Safety Tools and Methods for General Practice – The Scottish Perspective

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Declaration of Financial Interests or Relationships

I have the following financial interest or relationship(s) to disclose with regard to the subject matter of this presentation:

Paul Bowie
About Scotland and our National Health Service (NHS)

- Scotland: one of 4 home nations that make up United Kingdom
- Population: ~5m+
- Health Care is Tax-Payer funded and free at point of delivery - National Health Service (NHS) Scotland
- 14 Regional Health Boards
- 1000+ General Medical Practices – Independent Contractors to NHS
6 Safety & Improvement Tools for Individual, Team & Organisational Learning

1. **Trigger Review Method** – A tool for the rapid screening of small samples of electronic health records of high risk patient groups to identify and learn from previously undetected incidents and risks

2. **MoRISS** – A system-wide tool for routine checking of safety-critical issues in the GP work environment

3. **GP-SafeQuest** – Measuring and acting on GP team perceptions of safety climate

4. **Enhanced Significant Event Analysis (SEA)** – A systems approach to analysing significant events and considering emotional impacts on practitioners

5. “**Never Events**” – A validated list of serious patient safety incidents to drive collective learning and improvement

6. “**Always Events**” – A tool for capturing patient feedback on what is important to them and linking this to a quality improvement activity
Implementation of the trigger review method in Scottish general practices: patient safety outcomes and potential for quality improvement

Carl de Wet,¹,² Chris Black,¹ Sarah Luty,¹ John McKay,¹ Kate O’Donnell,² Paul Bowie¹,²

The preliminary development and testing of a global trigger tool to detect error and patient harm in primary-care records

C de Wet,¹ P Bowie²

Searching primary care records for predefined triggers may expose latent risks and adverse events

Paul Bowie, Lyn Halley, Jill Gillies, Neil Houston and Carl de Wet

Applying the trigger review method after a brief educational intervention: potential for teaching and improving safety in GP specialty training?

John McKay¹, Carl de Wet¹,², Moya Kelly¹ and Paul Bowie¹
Original Development and Testing as a Harm Measurement Tool
(de Wet & Bowie, 2009)

- Adapted the IHI Outpatient Trigger Tool
- Pilot - 5 General Practices (5 x 100 records reviewed)
- Adverse event was found in 47 records (9.4%), indicating that harm occurred at a rate of 1 event per 48 consultations.
- Of these, 27 were judged to be (42%).
- A further 17 records (3.4%) contained evidence of a potential adverse event.
- Harm severity was low to moderate for most patients (82.9%).
- Harm rates were higher in those >60 years, and most were medication-related (59%).
<table>
<thead>
<tr>
<th>Trigger</th>
<th>Description and rationale for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Timing of consultation</td>
<td>&gt;3 contacts with the practice in any given period of a week (this can include telephone calls, consultations with nurse/GP or home visits)</td>
</tr>
<tr>
<td>2. Place of consultation</td>
<td>Any home visit, whether by the GP or by a nurse from the practice serves as a trigger</td>
</tr>
<tr>
<td>3. Frequency of consultation</td>
<td>&gt;10 consultations for the period of review (12 months)</td>
</tr>
<tr>
<td>4. Changes to medication</td>
<td>Has any “repeat medication” been added or cancelled in the period under review?</td>
</tr>
<tr>
<td>5. Adverse drug events/allergies</td>
<td>Has a new “read code” for allergy/adverse drug event been added to the record in the year under review?</td>
</tr>
<tr>
<td>6. New clinical read code</td>
<td>Has a high priority clinical “read code” been added to the record in the period under review?</td>
</tr>
<tr>
<td>7. Abnormal blood results</td>
<td>Specific abnormalities in U&amp;E, LFT, INR and FBC levels served as a trigger</td>
</tr>
<tr>
<td>8. Out-of-hours and/or A&amp;E</td>
<td>Attendance at either of these services in the period under review served as a trigger</td>
</tr>
<tr>
<td>9. Hospital admission/discharge</td>
<td>Has the patient been admitted to a hospital for any intervention, management or procedure? The patient should have been admitted for at least one night</td>
</tr>
<tr>
<td>10. &gt;1 outpatient appointments in last year</td>
<td>More than one outpatient appointment or hospitalised as a day-case during the period under review</td>
</tr>
</tbody>
</table>

A&E, accident and emergency department; FBC, full blood count; GP, general practitioner; INR, international normalised ratio; LFT, liver function test; U&E, urea and electrolytes.
Examples of Potential ‘High Risk’ Patient Sub-Populations to Review

<table>
<thead>
<tr>
<th>1. Specific, Shared Patient Characteristics</th>
<th>2. Chronic Disease Areas</th>
<th>3. High risk Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Home patients</td>
<td>COPD</td>
<td>Insulin</td>
</tr>
<tr>
<td>&gt;75years</td>
<td>Stroke/TIA</td>
<td>Morphine</td>
</tr>
<tr>
<td>Last 25 attending out-of-hours</td>
<td>CVD</td>
<td>Warfarin</td>
</tr>
<tr>
<td>Housebound patients</td>
<td>Diabetes</td>
<td>NSAIDs</td>
</tr>
<tr>
<td>Last 25 hospital admissions</td>
<td>Heart failure</td>
<td>Diuretics(x2)</td>
</tr>
<tr>
<td>Last 25 hospital referrals</td>
<td>CKD</td>
<td>&gt;5 repeat Medication items</td>
</tr>
</tbody>
</table>

4. Combinations of Groups 1 to 3

  e.g. patients over 75 years with CVD, taking >5 repeat medication items
How to Undertake a Trigger Review

When examining a record, the reviewer looks to answer the following 5 questions:

1. **Can triggers be detected?**
   - If yes, the reviewer examines the relevant section of the record in more detail to determine if the patient came to any harm. If no, move onto the next record.
   - Speed is a key advantage of process - average review time is 2 to 3 minutes.

2. **Did harm occur?**
   - If yes, move onto the next question in the proforma sheet.
   - If none is detected, move onto the next record.
   - After 20 minutes if unable to decide if harm occurred you ignore the record and move on.

3. **What was the severity of harm detected?**
   - The reviewer should grade the severity of every incidence of detected harm.

4. **Was the detected harm incident preventable?**
   - The reviewer should determine whether the detected harm was preventable - based on a combination of evidence found and professional judgement.

5. **Where did the harm incident originate?**
   - The circumstances leading to the harm event may have originated in primary or secondary care, or a combination of both.
Implementation of the Trigger Review Method at Scale in NHS Scotland

- **Objectives:** To report the patient safety-related findings from the implementation of the Trigger Tool in two NHS Board areas

- **Design:** Cross-sectional review of random samples of the electronic records of ‘high risk’ patient groups

- **Setting:** 274 Scottish general practices

- **Intervention:** Contractual incentivisation of Trigger Tool implementation via SPSP-PC

- **Main outcome measures:** Practice participation rate; prevalence of patient safety incidents (PSIs), and their severity and preventability as judged by clinical reviewers; reported length of time taken to conduct reviews; and preliminary PSI taxonomy development.
National Trigger Tool Study in Scotland: Main Results

- **13,351** patient records were reviewed in 274 practices (86.2%).
- **1887** PSIs were recorded (14.1%), a mean of **3.5 per review** (SD ±1.6).

- Of these, **830** were judged to have caused **mild to moderate harm** (44.8%), with **262** cases resulting in more **severe harm** (14.2%).
- **852** PSIs (46.9%) were rated as **preventable/potentially preventable**.
- Most common PSI types were medication (34.7%) and care monitoring (17.3%) issues.
- Mean length of time to conduct a review/complete review summary was **174.2 minutes** (SD ±78.4 minutes, range 30 to 480 minutes).
Examples of improvements taken during Trigger Review:

1. Nephrotoxic medication discontinued.
2. Drug dosage (warfarin) adjusted.
3. Referral letter to secondary care done (x3).
4. Allergy or adverse reaction code updates.
5. Medication reviews done.
7. Initiated follow up appointment for patients requiring review.
8. Cardiotoxic drug discontinued.
9. Updated notes with investigation.
10. Follow-up blood test arranged.
National Study Conclusions

• The Trigger Review Tool is uncovering important and previously undetected patient safety concerns

• Can serve as prompts for subsequent learning and driving improvements in related care systems at the practice, regional and national level in the Scottish health service.

• Routine implementation of the Tool may provide the greatest measureable benefit in terms of detecting and potentially learning from unsafe patient care than all other methods currently at our disposal in general medical practice.
Participatory design of a preliminary safety checklist for general practice

**Monitoring Risk and Improving System Safety (MoRISS):**
Design and Evaluation of a Safety Management Checklist Tool for Scottish General Medical Practice
PROBLEM?

- In GP localised checking procedures exist - does not appear to be a combined (i.e. integrated) checking approach for safety-critical processes.

- Evidence suggests existing systems are applied *ad hoc* and are often found to be inadequate barriers to identifying and minimising potential and actual risks - and harm to patients and team members.
GP Checking Systems - Safety Problems
Examples identified by SEA, literature etc. (McKay et al, 2009)

- No emergency drugs
- Out-of-date emergency drugs
- Malfunctioning equipment (e.g. refrigerators, CPR, oxygen)
- Preventable needle stick injuries
- Inadequate staff induction processes
- Stolen prescription pads
- Maintaining confidentiality
- Staff not offered immunisation protection
- Doctors/nurses practising unregistered
- Stress/burnout/sickness absence
  - Unreliable checking systems
  - Variable checking systems
  - Inadequate safety culture
<table>
<thead>
<tr>
<th>Main Safety Domains (n=6)</th>
<th>Example of Checklist Category (n=24)</th>
<th>Example of Checklist Item (n=62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication safety</td>
<td>Controlled drugs</td>
<td>Stock balances are undertaken at appropriate time intervals based on practice usage</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>Stocking of clinical rooms</td>
<td>Adequate PPE (Personal Protection Equipment) is available</td>
</tr>
<tr>
<td>Information systems</td>
<td>Data protections</td>
<td>Latest software updates for all information systems are installed (e.g. Formulary, EMIS, Vision)</td>
</tr>
<tr>
<td>Practice team</td>
<td>Registration checks</td>
<td>All clinicians are registered with the appropriate regulator</td>
</tr>
<tr>
<td>Patient access and identification</td>
<td>Standardised patient identification (ID) verification</td>
<td>The practice has a patient ID process using two approved patient identifiers and the practice team can describe how it is applied</td>
</tr>
<tr>
<td>Health &amp; Safety</td>
<td>Building safety and insurance</td>
<td>Public and employer’s liability insurance are up-to-date and displayed</td>
</tr>
</tbody>
</table>
Aggregate level checklist findings divided by grouped ‘Mandatory’, ‘Essential’ and ‘Advisory’ items (n=15 general practices)

<table>
<thead>
<tr>
<th>Practice ID No.</th>
<th>Mandatory (n=25)</th>
<th>Essential (n=25)</th>
<th>Advisory (n=12)</th>
<th>Number (n=62)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>18</td>
<td>11</td>
<td>52</td>
<td>83.8</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>23</td>
<td>11</td>
<td>58</td>
<td>93.5</td>
</tr>
<tr>
<td>3</td>
<td>25</td>
<td>25</td>
<td>11</td>
<td>61</td>
<td>98.3</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>22</td>
<td>12</td>
<td>58</td>
<td>93.5</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>23</td>
<td>11</td>
<td>58</td>
<td>93.5</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>23</td>
<td>10</td>
<td>58</td>
<td>93.5</td>
</tr>
<tr>
<td>7</td>
<td>25</td>
<td>23</td>
<td>12</td>
<td>60</td>
<td>96.7</td>
</tr>
<tr>
<td>8</td>
<td>25</td>
<td>24</td>
<td>11</td>
<td>60</td>
<td>96.7</td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>22</td>
<td>10</td>
<td>56</td>
<td>90.3</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
<td>23</td>
<td>12</td>
<td>60</td>
<td>96.7</td>
</tr>
<tr>
<td>11</td>
<td>23</td>
<td>21</td>
<td>11</td>
<td>55</td>
<td>88.7</td>
</tr>
<tr>
<td>12</td>
<td>23</td>
<td>23</td>
<td>8</td>
<td>54</td>
<td>87.0</td>
</tr>
<tr>
<td>13</td>
<td>22</td>
<td>23</td>
<td>12</td>
<td>57</td>
<td>91.9</td>
</tr>
<tr>
<td>14</td>
<td>24</td>
<td>20</td>
<td>7</td>
<td>51</td>
<td>82.8</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>24</td>
<td>12</td>
<td>60</td>
<td>96.7</td>
</tr>
<tr>
<td><strong>STUDY TOTALS</strong></td>
<td><strong>360 (96%)</strong></td>
<td><strong>337 (90%)</strong></td>
<td><strong>161 (89%)</strong></td>
<td><strong>858 (92%)</strong></td>
<td></td>
</tr>
</tbody>
</table>
Checklist Evidence/Problems

• ....are mainly social and cultural e.g. undermine expertise; are infantilising; impede quick decision-making etc.
• Major assumption: a technical solution (e.g. a checklist) can solve a cultural problem in the workplace
• Successful implementation is NOT down to the ‘checklist’ BUT
  - to team ‘buy-in’
  - attitude changes
  - efforts to remove barriers
  - finding creative solutions to normalise their use
  - acting on the feedback and driving improvement
  - system redesign
Checklist Acceptance: Basic Assumptions to be Met -

1. “There must be a predefined problem that a checklist is the right tool for solving”

2. “The end user must not get the feeling that he or she is deprived of the opportunity to apply common sense”

3. “It must be better than the current system”
The development and psychometric evaluation of a safety climate measure for primary care

C de Wet,1 W Spence,2 R Mash,3 P Johnson,4 P Bowie1

Measuring perceptions of safety climate in primary care: a cross-sectional study

Carl de Wet MRCGP MMEd,1 Paul Johnson PhD,3 Robert Mash MRCGP PhD,5 Alex McConnachie PhD4 and Paul Bowie PhD2

1General Practitioner and Patient Safety Research Fellow, 2Associate Adviser, NHS Education for Scotland, Glasgow, UK
3Statistician, 4Senior Statistician, Robertson Centre for Biostatistics, Faculty of Medicine, University of Glasgow, Glasgow, UK
5Associate Professor, University of Stellenbosch, Cape Town, South Africa
GP-SafeQuest Online Survey Tool

Welcome to the Safety Climate Questionnaire Web Portal.

Primary Care Teams can use this website to find where they could improve in areas which have been shown to be important to patient safety.

If you are the Practice Manager of a GP Practice, click one of the buttons on the right to proceed.

The questionnaire and website were developed by NHS Education for Scotland and the system is supported by Healthcare Improvement Scotland.
Measurement of safety climate and related learning and improvement in Scottish general medical practice: A cross-sectional mixed methods study

G MacWalter, J McKay, M Russell, D McNab, J Gillies, N Houston, P Bowie

1NHS Education for Scotland, Glasgow, UK
2Airdrie Community Health Centre, Airdrie, UK
3Healthcare Improvement Scotland, Edinburgh, UK
4Institute of Health and Wellbeing, University of Glasgow, UK

National results by domain and year

- Workload
- Communication
- Leadership
- Teamwork
- Systems

Maximum score is 7
In 3 NHS Boards we reviewed Practice Climate Summary Sheets (n=275)
Described 1572 actions for improvement implemented/proposed
Categorised using a Human Factors systems model

<table>
<thead>
<tr>
<th>SEIPS 2.0 Category</th>
<th>Identified themes</th>
<th>Total number of response n = 1572</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Implement</td>
</tr>
<tr>
<td>People</td>
<td>Turnover of non-clinical staff (e.g. administrative staff recruitment)</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Training and learning events (e.g. educational event)</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Promotion of teamwork and respect amongst staff</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Turnover of clinical staff (e.g. nurse or doctor recruitment)</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Increased clinical sessions from existing staff (e.g. existing nurse employed for extra sessions)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Paid overtime (e.g. payment for working outside existing contract)</td>
<td>5</td>
</tr>
</tbody>
</table>

<p>| Tools &amp; Tech.      | Information sharing using information technology (e.g. use of electronic messenger) | 33        | 47       | 88 (44.9%)  |
|                    | Information sharing without information technology (e.g. use of whiteboard in reception) | 10        | 47       | 57 (29.1%)  |
|                    | Appointments automation (e.g. self check-in screen, online appointment booking)  | 7         | 13       | 20 (10.2%)  |
|                    | Web based automation excluding appointments (e.g. online prescription ordering)  | 4         | 12       | 16 (8.2%)   |
|                    | Phone line changes (e.g. installation of additional phone line)                  | 6         | 8        | 14 (7.1%)   |
|                    | Information technology access (e.g. remote access from home)                    | 3         | 3        | 6 (3.1%)    |
|                    | Appointment reminder service (e.g. SMS reminder)                                 | 3         | 0        | 3 (1.5%)    |</p>
<table>
<thead>
<tr>
<th>Physical Environment</th>
<th>New room or premises (e.g. Refurbish building)</th>
<th>6</th>
<th>4</th>
<th>10 (34.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relocation of equipment (e.g. move location of computers)</td>
<td>2</td>
<td>5</td>
<td>7 (24.1)</td>
</tr>
<tr>
<td></td>
<td>Relocation of staff (e.g. move staff back from reception desk)</td>
<td>2</td>
<td>4</td>
<td>6 (20.7)</td>
</tr>
<tr>
<td></td>
<td>Relocation of practice (e.g. New purpose built premises)</td>
<td>2</td>
<td>2</td>
<td>4 (13.8)</td>
</tr>
<tr>
<td></td>
<td>Time variations (relocate to branch surgery at certain time points)</td>
<td>1</td>
<td>1</td>
<td>2 (6.9)</td>
</tr>
<tr>
<td>Organisation</td>
<td>Meetings (e.g. whole practice, clinical meetings.)</td>
<td>107</td>
<td>94</td>
<td>201 (27.9)</td>
</tr>
<tr>
<td></td>
<td>Communication other than meetings (open communication to raise safety concerns)</td>
<td>121</td>
<td>58</td>
<td>179 (24.9)</td>
</tr>
<tr>
<td></td>
<td>Significant event analysis (e.g. Enhanced SEA)</td>
<td>76</td>
<td>52</td>
<td>128 (17.8)</td>
</tr>
<tr>
<td></td>
<td>Procedure / Policy review (e.g. update existing procedures)</td>
<td>45</td>
<td>47</td>
<td>92 (12.8)</td>
</tr>
<tr>
<td></td>
<td>Workload review (e.g. reduce administrative workload)</td>
<td>7</td>
<td>35</td>
<td>42 (5.8)</td>
</tr>
<tr>
<td></td>
<td>Safety climate survey (e.g. PC-Safequest)</td>
<td>6</td>
<td>28</td>
<td>34 (4.7)</td>
</tr>
<tr>
<td></td>
<td>Audit tools (e.g. trigger tools)</td>
<td>16</td>
<td>14</td>
<td>30 (4.2)</td>
</tr>
<tr>
<td></td>
<td>Appraisal (e.g. staff reviews)</td>
<td>3</td>
<td>7</td>
<td>10 (1.4)</td>
</tr>
<tr>
<td></td>
<td>Management learning event (e.g. leadership skills event)</td>
<td>0</td>
<td>4</td>
<td>4 (0.6)</td>
</tr>
</tbody>
</table>
Research

Carl de Wet, Catherine O’Donnell and Paul Bowie

Developing a preliminary ‘never event’ list for general practice using consensus-building methods
What are Never Events?

“a serious, largely preventable patient safety incident that should not occur if the available preventable measures were implemented by healthcare workers”
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prescribing a drug to a patient that is recorded in the practice system as having previously caused her/him a severe adverse reaction</td>
</tr>
<tr>
<td>2</td>
<td>A planned referral of a patient, prompted by clinical suspicion of cancer, is not sent</td>
</tr>
<tr>
<td>3</td>
<td>Prescribing a teratogenic drug to a patient known to be pregnant (unless initiated by a clinical specialist).</td>
</tr>
<tr>
<td>4</td>
<td>Emergency transport is not discussed or arranged when admitting a patient as an emergency</td>
</tr>
<tr>
<td>5</td>
<td>An abnormal investigation result is received by a practice but is not reviewed by a clinician</td>
</tr>
<tr>
<td>6</td>
<td>Prescribing Aspirin for a patient ≤ 12 years old (unless recommended by a specialist for specific clinical conditions)</td>
</tr>
<tr>
<td>7</td>
<td><strong>Prescribing systemic oestrogen-only Hormone Replacement Therapy for a patient with an intact uterus</strong></td>
</tr>
<tr>
<td>8</td>
<td><strong>Prescribing Methotrexate daily rather than weekly (unless initiated by a specialist for a specific clinical condition e.g. leukemia)</strong></td>
</tr>
<tr>
<td>9</td>
<td>A needle-stick injury due to a failure to dispose of ‘sharps’ in compliance with national guidance and regulations</td>
</tr>
<tr>
<td>10</td>
<td>Adrenaline (or equivalent) is NOT available when clinically indicated for a medical emergency in the practice or GP home visit.</td>
</tr>
</tbody>
</table>
‘Never Events’ Criteria for General Practice

1. Is known to cause **severe** harm to a patient, or has the potential to do so AND
2. Is **preventable** by the health care professional, team or organization AND
3. Can be clearly and precisely **defined** AND
4. Can be **detected** AND
5. Is not the result of an unlawful act
Percentage of GPs reporting at least one Never Event in past 12 months

- Adverse drug reaction
- Methotrexate
- Teratogenic drug
- Adrenaline n/a
- Cancer referral not sent
- HRT & intact uterus
- Missed review
- Ambulance
- Needle stick
- Aspirin

% of GPs reporting at least one event in the last 12 months
Frequency of Never Events in the last year

Number of GPs reporting in past year

Frequency of never events in past year

- Aspirin
- Needle stick
- Ambulance
- Missed review
- HRT & intact uterus
- Cancer referral not sent
- Adrenaline n/a
- Teratogenic drug
- Methotrexate
- Adverse drug reaction
Table 2. Estimate of likely occurrence in next 5 years

<table>
<thead>
<tr>
<th>Never Event</th>
<th>Is it likely to occur in next 5 years</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manchester (% yes)</td>
<td>Scotland (% yes)</td>
<td>P value</td>
<td></td>
</tr>
<tr>
<td>Needle stick injury</td>
<td>37%</td>
<td>61%</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Cancer referral not sent</td>
<td>34%</td>
<td>38%</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Adrenaline/Epinephrine is NOT available</td>
<td>28%</td>
<td>19%</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Emerg. Ambulance transport is not arranged</td>
<td>23%</td>
<td>36%</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Abnormal investigation result not reviewed</td>
<td>59%</td>
<td>66%</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Prescribing &amp; adverse reaction recorded</td>
<td>57%</td>
<td>64%</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td><strong>Teratogenic drug &amp; pregnant</strong></td>
<td><strong>27%</strong></td>
<td><strong>31%</strong></td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Prescribing aspirin for a patient &lt;12 years</td>
<td>9%</td>
<td>7%</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Methotrexate daily rather than weekly</td>
<td>8%</td>
<td>10%</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td><strong>HRT &amp; intact uterus</strong></td>
<td><strong>33%</strong></td>
<td><strong>40%</strong></td>
<td>0.11</td>
<td></td>
</tr>
</tbody>
</table>
Next Steps?

• Any ideas – No movement for 3 years!!!!
• Pilot: linking with QI Activity?
• Introducing feasible Prospective Hazard Analysis method (e.g. Swift)
• NEs/Serious PSIs – Incident Reporting / Analysis / NPSA Risk Matrix
• Barrier Analysis: Bowtie?
Quality improvement and person-centredness: a participatory mixed methods study to develop the ‘always event’ concept for primary care

Paul Bowie,¹,² Duncan McNab,¹,³ Julie Ferguson,¹ Carl de Wet,¹ Gregor Smith,⁴,⁵ Marion MacLeod,¹ John McKay,¹ Craig White⁶,⁷
Background

- Growing recognition of need to take a **Person-Centred** approach

- Patient experience/satisfaction surveys useful **but may not be meaningful locally** or link well with QI efforts

- The ‘Always Event’ (AE) concept (Picker Institute/IHI) offers a **person-centred QI approach** to optimising aspects of the patient’s experience of their healthcare

- Potential for **routine use in many** care settings.
Always Event Definition

• “... a clear, action-oriented and pervasive practice or set of behaviours that, when implemented reliably, will ensure an optimal patient and family experience and improved outcomes”.

• A simple example - “Patient always wants to know what happens next”

• Plays opposite to Never Events

• ‘Open Architecture’ – identify, contextualise, define, adapt

• Application of process likely to produce different localised AE lists
Our Aims
(Against a background of no published evidence)

1. To ascertain from patients **what really matters to them** on a personal level of such high importance that it should ‘always happen’ when they interact with healthcare professionals and staff groups.

2. To **critically review** existing criteria for selecting ‘always events’ (AEs) appropriate to the Scottish GP context

3. To **generate examples of AEs** based on the patient feedback study data collated and demonstrate how these could be **implemented for QI purposes**.
Interview and Survey Questions

• What matters to you about the care you receive from your surgery?

• What do you feel is so important that it should ALWAYS happen when you have contact with your doctor’s surgery?

• Please complete this sentence: *The care I receive would be better if.......*
Results

• 13 general practices participated
• Long-term conditions - 65 patient interviews; questionnaire completion by a further 130 n=195).
• Four key themes emerged
• AE selection criteria contextualised
Theme 1 - Emotional support, respect and kindness

• “It should be friendly and efficient and I should always be No.1”
• “All staff should be polite and pleasant towards patients”
• “That you are treated with respect at all times”
• “Being treated as an individual – not next in line, but don’t feel this is a problem”
• “Someone shows genuine concern for any matter that I present with”
Theme 2 - Clinical care management

• “The correct treatment in accordance with my past medical history”
• “That I receive it when I want it. It is free and I do not have to pay for it. It is delivered quickly. It is given to me by people who are properly qualified and understand my needs”
• “It matters a lot to me that I receive good care which I do, as this allows me to continue working and doing the many things I do”
Theme 3 - Communication and information

• “That you can ask the GP anything you need to and to understand what they say because they are saying it using word and language you understand. That they talk to you, not look at the book or computer…”

• “The appreciation by reception staff that patients (more often than not) actually do need some consultation with someone whom they find approachable and whose diagnoses and judgement they trust”

• “I feel that when I leave the surgery that I have had a positive outcome e.g. any questions that I had have been answered and even more importantly that I have been listened to”
Theme 4 - Access to, and continuity of, healthcare

• “The ability to book appointments in advance with a GP of my choice and at a time convenient to me”

• “Being able to arrange appointments around work and family commitments”

• “That we are able to access a doctor or practice nurse ‘on the day’ for important problems…”

• “Prefer to see same GP every time and if given bloods want to know exactly what the results are…”

• “That I should be able to see the nurse/doctor I always see and have confidence in…”
Table 3. Comparison of original and redesigned selection criteria for Always Events

<table>
<thead>
<tr>
<th>Original AE Selection Criteria</th>
<th>Redesigned AE Selection Criteria by NES Development Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Important</strong>: Patients have identified the experience as fundamental to their care</td>
<td>An Always Event...</td>
</tr>
<tr>
<td>2. <strong>Evidence-based</strong>: The experience is known to be related to the optimal care of, and respect for, the patient</td>
<td>1. Is any healthcare interaction, process or outcome that is <strong>judged</strong> by patients, carers or relatives to be a highly <strong>important determinant of care quality</strong> and experience; AND</td>
</tr>
<tr>
<td>3. <strong>Measurable</strong>: The experience is specific enough that it is possible to accurately and reliably determine whether or not it occurred</td>
<td>2. Is <strong>unambiguous and specific to enable reliable measurement</strong>; AND</td>
</tr>
<tr>
<td>4. <strong>Affordable and sustainable</strong>: The experience can be achieved by any organisation without substantial renovations, capital expenditures or the purchase of new equipment or technology</td>
<td>3. Is <strong>consistently deliverable</strong> to applicable patient groups <strong>by all relevant</strong> health care organisations, teams and individuals; AND</td>
</tr>
<tr>
<td></td>
<td>4. Is <strong>feasible</strong> as part of routine health care delivery</td>
</tr>
</tbody>
</table>
### Examples of Candidate AE list

<table>
<thead>
<tr>
<th>Examples of Candidate ‘Always Events’</th>
<th>What would it look like to the patient?</th>
<th>Link to care process?</th>
<th>How to measure?</th>
<th>Feasibility</th>
</tr>
</thead>
</table>
| “I want to be able to get through on the telephone to reception quickly” | • Telephone would be answered within 1 minute. If the practice has a call queuing system – call transferred to operator within 1 minute | • Technology – to direct phone calls efficiently to correct member of staff.  
• Manager to ensure enough staff are present to answer phones and prioritise this based on demand. | • Measure time to answer phone. Performed by manager at several points through the day.  
• Time until speak to operator in call queuing system.  
• Patient satisf. with access. | • Yes but may have staff implications.  
• Technological solution may have cost implications. |
| “I want to arrange appointments around my family and work commitments” | • When patient phones for appointment they are offered appointments in advance at varying times through the day. This may involve waiting for appointments. | • Appointment templates are added to the system in advance and include pre-bookable appointments at different times through the day. | • Pre bookable appointments are on the system 4 weeks in advance. | • Yes |
FINAL REPORT TEMPLATE: Design refinement and dissemination of the enhanced Significant Event Analysis (enhanced SEA) guiding tools for UK health and social care
Enhancing the Effectiveness of Significant Event Analysis: Exploring Personal Impact and Applying Systems Thinking in Primary Care

Paul Bowie, PhD, MIEHF, FRCPE; Elaine McNaughton, MB ChB, DRCOG, DFSRH, FRCGP; David Bruce, MB ChB, FRCGP; Deirdre Holly, DHealthPsych CPsychol; Eleanor Forrest, BA, C.ErgHF, FIEHF; Marion Macleod, MBE, MBA, MIHM; Susan Kennedy, MSc, RGN, DN; Ailsa Power, PhD, MRPharmS, FFRPS; Denis Toppin, BDS, DGDP, MEd; Irene Black, BDS, CertEDLM, FGDP; Janet Pooley, PhD, MCOptom; Audrey Taylor, MSc, DipOT; Vivien Swanson, PhD, CPsychol; Moya Kelly, PhD, FRCGP; Julie Ferguson, DHealthPsych; Suzanne Stirling, MSc, Med Sci HPE; Judy Wakeling, PhD; Angela Inglis; John McKay, MD, FRCGP; Joan Sargeant, PhD
**PAcE Analysis Tool - CONCEPTUAL FRAMEWORK for eSEA**

Informed by Vincent et al’s London Protocol and Carayon et al’s SEIPS Model

<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>ACTIVITY</th>
<th>ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual e.g. physical, psychological, personality or social issues; cognitive factors, competence, skills, attitudes, risk perception, training issues</td>
<td>Complexity of work process or task, guidelines, policies and procedures e.g. not up-to-date, not available, unclear/unusable, not followed</td>
<td>Work setting e.g. staffing, environmental conditions, workload or hours of work, design of physical environment, administrative and/or time factors</td>
</tr>
<tr>
<td>Team e.g. roles, support, communication, leadership</td>
<td>Design or organisation of work process of system e.g. level of complexity, workload, poor design</td>
<td>Organisational e.g. safety culture, priorities, external risks, organisational structure</td>
</tr>
<tr>
<td>Patient e.g. clinical condition, physical, social, psychological, relationship factors</td>
<td>Equipment e.g. positioning, not available, not working, not calibrated, usability issues</td>
<td>Communication e.g. verbal, written, non verbal systems, poor communication, failure to communicate</td>
</tr>
<tr>
<td>Others e.g. other health and social services</td>
<td></td>
<td>Education and training e.g. supervision, competence, availability/accessibility, appropriateness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Societal, cultural and regulatory influences</td>
</tr>
</tbody>
</table>
Spread and Dissemination
(Additional Health Foundation funding secured)

• GP Specialty Training/Dental/Pharmacy/Secondary care
• Vocational Training for Practice Nurses and Managers
• Medical Appraisal and Revalidation
• Scottish National M&M Programme – Good Practice Guidance
• Early Resolution of NHS Complaints
• UK Military Medicine
• SPSP-PC/HIS Management and Reporting of Adverse Events
• Department of Health in England/PS Toolkit/’Never Events’
• Some NHS Boards – as part of local enhanced services
• Power of Apology / Duty of Candour
National Implementation Routes?
How do we engage and overcome barriers – ‘realistic’, ‘integrated’ and collective learning and improvement?

• GP Specialty Training (and PM/PN VTS)
• Specialty Training Accreditation
• Medical Appraisal/Revalidation (QI Activity)
• CPD e.g. Practice-based Small Group Learning Modules
• Scottish Quality and Outcomes Framework/SPSP
• NHS Health Boards Local Enhanced Services
• Partnerships e.g. Medical Protection
• National Agenda e.g.: Quality Improvement – Complaints Resolution – Duty of Candour – Human Factors Integration
• GP Quality Clusters
Key learning to share

- National policy and leadership of great importance
- Integrated approach (e.g. training, professional, service, regulatory obligations)
- Participatory approach to design and contextualisation of tools
- Protected time to upskill the GP workforce (e.g. Health authorities, GPST, PMVTS, CPD arrangements)
- Smart implementation i.e. toolbox for different challenges/team working roles and responsibilities
- Scope for GP team to prioritise local safety issues
Thank You

A Very Speedy Overview!!

Any Questions?