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An Evidence-Based Policy Brief

European Implementation Score (EIS)

Assessing the implementation of research evidence into practice

Executive Summary

Included:

- *Description of the problem: assessing the implementation of research evidence into practice*
- *Policy options for Health Policy Makers*
- *Policy options for Health Care Professionals*
- *Implementation considerations for these options*

European Implementation Score (EIS) – *Development of a European Implementation Score for measuring implementation of research into healthcare practice using vascular disease as an example (EIS)* – is a collaborative project between King's College London, University of Florence, University of Lund, London School of Economics, University College London, German Stroke Foundation and University of Wurzburg. EIS is funded by the European Commission under the 7th Framework Programme, Grant Agreement 223153 http://eisproject.com/

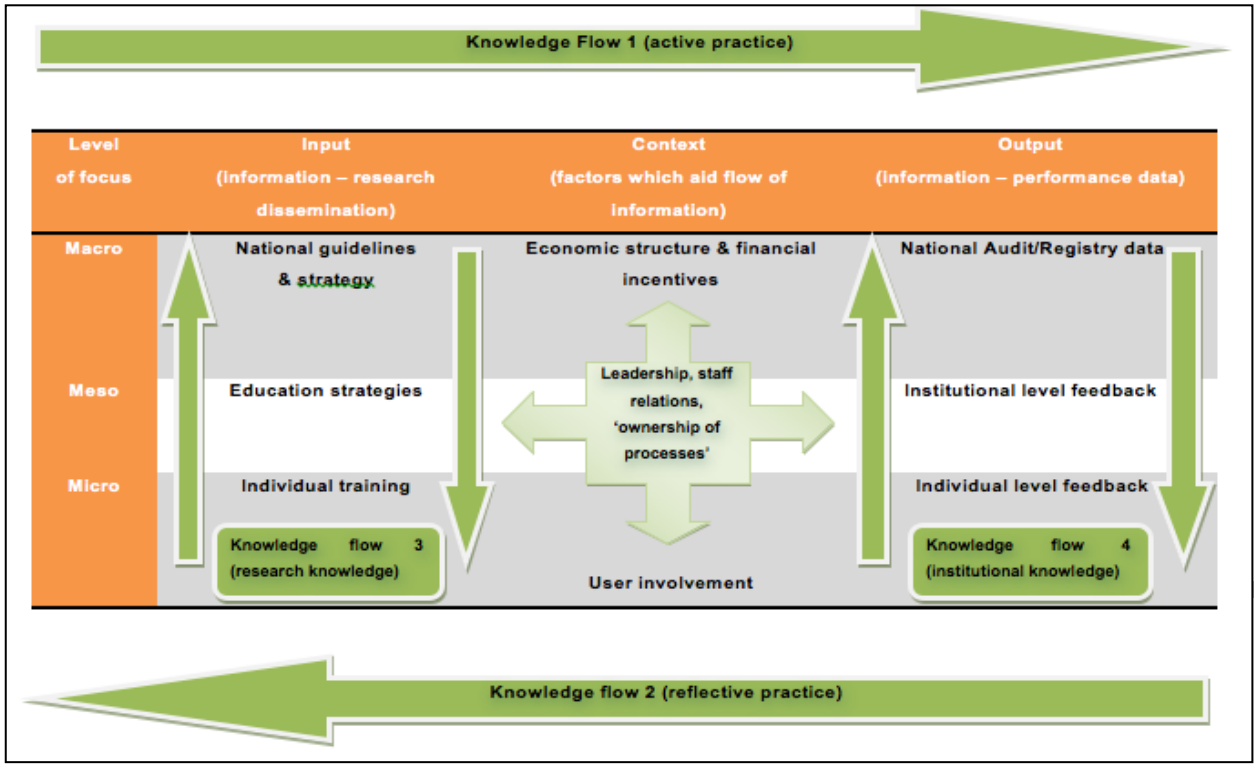
Key messages

The problem:

Assessing the implementation of research evidence into practice
This collaborative project set out to develop a European methodology to assess the implementation of research evidence into practice (the European Implementation Score (EIS)), in primary, secondary and specialist care from the perspectives of different target groups (users and carers, voluntary organisations, range of health and social care professionals and health policy makers).

Policy options:

Recommendations
General recommendations for measuring effective implementation of research results were developed from the perspectives of health care professionals and health policy, hence widening the theoretical framework for effective implementation from a focus on patients and professionals alone.



The problem: assessing the implementation of research evidence into practice

The European Implementation Score (EIS) aimed to measure how well new knowledge is implemented into clinical practice in Europe. The EIS addressed implementation of research knowledge at different levels of the health care system (micro-, meso- and macro-level) and in different health care settings (e.g. primary care, hospital, specialised care).

Focus on stroke
The focus of the project was stroke because of the emerging new evidence of effective new treatments available and because of the national initiatives and governmental policies in this area. We tested the transferability of the developed methods using coronary heart disease as another vascular disease example

Methods
To develop the project objectives, 8 partners and data from 14 stroke registers and 2 coronary heart disease registers were utilised. A range of methods were used including: literature reviews on implementation, evidence based stroke care and user involvement; multinational surveys; consensus methods for deriving performance indicators; ethnographic methods, statistical modeling of data, including health economic analysis.

Findings
There are variations in aspects of stroke policy through to patient care across the study countries with half the countries having regulation of care and incentives to practice evidence-based stroke care. All countries have guidelines and national audits in six of the countries. Interviews with 125 informants identified that implementing evidence-based care is easier in the acute period after stroke and highlighted the need for strategic level leadership and collaboration. The EIS score was developed, with weightings to assess policy level and patient level factors that might influence performance. The performance measures represented all aspects of care with representation from 16 countries in a consensus meeting, the results being adopted by the European Stroke Association.

400,000 patients from the national stroke audits of EIS were used to model the relationship between components of the score and performance and there was no homogenous association between the total score or components on performance.

Modeling in 6 European populations datasets demonstrated that the introduction of ‘best practice’ would lead to reductions in mortality and was cost effective.

There is evidence of an EU drive to improve patient participation but little evidence in the area of research, but some good examples were identified. A survey of stroke survivors indicated patients are not well informed about research.

Transferability to coronary heart disease
When applying the score to coronary heart disease in three countries, the higher the score the greater the improvement in care over time. A comparative effectiveness study of acute myocardial infarction in Sweden and UK showed clinically important differences in uptake of effective treatments and outcomes not explained by known confounders.

Policy options

General recommendations for measuring effective implementation of research results were developed from the perspectives of health care professionals and health policy, hence widening the theoretical framework for effective implementation from a focus on patients and professionals alone. The EIS benchmarked the current status of implementation of research results in different health care settings at different levels of the health care system using population registers and national audit data.

Policy option 1: for Health Policy Makers

For health policy makers the concept is complex and the notion of a simple numeric score is not realistic. However the EIS project has identified specific evidence-based factors which should be considered by policy makers when addressing the uptake of new interventions and these do vary widely between EU states.

At the macro-level, we have identified the following key components of the EIS:

1. Input: National Policy (guidelines/strategy),
2. Context: Economic structure and financial incentives,
3. Output: National audit/registry data.

Policy option 2: for Health Care Professionals

For the Health Care Professionals, a set of criteria has been developed that will facilitate implementation locally and should be considered as part of quality assurance.

At the micro-/meso-level, we have identified the following key components of the EIS:

1. Input: Educational strategies and individual training,
2. Leadership, staff relationships, 'ownership', user involvement,
3. Output: Institutional and individual level feedback on performance.

Implementation considerations

The EIS project has demonstrated that an EU approach to implementing best evidence for stroke is supported by the Stroke Alliance of user groups in different countries and should be considered a facet to implementation plans.

Conclusion

The project has developed methods to identify components of an Implementation Score and generated results that indicate variable quality of stroke care in European populations and a complex relationship between the EIS and stroke performance indicators overall and at the level of policy and individual patient care.

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