EREWASH Clinical Commissioning Group, Derbyshire

AF Detection Programme: Quality, Innovation, Prevention & Productivity (QIPP) in Action

Background

NHS Erewash CCG Board identified the reduction of health inequalities with a specific focus on cardiovascular prevention as one of the key strategic priorities for Erewash CCG. In addition, the Erewash Local Strategic Partnership prioritised cardiovascular disease prevention. 33% of the deaths that contribute to the life expectancy gap between Erewash's most deprived area and the England average are due to cardiovascular disease.

The four CCG GP clinical leads identified the detection of Atrial Fibrillation (AF) as a priority area for work to support stroke prevention. By identifying people with atrial fibrillation and ensuring that they received appropriate preventive treatment this would reduce stroke occurrences.

As at March 2012, there were 1,469 people on general practice registers in Erewash with a diagnosis of AF which is a prevalence of 1.52%. Four of the 13 practices have a population with AF higher than expected ratio with the reminder having AF population below expected levels.

'Atrial Fibrillation – detection and optimal therapy in primary care' has been highlighted as a potential high impact change by NHS Evidence. Atrial fibrillation (AF) is a major cause of stroke and also increases the risk and severity of stroke. Recognition and optimal treatment of AF is of particular importance as strokes due to AF are preventable.

The detection programme

Whilst the CCG was developing its plans for atrial fibrillation detection, from our research we found an innovative Blood Pressure machine which also detected atrial fibrillation. The Microlife WatchBP Home Machine has been used in other CCGs (e.g. Hull) to support AF detection programmes.

A cost impact assessment published in May 2012 by Newcastle Upon Tyne Hospitals and York Health Economics Consortium concluded that the WatchBP Home A when used in a primary care clinical setting is likely:

- *To be cost saving to the NHS and personal social services over both the short and long term in patients at relatively high risk of AF and therefore stroke*
- *To lead to the clinical benefit of reducing strokes in this patient group.*

In January 2012, Dr Neerunjun Jootun, GP clinical lead for the AF project agreed to trial one of the BP machines in his practice using the BP machine to take blood pressures during routine consultations.

A paper was taken to the CCG Board in January 2012 which proposed a focus on AF detection. The CCG Board were keen to support work in primary care on atrial fibrillation detection and gave the go ahead for the clinical leads and commissioning managers to develop a full proposal to come back to the Board.

Since the AF Detection Programme commenced in Erewash in June 2012, NICE published the Technology Appraisal on the WatchBP Home A machine in January 2013 which stated that:

> "The case for adopting WatchBP Home A in the NHS, for opportunistically detecting asymptomatic atrial fibrillation during the measurement of blood pressure by primary care professionals, is supported by the evidence. The available evidence suggests that the device reliably detects atrial fibrillation and may increase the rate of detection when used in primary care."

What was done and how it was done

It was agreed by clinical leads that using flu clinics as well as opportunistic screening during routine consultations were the best ways to target the at risk population aged 65 and over. The clinical leads reviewed the evidence on the use of the BP machine to detect AF and supported their use by general practices in Erewash to support the AF detection programme and preferred this to use of pulse palpation method. The AF detection programme was also developed as a QIPP scheme which would impact on reducing admissions for stroke as well as impact on other costs .e.g. rehabilitation and social care costs.

An updated paper setting out the proposed AF Detection Programme was approved by the Remuneration Committee in March 2012 and this decision was subsequently ratified by the Governing Body. A proposal to use the 2% transformation fund to purchase the BP machines for provision to general practice was approved by the Primary Care Trust.

The AF Detection Programme was launched at the Quest event on 13th June. This presented the case for the AF Detection Programme, launched the programme and trained the practice staff on use of the new BP machines.

Results

Between June 2012 and March 2013, the outcomes of the AF Detection Programme were:

- **8,023 people aged 65 and over have been screened for AF**
- **45.3% of population aged 65 and over have been screened for AF – one practice has achieved an uptake of screening of 71.2%**
- **An additional 129 patients have been identified as having AF**
- **The percentage of patients diagnosed with AF has increased by an average of 8.3% across the GP practices**
- **The practice that has screened 71.2% of population aged 65 and over for AF has identified an additional 20 people with AF increasing the population with AF in the practice by 19%**

- **Modelling of the impact of the AF Detection Programme to date, 8 strokes will have been prevented of which 2 or 3 would have been fatal**
- **The saving in avoiding a stroke is £18,000 in NHS costs. A reduction of 8 strokes per annum in Erewash would save £144,000. The scheme will result in cost savings to the NHS and social care in both the short and long-term.**

In addition, the lead GP Dr Neerunjun Jootun who conducted the initial pilot of the WatchBP Home A machine found that the use of the machine had detected a number of patients with AF (who had the diagnosis later confirmed through ECG but on whom taking a pulse check, fibrillation could not be detected. This demonstrated additional diagnostic accuracy beyond use of pulse checks.

Conclusions

The AF detection programme helped to deliver an innovative and effective stroke prevention programme which supports delivery on a strategic priority and delivers real benefits in quality of life for patients. This programme truly helped to deliver the CCG's mission statement of Better Care, Better Health, Better Value.

Dr Neerunjun Jootun, Clinical Lead for the AF Detection programme commented:

"AF is the most common heart rhythm disorder and significantly increases an individual's risk of stroke if they are not receiving appropriate anticoagulation.

"Given the significant implications AF has, both on the health of individuals and in terms of subsequent cost to the NHS, we decided as a CCG to trial the WatchBP device as a means of detection.

"The results of the programme clearly show how effective this device is in detecting AF.

"On more than one occasion the device detected AF but when a manual pulse was taken the AF could not be detected, which demonstrates the device has diagnostic accuracy beyond manual pulse checks.

"By trialling the device we increased the numbers of patients on AF registers across the GP surgeries by an average of nearly 8%.

"Those patients identified are now on appropriate anticoagulant medication to manage the significantly increased risk of stroke associated with AF."

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