

**Case Study: Providing timely brain scans for stroke patients at a Hyperacute Stroke Unit (HASU)**

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**Challenge:**

To provide increased access to rapid CT scanning for stroke patient admissions.

From the inception of the stroke service, immediate access to CT scan was available by dedicated CT radiographers from 8am to 8pm Monday to Friday. However as Fairfield's stroke service expanded, it became apparent in order to extend this level of service, a more efficient and cost effective approach was necessary.

**Solution:**

- Develop training programmes for general radiographers who were already on site working a 24/7 shift rota to ensure all staff were competent in performing CT scans
- Include radiographers within stroke team to help them to understand about the importance and impact of rapid scanning in stroke
- Introduce a number of process improvements to streamline patient flow; eg redesigned CT forms to include time of onset and arrival; requests for CT scan sent ahead of the patient's arrival to speed up processes
- Promote teamwork, and a culture of openness to change/improvement

**Impact:**

By improving access and timeliness to urgent brain scanning, we have set the stage for better care early on in the stroke care pathway and this will ultimately improve patient outcomes

Improvements in 1 hour scanning at Fairfield General Hospital:

In 2013/2014: 36.4% of patients

In 2016/2017: 80.6% of patients

Median time to scan

In 2013/2014: 139 minutes

In 2016/2017: 18 minutes

**Reflection:**

The secret to our success has been the close working relationship between the Radiographers and the Stroke team which fostered excellent communication and co-

operation between the two teams. The improvement in stroke imaging established a culture of pride in the part we play within the service, and ensured continued dedication to maintain our high quality service. The fact that these improvements were reflected in SSNAP results reinforced our belief that this project was having a real impact on many stroke patients under our care.

### Patient Story

from coming into A+E dept there  
was about 30 people in waiting you  
from triage to been seeing by stroke  
immediately. I was seen by doctor and  
transferred for a CT scan which felt was  
in about 10 minutes. The service was  
excellent and the doctor was waiting to  
review me after my CT scan.  
Then everything moved quickly from A+E  
to being admitted to ward 5.

by patient



This case study was submitted by Andrea Maxwell CT Lead Radiographer and Michele Mayes Department Manager at Fairfield General Hospital, Pennine Acute Hospitals NHS Trust