Leeds Institute of
Health Sciences

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Optimising intervention design to create sustainable interventions

Liz Glidewell, Rebecca Lawton, Rosie McEachan, Tom Willis, Emma Ingleson, Duncan Petty, Peter Heudtlass, Andrew Davies, Suzanne Hartley, Gemma Louch, Jane Heyhoe, Tony Jamieson, Matt Fay, Sarah Alderson, Susan Clamp and Robbie Foy.

Background

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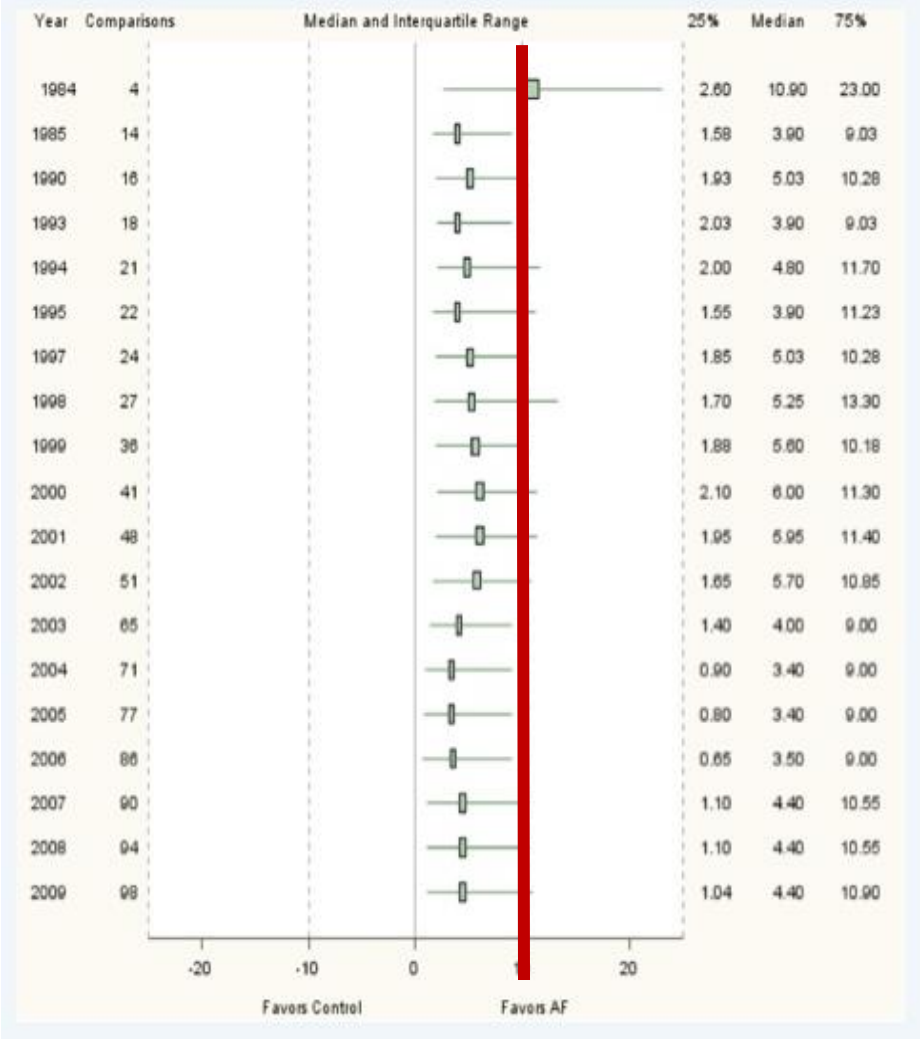
- Interventions to support implementation have important but variable effects:
  - audit (6-16%)
  - education (6%)
  - computerised prompts (3-14%)
- Scope to increase adoption/adherence



Ivers et al. Growing literature, stagnant science? Systematic review, meta-regression and cumulative analysis of audit and feedback interventions in health care. (2014) J Gen Intern Med

Background (2)

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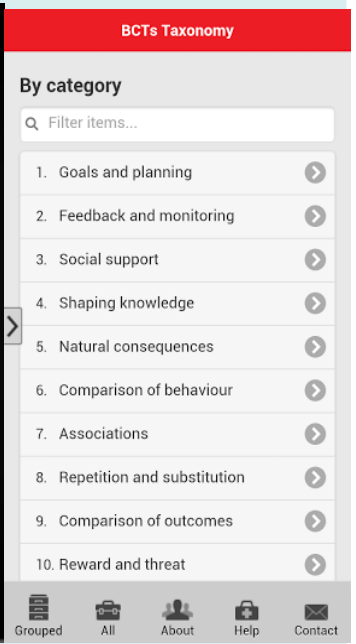
- Typically interventions are adapted because of prior experience without a full understanding of how and why they work.
- Psychological theory offers a structured approach to identify why translation fails and evidence-based techniques to change behaviour:

Capability
Do they know how to?

Opportunity
Do they have the opportunity to?

Motivation
Do they want to, plan to, believe they can or are they in the habit of doing?



Michie et al (2011) Implementation Science

Aims

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To develop cost-effective and sustainable intervention strategies to implement evidence-based recommendations with potential high impact for UK primary care

1. managing diabetes outcomes (20.8-66.2% mean 42.7%)
2. managing blood pressure (54.7-89.5% mean 71.6%)
3. avoiding risky non-steroidal prescribing (3.8-34.7% mean 11.1%)
4. prescribing anticoagulants for atrial fibrillation (0-100% mean 60%)

Why selected

- Burden of illness
- Potential for significant patient benefit
- Scope for improvement upon current levels of adherence
- Likelihood of cost savings without patient harm
- Feasibility of measuring using routinely collected data
- Extent of control of individual teams or professionals.

Mixed methods study

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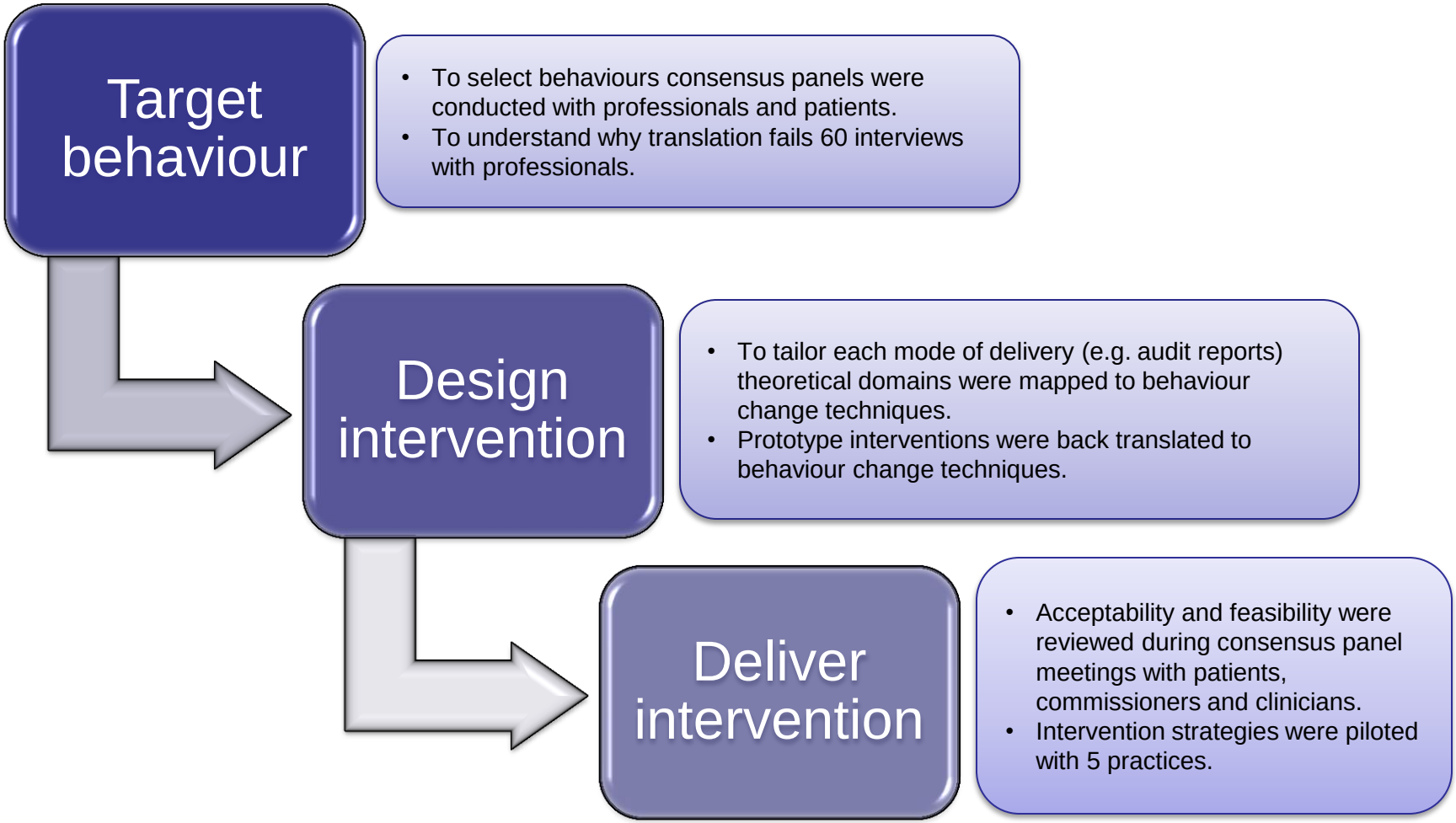

Results: Menu of interventions

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QUARTERLY AUDIT AND FEEDBACK

NHS

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ASPIRE
Action to Support Practices Implementing Research Evidence

Can your practice make NSAID prescribing safer?

Dear #PracticeManager and colleagues

Prescribing safety is a high priority for patients, practices, their CCGs, the CQC and NHS England. Local general practitioners, practice nurses and practice managers have selected improving the safety of NSAID prescribing as a priority.

As part of this initiative, supported by West Yorkshire CCGs, we plan to provide regular feedback on 'risky prescribing' involving NSAIDs and antiplatelet drugs. This is the first report for your practice. We will provide regular quarterly updates on your practice's achievement. In addition we will offer two outreach meetings, computerised searches to identify patients and additional support to review patient notes. In this meeting we will work with you to create an action plan (see attached Word template).

Please distribute this report to your practice team. We will be in touch to arrange a convenient time to discuss how we can support you to protect your patients at a practice meeting.

We know that practices are currently under a great deal of pressure and there are increasing demands within consultations. However, NSAID use is a well-recognised indicator of prescribing safety in patients at higher risk of developing serious side effects. Reducing NSAID prescribing can prevent adverse events (e.g. gastro-intestinal bleeding, worsening of chronic renal impairment and precipitating heart failure) all of which increase demand on your practice.

Whilst all prescribing carries some unavoidable risk, **we invite you to review your practice's prescribing of NSAIDs and to consider whether you can do more to protect your patients**. We will offer your practice support to help make prescribing safer.

We will also send ten copies of this report for your team. If you require more please contact Dr Tom Willis on **aspire@leeds.ac.uk** or 0113 343 6731.

Yours sincerely

Dr Robbie Foy
General Practitioner & Professor of Primary Care
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"We do our patients an injustice by accepting risks without giving them an opportunity to protect themselves from harm. Working together with patients to reduce the risk of serious harm is the way forward. The ASPIRE programme offers practices a unique and customised way to improve prescribing behaviours"

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For more information on ASPIRE, please see
http://medhealth.leeds.ac.uk/aspire

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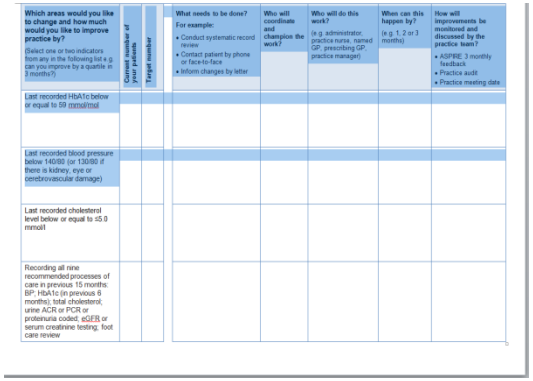
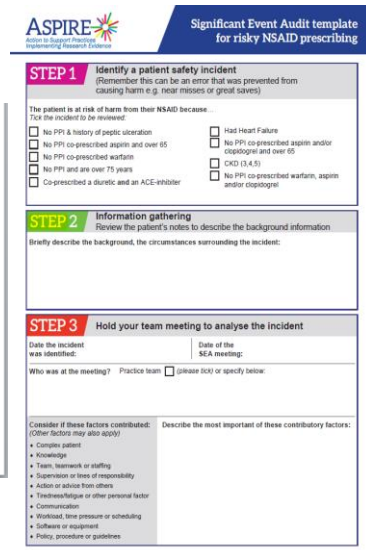
EDUCATIONAL OUTREACH



Which areas would you like to change and how much would you like to improve practice by? (Select one or two indicators from any in the following list e.g. can you improve by a quartile in 3 months?)	Current number of your patients	Target number	What needs to be done? For example: • Conduct systematic record review • Contact patient by phone or face-to-face • Inform changes by letter	Who will coordinate and champion the work?	Who will do this work? (e.g. administrator, practice nurse, named GP, prescribing GP, practice manager)	When can this happen by? (e.g. 1, 2 or 3 months)	How will improvements be monitored and discussed by the practice team? • ASPIRE 3 monthly feedback • Practice audit • Practice meeting date
Last recorded HbA1c below or equal to 69 mmol/mol							
Last recorded blood pressure below 140/80 (or 130/80 if there is kidney, eye or cerebrovascular damage)							
Last recorded cholesterol level below or equal to ≤5.0 mmol/l							
Recording all nine recommended processes of care in previous 15 months: BP, HbA1c (in previous 6 months), total cholesterol, urine ACR or PCR or proteinuria coded, eGFR or serum creatinine testing, foot care review							

SIGNIFICANT EVENT AUDIT



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Action to Support Practices Implementing Research Evidence

Significant Event Audit template for risky NSAID prescribing

STEP 1 Identify a patient safety incident
(Remember this can be an error that was prevented from causing harm e.g. near misses or great saves)

The patient is at risk of harm from their NSAID because…
Tick the incident to be reviewed

- ☐ No PPI & history of peptic ulceration
- ☐ No PPI co-prescribed aspirin and over 65
- ☐ No PPI co-prescribed warfarin
- ☐ No PPI and are over 75 years
- ☐ Co-prescribed a diuretic and an ACE-inhibiter
- ☐ Had Heart Failure
- ☐ No PPI co-prescribed aspirin and/or clopidogrel and over 65
- ☐ CKD (3,4,5)
- ☐ No PPI co-prescribed warfarin, aspirin and/or clopidogrel

STEP 2 Information gathering
Review the patient's notes to describe the background information

Briefly describe the background, the circumstances surrounding the incident:

STEP 3 Hold your team meeting to analyse the incident

Date the incident was identified: | Date of the SEA meeting:

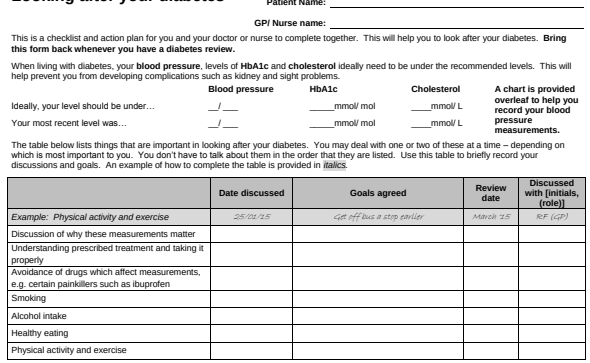
Who was at the meeting? Practice team ☐ (please tick) or specify below:

Consider if these factors contributed: *(Other factors may also apply)*

- Complex patient
- Knowledge
- Team, teamwork or staffing
- Supervision or lines of responsibility
- Action or advice from others
- Tiredness/fatigue or other personal factor
- Communication
- Workload, time pressure or scheduling
- Software or equipment
- Policy, procedure or guidelines

Describe the most important of these contributory factors:

PATIENT MEDIATED



Looking after your diabetes

Patient Name: _____

GP/ Nurse name: _____

This is a checklist and action plan for you and your doctor or nurse to complete together. This will help you to look after your diabetes. **Bring this form back whenever you have a diabetes review.**

When living with diabetes, your **blood pressure**, levels of **HbA1c** and **cholesterol** ideally need to be under the recommended levels. This will help prevent you from developing complications such as kidney and sight problems.

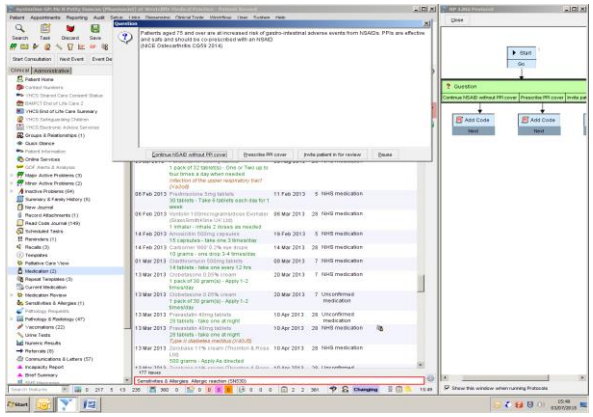
	Blood pressure	HbA1c	Cholesterol
Ideally, your level should be under…	__/__	____mmol/ mol	____mmol/ L
Your most recent level was…	__/__	____mmol/ mol	____mmol/ L

A chart is provided overleaf to help you record your blood pressure measurements.

The table below lists things that are important in looking after your diabetes. You may deal with one or two of these at a time – depending on which is most important to you. You don't have to talk about them in the order that they are listed. Use this table to briefly record your discussions and goals. An example of how to complete the table is provided in *italics*.

	Date discussed	Goals agreed	Review date	Discussed with (initials, (role))
Example: Physical activity and exercise	*25/01/15*	*Get off bus a stop earlier*	*March '15*	*RF (GP)*
Discussion of why these measurements matter				
Understanding prescribed treatment and taking it properly				
Avoidance of drugs which affect measurements, e.g. certain painkillers such as ibuprofen				
Smoking				
Alcohol intake				
Healthy eating				
Physical activity and exercise				

COMPUTERISED DECISION SUPPORT



REMINDERS

	Blood pressure	Management	Targets for Treatment	
Moderate Stage 2	≥ 160/100 mmHg or ABPM ≥ 150/95 mmHg	*Consider setting goals with patients, e.g. smoking, alcohol, physical activity, diet* **Offer antihypertensive drug treatment to all**	Over 80 years	< 150/90 mmHg
Mild Stage 1	≥ 140/90 mmHg or ABPM ≥ 135/85 mmHg	*Consider setting goals with patients, e.g. smoking, alcohol, physical activity, diet* *Offer drug treatment if:* **Target organ damage**, e.g. kidney, eye **Established CVD** e.g. IHD, stroke, PVD **10 year CVD risk >20%** **Diabetes** **CKD** **Over 80 years**	**Under 80 years** **Target organ damage**, e.g. kidney, eye **Established CVD** e.g. IHD, stroke, PVD **10 year CVD risk >20%**	< 140/90 mmHg
			Diabetes Uncomplicated With kidney, eye or CVD damage	<140/80mmHg < 130/80mmHg
			CKD Without proteinuria With proteinuria	<140/90mmHg <130/80mmHg
			For all, ABPM targets are 5mmHg less than above targets	
Low risk	< 140/90 mmHg	No treatment required		

Example of active ingredient content

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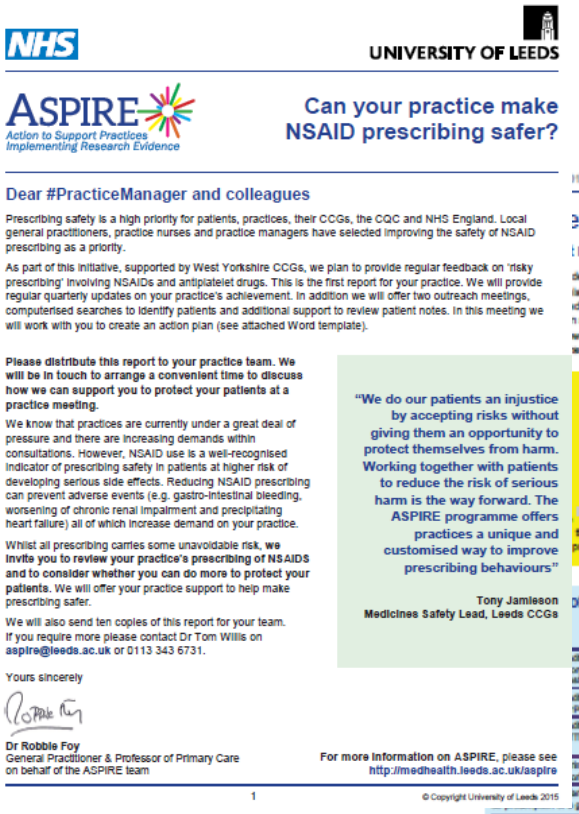

NHS

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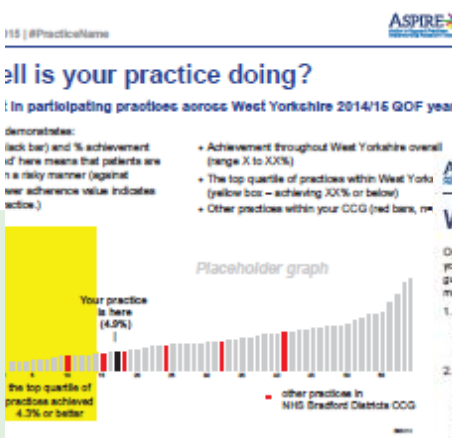

ASPIRE

ll is your practice doing?

In participating practices across West Yorkshire 2014/15 QOF year

demonstrates:

- Achievement throughout West Yorkshire overall (range X to XX%)
- The top quartile of practices within West Yorks (yellow box – achieving XX% or below)
- Other practices within your CCG (red bars, n=

Placeholder graph

Your practice is here (4.0%)

the top quartile of practices achieved 4.3% or better

other practices in NHS Bradford Districts CCG

of risky prescribing for your practice

	Proportion of patients (%)	Number of patients	Number of patients to be reviewed	Proport patients reviewe
ditional oral NSAID or low dose aspirin in ory of peptic ulceration WITHOUT co-astro-protective drug	00	00/00	00	00
ditional oral NSAID in patients aged 75 or prescription of a gastro-protective drug	00	00/00	00	00
ditional oral NSAID and aspirin in patients ITHOUT co-prescription of a gastro-protective	00	00/00	00	00
n and clopidogrel in patients aged 65 or over cription of a gastro-protective drug	00	00/00	00	00
rin and a traditional oral NSAID WITHOUT gastro-protective drug	00	00/00	00	00
Prescribing of warfarin and low-dose aspirin or clopidogrel, WITHOUT co-prescription of a gastro-protective drug	00	00/00	00	00
Prescribing an oral NSAID in patients with heart failure	00	00/00	00	00
Prescribing an oral NSAID in patients prescribed both a diuretic and an ACE-inhibitor / ARB	00	00/00	00	00
Prescribing an oral NSAID in patients with CKD	00	00/00	00	00
Combined indicators	00	00/00	00	00

Higher levels on these indicators generally suggest risky prescribing practice; lower levels generally suggest safer clinical prac

ASPIRE

Report 1 April 2015 | #PracticeName

What next?

Our team will be in touch to offer an outreach visit to support any changes your practice would like to make. Or you can use the following template to guide a discussion about who will do what by when. It may involve one or more of the following:

1. Set up a system for opportunistic review of higher risk patients using the S1 prompt that we can provide. Consider whether to continue or stop drug, reduce dose or total exposure by prescribing PRN, trying an alternative and/or adding gastro-protection.
2. Run the audit template that we have provided to identify which patients might benefit. Conduct a record review and if necessary a telephone or face-to-face review of those at higher risk. Consider allocating records for review within the team to the patient's usual GP or to a pharmacist for review and follow-up (if necessary) by usual GP. Could administrative staff identify and code patients?
3. Set a target to increase the number of patients reviewed from the last feedback report.
4. Review your progress in light of further feedback we will send you later.

About ASPIRE

We are a multi-disciplinary group involving experienced researchers (from Leeds, Bradford and York), general practitioners, clinical leads from NICE, managers and patients. We also have panels of patients and international experts advising our programme. For further information see **http://medhealth.leeds.ac.uk/aspire**.

Clinical research continually produces new evidence that can benefit patients. Despite the best efforts of many professionals, this evidence does not reliably find its way into everyday patient care. Much research suggests that we can do better for our patients – everyone knows this, and knows that achieving it is often easier said than done. We also understand the many competing demands that general practices face.

Our mission is to develop and test ways to support general practices in implementing evidence-based practice effectively and realistically within the constraints and challenges of real-life general practice.

ASPIRE is supported by all CCGs and by general practices across West Yorkshire

Airedale, Wharfedale & Craven
Bradford Districts
Bradford City
Leeds North
Leeds South & East
Calderdale
Wakefield
Greater Huddersfield

4

Shaping knowledge

Salience of consequences

Feedback on behaviour

Comparison of behaviour

Goal setting

Action planning

Results continued

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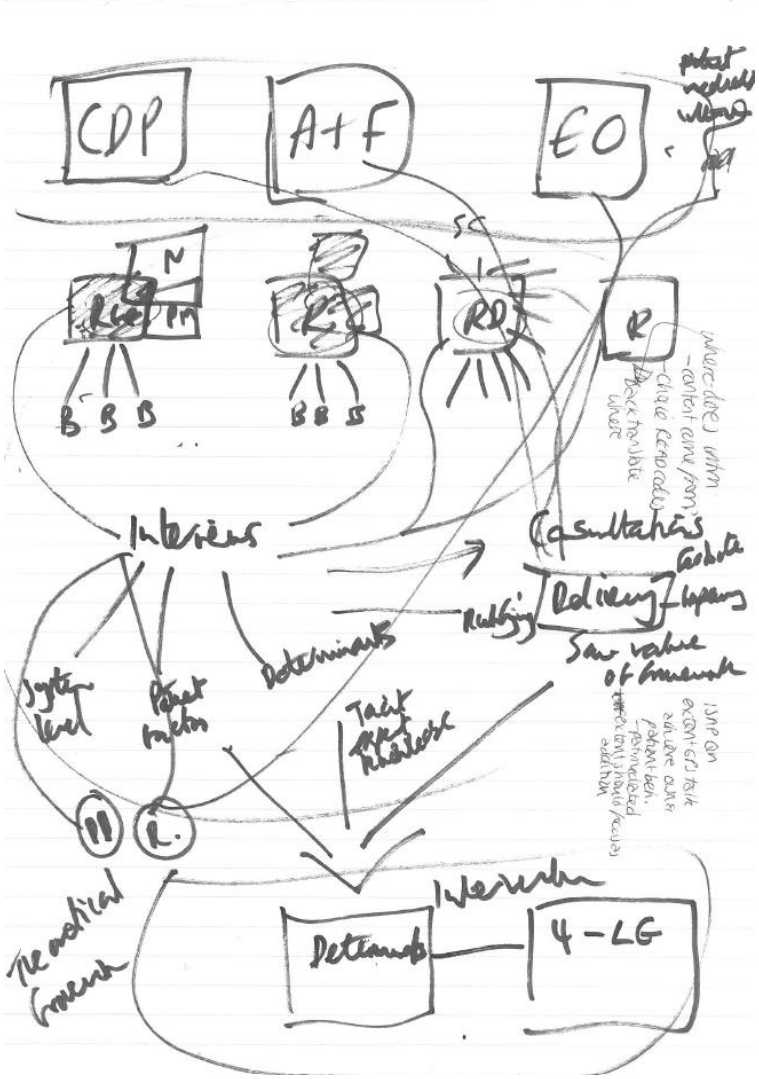
- Determinants varied by recommendation
- Consensus panel meetings to refine delivery
  - e.g. the appropriateness and timing of computerised prompts were questioned for diabetes and hypertension recommendations.

Risky non-steroidal prescribing	**Anticoagulation prescribing**
Protected learning time	Contact with patient
Memory (risk factors)	Secondary care knowledge
Audit time	Patient agenda
Consultation time	Tailoring care (elderly, multiple conditions)
Patient compliance	

Limits

- Cost-effectiveness is unknown (2 cRCTs and process evaluations)
- Specifying behaviours within recommendations
- Generalizability of determinants (participants/study design/context/setting)
- Trade offs generic/focussed intervention
- Complex iterative process



Bottom line

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- More patients could receive evidence-based care if interventions to change practice can be optimised.
- Tailoring indigenous interventions cost-effective?
- Optimising sustainably delivered interventions in routine health care using replicable methods.

http://www.business2community.com/b2b-marketing/b2b-marketing-strategy-integrate-inbound-outbound-best-results-0850174

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This work has been informed by the wider ASPIRE research team
http://medhealth.leeds.ac.uk/info/650/aspire