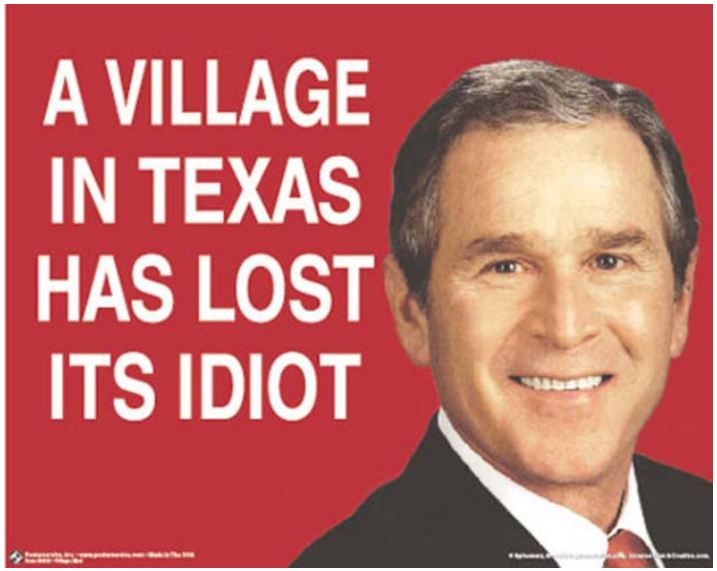
Implementation research in primary care

What's so special about being so general?



Robbie Foy

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What's so special about primary care?

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- First-contact access for each new need
- Long-term person- (not disease) focused care
- Comprehensive care for most health needs
- Coordination of specialist care

WHO, 1978

What's so special about being so general?

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How can we cope with multiple recommendations from multiple guidelines?

How can we improve the generalisability of our implementation research?

How can we ensure that proposed solutions to implementation problems fit in with how primary care works?

Multiple recommendations from multiple guidelines

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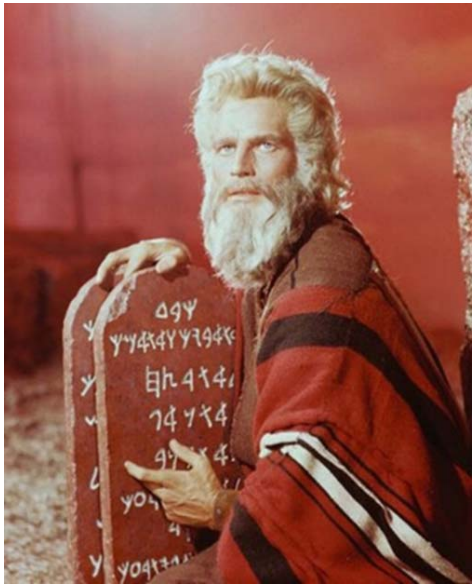
NICE clinical guidelines potentially relevant to general practice up to and including July 2012*	107
‘Key priorities for implementation’ from 91 guidelines and all recommendations from 16 guidelines	2085



*Not counting QOF, NHS quality standards and other guidelines

When assessing a person who may have depression, conduct a comprehensive assessment that does not rely simply on a symptom count. Take into account both the degree of functional impairment and/or disability associated with the possible depression and the duration of the episode.

In addition to assessing symptoms and associated functional impairment, consider how the following factors may have affected the development, course and severity of a person's depression: any history of depression and comorbid mental health or physical disorders; any past history of mood elevation (to determine if the depression may be part of bipolar disorder); any past experience of, and response to, treatments; the quality of interpersonal relationships; living conditions and social isolation.

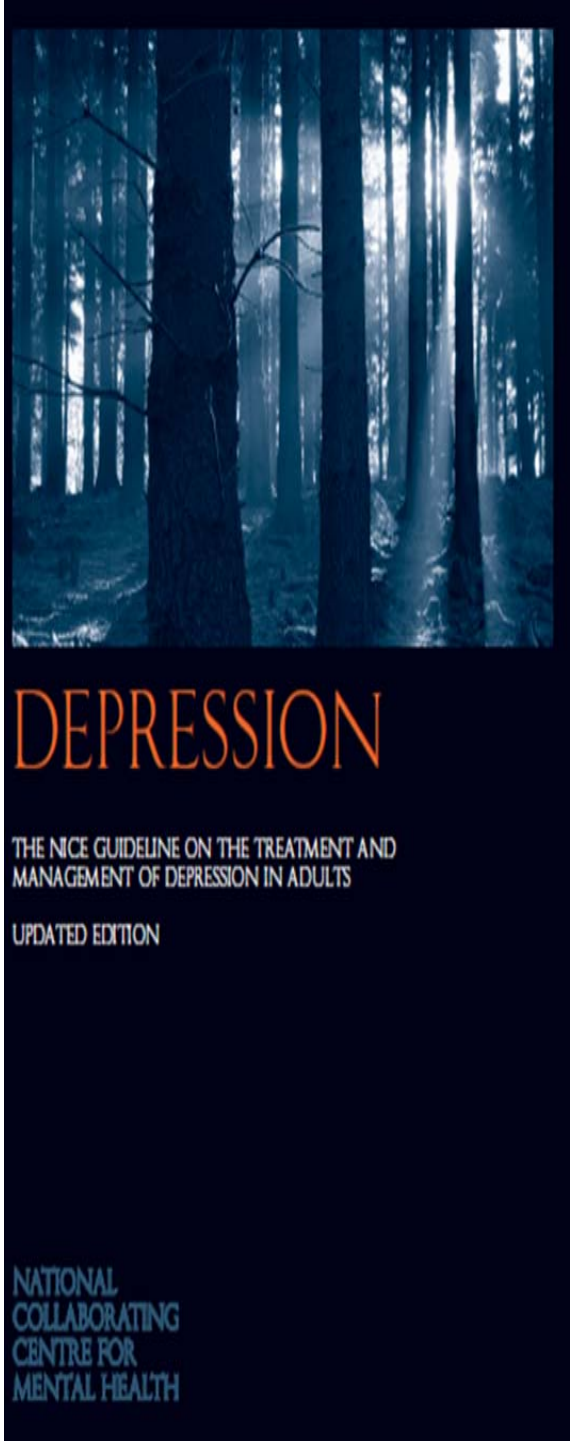
Be respectful of, and sensitive to, diverse cultural, ethnic and religious backgrounds when working with people with depression, and be aware of the possible variations in the presentation of depression. Ensure competence in: culturally sensitive assessment; using different explanatory models of depression; addressing cultural and ethnic differences when developing and implementing treatment plans; working with families from diverse ethnic and cultural backgrounds.

Always ask people with depression directly about suicidal ideation and intent. If there is a risk of self-harm or suicide: assess whether the person has adequate social support and is aware of sources of help; arrange help appropriate to the level of risk; advise the person to seek further help if the situation deteriorates.

If a person with depression presents considerable immediate risk to themselves or others, refer them urgently to specialist mental health services.

If a person with depression is assessed to be at risk of suicide: take into account toxicity in overdose if an antidepressant is prescribed or the person is taking other medication; if necessary, limit the amount of drug(s) available; consider increasing the level of support, such as more frequent direct or telephone contacts; and consider referral to specialist mental health services.

Advise people with depression of the potential for increased agitation, anxiety and suicidal ideation in the initial stages of treatment; actively seek out these symptoms and: ensure that the person knows how to seek help promptly; review the person's treatment if they develop marked and/or prolonged agitation.



Advise a person with depression and their family or carer to be vigilant for mood changes, negativity and hopelessness, and suicidal ideation, and to contact their practitioner if concerned. This is particularly important during high-risk periods, such as starting or changing treatment and at times of increased personal stress.

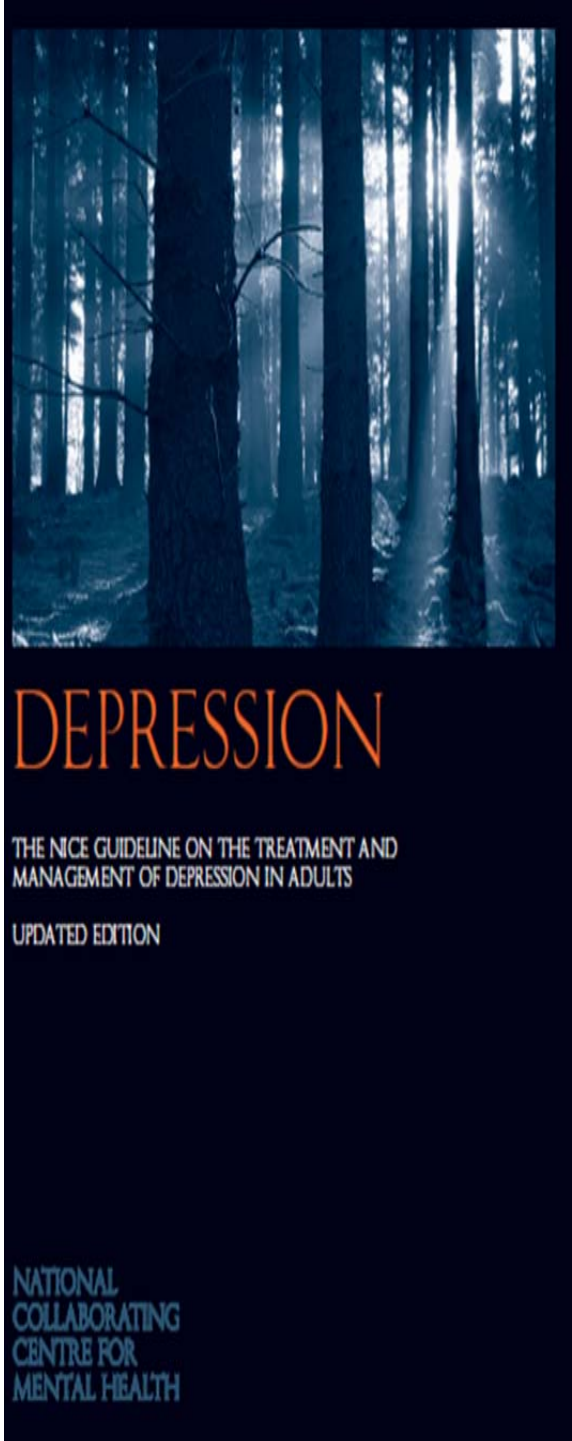
When depression is accompanied by symptoms of anxiety, the first priority should usually be to treat the depression. When the person has an anxiety disorder and comorbid depression or depressive symptoms, consult the NICE guideline for the relevant anxiety disorder and consider treating the anxiety disorder first (since effective treatment of the anxiety disorder will often improve the depression or the depressive symptoms).

Offer people with depression advice on sleep hygiene if needed, including: establishing regular sleep and wake times; avoiding excess eating, smoking or drinking alcohol before sleep; creating a proper environment for sleep; taking regular physical exercise.

For people who, in the judgement of the practitioner, may recover with no formal intervention, or people with mild depression who do not want an intervention, or people with subthreshold depressive symptoms who request an intervention: discuss the presenting problem(s) and any concerns that the person may have about them; provide information about the nature and course of depression; arrange a further assessment, normally within 2 weeks; make contact if the person does not attend follow-up appointments.

For people with persistent subthreshold depressive symptoms or mild to moderate depression, consider offering one or more of the following interventions, guided by the person's preference: individual guided self-help based on the principles of cognitive behavioural therapy (CBT); computerised cognitive behavioural therapy (CCBT); a structured group physical activity programme.

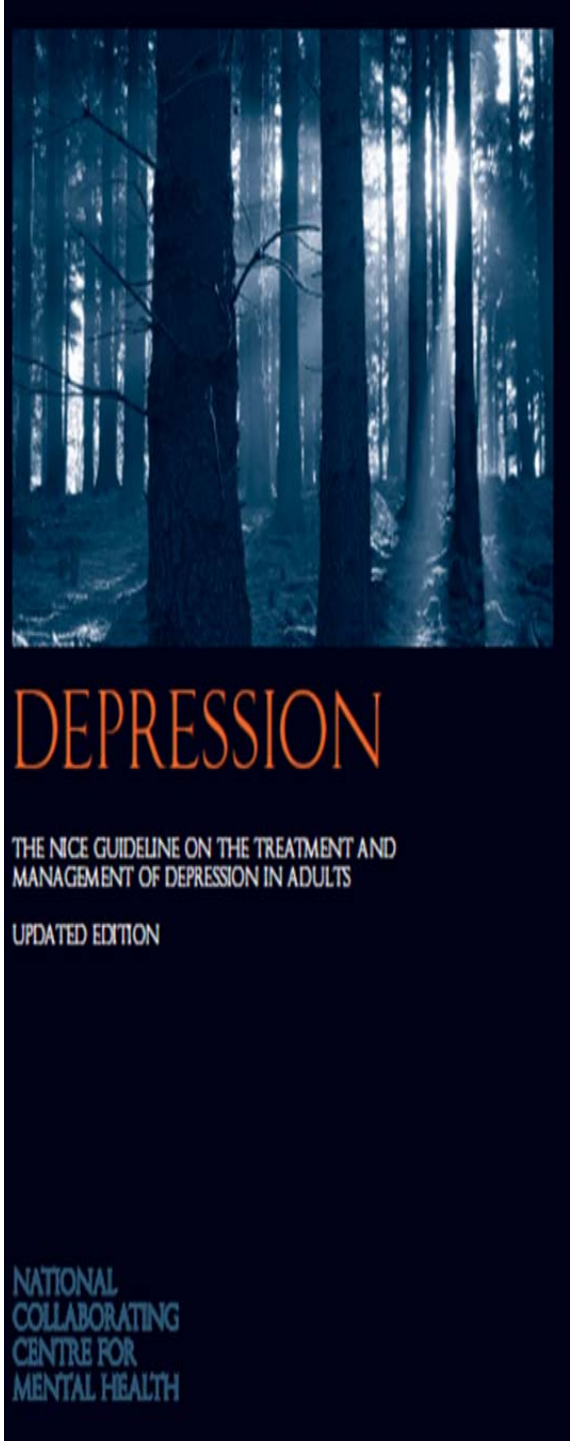
Do not use antidepressants routinely to treat persistent subthreshold depressive symptoms or mild depression because the risk–benefit ratio is poor, but consider them for people with: a past history of moderate or severe depression or initial presentation of subthreshold depressive symptoms that have been present for a long period (typically at least 2 years) or subthreshold depressive symptoms or mild depression that persist(s) after other interventions.



When an antidepressant is to be prescribed, it should normally be an SSRI in a generic form because SSRIs are equally effective as other antidepressants and have a favourable risk–benefit ratio. Also take the following into account: SSRIs are associated with an increased risk of bleeding, especially in older people or in people taking other drugs that have the potential to damage the gastrointestinal mucosa or interfere with clotting. In particular, consider prescribing a gastroprotective drug in older people who are taking non-steroidal anti-inflammatory drugs (NSAIDs) or aspirin. Fluoxetine, fluvoxamine and paroxetine are associated with a higher propensity for drug interactions than other SSRIs. Paroxetine is associated with a higher incidence of discontinuation symptoms than other SSRIs.

When prescribing drugs other than SSRIs, take the following into account: The increased likelihood of the person stopping treatment because of side effects (and the consequent need to increase the dose gradually) with venlafaxine, duloxetine and TCAs. The specific cautions, contraindications and monitoring requirements for some drugs. For example: the potential for higher doses of venlafaxine to exacerbate cardiac arrhythmias and the need to monitor the person's blood pressure; the possible exacerbation of hypertension with venlafaxine and duloxetine; the potential for postural hypotension and arrhythmias with TCAs; the need for haematological monitoring with mianserin in elderly people. Non-reversible monoamine oxidase inhibitors (MAOIs), such as phenelzine, should normally be prescribed only by specialist mental health professionals. Dosulepin should not be prescribed.

When prescribing antidepressants, explore any concerns the person with depression has about taking medication, explain fully the reasons for prescribing, and provide information about taking antidepressants, including: the gradual development of the full antidepressant effect; the importance of taking medication as prescribed and the need to continue treatment after remission; potential side effects; the potential for interactions with other medications; the risk and nature of discontinuation symptoms with all antidepressants, particularly with drugs with a shorter half-life (such as paroxetine and venlafaxine), and how these symptoms can be minimised; the fact that addiction does not occur with antidepressants.

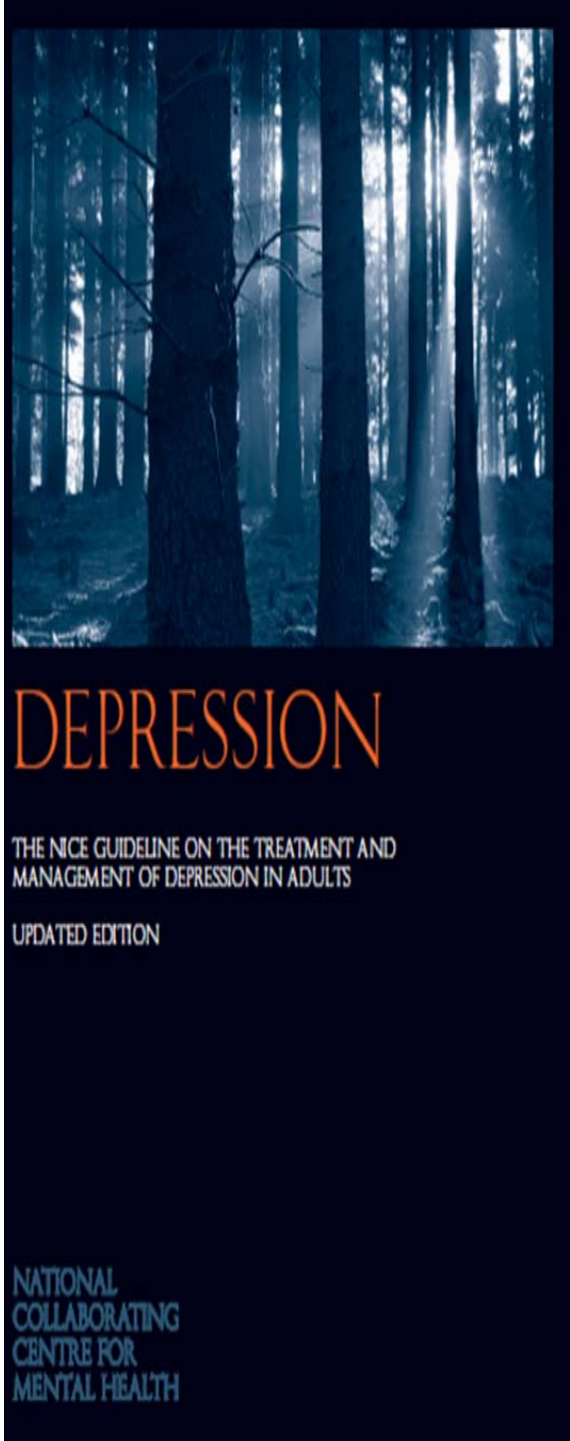


When working with people with depression and their families or carers: provide information appropriate to their level of understanding about the nature of depression and the range of treatments available; avoid clinical language without adequate explanation; ensure that comprehensive written information is available in the appropriate language and in audio format if possible; and provide and work proficiently with independent interpreters (that is, someone who is not known to the person with depression) if needed.

Inform people with depression about self-help groups, support groups and other local and national resources.

Make all efforts necessary to ensure that a person with depression can give meaningful and informed consent before treatment starts.

Ensure that consent to treatment is based on the provision of clear information (which should also be available in written form) about the intervention, covering: what it comprises; what is expected of the person while having it; likely outcomes (including any side effects).



Multiple recommendations from multiple guidelines in multimorbidity

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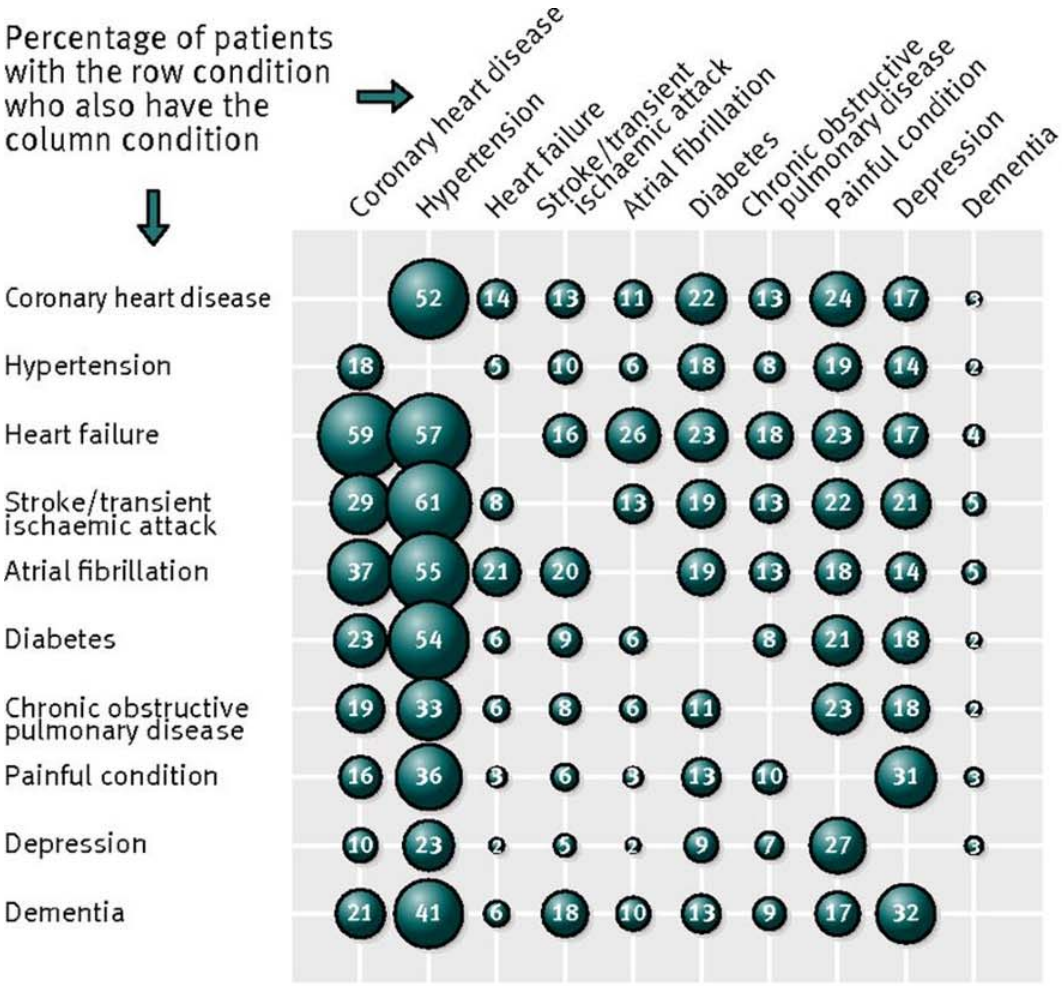

	Percentage who only have the row condition*	Mean No of conditions in people aged <65 years with row condition	Mean No of conditions in people aged ≥65 years with row condition
Coronary heart disease	8.8	3.4	4.4
Hypertension	21.9	2.5	3.6
Heart failure	2.8	3.9	5.6
Stroke/transient ischaemic attack	6.0	3.6	4.8
Atrial fibrillation	6.5	3.3	5.0
Diabetes	17.6	2.9	6.5
Chronic obstructive pulmonary disease	14.3	2.8	4.5
Painful condition	12.7	3.1	4.3
Depression	25.4	2.6	4.9
Dementia	5.3	4.1	4.6

* Percentage who do not have one of 39 other conditions in the full count

Guthrie B et al. BMJ 2012;345:bmj.e6341

BMJ

Multiple recommendations from multiple guidelines

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Need for priority setting

- Burden of illness
- Potential for significant patient benefit
- Likelihood of cost savings without patient harm
- Scope for improvement upon current levels of adherence
- Feasibility of measuring adherence

But do we need a different implementation trial for every guideline or recommendation?

Generalisability of implementation research

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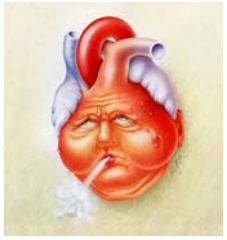
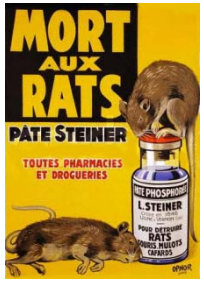
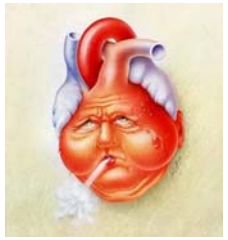
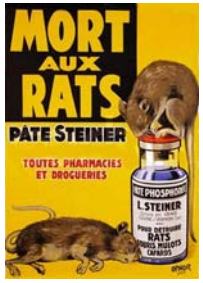


A trial shows that an intervention increases the use of beta-blockers for heart failure in primary care. Could the same intervention be applied to:

Reduce antibiotic prescribing for upper respiratory tract infections?

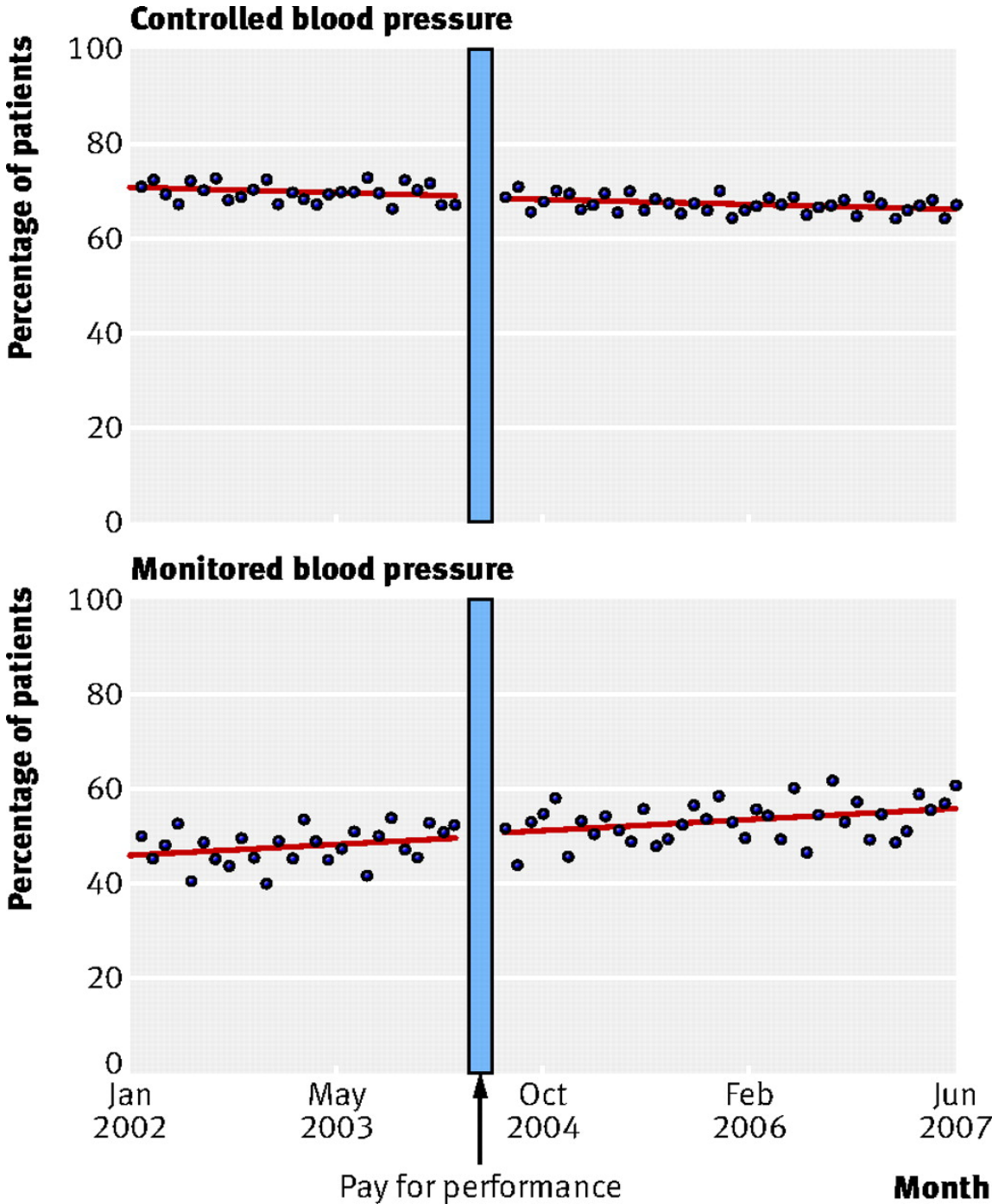


Increase initiation of anticoagulation for atrial fibrillation?

Targeted behaviour	Complex or simple?	Habitual or new?
 Beta-blockers in heart failure	Complex	New
 Avoidance of antibiotics for URTI	Simple	Habitual
 Anticoagulation for atrial fibrillation	Complex	'New'

Foy R, MacLennan G, Grimshaw J, et al. J Clin Epidemiol 2002; 55: 717-22

Effect of pay for performance on blood pressure control and monitoring in UK

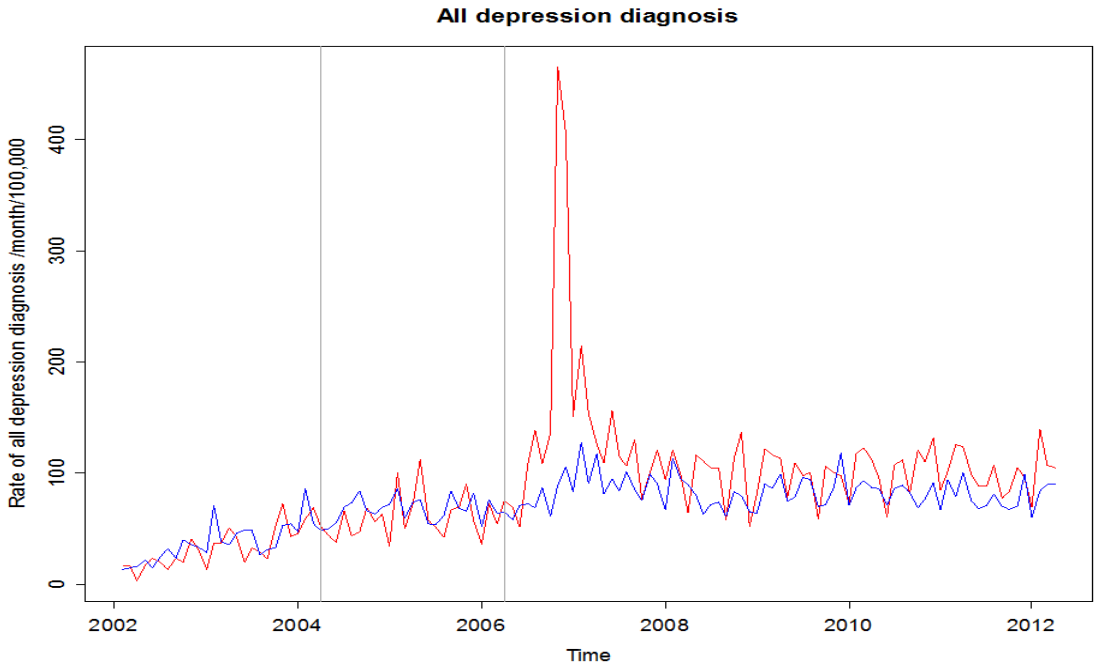


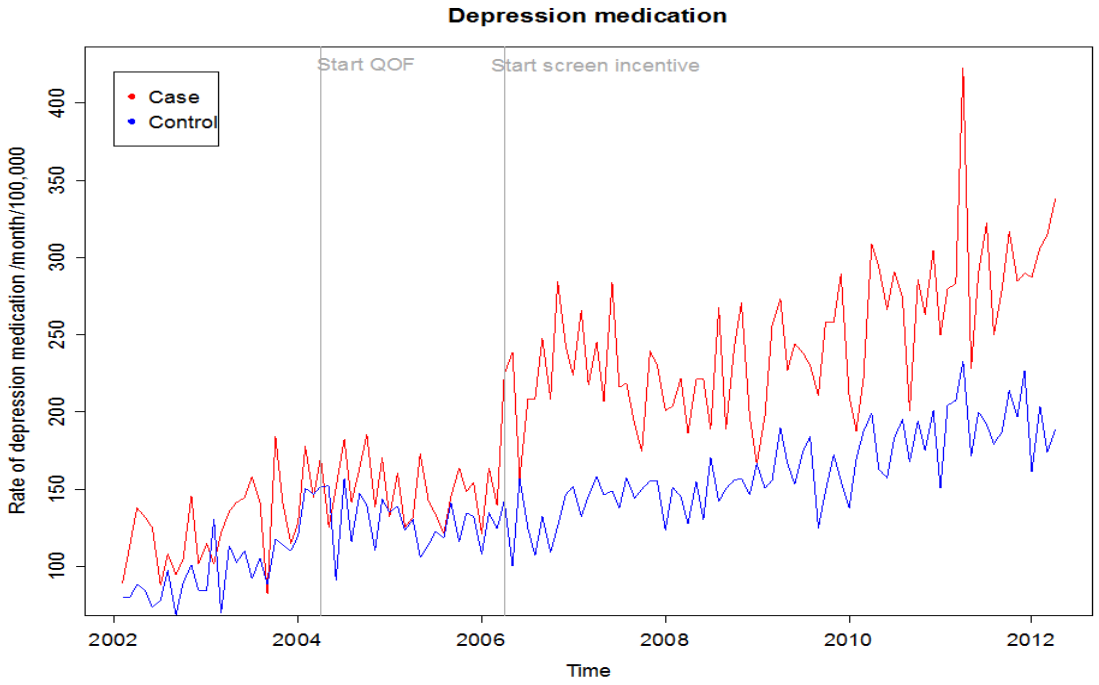
BMJ

Serumaga B et al. BMJ 2011;342:bmj.d108

Depression diagnosis and antidepressant prescribing following financial incentives for depression screening in people with diabetes and heart disease

Results for 65 / 112 general practices in Leeds





Generalisability of implementation research

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What's in it for practices and commissioners?

- Altruism, professionalism and interest
- If not minimally intrusive, time and resources are remunerated
- Association between participation in research and quality of patient care
- Close fit with quality improvement
- Core health service function
- Need for decent research relevant to needs of primary care

Ensuring that proposed solutions fit in with how we work

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What makes for an ideal intervention?

Cost-effective: benefits outweigh harms and costs

Predictable: we will know how and when it works best

Transferable: we know how it could be adapted for another problem or context

Sustainable: intervention and monitoring of its effects can be embedded within existing structures and routines


9P
SCOTLAND
World Cup Winners 1978


9P
1978

Ensuring that proposed solutions fit in with how we work

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Ensuring that proposed solutions fit in with how we work

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“That's the one point it does get a little bit annoying when that comes up and you think `well I'm seeing them for their big toe'

Rousseau et al. *BMJ* 2003; 326:314-318

Ensuring that proposed solutions fit in with how we work

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"They're off [patient has left], I turn back and go back into this and then select the problem title, and then I say right well I've looked at ischaemic heart disease and then this comes up—and there [system has activated] and the patient's already gone by this stage."

Rousseau et al. *BMJ* 2003; 326:314-318

Ensuring that proposed solutions fit in with how we work

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General practices in Newcastle

↓

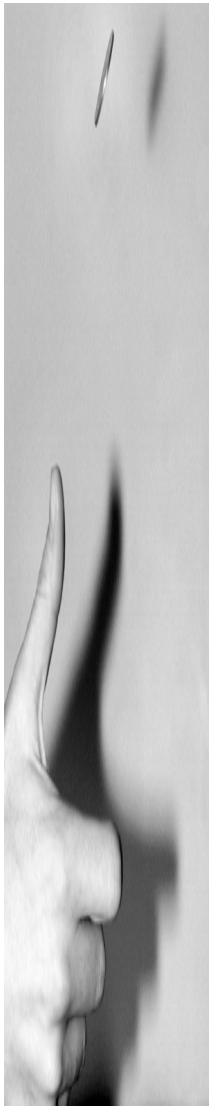
Randomisation

Brief educational message
Attached to lab test reports

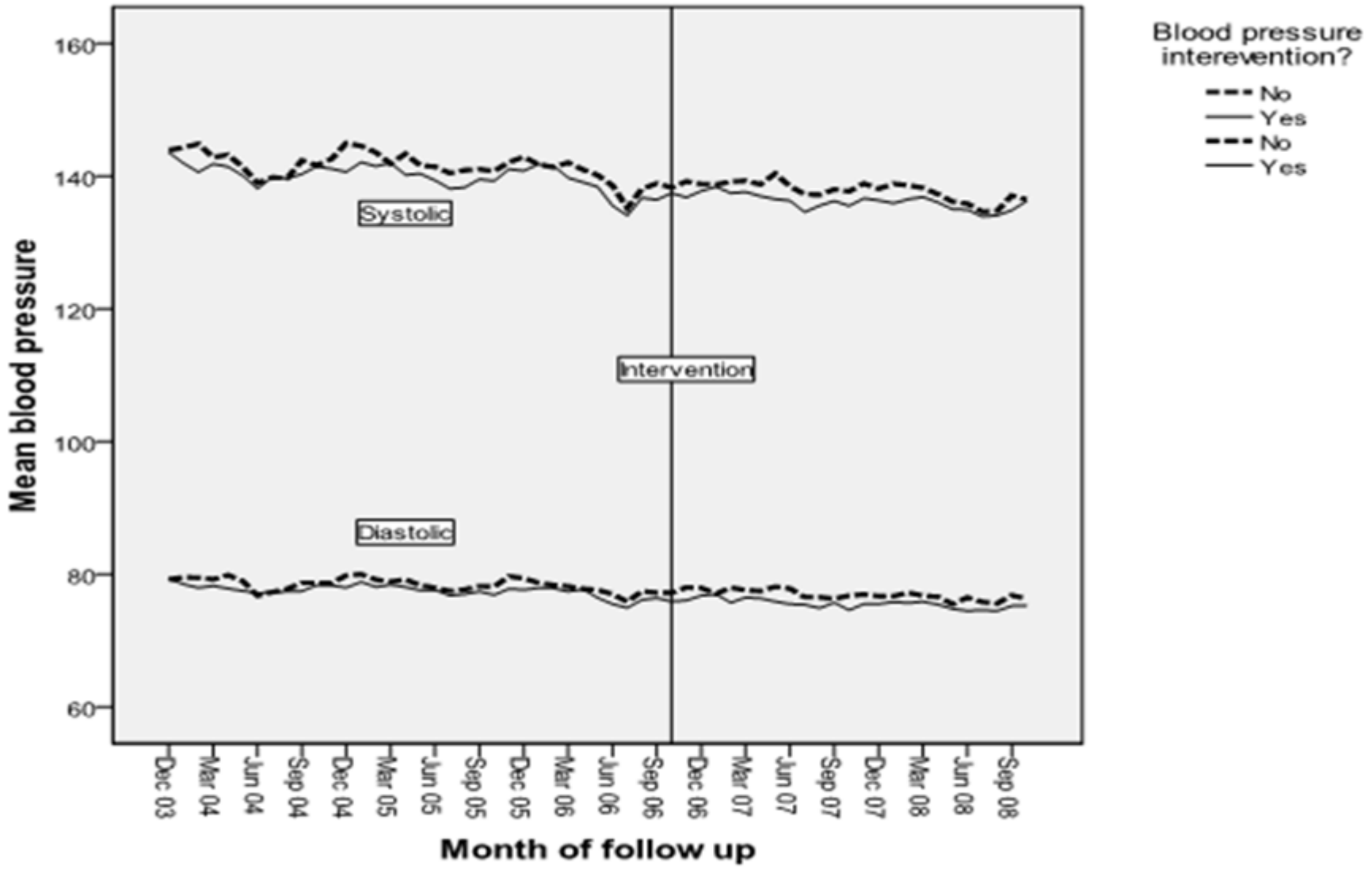
No message

↓ ↓

Patient outcomes and test ordering practice



Foy et al. Implementation Science 2011; 6: 129



Increased odds of patient BP being controlled (OR 1.05 (95% CI 1.00, 1.10)

What's so special about being so general?

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How can we cope with multiple recommendations from multiple guidelines?

Priority setting and…

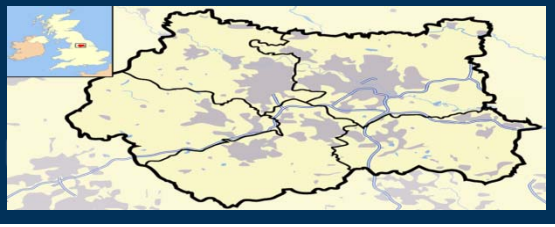
How can we improve the generalisability of our implementation research?

Theoretical frameworks; normalisation

How can we ensure that proposed solutions to implementation problems fit in with how primary care works?

With difficulty

ASPIRE: Action to Support Practices Implementing Research Evidence



1. Identification of ‘high impact’ NICE recommendations
2. Measurement and analysis of adherence to high impact recommendations
3. Systematic development of an intervention package which can be adapted to target the implementation of high impact recommendations
4. Randomised evaluation of intervention effects and cost-effectiveness
5. Process evaluation to understand the process of implementation and how the intervention works

Acknowledgements

Evaluation of screening for depression in patients with coronary heart disease and diabetes in primary care. Robbie Foy, Sarah Alderson, Kate McLintock, Amy Russell, Robert West, Karen Johnson & Allan House

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To Martin Eccles, who often makes me wonder why I bothered turning up at all in the first place…

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