellbeing Walks is to encourage other health professionals including Practice Nurses and GPs to prescribe exercise as a means of improving their patient's mental health. At CHANGES it is hoped that we can provide an effective method by which the National Outcome (mentioned previously) can be achieved by encouraging primary care staff to refer people onto the Wellbeing Walks. Another aim is to encourage people to form their own independent walking groups after they have walked as a group with CHANGES. One such group was established in June 2010, with initial support from CHANGES and since then, with only one week off in 18 months, this band of twelve walkers has gone from strength to strength.

Feedback from the walkers has shown how important and beneficial this weekly event has become. The group has a very positive attitude, in supporting each other, with everyone making an effort to chat along the way. A friendly phone call is made to anyone who has been unwell, to encourage them back to the group. The group is confident they will be walking together for many years to come, benefiting from the physical activity and sociability that walking in the outdoors can bring.

Local evidence from evaluations of the walking programme carried out by CHANGES indicate that people value the walking programme for several reasons including the physical activity it provides and the opportunity for social contact. For more information contact Heather Cameron at <http://www.changeschp.org.uk/>

***"I have been feeling down for some time owing to family illness. Mixing with friendly people has helped a lot, it's been a good pick me up."***

***"I was depressed, I joined CHANGES walking group and started to feel better - the company was so good, so inclusive, the walks interesting and varied. I feel so much better now. My bouts of depression are almost a thing of the past."***

**For the full referenced article please go to our website [www.scphrp.ac.uk](http://www.scphrp.ac.uk)**

# SCPHRP Working Group News

## Healthy Happy Bairns

**ROSEMARY GEDDES**, from the EARLY LIFE Working Group was delighted to attend The Healthy Happy Bairns conference recently, at the Musselburgh Quay. The purpose of this event was to reflect on and celebrate the achievements for children and families in East Lothian through the Equally Well test site 'Support from the Start', and to plan the next phase.

The conference brought together participants from varied backgrounds and the enthusiasm of all was palpable, from Early Year's Minister, Aileen Campbell, who opened the event, Susan Deacon (previous health minister and author of the 'Joining the Dots' report) who chaired, to the children who sang 'Lean on me'.

Among the presenters were Karen Grieve, the Equally Well programme Manager, who presented on an assets-based approach; Ronnie Hill, Head of Children's services for East



Lothian council, who set out the vision for the next phase of 'Support from the Start' and Rosemary, who reported on the Early Development Instrument (EDI) pilot.

The most striking speakers were three mothers who bravely told their 'stories' and how they received support. 'Support from the start' has clearly initiated some

well-appreciated work, and they are intent on evaluating it properly.

Both qualitative (narratives, process measures etc) and quantitative measures (routinely collected data and EDI) are being used.

*More information can be found at <http://edubuzz.org/equallywell/>*

## Parenting and Adolescence

### *Informing the Scottish Government's National Parenting Strategy*



*The Scottish Government's National Parenting Strategy aims to encourage agencies to work together to improve support to families across Scotland.*

**JOHN MCATEER**, from the ADOLESCENT & YOUNG ADULT Working Group is working with colleagues at NHS Health Scotland, the Scottish Government and the MRC Social and Public Health Sciences Unit, conducting a broad brush review of the literature around parenting of adolescents.

'In particular', John says, 'we are looking at parental factors associated with adolescent outcomes, and parenting programmes to improve those outcomes'.

Over the next few weeks, the steering group will meet to discuss and decide on a specific topic upon which to conduct a realist review. A realist review aims to enhance our understanding of what works by asking -

- **for whom it works**
- **in what circumstances**
- **in what respect and how?**



## WORKPLACE HEALTHY EATING PROJECT

**JOHN MOONEY**, from the WORKING LIFE Working Group has been involved with the **Workplace Healthy Eating Project**. Funded by SCPHRP seed-funding resources, and led by the Department of Public Health Nutrition at the University of Dundee, this feasibility study is designed to evaluate tailored incentivised healthy eating interventions within workplace restaurants in Scotland. Baseline qualitative work is currently being undertaken in two large worksites (one private sector, one public), to decide on the type(s) of intervention that are likely to be the most acceptable to employees and catering staff.



Although the SCPHRP policy review for obesity prevention highlighted published successes associated with workplace nutrition-related interventions (particularly those with a monetary incentive), it remains unclear how well these would transfer to a Scottish workplace setting. Previous studies have also not set out to fully explore how best to tailor a healthier eating incentive programme to the characteristics of different workplace environments. The result should therefore provide a rich level of details to guide future programmes of this type, both in Scotland and beyond.

### European Congress on Obesity 2012 & work with Glasgow Centre for Population Health on FAST-FOOD outlets



In May this year, John will be attending the European Congress on Obesity conference in Lyon. This international meeting has an entire track of the programme dedicated to Policy and Environmental measures and John will be presenting early results from the schools fast-food outlet survey. In this jointly funded project with the Glasgow Centre for Population Health (GCPH), the commercial food environment was surveyed around five Glasgow secondary schools and 50 typical school-pupil purchases from fast food outlets were subjected to nutritional analysis. The nutrient composition was then compared with recommended standards for Scottish school-meals and made for a poor comparison in terms of fat and energy content. GCPH's lead for the project, programme manager Fiona Crawford, will also be presenting the results at the Birmingham Population Health Methods and Challenges Conference in April.

## BRIDGE

*Building relationships in deprived general practice environments. Enabling health and wellbeing in later life.*

**HELEN FROST**, from the LATER LIFE Working Group has been involved with BRIDGE, a newly funded SCPHRP research project which Professor Sally Wyke and colleagues have started working on. The BRIDGE study aims to help general practices in deprived areas make links between older people, resources and activities in their local areas which could enhance their health and wellbeing.



Dr Clare Dow, a research fellow working on the project reports that: 'We have recruited three general practices and will be working with them, older people in these three areas and representatives from voluntary and third sector in a co-design process to develop the prototype of the system ready for road test later in the year'.

### *Policies for older people in Scotland.*

Helen discussed the report of the programme for change 'Reshaping care for Older People' - the report sets out the Scottish Government's vision and immediate actions for reshaping the care and support of older people in Scotland. Ministers announced as part of the 2012 Spending Review that an £80m Change Fund for older people's service would be available for Partnerships in 2012/13; £80m in 2013/14; and £70m in 2014/15.

# OPINION

## WHEN PREVENTIVE HEALTH CARE DOES MORE HARM THAN GOOD: The Case of PSA Screening for Prostate Cancer by John Frank

### Background

In October 2011, the prestigious and widely respected U.S. Preventive Services Task Force rigorously reviewed a great deal of new scientific evidence about the benefits, risks and costs of Prostate Specific Antigen (PSA – a blood test) for use as a screening test for asymptomatic prostate cancer in older men. In a remarkable about-face rarely ever seen in preventive health care guidance, the Task Force reversed its previous recommendation, issued some years before, that all older healthy men – i.e. even those without any symptoms of genito-urinary cancer, or risk factors for this disease, such as a positive family history – have the pros and cons of the test discussed with them by their primary care physician, and then be offered the test.

Based on the new evidence, the Task Force instead recommended in late 2011 that the test generally NOT be used for screening healthy men, unless they have clear risk factors. Its use for the investigation of clinical symptoms and signs of prostate disease or for follow-up

The following is a brief summary of the more conclusive RCT of PSA screening\*. which has some novel epidemiological features, and requires - for its critical reading -- skills not usually taught to Public Health professionals at the general Masters-degree level.

of patients with proven prostate cancer is, however, not being questioned, nor is its use for screening in high-risk men, such as those with a strong family history of this cancer. However, the relatively small benefits, considerable risks, and not-inconsequential costs of having the test – see below -- especially for those testing positive and requiring a full investigational work-up (including multiple needle biopsies of the prostate through the rectal wall, under radiological guidance) should be discussed with anyone who is offered it.

The Collaboration was not surprised by this about-face, which followed on the publication, starting in 2009, of at least two very large, well-designed, and expensive Randomized Control Trials (RCTs) of PSA screening in healthy older men – one which is quite conclusive, and is discussed here\*. We have in fact been teaching, as one session in the five-session CPD course which we recently created -- “Critical Appraisal for Public Health” -- a detailed critical analysis of this paper, which is probably one of the most fully-reported RCTs of screening ever published.

\* Schroder FH et al. Screening and prostate-cancer mortality in a randomized European study. *N Engl J Med* 2009; 360: 1320-1328.

### Essence of the New Evidence on the Benefits and Risks of PSA Screening:

Since the publication last spring of a definitive, adequately powered and well followed-up trial of PSA testing in 182,160 healthy European men aged 50-69 on accrual (the age-group thought most likely to benefit), virtually all public health experts now agree that such screening – at least for men at usual risk, as opposed to high-risk – should be avoided. The reason is buried in the trial’s summary of the modest magnitude of benefits found from the screening programme, in terms of prostate cancer mortality reductions, versus the extensive risks documented as arising from many early cancer cases being detected, and often more

aggressively treated than was warranted. The problem with many of those early prostate cancer cases is that, as the trial clearly shows by careful comparison with the large group of men randomized to no screening, many of these screen-detected cases were almost certainly not ever going to grow fast enough, or spread far enough in the body, to cause any symptoms or functional problems whatsoever, especially in men over 65 years of age when screened. This problem is termed “over-diagnosis” and “over-treatment” and is common to most cancer screening tests in current use, including Pap smears for cervical cancer, and

mammography for breast cancer. After the painstaking completion of nine years of virtually complete follow-up, the results of the massive European trial are revealing. For each 10,000 men who were screened with the PSA blood test, 340 extra cases of prostate cancer were indeed detected over the nine years of average follow-up, affecting 8.2% of the screened group, compared to the 4.8% of men diagnosed with prostate cancer by “usual care” in the unscreened group.

*Cont. overpage*

117 of these 340 screen-detected cancer cases were managed by “watchful waiting,” and 223 cases by chemo/ radio-therapy and/or standard surgery – which carry the risk of significant long-term side-effects, such as impotence and urinary incontinence. However, only 7 men per 10,000 screened (one in 1410) had their deaths by prostate cancer delayed at all, leaving the balance of some 216 aggressively treated men, per 10,000 screened, effectively worse off after screening than before. Overall, 48 (340 divided by 7) extra cancers had to be dealt with by both the patients and their family

and friends, as well as the health care system, for each death averted – probably the worst risk-benefit ratio ever conclusively demonstrated in a robust screening evaluation. These “victims of a bad screening test” had to be told they had cancer, and in many cases they were aggressively managed for it. However, in the end, forty-seven out of forty-eight of them died – on average -- at the same age as they would have died anyway, without screening. In short, they were victims of a particularly inaccurate test, now known to detect many very common, but clinically silent, prostate cancers in older men.

These cancers typically grow so slowly that most of the men diagnosed as a result of screening – especially those above age 65 at the outset -- would continue to have no symptoms at all before they died of an unrelated condition. Clearly the considerable costs of the screening programme, including subsequent confirmatory needle biopsies of the prostate, as well as the complex treatments offered to most of those with confirmed cancers, were associated an extremely unfavourable benefit-to-risk ratio – and the money could have been much better spent elsewhere.

## Relevance to the U.K. NHS

While the NHS has never officially sanctioned PSA screening in healthy men, steeply increasing time-trends in prostate cancer incidence in the UK over the last 20 years, are strikingly accompanied by fairly stable mortality rates from this disease. And the increase is largely found in wealthier and more educated men -- just the sort of primary care patient to inquire about or ask to be screened. Experts believe this pattern cannot be explained other than by fairly frequent use of PSA as a screening test in the UK, on the public purse. The observed major increase in recent years, in prostate cancer incidence (the rate of new cases diagnosed in the population, per year), has been seen in every developed nation where the use of PSA screening has become widespread. It is especially evident since the mid-1980s in the USA – where an enthusiastic lobby of ill-informed cancer survivors and unscientifically-trained specialists has trumpeted the test’s benefits for more than two decades. This is probably the largest population ever affected by “iatrogenic” (doctor-caused) ill-health, due to the premature use of an un-validated screening test.

In UK-based medical practice, any NHS GP or specialist who feels the test is warranted can simply order it – whether the use is entirely justified (as in the follow-up of proven prostate cancer cases, or the diagnostic

work-up of cases presenting with suggestive symptoms) or instead intended for the screening of men with no risk factors or symptoms, a use no longer recommended by the USPSTF.

The latter circumstance is therefore an example of a current UK health care expenditure which cannot be justified, but which in fact requires more effective regulation of the test’s use – for example by restricting its use to physicians in charge of diagnosing symptomatic cases of undefined prostate disease, or following up cancer cases already diagnosed. Although the test itself appears to have a modest cost, it sets in motion a very expensive – and upsetting (for the patient and his family) -- “cascade” of further investigations and treatments in about 16% % of patients (one in six) screened, who had a positive PSA test in the Schroder et al. trial. This positively-screened group is then routinely sent for invasive and expensive prostate biopsy, the gold-standard confirmatory test, leading to 3.4% of men tested (one in thirty) being actually diagnosed as having cancer as a result of screening, even though only 0.07% (one in 1410 men tested) definitely benefited over the next nine years in the trial. No other screening test for any cancer has such a high rate of “collateral damage” to persons without any serious disease.

## Conclusion:

In sum, PSA screening is surely a cautionary tale for well-intended prevention. It is also a clarion call for better, and earlier, control of the wide dissemination and use of new medical technologies, until their effectiveness has been properly assessed by studies such as that of Schroder et al. In this case, the more than twenty-year lag between initial enthusiastic adoption of the test, and its final denouement after the trial’s publication, is surely too long a period of un-validated screening and related health care expenditure. Surely there are much better uses of these scarce resources for older men, who face a plethora of aging-related problems.

*For the full referenced article please go to our website  
[www.scphrp.ac.uk](http://www.scphrp.ac.uk)*



## FEEDBACK

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