## What is already known on this topic

Home monitoring by hypertensive patients results in small but significant reductions in blood pressure, though the studies with such findings have largely been underpowered with inadequate length of follow up

No published randomised studies have evaluated self monitoring outside the home

## What this study adds

Small early reductions of blood pressure are achieved by self monitoring in a community setting, but these are not maintained long term

The reductions seem to result from non-pharmacological mechanisms rather more intensive treatment

Self monitoring is feasible in a community setting, highly acceptable to hypertensive patients, and cost effective in the United Kingdom

**Conclusion**

Blood pressure can be controlled to the same degree with either practice based self monitoring or usual care. Self monitoring of blood pressure results in worthwhile improvements in systolic blood pressure at six months. How this early improvement might be maintained requires further study. Self monitoring has negligible costs, reduces practice consulting rates, and is acceptable to patients. If the training associated with self monitoring were performed by non-medical or lay individuals then cost savings might be possible.

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Competing interests: FDRH sits on the boards of the British Cardiac Society, the British Society of Heart Failure, and the Primary Care Cardiovascular Society; he is chairman of the Secondary Prevention Board of the British Heart Foundation and serves on the European Society of Cardiology Working Group for Heart Failure. He has received travel sponsorship and honorariums from a number of multinational biotechnology and pharmaceutical companies with cardiovascular products for plenary talks and attendance at major cardiology scientific congresses and conferences. To the best of his knowledge, none of these interests conflicts with the work contained in this paper.

Ethical approval: Ethical approval was received from South Birmingham (ref 5694) and Sandwell (ref SEC 320/060701) Local Research Ethics Committees.

1 Mathers CD, Bernard C, Iburg CM, Innoue M, Fat DM, Shibuya K, et al. *Global burden of disease in 2002: data sources, methods and results.* Geneva: World Health Organization, 2003.
2 Psaty BM, Lumley T, Furberg CD, Schellenbaum G, Pahor M, Alderman MH, et al. Health outcomes associated with various antihypertensive therapies used as first-line agents: a network meta-analysis. *JAMA* 2003;289:2534-44.
3 Montgomery AA, Fahey T, Ben Shlomo Y, Harding J. The influence of absolute cardiovascular risk, patient utilities, and costs on the decision to treat hypertension: a Markov decision analysis. *J Hypertens* 2003; 21:1753-9.
4 Williams B, Poulter NR, Brown MJ, Davis M, McInnes GT, Potter JF, et al. Guidelines for management of hypertension: report of the fourth working party of the British Hypertension Society, 2004-BHS IV. *J Hum Hypertens* 2004;18:139-85.
5 Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL Jr, et al. The Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. *JAMA* 2003;289:2560-72.
6 Wolf-Maier K, Cooper RS, Kramer H, Banegas JR, Giampaoli S, Joffres MR, et al. Hypertension treatment and control in five European countries, Canada, and the United States. *Hypertension* 2004;43:10-7.
7 Cappuccio FP, Kerry SM, Forbes L, Donald A. Blood pressure control by home monitoring: meta-analysis of randomised trials. *BMJ* 2004;329:145-51.
8 Soghikian K, Casper SM, Fireman BH, Hunkeler EM, Hurley LB, Tekawa IS, et al. Home blood pressure monitoring. Effect on use of medical services and medical care costs. *Med Care* 1992;30:855-65.
9 Townsend P, Phillimore P, Beattie A. *Health and deprivation. Inequality and the north.* London: Croom Helm, 1988.
10 Ramsay L, Williams B, Johnston G, MacGregor G, Poston L, Potter J, et al. Guidelines for management of hypertension: report of the third working party of the British Hypertension Society. *J Hum Hypertens* 1999;13:569-92.
11 Marteau TM, Bekker H. The development of a six-item short-form of the state scale of the Spielberger state-trait anxiety inventory (STAI). *Br J Clin Psychol* 1992;31(part 3):301-6.
12 Mant J, Murphy M, Rose P, Vessey M. The accuracy of general practitioner records of smoking and alcohol use: comparison with patient questionnaires. *J Public Health Med* 2000;22:198-201.
13 Godin G, Shephard RJ. A simple method to assess exercise behavior in the community. *Can J Appl Sport Sci* 1985;10:141-6.
14 Little P, Barnett J, Margetts B, Kinmonth AL, Gabbay J, Thompson R, et al. The validity of dietary assessment in general practice. *J Epidemiol Community Health* 1999;53:165-72.
15 Hollis S, Campbell F. What is meant by intention to treat analysis? Survey of published randomised controlled trials. *BMJ* 1999;319:670-4.
16 Netten A, Curtis L. *Unit costs of health and social care 2002.* www.pssru.ac.uk/pdf/uc2002/Unit%20Costs%202002.pdf (accessed 8 Aug 2005).
17 Department of Health. *National reference costs 2002.* www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/NHSReferenceCosts/fs/en (accessed 8 Aug 2005).
18 Kernick DP, Reinhold DM, Netten A. What does it cost the patient to see the doctor? *Br J Gen Pract* 2000;50:401-3.
19 Little P, Barnett J, Barnsley L, Marjoram J, Fitzgerald-Barron A, Mant D. Comparison of acceptability of and preferences for different methods of measuring blood pressure in primary care. *BMJ* 2002;325:258-9.

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### Corrections and clarifications

*Short Cuts*

Readers might have been confused by some inaccurate labelling of a figure in this section by Alison Tonks (*BMJ* 2005;331:13-4, 2 July). In preparing the figure to accompany the third item ("Antibiotics don't work for patients with cough"), we ill-advisedly labelled the y axis as "Cumulative percentage cured." We should have said, "Cumulative percentage feeling better."

*The future of health care in Africa*

We inadvertently omitted to say that Eric Buch, who cowrote this editorial with Lola Dare (*BMJ* 2005;331:1-2, 2 Jul), is also professor of health policy and management at the University of Pretoria, South Africa.

*Editor's Choice*

In Fiona Godlee's column in the issue of 16 July, she said that the *BMJ* had never failed to come out "in its 160 year history" (*BMJ* 2005;331). In fact, the *BMJ* has been around for slightly longer than that. It began life in 1833 as *Transactions of the Provincial Medical and Surgical Association.* In 1840 it became the *Provincial Medical Journal*, changing its name in 1845 to the *British Medical Journal.* Finally, in 1988, it became the *BMJ.* However, we consider the "official" start date of our journal to be 1840 as that is when we began our volume numbering system; some readers (and long serving staff) will remember that we celebrated our 150th birthday in 1990.