# Development of a stroke assessment team: focus on physiotherapy

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# BJTR pull-out physiotherapy supplement on stroke


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# Development of a stroke assessment team: focus on physiotherapy


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**A multidisciplinary team was appointed for acute stroke services in preparation for opening a stroke assessment unit at Walsgrave Hospitals NHS Trust. Since introduction, the frequency of physiotherapy treatment for stroke patients has improved, as an indirect consequence of increasing awareness of therapy needs and greater staff confidence in treating stroke patients.**



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Following the Director of Public Health's annual health report in Coventry in 1994 (Coventry Health, 1994), it was identified that Coventry had a higher than average incidence of death from stroke compared with England and Wales.

The recommendations of the report included the commissioning of organized and integrated services for stroke patients. This lead to the formation of a stroke assessment team (SAT).

## The role of the SAT

The role of the SAT is to promote recovery from stroke and maximize potential for return to independence.

## Philosophy of SAT

To provide a coordinated approach to the assessment, treatment and rehabilitation of stroke patients to maximize the benefits of therapy and to encourage maximum participation of nurses, medical staff, other professionals, the patients and their relatives and carers in the rehabilitation process.

## The team

Between September 1995 and February 1996, the members of the SAT were appointed. The members were a full-time coordinator and a half-time speech and language therapist, occupational therapist, physiotherapist and dysphagia audit nurse.

## Assessment of the stroke patient

Walsgrave Hospitals NHS Trust intend to open an acute stroke assessment unit and are in the process of recruiting a consultant physician to lead a specialized unit. The aims of the SAT are to:

- Provide timely coordinated assessment
- Maximize rehabilitation potential
- Improve communication
- Provide support and information for patients, relatives and carers
- Collect statistical data
- Provide advice for other members of the multidisciplinary team
- Facilitate discharge planning.

The service to stroke patients at the Walsgrave Hospitals NHS Trust has been thoroughly analysed. Before any input from the SAT the number of stroke

patients and their location within the hospital was audited. The rate, route and number of referrals had been audited during the 3-month trial and this has been continued.

In preparation for the opening of the unit, the SAT focused their input into four general medical wards which had retrospectively been shown to have the highest number of stroke patients admitted. This input was initially only for a trial period of 3 months. Following early success this has continued and the SAT therapy hours have been extended to meet the needs of the services.

**Physiotherapy input**

In December 1995, the initial appointment was a 0.5 whole time equivalent Senior I physiotherapist for the SAT, being supernumerary to the medical physiotherapy team. The role of the SAT physiotherapist was not to increase physiotherapy input to stroke patients directly, but indirectly by:

- Providing an initial assessment for all stroke patients admitted to the trial wards
- Increasing awareness of stroke patients within the physiotherapy team
- Increasing awareness of the role of the SAT on the medical wards
- Improving staff training in stroke assessment and rehabilitation
- Improving interdisciplinary communication.

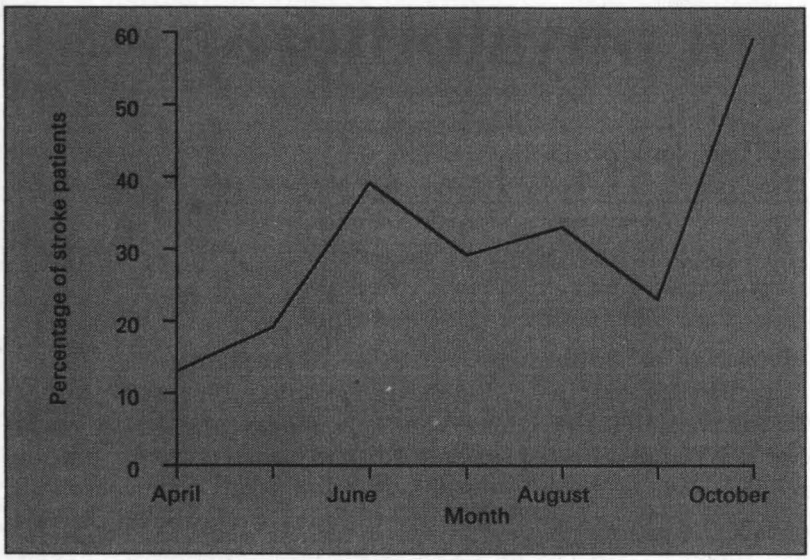


Figure 1. Percentage of stroke patients receiving recommended frequency of physiotherapy input.

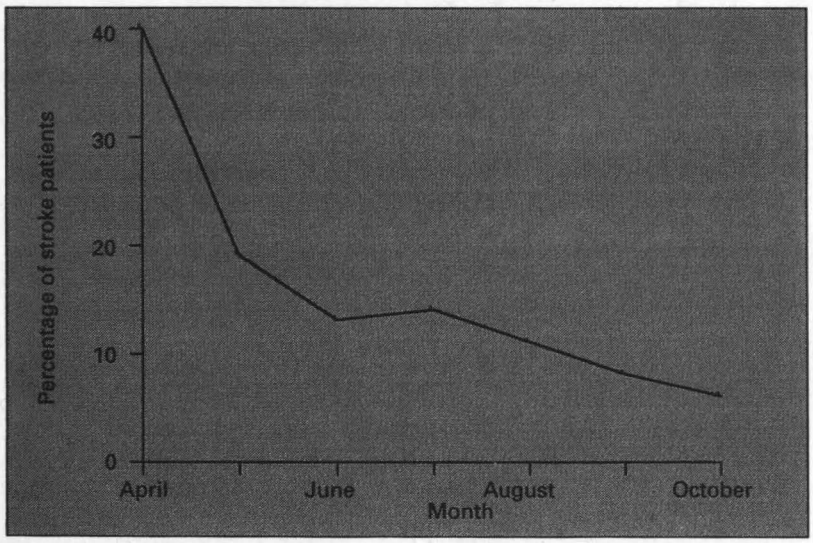


Figure 2. Percentage of stroke patients receiving no physiotherapy during the first week of assessment.

**Physiotherapy audit**

Following an initial assessment by the SAT physiotherapist, all patients were advised of an optimal frequency of treatment, based on the rehabilitation needs of the patient, their tolerance of rehabilitation and known staffing levels.

In order to audit the physiotherapy service on the trial wards, the recommended frequency of physiotherapy was compared to the actual frequency of input during the first week after assessment.

*Figures 1–3* illustrate the contrast between the frequency of physiotherapy input recommended following the initial assessment and the actual frequency of input for the 7 months between April and October 1996. Analysis of the graphed data is shown in *Table 1*.

During April, the first month of the trial, only 13% of stroke patients received the frequency of physiotherapy recommended by the SAT physiotherapist and 40% received no physiotherapy at all during the first week after assessment. *Figure 1* shows how this has changed over the subsequent months. Since the start of the trial the number of patients receiving the recommended frequency of physiotherapy has increased. This is most notable in October, when the full-time SAT physiotherapist was appointed.

During the first month of the trial, 40% of the patients assessed by the SAT physiotherapist received no subsequent physiotherapy within the following week. *Figure 2* illustrates how this patient group has reduced over the months to only 6% during October.

In order to maintain the quality of service and maximize carry-over from treatment session, it was considered that three sessions of physiotherapy per week was the minimum frequency of physiotherapy

input each stroke patient should receive. The physiotherapy department acknowledges the national guidelines (Association of Chartered Physiotherapists Interested in Neurology, 1995), recommending five physiotherapy sessions per week for the acute stroke patient. However, at the time of this study the level of unfilled vacant physiotherapy posts in the hospital needed to be taken into consideration and hence reluctantly the standard of a minimum of three sessions per week was accepted. It is hoped that as the vacant posts are filled this standard will come into line with the national guidelines.

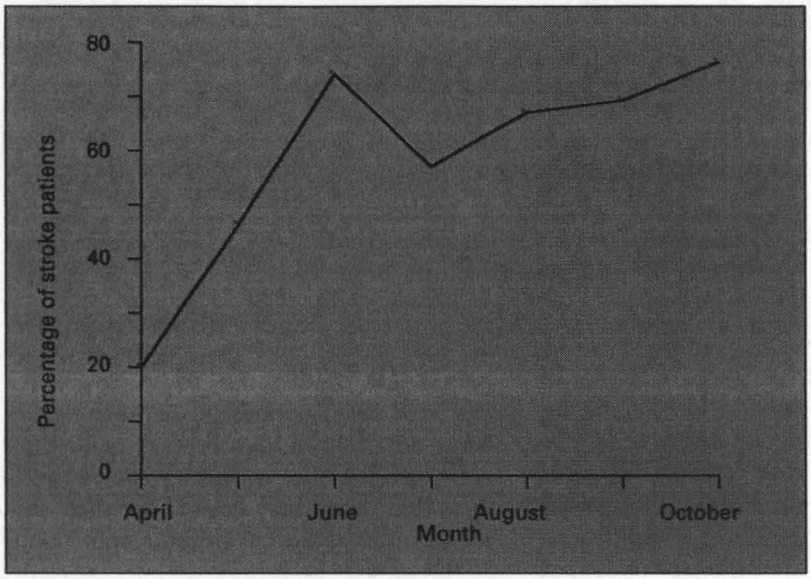


Figure 3. Percentage of stroke patients receiving at least three physiotherapy sessions per week.

Table 1. Summary of physiotherapy audit from April to October 1996

| | April | May | June | July | Aug | Sept | Oct |
|---|---|---|---|---|---|---|---|
| Number of patients recommended for physiotherapy | 15 | 26 | 23 | 7 | 9 | 13 | 17 |
| Patients receiving at least recommended frequency of physiotherapy | 2 (13%) | 5 (19%) | 9 (39%) | 2 (29%) | 3 (33%) | 3 (23%) | 10 (59%) |
| Patients receiving physiotherapy >4 times per week | 3 (20%) | 8 (31%) | 12 (52%) | 2 (29%) | 4 (44%) | 3 (23%) | 9 (53%) |
| Patients receiving physiotherapy >3 times per week | 3 (20%) | 12 (46%) | 17 (74%) | 4 (57%) | 6 (67%) | 9 (69%) | 13 (76%) |
| Patients receiving no physiotherapy when it had been recommended | 6 (40%) | 5 (19%) | 3 (13%) | 1 (14%) | 1 (11%) | 1 (8%) | 1 (6%) |

## KEY POINTS

- **The introduction of a stroke assessment team has resulted in improved physiotherapy service for stroke patients on general medical wards in Walsgrave Hospitals NHS Trust, Coventry.**
- **An audit of physiotherapy service showed an increase in the frequency of physiotherapy input for acute stroke patients over a 7-month period.**
- **Improved service resulted from an increase in the awareness of the therapy needs of stroke patients by physiotherapy staff.**

During the first month of the trial, this standard was achieved in only 20% of patients. *Figure 3* illustrates how this has improved over the months, so that in October, the standard of at least three sessions per week was achieved in over 75% of patients.

It is evident that although the general trend is improving, there is a peak in June when annual leave, study leave and sickness were at a minimum. Conversely, there is a dip in September when there was 3 weeks of annual leave spread between the medical Senior I and medical Senior II and multiple study leave days for management courses.

## Conclusion

The physiotherapy audit has illustrated how the presence of a dedicated stroke assessment team resulted in an improvement in at least one area of the acute service for stroke patients on general medical wards at Walsgrave Hospitals NHS Trust.

Positive written feedback was received from medical, nursing and therapy staff on the trial wards. Factors contributing to the improved service were identified as improved communication and increased awareness of the needs of stroke patients, as a result of staff education provided by the SAT.

It is planned to continue the audit of the physiotherapy service alongside a similar audit of the occupational therapy service. It is hoped that this information will prove useful not only in planning improvements in therapy services, but in assessing any changes in service provision following the opening of the stroke assessment unit.

Association of Chartered Physiotherapists Interested in Neurology (1995) *Standards of Physiotherapy Practice in Neurology*. Chartered Society of Physiotherapists, London

Coventry Health (1994) *Health in Coventry*. Annual Report of the Director of Public Health. Coventry Health, Coventry