



get
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on

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The University of
Nottingham

Switch on **Q**Research[®] and **Q**Surveillance[®] data contributions – and start making a difference

There are approximately 3,000 EMIS practices contributing to **Q**Surveillance, and currently 670 EMIS practices contributing to **Q**Research - but to make an even bigger difference to UK healthcare - we need your help.

Since starting **Q**Research and **Q**Surveillance, we have made great strides in helping improve UK medical care. From discovering that Framingham risk scores do not accurately predict in a multicultural Britain and creating a new score that does, to helping reshape the medical landscape for Britain.

What's stopping you?

- It costs nothing
- All patient level data is anonymised so patient confidentiality is never breached
- It's easy to switch on
- It's improving the health of individual patients, as well as the nation as a whole
- By contributing your data, you can help us make a bigger difference, with more accurate research of the UK population

Get switched on

If your practice is using EMIS LV, and you would like to contribute, simply email: julia.hippisley-cox@nottingham.ac.uk with your EMIS CDB number.



What is it?

QResearch is one of the world's largest GP research databases. It extracts anonymised patient data from contributing EMIS LV practices, and includes historical data stretching back more than 20 years.

What does it do?

The not for profit project was set up by EMIS and the University of Nottingham in 2002 with the aim of collecting rich primary care data for medical research projects that test or generate hypotheses, and which lead to new knowledge capable of publication in peer reviewed academic journals. All research arising from the database is made publicly available for maximum public benefit. This research is directly improving UK patient care and outcomes.

Individual patients can opt out.

How it's shaping UK healthcare

- **A set of new risk tools are identifying patients at risk of serious illness**
Based on factors such as socioeconomic and lifestyle, several new risk scores have been developed for the UK population. A number of these risk scores have already been integrated back into UK clinical systems (see QScores for detailed information).
- **A better understanding of drug effectiveness and safety of commonly used drugs**
QResearch published a key study on NSAID safety in the BMJ in 2005, which led to a review of and changes in national and European policy on NSAID safety.

QResearch also undertook a study in 2010 which quantified the risks and benefits of statins, which is important given the rapid rise in statin prescribing over the last 10 years.
- **Essential evidence to inform evidence based national guidelines and policy**
QResearch published a series of studies highlighting inequalities in health care and outcomes for patients with severe mental illness, which has been used by the Department of Health to inform its health policy for such patients.
- **Develop new quality indicators for inclusion in national guidelines, such as for osteoporosis**
- **Help identify new risk groups for flu vaccines**, resulting in better search utilities within the GP clinical system to help GPs identify high risk patients for recall.

This has now been rolled out by the Department of Health to all GP clinical systems.
- **Pinpoint gaps in care**
For example, QResearch published a study that estimated that around 60,000 patients in the UK had a fasting glucose level in the diabetic range, without a follow up or diagnosis. Software was then added to the clinical system to identify such patients in a recall list for re-testing or diagnosis.
- **Measure trends in GP and nurse workload to better optimise resource allocation and inform government policy**

For more examples of QResearch, visit www.qresearch.org

QScores

What are QScores?

QScores are an expanding family of innovative risk prediction tools designed to assess an individual's risk of getting a range of diseases or conditions based on their personal characteristics, age, lifestyle, history and treatments.

| | |
|--|-------------------------------------|
| www.qrisk.org | Cardiovascular disease |
| www.qdscore.org | Diabetes |
| www.qfracture.org | Hip fracture |
| www.qkidney.org | Kidney failure |
| www.qcancer.org | Cancer |
| www.qthrombosis.org | Venous thromboembolism |
| www.qintervention.org | Risks and benefits of interventions |

Why were they created?

In 2007 a QResearch study uncovered that the previously used Framingham risk algorithm did not accurately predict a patient's likelihood of developing cardiovascular disease in a multicultural Britain. Using analysis of EMIS patient data, QRisk® was developed to include traditional risk factors and other risk factors such as socioeconomic and medical history. In 2007 the BMJ published a paper, which concluded that QRisk was a more accurate measure of how many UK adults are at risk of developing heart disease.

Further QResearch studies have led to new risk scores for diabetes, kidney failure, cancer and more.

All QScores have the potential to be integrated back into the EMIS clinical system to help doctors and patients make better decisions, and are also available as open and closed source software to enable reliable and widespread implementation and stimulate further research.

Direct impact on UK healthcare

On an individual level, QScores are being used as decision tools for GPs and nurses to use with patients to explain their personal level of risk, as well as various outcomes and how they might change with interventions such as stopping smoking, losing weight and/or taking medication.

At a practice or PCT level, the 'risk engine' has the potential to:

- risk stratify entire populations for a whole range of outcomes
- identify those at highest risk who need further assessment or intervention, for example, screening, prevention and smoking cessation
- predict likely future health needs especially as population ages, such as drug costs, use of diagnostic tests, hospital admissions, and operations
- optimise the use of scarce resources, which is crucial for commissioning.

QSurveillance[®]

What is QSurveillance?

QSurveillance is a near real-time data surveillance system that collects, analyses and reports on data daily from approximately 3,000 contributing EMIS LV practices, covering a population of more than 20 million patients.

What does it do?

QSurveillance reports on a range of conditions such as infectious diseases, chronic diseases, vaccine uptake including flu, pneumococcal and MMR, as well as incidents that may have an adverse effect on health, such as the number of respiratory-related illnesses after a chemical fire.

Set up in 2005 to initially help alert and manage a flu pandemic, it has since been expanded so that it can respond to different types of public health emergencies including epidemics, chemical or natural disasters.

QSurveillance is now run by EMIS, the University of Nottingham and ClinRisk Ltd.

How it's helped UK healthcare

- QSurveillance has informed government policy in times such as after the Buncefield fuel explosion in 2005, during the Avon flood in 2007 and the 2009 and 2011 swine flu pandemics.
- It forms part of the Health Protection Agency and Department of Health emergency response process to flu pandemics, heat wave and other emergency situations. It can be essential to help the NHS match resources to need, and keeps the public informed via a regular published bulletin.
- QSurveillance has a second function that enables GP practices to submit vaccine returns to the Department of Health, reducing work for practices.
- From the QSurveillance data, a unique practice portal has been created for participating practices to compare their data to those across the country (see QFeedback for more information).

QSurveillance will be a core part of heightened surveillance to cover the 2012 Olympics.

For more information, visit www.qsurveillance.org



What is QFeedback?

Launched in 2010, QFeedback is a practice portal that enables practices to compare their own data with anonymised practices in their PCT, SHA and the UK.

Participating practices can view their own data on flu and other diseases such as cancer and heart disease, as well as vaccinations, and compare it with anonymised practices in their local area and across the UK in near real-time.

Data can be visualised as graphs, maps or tables.

Why was it created?

QFeedback was developed using QSurveillance data as a way for practices to see how they measure up against others with a similar demographic, and also nationally.

QFeedback software has been developed by the University of Nottingham and ClinRisk Ltd and is available free to all EMIS LV practices contributing to the QSurveillance scheme.

How it's helping EMIS practices

- During winter 2010/11, QFeedback was used by more than 2,500 practices to monitor flu outbreaks, assess vaccination uptake and help plan resources. It was also used to see a national picture of flu outbreak and vaccinations.
- Because the system updates in near real-time, it can be rapidly responsive to emerging health issues and pandemics.

“ This is a brilliant resource. I found it very quick and easy to use and the results have been thought-provoking for our practice. As well as giving us an insight into our own incidence of seasonal problems such as flu, it will also enable us to compare how we are doing on longer term issues such as heart disease, and concentrate our resources where they are needed most. ”

Dr Arun Aggarwal,
GP, Rainbow Surgery, Cambridgeshire

QFeedback has been shortlisted as a finalist in the 'Healthcare IT Product Innovation' category at the EHI Awards 2011.



Get switched on

If you would like your practice to contribute to QResearch and QSurveillance, simply email: julia.hippisley-cox@nottingham.ac.uk with your EMIS CDB number.

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