WM QRS West Midlands Quality Review Service

NHS

West Midlands Partnership of Cardiac and Stroke Networks

Review of Stroke (Acute Phase) & TIA Services

Report Date: June 2011 Visit Dates: May to November 2010

Images courtesy of The Stroke Association, Sandwell & West Birmingham NHS Trust and NHS Photo Library

INDEX

INTRODUCTION

West Midlands Quality Review Service (WMQRS) was set up as a collaborative venture by NHS organisations in the West Midlands to help improve the quality of health services by developing evidence-based Quality Standards, carrying out developmental and supportive quality reviews - often through peer review visits, producing comparative information on the quality of services and providing development and learning for all involved.

Expected outcomes are better quality, safety and clinical outcomes, better patient and carer experience, organisations with better information about the quality of clinical services, and organisations with more confidence and competence in reviewing the quality of clinical services. More detail about the work of WMQRS is available on the WMQRS website: http://www.wmqi.westmidlands.nhs.uk/wmqrs/.

Reviews of urgent care, critical care, stroke (acute phase) & transient ischaemic attack (TIA), and vascular services in the West Midlands were undertaken between May and November 2010. Full reports of each visit are available on the WMQRS website, including details of compliance with Quality Standards and membership of the visiting teams. This report contains the stroke (acute phase) & TIA section from each of the 2010 visit reports. These should be read in the context of the full visit reports, including details of compliance with WMQRS Quality Standards for Stroke (Acute Phase) and Transient Ischaemic Attack, Version 1 (April 2010).

These visits were organised by WMQRS on behalf of the West Midlands Partnership of Cardiac and Stroke Networks. The dates for each visit are given in Appendix 1.

The reports reflect the situation at the time of the peer review visits. Services may have changed and developed since these visits.

ACKNOWLEDGMENTS

The West Midlands Partnership of Cardiac and Stroke Networks and West Midlands Quality Review Service would like to thank the staff and patients of the West Midlands Stroke & TIA Services for their hard work in preparing for the reviews and for their kindness and helpfulness during the course of the visits. Thanks are also due to the visiting teams and their employing organisations for the time and expertise they contributed to these reviews.

SOUTH WARWICKSHIRE HEALTH ECONOMY

SOUTH WARWICKSHIRE NHS FOUNDATION TRUST

General Comments, Achievements and Good Practice

This service was working well. There was strong leadership from the newly appointed lead consultant and stroke coordinator. Direct admission to the stroke unit had recently been introduced which should help to achieve the 90% target for stay on the unit. There was agreement to appoint an extra band 6 nurse; three band 6 nurses will then provide cover for the stroke coordinator on a rotational basis. There was good collection of data on stroke patients. The Trust had worked with UHCW to ensure that patients potentially eligible for thrombolysis were seen at UHCW and transferred back to South Warwickshire as soon as possible. Staffing levels had been reviewed in relation to the dependency of patients and nurse staffing levels had been increased as a result.

Immediate Risk: None

Concerns

1 The service for patients with TIA was not yet well-developed. Neuro-vascular assessment was not available daily. Patients with high risk TIAs therefore waited more than 24 hours for assessment. There were three clinics a week with two TIA 'slots' each and additional clinics were arranged if necessary. Carotid Dopplers were available only once every two weeks and so some patients had to travel to UHCW for this service. There were plans to introduce a TIA service on Mondays to Fridays from June 2010 with carotid Dopplers provided by a neuro-radiologist and sonographer. There were no plans for a seven day a week service. Data collection did not yet include TIA patients and so there was no information on current activity for this group of patients.

2 The stroke service was not yet achieving expected targets for:

a. Brain imaging of patients within four hours of admission and, at the latest, within 24 hours: This was a particular problem at weekends and arises partly because of waits for a consultant referral, despite a clear pathway with explicit indications for imaging.

b. Proportion of patients' in-patient stay that was on a stroke unit: The change to direct admission to the stroke unit will, hopefully, resolve this issue.

c. Rehabilitation assessment by occupational therapy and speech and language therapy for both swallowing assessment and communication (if required) within 24 hours of admission: Patients could wait up to four days for occupational therapy assessment and patients were then seen only once a week. Speech and language therapy services were not available at weekends.

d. There was not yet a nurse on each night shift with competence in swallowing screening, although there was a good plan to increase training levels.

3 A senior member of the stroke team was not available on all days when emergency admissions were accepted. In particular, at weekends a senior member of the stroke team may not be on call and available to review patients. Patients will be seen by a care of the elderly consultant or specialist registrar.

Further Consideration

1 The South Warwickshire stroke service did not get feedback on patients referred to vascular surgeons and what had happened to them.

2 Younger stroke patients were cared for on a ward that was also an 'elderly care' ward. The service may wish to gather views of younger patients and their carers in order to see if there are ways of improving the patient experience for younger stroke patients.

3 Given the relatively small size of the service, it may be helpful to look at opportunities for collaboration, for example on staff training and development, with other units within the cardiovascular network.

4 The length of stay on the unit appeared relatively high. The service may wish to look at comparable units and whether this can be reduced.

Good Practice

1 For stroke patients there was a good care pathway, good clinical guidelines and good patient information. There was also a good, annual multi-disciplinary training programme.

Commissioning

General Comments

Considerable effort, with the cardiovascular network, had gone into developing a stroke service specification and associated guidelines and other supporting material. Themed visits to stroke services were undertaken by NHS Warwickshire in 2009/10 and action plans had been agreed to address issues identified during these visits.

Further Consideration

1 There was not yet a commissioning plan for TIA services although a service specification was being developed.

NORTH WARWICKSHIRE HEALTH ECONOMY

GEORGE ELIOT HOSPITAL NHS TRUST

General Comments and Achievements

This was a good service provided by staff who worked well together. There was good leadership, good multi-disciplinary working and a good in-house training programme. A policy of direct admission of stroke patients to the stroke unit had recently been implemented and seemed to be working well. The Trust had worked with UHCW to ensure that patients potentially eligible for thrombolysis are seen at UHCW and transferred back to George Eliot Hospital as soon as possible.

Immediate Risk: None

Concerns

1 There was no TIA service at weekends. At weekends high risk TIA patients were usually admitted to the stroke unit.

2 The TIA service available during the week did not include on-site ultrasound duplex scans and so patients had to travel to UHCW for these scans. A TIA service was, however, available daily Monday to Friday run by a nurse with competences in TIA assessment with a consultant available for advice.

3 A senior member of the stroke team was not available on all days when emergency admissions were accepted. In particular, at weekends a senior member of the stroke team was not always on call and available to review patients. There were plans to appoint an additional consultant in order to address this issue.

4 Rehabilitation assessment, if required, by occupational therapy and speech and language therapy (for both swallowing assessment and communication) was not achieved within 24 hours of admission because these services were only available Monday to Friday. At weekends there was an on-call chest physiotherapist but not a physiotherapist with expertise in the assessment of stroke patients. Proposals for increasing physiotherapy input at weekends were under discussion.

Further Consideration

1 Some policies and procedures had been recently agreed and it will be important to ensure these are followed through to full implementation.

2 The 2008 National Stroke Sentinel Audit data showed George Eliot Hospital as not achieving several of the key targets. The changes made since then should have addressed these issues. Achievement of targets should, however, be specifically reviewed after the 2010 audit.

3 The stroke coordinator was spending considerable time collecting data on patients with stroke and TIA. It may be helpful to review whether this is the most appropriate method of data collection.

4 As part of the continued service development the Trust , commissioners and the cardiac and stroke networks, may wish to consider whether thrombolysis for stroke patients could be offered at George Eliot Hospital at certain times. The Trust has much of the necessary infrastructure and this may make new consultant posts more attractive to applicants.

Good Practice

1 There was a good training and development plan for staff which was actively implemented and monitored.

Commissioning

Considerable effort, with the cardiovascular network, had gone into developing a stroke service specification and associated guidelines and other supporting material. Themed visits to stroke services were undertaken by NHS Warwickshire in 2009/10 and action plans had been agreed to address issues identified during these visits.

There was not yet a commissioning plan for TIA services although a service specification was being developed

HEREFORDSHIRE HEALTH ECONOMY

HEREFORD HOSPITALS NHS TRUST

General Comments and Achievements

The stroke service had made significant progress. There was good leadership and good multi-disciplinary working. A county-wide review had been undertaken and there were plans for investment in the service. Thrombolysis was administered in the Emergency Department, patients were then transferred to the coronary care unit and then to the stroke unit.

Immediate Risk:

1 The process for ensuring CT scanning of patient with suspected stroke within appropriate timescales was not robust, especially at weekends.

Concerns

1 The service had only one stroke consultant. A senior member of the stroke team was therefore not available on a daily basis to manage complications of thrombolysis (after discharge from the coronary care unit) and review the care of patients who had been admitted as emergencies. During absences of the stroke consultant the service was covered by care of the elderly consultants.

2 Thrombolysis was available only between 9am and 5pm Mondays to Fridays. A low proportion of patients with stroke were receiving thrombolysis (in 2009 six patients were thrombolysed out of 339 patients with stroke admitted to the hospital). The pathway for patients potentially eligible for thrombolysis who arrived at the hospital outside of these hours was not clear. Reviewers were told of plans to appoint additional emergency physicians and to undertake additional training for staff in the Emergency Department in order to increase the times when thrombolysis is available. Timescales for implementation of these changes were not clear.

3 The service had only one vascular technician and arrangements for cover during absences were not clear.

4 **Rehabilitation Services**

Rehabilitation assessment by physiotherapy, speech and language therapy and occupational therapy (if required) within 24 hours of admission was not being achieved at weekends. Physiotherapy and occupational therapy services were available Monday to Friday but limited speech and language therapy support was available. No clinical psychology support was available for stroke patients.

5 The pathway for the management of patients with TIA was not robust. A TIA clinic was available five days a week with 'slots' for CT scans for five patients per week. Patients with high risk TIA were not therefore being able to receive a full neuro-vascular assessment within 24 hours.

6 The pathway for referral of patients for neuro-surgery was not clear.

Further Consideration

1 There was no operational policy for the stroke service. Responsibilities for ensuring each stage of the patient pathway was achieved within expected timescales were not clear. Reviewers suggested that this should be developed soon with robust monitoring of implementation.

2 Some social work support was available but the numbers of patients was not considered sufficient to justify a social worker with specific time allocated to their work on the Stroke Unit. Reviewers suggested that this should be kept under review.

3 The Hereford service is a relatively small and it may be helpful to develop links with another stroke service for support on educational and governance issues.

4 An audit of the care of patients with stroke and TIA in the Emergency Department was undertaken in 2009. This recommended a repeat audit and reviewers supported this recommendation.

Good Practice

1 There was a good management plan document for patients with dysphagia.

2 There was a good TIA management plan document.

Commissioning

A county-wide review of stroke services has been undertaken and there was good mapping of the expected number of patients at each stage of the pathway.

Concern

1 There was not a clear commissioning plan for the full availability of stroke thrombolysis for Herefordshire patients. Plans with expected dates for the achievement of a) other stroke-related Quality Standards (especially QS CN-602) and b) neuro-vascular assessment of patients with high risk TIAs within 24 hours were not evident.

WORCESTERSHIRE HEALTH ECONOMY

WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST

General Comments and Achievements

This service was provided by a caring, enthusiastic team who were doing their best in difficult circumstances. Medical, nursing and allied health professional staffing was insufficient at both the Alexandra Hospital and Worcestershire Royal Hospital for the provision of an acute stroke service meeting expected Quality Standards. A good community support team was available for patients who were ready for discharge. Three specialist nurses had been appointed. Working relationships with the Emergency Departments were good with Emergency Department consultant staff taking part in the thrombolysis rota.

Immediate Risk:

1 The stroke and TIA pathways for Worcestershire were categorised as an immediate risk for a combination of reasons:

a. The thrombolysis pathway was not robust. Thrombolysis was planned to be available 9am to 5pm Monday to Fridays. The pathway for patients eligible for thrombolysis outside of these hours was not clear, including arrangements for CT scanning and reporting. There was only one stroke consultant on each hospital site and the arrangements for cover for absences were not clear.

b. Arrangements for the management of acute stroke admissions were not robust. A senior member of the stroke team was not available to review patients admitted with stroke daily on either site. On both sites nurses did not yet have the expected competences in the care of patients with stroke, although training was taking place. At Worcestershire Royal Hospital nurse staffing was insufficient for the number and severity of patients. One registered nurse was rostered to the 11 bedded stroke ward, which included two high dependency beds which could not be seen from the nurse's station. Reviewers were very concerned that patients in these beds may not be being appropriately observed.

c. The TIA pathway was not robust and patients with high risk TIAs could wait up to a week for clinical assessment, sonography and results.

d. Allied health professional staffing was insufficient to enable rehabilitation assessments to be undertaken within the expected timescales (see full report Appendix 2, QS 302 and 303 for more detail).

e. Guidelines and protocols were not clear about the pathway to be followed locally.

f. Partial data sets were being collected. The stroke register was paper-based and TIA assessment data appeared to be incorrectly counted.

Concerns

1 The service did not have a lead nurse / allied health professional member of the stroke team with oversight of and responsibility for the whole pathway for patients with stroke and TIA. The medical lead for the stroke service across the county was also the Clinical Director and a single-handed stroke physician at Worcestershire Royal Hospital and did not have the time needed to drive the development of stroke services. There was a county-wide matron for stroke as well as other areas who had responsibility for nursing staff. Leaders with the time and expertise in stroke and TIA care, who have responsibility across the whole stroke pathway, will be essential to addressing the issues identified in this report.

2 Guidelines and protocols had not been developed to support a clear pathway for patients. Current guidelines and protocols were not clear about responsibilities and expected timescales for action, and were not in a format where implementation could be audited.

Further Consideration

1 The number of patients who had received thrombolysis appeared low for the population served. Further audit of the thrombolysis pathway may be useful as part of the further development of the service.

2 The number of community stroke rehabilitation beds appeared high for the population served. Patients needing a community rehabilitation bed were ideally admitted to one near their home but, in practice, could be admitted anywhere in Worcestershire. It may be helpful to review again the number of beds and their usage to ensure these resources are being used most efficiently and effectively.

3 As part of the development of robust pathways for stroke and TIA, the roles and expectations of the three specialist nurses should be kept under review to ensure their skills are being most appropriately used.

Commissioning

NHS Worcestershire had a Commissioning Strategy for Stroke and TIA. Reviewers were concerned that, although this Strategy included appropriate targets, it was not clear about how these would be achieved. There was no implementation plan for the Strategy, including agreement with the acute Trust on relevant aspects, and the expected timescales for different stages of implementation were not clear.

South Staffordshire (West Locality) Health Economy

Mid Staffordshire NHS Foundation Trust

General Comments and Achievements

At the time of the review Mid Staffordshire NHS Foundation Trust had a policy, agreed with its commissioners, that patients with acute stroke would not be admitted to the Trust. Patients potentially eligible for thrombolysis and those with acute stroke were supposed to be taken by ambulance or transferred to Wolverhampton or Stoke. Patients were then supposed to be transferred back to the rehabilitation ward at Cannock Hospital or to their home. There was good awareness of this policy throughout the Trust.

Within Mid Staffordshire NHS Foundation Trust there was an enthusiastic committed stroke team comprising a single stroke consultant and active rehabilitation services who covered both Stafford and Cannock Hospitals.

Immediate Risk: None

Concerns

1 The number of patients with stroke in Stafford Hospital was higher than would be expected from the reported policy of transfer of all acute stroke patients to Wolverhampton or Stoke. Spot audits had been undertaken in May and June. In May, 14 patients were considered suitable for a stroke ward of whom five had definitive strokes and were cared for on Ward 10. In June, 18 patients were considered suitable for a stroke ward, of whom 9 had definitive strokes and were cared for on Ward 10. This suggested that patients with acute stroke were being admitted to Stafford Hospital as the number of patients with uncertain diagnoses or having a stroke while in the hospital would be unlikely to be this high. If patients with acute stroke are still being admitted, the service should comply with the Quality Standards for a Stroke Unit. Several of these standards were not met: There was only one consultant and so a senior member of the stroke team was not available to review patients following admission. Nursing staff did not have the expected competences, including those in swallowing screening. It was not clear that the ROSIER tool was being used in the Emergency Department and Medical Admissions Unit for patients who present there with a stroke.

2 There was no stroke coordinator. It was not clear how the pathway for patient with stroke in South Staffordshire (West Locality) was being coordinated although the rehabilitation therapy team fulfilled some of this function.

3 The pathway for patients with TIA was not robust. One policy was that an ABCD2 score of 5+ should be considered as high risk (rather than the national guidance of 4+). Another document stated that patients with an ABCD2 score of 4 to 5 should be considered as at moderate risk and those with a score of 6+ should be admitted. The ABCD2 score was not regularly recorded and used in determining the level of risk. Reviewers were told that patients could wait between seven days and three weeks for a TIA clinic appointment (rather than 24 hours / 7 days for high / low risk patients respectively as recommended by national guidance). There was not robust collection of data on patients with TIA and no formal policy on imaging for these patients.

4 Several policies and procedures expected by the Quality Standards were not documented. Some policies were available on the Trust intranet but some of these were out of date.

Further Consideration

1 It was not clear that other specialties were aware of the action they should take if a patient had a stroke while in hospital. It was therefore not clear that these patients would be receiving appropriate acute management.

2 A clear plan for the future development of this service is needed. Members of the stroke team were very keen to see the re-establishment of an acute stroke service at Stafford Hospital. Some other hospitals of a similar size have a Stroke Unit providing acute care and, in some cases, thrombolysis at some times of day. The rehabilitation services at Mid Staffordshire NHS Foundation Trust were well placed to support such a service but investment in medical and nursing staff would be needed. This should include consideration of a stroke coordinator / lead nurse to coordinate the patient pathway and ensure appropriate data collection. Consideration could also be given to developing nurse-led assessment of patients with TIAs.

3 Multi-disciplinary discussion with vascular nurses who undertake ultrasound examinations and the radiology team could be developed to improve quality control. Reviewers suggested that the governance arrangements for this aspect of the service should be clarified.

Good Practice

1 Rehabilitation services were identifying all patients with stroke in the hospital and ensuring that a rehabilitation assessment was undertaken within 24 hours of admission, and speech and language therapy assessment within 48 hours of admission.

2 The discharge planning form was very good and included patient negotiated goals.

3 Rehabilitation documentation was excellent. There was also a very good neurological therapy assessment tool.

Commissioning

The arrangements for the care of patients with hyper-acute and acute stroke in place at the time of the review were supported by commissioners. A clear plan about the future development of services for the residents of South Staffordshire (West Locality) was needed.

NORTH STAFFORDSHIRE HEALTH ECONOMY

UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST

General Comments and Achievements

An excellent service for patients with stroke and TIA was available. The whole team should be commended on the standards of care that have been achieved. There were also good links with community services.

Immediate Risk None

Concerns:

1 Neuro-vascular assessment for patients with high risk TIA was not yet available at weekends

Further Consideration

1 The weekend service for patients with stroke is provided by four consultants working additional sessions. This may not be a sustainable arrangement in the longer term.

2 Minor changes to some of the primary care related aspects of the service may be helpful, including ensuring information is available for patients in primary care, clarifying the pathway to lifestyle advice and confirming arrangements for one month follow up of patients with TIA.

3 Reviewers noticed that therapy staff usually wore gloves when mobilising patients. The reason for this practice was not clear.

Good Practice

1 An acute stroke service was available seven days a week, including consultant review of patients daily and an extended weekend therapy service.

2 Physiotherapy and occupational therapy services were available from 7.30am to 6pm Monday to Friday and also at weekends. The working arrangements had been re-modelled specifically to meet the needs of patients with stroke. There were two shifts each day with double shifts in the middle of the day.

3 The work of nursing and therapy staff was fully integrated, including shared management by a Stroke Unit Manager.

4 An excellent competence framework was available. This was clearly structured and openly available so that all staff knew what was expected.

5 Very good patient information packs were available. There was also a website with information for patients and carers.

Commissioning

Commissioners should be commended for supporting the development of such an excellent service.

SOUTH STAFFORDSHIRE (EAST LOCALITY) HEALTH ECONOMY

BURTON HOSPITALS NHS TRUST

General Comments and Achievements

This service was provided by an enthusiastic team who worked well together. Thrombolysis was provided between 9am and 5pm Mondays to Fridays. At other times patients were taken to their nearest thrombolysis centre (usually Derby or Stoke). The stroke coordinator had a major role in coordinating the patient pathway and developing and implementing a competence framework and training programme for nursing staff. Appropriate monitoring equipment was not yet available but had been ordered.

Immediate Risk: None

Concerns

1 Reviewers were seriously concerned about stroke (acute phase) services for a combination of reasons:

- **a.** The four beds on the acute stroke unit did not all have piped oxygen, suction and appropriate monitors. Monitoring equipment had been ordered. Single sex accommodation was not available in the acute stroke unit.
- **b.** A senior member of the stroke team was not available to review patients on all days when patients were admitted and the day after. Patients with acute strokes were admitted at all times. There were only two stroke consultants supported by a staff grade doctor and specialist registrar. Cover at night and weekends was from the general medical rota.
- **c.** Nursing staff did not yet have all the competences expected, including in swallowing screening. This was a particular problem at night.
- **d.** There was no cover for the stroke coordinator. Most of the organisation of the patient pathway fell to the stroke coordinator and it was not clear that robust arrangements for managing the pathway in his absence were in place, especially as there were no stroke specialist nurses.
- **e.** Rehabilitation services were not available at weekends and so rehabilitation assessments for acute stroke patients were not always undertaken within 24 hours of admission, especially at weekends.

2 Neuro-vascular assessment was not available at weekends for patients with high risk TIA.

3 The TIA referral form and pathway did not specify that patients should be advised not to drive until their neuro-vascular assessment.

Further Consideration

1 The working arrangements for allied health professionals between the acute stroke ward and rehabilitation ward may benefit from review to ensure that their time is used in the most appropriate way.

2 Some of the documentation may benefit from review. In particular, the DVLA information was out of date and the reference to the Liverpool Care Pathway within the stroke pathway may not be appropriate in all cases.

Good Practice

1 CT scans were available very quickly. The radiographer was included within the 'fast bleep' when the Trust was alerted to the arrival of a patients with stroke and patients access the next CT slot.

Commissioning

Commissioners had developed the stroke and TIA pathways and had worked with Burton Hospitals NHS Foundation Trust on the progress achieved to date. Further joint work will be needed to ensure that all aspects of the expected Quality Standards for stroke and TIA services are in place.

COVENTRY & RUGBY HEALTH ECONOMY

UNIVERSITY HOSPITALS COVENTRY & WARWICKSHIRE NHS TRUST

General Comments and Achievements

An excellent thrombolysis and TIA service was provided. Some aspects of the service for patients with stroke who were not suitable for thrombolysis was still in need of development.

Immediate Risk: None

Concerns

1 Physiotherapy, speech and language therapy and occupational therapy services were available only Monday to Friday 9am to 5pm. Rehabilitation assessment therefore could not be undertaken within 24 hours of admission.

2 Nursing competences did not meet expected level, including competences in swallowing screening. A nurse with competences in swallowing screening was not always available. The Trust was aware of this issue and had plans for training to take place.

3 Speech and language therapists undertook in-depth assessments but did not have time available for communication therapy after the initial assessment.

Further Considerations

1 At the time of the visit, the four acute stroke beds were about to be moved to the stroke rehabilitation ward. This may enable a more holistic approach to acute stroke care to be developed, including nursing and therapy input throughout the patient pathway. Development of this aspect of the service should include agreeing stroke-specific discharge guidelines and guidelines on communication with Warwick Hospital and George Eliot Hospital.

2 The service had a good stroke care plan and thrombolysis check list but these had not been completed in any of the patient notes seen by reviewers.

3 It may be helpful to record the information that is given to stroke patients to ensure that all patients receive the information that they need.

Good Practice

1 An impressive, robust and sustainable thrombolysis and TIA service was provided which was able to meet the expected timescales for thrombolysis and for assessment of high risk and low risk patients with TIA.

Commissioning: Commissioners need to ensure agreement of timescales for implementation of rehabilitation assessment within 24 hours.

WOLVERHAMPTON HEALTH ECONOMY

ROYAL WOLVERHAMPTON HOSPITALS NHS TRUST

General Comments and Achievements

The stroke service was provided by a strong multi-disciplinary team with good leadership. Thrombolysis was available at all times. There was a clear process for ensuring that thrombolysis was administered quickly and high rates of thrombolysis were being achieved. The stroke unit provided good care and there was good support from allied health professionals with particular expertise in the care of patients with stroke. The sister of the stroke ward was 'Trust nurse of year 2009'. Information for patients was well written and easily available, including a good 'moving on' document. Patient feedback about care by the stroke team was good and patient reviewers commented positively on the model of care and approach of the stroke team. Clinical guidelines and protocols were clear and well-written. A good stroke register was in place. There were good links with staff in the Emergency Department and with Trust management.

Immediate Risk:

1 The process for reporting CT scans of the head outside of normal working hours was not robust. These scans were routinely reported by Consultant Radiologists (or other appropriately trained staff) the next day. Consultant Radiologists could be called out of hours but reviewers were told that this did not always happen. This was considered to be an immediate risk, particularly for patients being considered for thrombolysis and those with head injuries.

Concerns

1 A senior member of the stroke team was not available to review patients at weekends, including post-thrombolysis patients. Two stroke consultants were in post. Stroke patients were reviewed by general physicians at weekends.

2 A relatively low proportion of patients were admitted to stroke unit (45% compared with a target of 90%). Reviewers were particularly concerned because patients admitted to other wards may not be receiving swallow screening.

3 TIA assessment was not yet available at weekends. High risk TIA patients were therefore being admitted at weekends who could have gone home if this service was available.

4 NICE (2008) guidance on nasogastric tube feeding was not yet being implemented. Reviewers were told that feeding was normally at 48 hours and could be up to 3 or 5 days later.

5 Data on time of presentation were not being collected in the Emergency Department for patients with TIA as needed for 'Vital Signs'.

Further Consideration

1 The potential for speeding up discharges to West Park Hospital and Cannock Hospital may benefit from review in order to free up bed capacity at New Cross Hospital for the admission of patients with acute stroke.

2 Extended nursing roles, for example, for naso-gastric tube insertion, were being utilised at weekends but not weekdays. The potential for extended nursing roles at all times should be considered.

3 Criteria for the use of Clexane may benefit from review.

4 The programme of audit of adherence to local protocols and guidelines could be more clearly organised.

5 Robust arrangements for multi-disciplinary discussion of patients' suitability for vascular surgery were not in place although ad hoc discussions took place as considered necessary.

Good Practice

1 Training of HCAs and nursing staff was well integrated.

Commissioning

Commissioners should continue to work with the Royal Wolverhampton Hospitals NHS Trust to ensure a stroke service meeting all of the expected Quality Standards is in place.

SHROPSHIRE HEALTH ECONOMY

SHREWSBURY & TELFORD HOSPITAL NHS TRUST

General Comments and Achievements

A great deal of work was being put into developing stroke services. Good pathways had been developed and the proportion of patients admitted directly to the stroke wards was beginning to increase. There was a strong ethos of multi-disciplinary working, including social work input into multi-disciplinary meetings. New leads had been appointed at both sites. The unit at Royal Shrewsbury Hospital provided a pleasant environment for patients with stroke with good infection prevention including notices and 'traffic light' warnings to use hand gel. A good database was available. There were only two stroke consultants at Princess Royal Hospital and two (with an establishment for three) at Royal Shrewsbury Hospital. Plans for 24/7 thrombolysis were being considered.

Immediate Risk: None

Concerns

1 Although progress had been made on the development of stroke services, reviewers were seriously concerned about Shropshire's stroke (acute phase) services for a combination of reasons:

- Stroke thrombolysis was only available Monday to Friday, 8am to 8pm.
- Imaging of acute stroke patients did not yet meet the expected standards, in particular, CT within four hours
- A senior member of the stroke team was not available to review patients on the day after admission. Post-thrombolysis and post-acute stroke patients were unlikely to be reviewed by a senior member of the stroke team at weekends because of the small number of stroke consultants on each site. There were only two stroke consultants at Princess Royal Hospital and two (with an establishment for three) at Royal Shrewsbury Hospital.
- Rehabilitation services could not assess patients within 24 hours of admission, especially at weekends.
- Nurse staffing levels on the stroke ward at Royal Shrewsbury Hospital were very low, especially at night.

2 TIA clinics were available on Mondays to Fridays only. At weekends, assessment of high risk patients within 24 hours could not therefore be achieved.

Further Consideration

1 The sustainability of the current configuration of services should be considered. Achieving the expected Quality Standards on two hospital sites will be difficult given current staffing levels. The health economy may wish to consider the improvement in quality, and expected outcomes, which could be achieved by providing acute stroke care on one hospital site. If this option was pursued, the choice of site for the acute service would need to take account of travel times and population demographics.

2 Clinical psychology support was not available for in-patients. The development of this service should be considered as part of plans for the future of the Trust's stroke services.

3 Some of the expected clinical guidelines were not yet in place. Some of the Quality Standards were met because of the Integrated Stroke Care Pathway but this was not in a format which was easily accessible by staff on a day to day basis.

Good Practice

1 A Stroke Association Family Support Worker made contact with all patients and relatives to ensure that they had all the appropriate information. There was also a good communication diary.

Commissioning

The sustainability of the current configuration of services should be considered. Achieving the expected Quality Standards on two hospital sites will be difficult given current staffing levels. The health economy may wish to consider the improvement in quality, and expected outcomes, which could be achieved by providing acute stroke care on one hospital site. If this option was pursued, the choice of site for the acute service would need to take account of travel times and population demographics.

DUDLEY HEALTH ECONOMY

DUDLEY GROUP OF HOSPITALS NHS FOUNDATION TRUST

General Comments and Achievements

The Dudley stroke and TIA services had made considerable progress. Staff were highly committed to providing a good service. Good training on dysphagia had been undertaken. The service had good therapy input, including physiotherapy and occupational therapy input at weekends. There was a clear thrombolysis pathway with nurse leadership of the assessment process. A five day a week TIA assessment service had been in place for some years. A very good stroke database had been developed. Reviewers were impressed that the stroke coordinator was able to undertake carotid imaging.

Immediate Risk: None

Concerns

1 Nursing staff on the acute stroke ward did not yet have the competences expected. A nurse with competence in swallow screening was usually on duty – but not yet always available. There was no evidence that other expected competences were in place.

2 A consultant stroke physician was not always available to review patients on the day after admission, especially at weekends. Some weekends were covered by stroke physicians but some by general physicians.

3 Arrangements for multi-disciplinary review of morbidity, mortality, incidents and complaints were not in place. These had functioned previously but had not taken place for some time.

4 Neurovascular assessment of patients with high risk TIA was available on an out-patient basis five days a week at weekends patients were admitted in order to receive assessment. Plans for seven day a week out-patient assessment were being developed.

Further Consideration

1 Some of the present evidence of compliance presented to reviewers was inconsistent and reviewers suggest that further work to confirm compliance may be helpful.

2 Wider sharing of information from the stroke database about achievement of key performance indicators may help to involve staff in driving forward further service improvements.

Good Practice

See general comments and achievements

Commissioning: No specific commissioning issues were identified

HEART OF BIRMINGHAM AND SANDWELL HEALTH ECONOMIES

SANDWELL & WEST BIRMINGHAM HOSPITALS NHS TRUST

TRUST-WIDE

Considerable effort had been put into improving care for people with stroke and TIA and a Stroke Action Team had been working across the Trust. Improvements in the proportion of patients scanned within 24 hours had been seen but the Trust was not yet meeting expected targets for the proportion of patients admitted directly to the acute stroke unit and the proportion spending 90% of their hospital stay on this unit. Assessment of patients with TIA within 24 hours (high risk) or seven days (low risk) was not yet happening routinely.

CITY HOSPITAL

General Comments and Achievements

This service was provided by an enthusiastic team, including one stroke consultant and a stroke coordinator. The acute stroke ward was shared with the neurology service, including care for patients with head injuries. 24/7 thrombolysis was being offered with the support of general medical registrars and consultants. Reviewers were impressed by this cooperation with general medical services and the extent of support they were giving to the care of patients with acute stroke. A comprehensive audit and performance review process was in place. The service had worked hard to develop care for patients with stroke (acute phase) and TIA. A stroke pathway implementation officer had been recruited to support data collection across the patient pathway.

Immediate Risk: None

Concerns

1 Door to needle times for patients needing thrombolysis were too long (97 minutes).

2 The service had only one stroke consultant who also had other responsibilities. The arrangements for the ensuring appropriate senior input to the care of patients with stroke in his absence were not clear.

3 Nursing staff did not have the competences expected for an acute stroke ward. A nurse with competence in swallow screening was not always available. A competence framework was being developed.

4 Ward rounds by a senior member of the stroke team were not undertaken at weekends and bank holidays (unless the stroke consultant was on call). Stroke patients, including those who had been thrombolysed, were not always reviewed the next day by a senior member of the stroke team. Stroke patients were reviewed by the on-call Medical Registrar and Consultant who had undertaken a one day training course in stroke thrombolysis.

5 Occupational therapy and speech and language therapy services were not available at weekends and bank holidays. Only one session of physiotherapy was available at weekends. Patients could not therefore receive a rehabilitation assessment within 24 hours of admission.

6 Neuro-vascular assessment of patients with high risk TIA was not available at weekends and bank holidays. TIA assessments were undertaken on Mondays to Fridays.

Further Consideration

1 The sustainability of the current configuration of services should be considered. Achieving the expected Quality Standards on two hospital sites will be difficult given current staffing levels. The health economy may wish to consider the improvement in quality, and expected outcomes, which could be achieved by providing acute stroke care on one hospital site. Improving the availability and speed of response of imaging services will be an important part of this consideration.

2 It may be helpful to review the availability, and ease of access to, stroke-related guidelines and protocols. This is particularly important given the number of people involved in the care of patients with stroke (general medical staff in the thrombolysis pathway and neurology staff for ward patients).

3 Relatively little patient information was available, including information for in-patients, post-discharge information and information for those attending the TIA clinic.

4 The training programme for general medical registrars and consultants should be reviewed to ensure that one day of training provides sufficient competence to support the thrombolysis pathway.

Good Practice:

1 A stroke family support worker was available to ensure that families had the information and support that they needed.

SANDWELL HOSPITAL

General Comments and Achievements

This service was provided by an enthusiastic team, including two stroke consultants and a stroke coordinator. An acute stroke ward was available. 24/7 thrombolysis was being offered with a door-to-needle time of 66 minutes. A comprehensive audit and performance review process was in place. The service had worked hard to develop care for patients with stroke (acute phase) and TIA. A stroke pathway implementation officer had been recruited to support data collection across the patient pathway.

Immediate Risk: None

Concerns

1 Ward rounds by a senior member of the stroke team were not undertaken at weekends and bank holidays (unless one of the two stroke consultants was on call). Stroke patients, including those who had been thrombolysed, were not always reviewed the next day by a senior member of the stroke team. Stroke patients were reviewed by the on-call Medical Registrar and Consultant who had undertaken a one day training course in stroke thrombolysis.

2 Nursing staff did not have the competences expected for an acute stroke ward, including competences in the management of post-thrombolysis patients and swallow screening. A competence framework was being developed.

3 Patients were sometimes being thrombolysed on the Emergency Admissions Unit (EAU). Nursing staff on the EAU did not have competences in the management of post-thrombolysis patients.

4 Occupational therapy and speech and language therapy services were not available at weekends and bank holidays. Physiotherapy was available on Saturdays but not Sundays. Patients could not therefore receive a rehabilitation assessment within 24 hours of admission.

5 Neuro-vascular assessment of patients with high risk TIA was not available to weekends and bank holidays. TIA assessments were undertaken on Mondays to Fridays.

6 Patients were being transferred from the acute stroke ward to a general rehabilitation ward at Rowley Regis Hospital. It was not clear that nursing staff of this ward had competences in the care of patients with stroke and that patients received input from therapists with stroke expertise following their transfer.

Further Consideration

1 The sustainability of the current configuration of services should be considered. Achieving the expected Quality Standards on two hospital sites will be difficult given current staffing levels. The health economy may wish to consider the improvement in quality, and expected outcomes, which could be achieved by providing acute stroke care on one hospital site. Improving the availability and speed of response of imaging services will be an important part of this consideration.

2 It may be helpful to consider the development of an early supported discharge service in order to help people to move directly from the acute stroke ward to home.

3 Reviewers were told that transfer of patients to the general rehabilitation ward at Rowley Regis Hospital happened on an unpredictable basis, depending on the extent of bed pressures on the acute hospital. The frequency with which this happens should be established and, if appropriate, the pathway should be formalised to ensure continuity of high quality care for patients with stroke.

4 The training programme for general medical registrars and consultants should be reviewed to ensure that one day of training provides sufficient competence to support the thrombolysis pathway.

Good Practice:

1 A stroke family support worker was available to ensure that families had the information and support that they needed.

Commissioning

The sustainability of the current configuration of services should be considered. Achieving the expected Quality Standards on two hospital sites will be difficult given current staffing levels. The health economy may wish to consider the improvement in quality and expected outcomes which could be achieved by providing acute stroke care on one hospital site.

WALSALL HEALTH ECONOMY

WALSALL HOSPITALS NHS TRUST

General Comments and Achievements

Considerable progress had been made on development of stroke and TIA services. Thrombolysis was available at all times and a senior member of the Stroke Team undertook a daily ward round of all acute stroke patients. A very good competence framework for registered nurses had been developed. A nurse with competence in swallow screening was always available on the stroke ward. A stroke social worker was available who has dedicated time for work with stroke patients.

The team was enthusiastic and highly committed. Patient and carer feedback about the service was very good. Good links with community services were in place.

Immediate Risk: None

Concerns

1 Rehabilitation services were not available to ensure a rehabilitation assessments for patients with acute stroke were undertaken within expected timescales at weekends. Physiotherapy was available Monday to Saturday with a limited service on Sundays. Occupational therapy was available Monday to Friday only. Speech and language therapy was available on weekdays for assessment but not for communication therapy.

2 Assessment of patients with TIA was available Mondays to Fridays only. High risk patients therefore could not be assessed within 24 hours at weekends.

3 There was no area on or near the stroke ward for exercise and rehabilitation. Patients and staff were concerned that this limited the rehabilitation that could take place and compromised the privacy and dignity of patients as patients needed to do exercise and rehabilitation at the bedside.

4 Only 60% patients were being admitted directly to the stroke ward, usually because a bed was not available, although over 80% patients spent 90% of their stay on the stroke unit.

Further Considerations

1 Work on achieving the expected competences for all members of the Stroke Team should continue. A good competences framework for nurses was available and good progress towards achieving these competences was being made. Further work on a competence framework for support workers was planned.

2 A consultant stroke specialist was not available at all times. There were, however, arrangements for daily review of acute stroke patients by a senior member of the Stroke Team.

3 Further development of links with other departments within the hospital and other services within the Network may be helpful. This may enable any operational issues to be addressed more quickly and appropriate network-wide collaboration and audit to be developed.

4 The sustainability of the current model of care with only two stroke consultants should be considered. In particular, the daily ward round by a senior member of the stroke team was highly dependent on Staff Grade doctors and the goodwill of consultant staff.

5 Thrombolysis guidelines, including those in the Emergency Department, should explain more clearly that a 24/7 thrombolysis service is available.

Good Practice

1 Several extended nursing roles had been developed, including a stroke nurse 7am to 7pm who assessed patients in the Emergency Department, nurse-requesting of CT scans and nurses performing Carotid Dopplers.

Commissioning

Commissioners should continue to work with Walsall Hospitals NHS Trust to ensure a stroke service meeting all of the expected Quality Standards is in place.

BIRMINGHAM EAST & NORTH AND SOLIHULL HEALTH ECONOMIES

HEART OF ENGLAND NHS FOUNDATION TRUST

ACUTE TRUST:

General Comments and Achievements

Stroke and TIA services were provided by committed and enthusiastic clinical staff who had plans for the future development of services. Staff were aware of the problems facing the service and were working to address these. The stroke unit at Solihull Hospital provided a good environment for the care of patients with stroke. A 24/7 thrombolysis service had been implemented, based at Solihull Hospital. Outside normal working hours, patients from Birmingham East and North PCT were supposed to be brought to Solihull Hospital by ambulance. Patients were thrombolysed on the Acute Medical Unit at Solihull Hospital prior to care on the stroke ward. During normal working hours, patients could also be thrombolysed at both Good Hope Hospital and Birmingham Heartlands Hospital. Patients with acute stroke who were not suitable for thrombolysis could be admitted to all three hospitals at any time. Heart of England NHS Foundation Trust was a large provider of stroke care, seeing over 1,000 patients with stroke each year.

Progress was being made with the appointment of a matron and lead nurse for stroke. Nursing staff were able to request CT scans, Carotid Dopplers and chest X-rays, Stroke Association family support workers were based on all three sites.

Immediate Risk: None

Concerns

1 Services for patients with stroke and TIA at Heart of England NHS Foundation Trust were of serious concern for a combination of reasons:

a. It was not clear that the pathway for out of hours thrombolysis was working in practice. In particular, staff within the Emergency Departments at Good Hope Hospital and Birmingham Heartlands Hospital were not clear of the actions they should take if a patient presented out of hours or close to 5pm. The reported thrombolysis rates were low (although see below concerning data collection).

b. Robust data on achievement of key activity and outcome indicators were not yet available. The Dendrite database was being implemented but staff were not yet confident that the information within the database was accurate. As a result, these indicators were not being routinely monitored.

c. At all three hospitals, a health care professional with competence in swallow screening was usually available between 9am and 5pm but not always out of hours. A competence based training programme was in place and there were plans to roll across all sites during 2010/11.

d. Nursing staff on the stroke wards at all three sites did not have the expected competences in the care of patients with acute stroke. A competence based training programme was in place and there were plans to roll across all sites during 2010/11

e. A ward round or review by a senior member of the stroke team did not take place at weekends. A consultant stroke specialist was not usually available at night and weekends (other than for patients needing thrombolysis). At Good Hope Hospital there was only one substantive stroke consultant plus one locum consultant. At Birmingham Heartlands Hospital there were only 1.5 wte stroke consultants. At Good Hope and Birmingham Heartlands Hospitals, out of hours cover, including a ward round at weekends, was provided by consultant geriatricians. At Solihull there were three stroke consultants who also had commitments to acute medicine. A separate out of hours rota for thrombolysis was run at Solihull Hospital for all Birmingham East and North and Solihull patients. A stroke specialist was available for advice at all times through the thrombolysis rota at Solihull

Hospital but it was not clear that staff at Good Hope Hospital and Birmingham Heartlands Hospital were aware of this or clear about the indications for seeking advice.

f. Rehabilitation staff (physiotherapy, occupational therapy and speech therapy) were not available at weekends and so rehabilitation assessment could not take place within 24 hours of admission at any of the three hospitals. Limited support from dietetics with expertise in the care of patients with stroke was available. Psychological support was not available for patients with stroke.

g. TIA assessment was available three days a week at Good Hope Hospital and five days a week at Birmingham Heartlands Hospital and Solihull Hospital. Patients with high risk TIA were being admitted at weekends because this service was not available daily.

h. Although Birmingham East and North PCT had a draft service specification '*A managed care system for stroke',* there was no agreed plan for the development of stroke (acute phase) and TIA services with identified actions and milestones towards achievement of the expected Quality Standards.

Further Consideration

1 The criteria for admission of patients with TIA may benefit from review. Some patients may be being admitted at weekends and, possibly, on weekdays in order to achieve access to diagnostics.

2 Criteria for CT scanning patients with TIA may benefit from review. Reviewers were told that 85% of patients with TIA had CT scans. This appeared inappropriately high.

3 Plans for extending rehabilitation services to weekends appeared to involve already low levels of staffing being stretched over seven days rather than five days.

4 The strategy for the future development of stroke services should take account not only achieving the Quality Standards expected at present on all three sites but also potential future developments in stroke care, in particular, the possibilities that expected times for assessment and treatment of patients may be reduced, that interventions may become more invasive and that more patients with co-morbidities will be treated.

Good Practice

1 At Solihull Hospital there were good plans to develop a patient garden specifically for patients with stroke. The 'Pets in Touch' charity was also involved in this development.

2 See also general comments

Commissioning:

Concern:

Although Birmingham East and North PCT had a draft service specification 'A managed care system for stroke', there was no agreed plan for the development of stroke (acute phase) and TIA services with identified actions and milestones towards achievement of the expected Quality Standards. The strategy for the future development of stroke services should take account not only achieving the Quality Standards expected at present on all three hospital sites but also potential future developments in stroke care, in particular, the possibilities that expected times for assessment and treatment of patients may be reduced, that interventions may become more invasive and that more patients with co-morbidities will be treated. See also acute trust stroke and TIA section of this report.

APPENDIX 1 VISIT DATES

Health Economy	Acute Trust	Visit dates 2010
South Warwickshire	South Warwickshire NHS Foundation Trust	11 & 12 May
North Warwickshire	George Elliott Hospital NHS Trust	20 May
Herefordshire	Hereford Hospitals NHS Trust	16 & 17 June
Worcestershire	Worcester Acute Hospitals NHS Trust	22 & 23 June
South Staffordshire (West) Locality	Mid Staffordshire NHS Foundation Trust	30 June
North Staffordshire	University Hospital of North Staffordshire NHS Trust	7 & 8 July
South Staffordshire (East) Locality	Burton Hospitals NHS Trust	14 July
Coventry and Rugby	University Hospitals Coventry & Warwickshire NHS Trust	7 & 8 September
Wolverhampton	Royal Wolverhampton Hospitals NHS Trust	22 & 23 September
Shropshire	Shrewsbury & Telford NHS Trust	28 & 29 September
Dudley	Dudley Group of Hospitals NHS Trust	6 October
Heart of Birmingham and Sandwell	Sandwell & West Birmingham Hospitals NHS Trust	13 & 14 October
Walsall	Walsall Hospitals NHS Trust	19 October
Birmingham East & North and Solihull	Heart of England Foundation Trust	16 & 17 November