Demonstrating impact of applying knowledge to practice in NHSScotland

Suzanne Wilson, Senior Health Information Scientist
Aim of session

• Outline development of our evaluation framework
• Provide an example of its application

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Healthcare Improvement Scotland
Bridging the gap

• “…on average, American receive about half of recommended medical care processes”
  (McGlynn et al, 2003)

• “…it takes an average of 17 years to get research evidence to reach clinical practice.”
  (Balas et al, 2000; Morris et al, 2011)
Approaches to evaluating impact

• Logic Model or Results chain
• Outcomes Planning
• Theory of change
• Contribution analysis
• Return on Investment
• Kirkpatrick model for evaluating learning
Evaluating impact of knowledge interventions

Level of influence

Programme delivery
- Inputs
- Activities
- Outputs

Direct contacts
- Reach & Reaction
- Knowledge, Skills, Attitudes

Wider community of interest
- Practice or Behaviour Change
- More Effective Practice

External factors
- Readiness of context
- Capacity of target group to respond
- Professional groups, networks, power
- Existing policy, practices, beliefs
- Political, social, economic, technological

INPUTS

ACTIVITIES

OUTPUTS

HIGH

LOW

HIGH

LOW
**Evaluation tool**

For each step in the chain, what will success look like?

At each level of the outcomes chain:
- What assumptions are you making?
- What are the identified risks?
- What will be your measure of success?
- How will you gather the measures?
Example – clinical enquiry & response service

CLEAR: clinical enquiry & response service

CLEAR is now optimised for your smartphone...

Question and Answer Categories
- Blood and Immune System
- Cancer
- Cardiovascular
- Central Nervous System
- Diagnostic Procedures
- Digestive System
- Ear, Nose and Throat
- Endocrine, Nutritional and Metabolic
- Eye
- Gynaecology, Pregnancy, and Birth
- Infectious Disease

Should the skin be pinched or held taut when administering an intramuscular injection in the deltoid muscle?

You asked
Intramuscular injection (Deltoid muscle) - should we or should we not bunch up the skin before introducing the needle?

We found
The Department of Health guidance on vaccination procedures states: “IM injections should be given with the needle at a 90° angle to the skin and the skin should be stretched, not bunched. Deep SC injections should be given with the needle at a 45° angle to the skin and the skin should be bunched, not stretched” [1].

References and Links

Creation date: 22/05/2015
### Impact of a clinical enquiry service

#### For each step in the chain, what will success look like?

<table>
<thead>
<tr>
<th>Direct control</th>
<th>Direct influence</th>
<th>Indirect influence</th>
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<tbody>
<tr>
<td>Resources or inputs</td>
<td>Activities</td>
<td>Outputs</td>
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</table>

- **What resources or inputs will support the activities?**
- **What activities will take place?**
- **What will the products/methods/services be?**
- **How far have the targeted groups been engaged at micro, meso and macro levels?**
- **How do the target groups react to the service?**
- **Satisfaction/timely/relevance/efficiency...**
- **What knowledge, skills, attitudes change as a result of using the activity/outputs?**
- **What practices/behaviours do you expect to change as a result of the activity/outputs?**
- **How will practice be more effective as a result of the activity/outputs?**

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**Improved care**

**Informed clinical decisions**

**Improved understanding**

**Quality service which saves practitioner time**

**NHS staff in primary care or remote and rural areas**

**Web based evidence summaries answering clinical enquiries**

**Develop service - processes, train staff, develop website**

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Team of information professionals and researchers
Assumptions, Risks, Indicators....

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>System measures</th>
<th>Outcome measures</th>
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**Practitioners value evidence based ways of working**

**Inaccurate information reported**

<table>
<thead>
<tr>
<th>Indicators</th>
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<tbody>
<tr>
<td>Number of requests received. Number of visits to website (reuse).</td>
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<table>
<thead>
<tr>
<th>Evidence</th>
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<tbody>
<tr>
<td>Number of requests by professional group or health board</td>
</tr>
<tr>
<td>Number of repeat users. Visits to website. Staff state they would recommend service and saves time.</td>
</tr>
<tr>
<td>Staff indicate they received new information or resources.</td>
</tr>
<tr>
<td>Staff indicate their practice was informed by the information provided.</td>
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</tbody>
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CLEAR outcomes

• 53% of survey respondents would have spent over an hour searching for an answer – saves time
• 52% weren’t very confident they would resolve their own query – we answered their queries
• 99% would use the service again (2% maybe) & 97% would recommend it to a colleague
• 52% of respondents said the information changed or partially changed a decision.

(n=88, May 2015)
References


5. Montague S. Using (Reach and) Results Chains to Understand (Plan, Measure and Evaluate) Complex Multi-level Interventions. 2011

Further information


• Contact: suzannewilson@nhs.net
  @suzwilson
Register your interest