

# Evaluation of the use and uptake of the Greater Manchester Stroke Assessment Tool (GM-SAT)

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## Executive Summary

This report describes an evaluation of the reach and uptake of the Greater Manchester Stroke Assessment Tool (GM-SAT). This tool was developed using a consensus user-involvement process with stroke survivors, carers, and professionals. The aim of the tool was to help identify unmet needs for people after stroke within four domains (health, physical, social and emotional).

The tool was presented at a Stroke Association-hosted launch in October 2010, and has been disseminated through several channels including practitioner conferences, workshops and online media. The tool was made freely available on the Greater Manchester Collaboration for Applied Health Research and Care (GM CLAHRC) website to download from <http://clahrc-gm.nihr.ac.uk/resources/gm-sat/5/>.

The GM CLAHRC is a five year programme funded by the National Institute for Health Research (NIHR) and matched funding providers including NHS providers and commissioners, which aims to bring clinical expertise and research together to reduce inequalities in health and improve care for the population of Greater Manchester. As part of this programme of work, the GM CLAHRC undertook an evaluation of the spread and uptake of the tool to estimate how widely the GM-SAT is now used across the UK, eighteen months after active dissemination ceased. We wanted to know how the tool was being used, by whom, and if we could identify any factors which would allow us to learn about implementation and dissemination more widely.

This information from this evaluation was analysed in order to identify learning for

- Stroke and health care professionals (HCP)
- Health professionals with an interest in quality improvement, or in introducing new practices into their workplace generally (QI)
- Health services researchers, particularly those working in knowledge mobilisation collaboratives such as the CLAHRCs (HSR)

For any comments or queries, please contact us at <http://clahrc-gm.nihr.ac.uk/contact-us/>.

# 1. Introduction

## Stroke: a disabling condition

In the UK, stroke is associated with a heavy morbidity and mortality burden. Estimated prevalence per year ranges from 110,00 (NAO, 2010; Lee 2011) to 150,000 (Stroke Association, 2013). Stroke costs the NHS more than £3 billion a year (NAO, 2010) with an estimated wider economic cost of £8 billion.

Around half of all stroke survivors have some long-term health and social needs, which can severely limit the survivor's quality of life. Although the treatment and diagnosis of stroke have improved, with incidence and mortality both falling, there are still approximately 300,000 people in the UK living with the aftermath of stroke.

Stroke survivors are cared for in the community by stroke teams that vary in composition and scope of work, and by social support. In 2007, the Department of Health recommended that all stroke survivors should have 6-week and 6-months reviews of their health and social care needs, and to be subsequently carried out at annual intervals (DH, 2007). This has subsequently been followed up by inclusion in the NICE guideline for Stroke Rehabilitation (NICE 2013). The GM CLAHRC developed a needs assessment tool in collaboration with stroke survivors for use in these reviews, to accurately and systematically determine these needs.

## Development of the tool

The tool was designed to assess the post-stroke needs of patients once discharged back into the community. This tool was developed using a consensus user-involvement process with stroke survivors to identify needs within four domains (health, physical, social and emotional). We held focus groups with stroke survivors and with professionals. The work was driven by a clinical group that was formed to assist with the development of the tool. The work was also informed by an informal literature scoping exercise, assessing the long-term needs of stroke survivors.

The work was co-ordinated by a Knowledge Transfer Associate (KTA), Katy Rothwell, who managed the development of the tool on a day-to-day basis, was responsible for spread and dissemination, and was and still is a point of contact for old and potential users of the tool.

## Dissemination of the tool

The National Stroke Strategy recommends that stroke survivors receive regular reviews of their health and social care needs. As part of an evaluation of the role of the Stroke Association's Information, Advice and Support (IAS) coordinators in carrying out these reviews in a national pilot, the GM-SAT tool was used to assess the needs of 137 stroke survivors. The IAS coordinators received training in how to use the tool.

The results of this pilot evaluation were presented at a national event (hosted by the Stroke Association in October 2010), attended by stroke coordinators from around the country. At this event, the GM-SAT was presented to all participants.



The dissemination of the tool also included presentations to:

- Stroke Improvement Network (including commissioners and clinical leads), November 2010
- UK Stroke Forum (Clinicians, health professionals and researchers), December 2010
- Yorkshire and Humber SHA 'Accelerating Stroke Improvement' Event, December 2010
- SDO/HSRN conference (Clinicians, health professionals and researchers), June 2011
- HSRN conference (Clinicians, health professionals and researchers), June 2012

Several papers were also written about the tool:

Bamford D, Rothwell K, Tyrrell P, Boaden R. *Improving care for people after stroke: how change was actively facilitated* (2013) **Journal of Health Organization and Management** 27:5

Rothwell K, Boaden R, Bamford D, Tyrrell P. *Feasibility of assessing the needs of stroke patients after six months using the GM-SAT tool.* (2012) **Clinical Rehabilitation** 27:3

Richardson G. *After Stroke: Discharge is just the beginning* (2012) **British Journal of Primary Care Nursing** 9:3

In addition to these events and dissemination channels, the tool was also publicised through the CLARHC website, through Twitter, and through informal personal channels.

## 2. Evaluating the reach and usage of the tool: Methods

To evaluate the reach of the tool, two approaches were used. First, communications data from the website (<http://clahrc-gm.nihr.ac.uk/>) was gathered to estimate the number of times the tool was downloaded. Secondly, a telephone/email survey of users was carried out. These were identified by the KTA as either people involved in the original dissemination strategy, or as subsequently having contacted the KTA or the CLAHRC for information about how to access or implement the tool.

Responses were gathered from a range of stroke professionals, community and acute NHS settings, the private sector, and the third sector. Most respondents were clinical nurse specialists or stroke co-ordinators, but

responses were also gathered from speech and language therapists, local and regional managers, and occupational and physical therapists.

Only one respondent from each organisation was included, in order not to bias the results. In total, 47 users were contacted by email or telephone with a 59% response rate. 3 people declined to answer and 1 person could not be contacted.

Each respondent was asked: (1) How they heard about the tool, (2) why they chose the tool, (3) what it is being used for, (4) who is using it, (5) any problems with the tool, and (6) any local tweaks people made. Participants were also asked if there were any other details that they thought may be helpful to the CLAHRC.

All participants were informed that an evaluation report would be prepared and circulated to them all.

### 3. Findings

The evaluation was not exhaustive, so definitive numbers of users cannot be ascertained. We therefore estimated the number of users, using estimated numbers of services, using data provided by the survey, and website statistics (see below).

The Stroke Association are using the tool in 24 services across England, and this number is to rise to include services in Wales and Scotland. The Stroke Association is responsible for 362 services across the UK. More than half of these provide services where the use of GM-SAT would be appropriate. The number of potential patients who may be affected by these services is therefore significant, and to date over 4,000 patients have already been reviewed by Stroke Association staff.

Information on the respondent's employer was gathered to analyse the national profile of GM-SAT users. For clarity, this information was plotted on a map of the UK (see Figure 2).

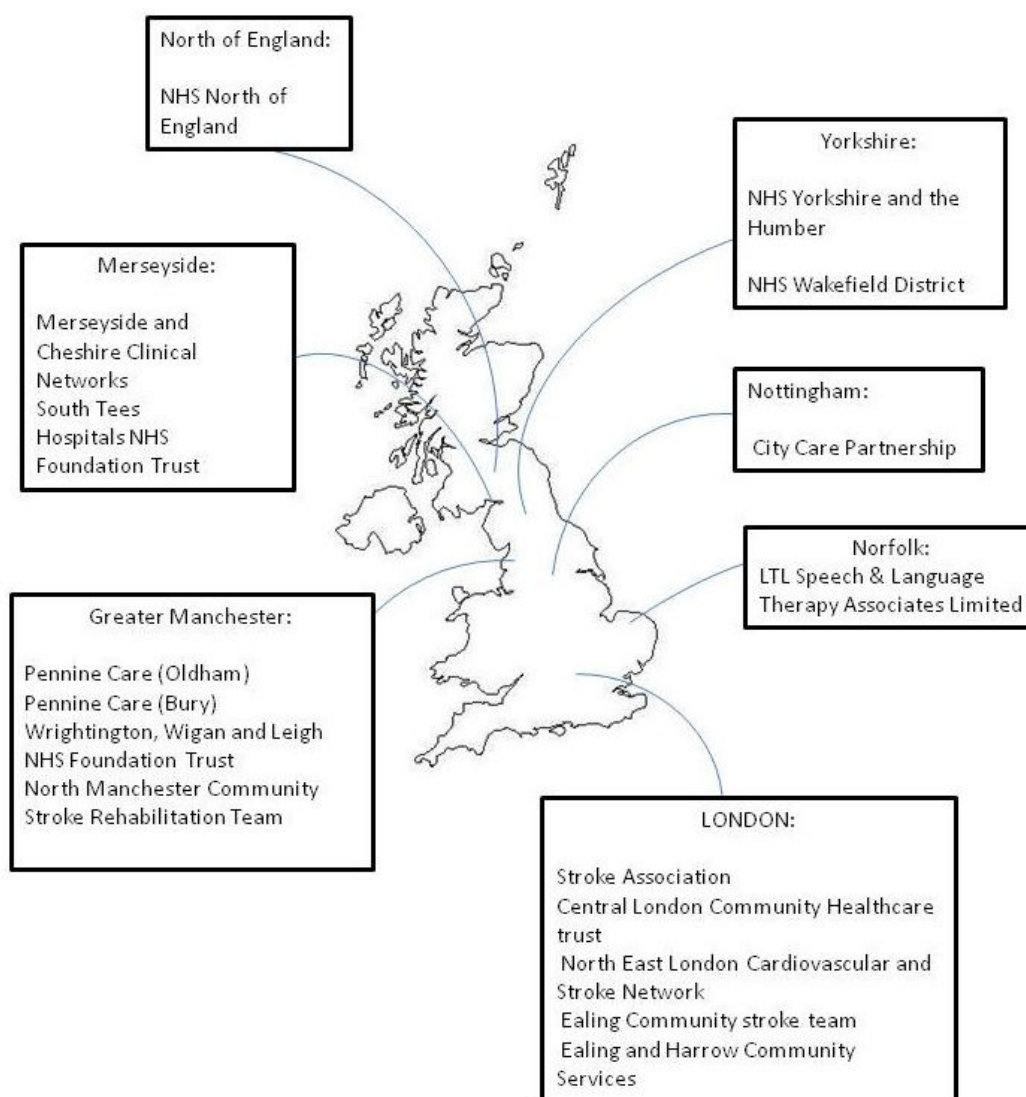


Figure 2: Map showing geographical sites of GM-SAT users.

However, this should be interpreted with caution, as the survey was not a complete sample of all potential users. This map just illustrates the geographical range of known users for whom we had contact details and responded to our query.

Estimating the “market share” of the GM-SAT is difficult, because of the current reorganisation and redistribution of providers in the English NHS. As Figure 2 indicates, users were found from within PCTs, acute care, the private sector, third sector and NHS-Associated organisations.

However, most participants indicated that they were in the initial stages of introducing the tool into their clinical practices and workplaces, so we would expect the proportion of clinical stroke services providers using GM-SAT to increase over time and we may revisit this in future.



## Website users

In total, the page containing details of GM-SAT and its download link was viewed 1683 times between February and October 2012, and 961 times between Jan and May 2013, with 1200 unique page views. There was an increase in the number of hits after the launch event in February 2012 (see Figure 3), and in June 2012, after the HSRN conference, which was the last in a series of major presentations. However, traffic to the site was generally consistent. Before this point, the pages were viewed between 0-10 times a week.

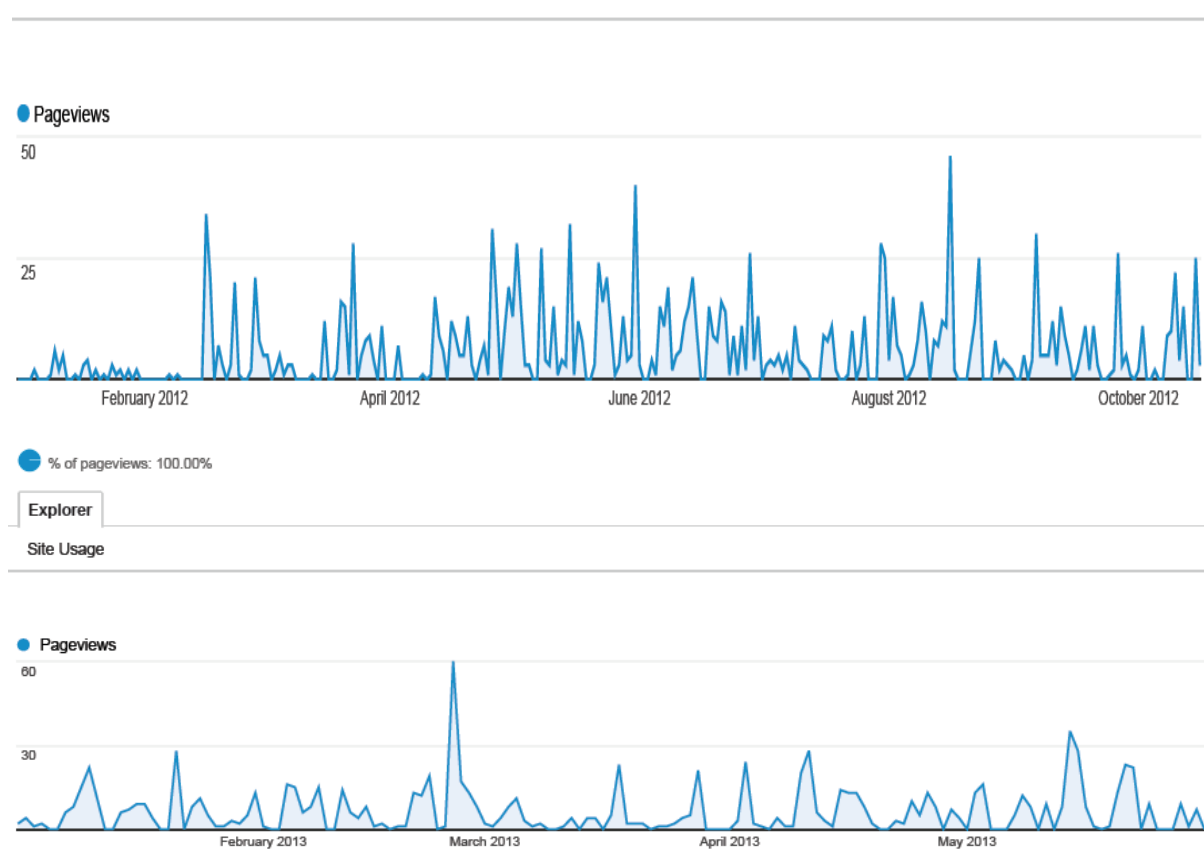


Figure 3: Website statistics for the GMSAT tool, Feb-2012 until May-2013. Figure expressed as page views as a percentage of the total page views.

There are noticeable peaks in website stats associated with key events (for clarity, these are listed again below):

- The Launch of the tool at a Stroke Association hosted event, October 2010
- NHS Stroke Improvement Network (including commissioners and clinical leads), November 2010
- UK Stroke Forum (Clinicians, health professionals and researchers), December 2010
- Yorkshire and Humber SHA 'Accelerating Stroke Improvement' Event, December 2010
- SDO/HSRN conference (Clinicians, health professionals and researchers), June 2011
- HSRN conference (Clinicians, health professionals and researchers), June 2012

## 4. Learning from the evaluation

### The effect of active dissemination

The initial pilot project presentation event and subsequent dissemination events clearly had a large effect on uptake of the tool, with most respondents claiming they (or their local stroke representative) attended one or other events. These events were organised with the Stroke Association and stroke networks, were targeted over 18 months to provide targeted dissemination. One Stroke Co-ordinator noted:

*“The Local Stroke Association came to Manchester and spoke to [The Greater Manchester CLAHRC] team and tweaked [the tool] for the [6 month] reviews.”*

The CLAHRC also responded to requests for personalised presentations from many local groups, with the KTA presenting the tool for individual organisations on a number of occasions.

#### Learning point for QI and HSR

Having the tool supported by both the Stroke Association and NHS Improvement (<http://www.improvement.nhs.uk/>) meant the CLAHRC had access to a wide range of practitioners. The Stroke Association is supported by local stroke-specific networks and national bodies and is embedded in local care delivery.

#### Learning point for QI and HSR

Dissemination through large and targeted events seems to boost impact. Not all clinical areas have the same community structure so dissemination needs to be tailored to the audience.

#### Learning point for HSR

Staff continuity is an important factor in creating and sustaining uptake of evidence-based projects and CLAHRC outputs. CLAHRC staff (KTA and Clinical Lead for Stroke) were both named repeatedly as sources of information about the tool. These individuals are clearly known by the stroke community and, although the tool has now been developed and is freely available, still have a profile connected with the tool.

### What made the GM-SAT attractive?

Not all respondents were currently using the tool. In some cases, the respondents were not currently providing stroke services. However, users were mainly very impressed with the tool. Another Stroke Co-ordinator said:

*“The tool was very user-friendly and just required for all the staff who were involved to know about the different local referral agency that would be required to refer if they had a need.... The tool was very easy and simple to use. “*



Other factors that helped local uptake:

- Having a ready-made piloted tool
- Looking very comprehensive and easy to use
- Support from regional health infrastructure around resources, data infrastructure, IT
- Synergy with additional local needs (e.g. also being used for long-term conditions, or local priority to improve stroke services)
- Could be used by non-clinical staff, provided they understand the medical terminology.
- Hearing about it from more than one source
- Having a tool available which matched national guidelines and commissioners' priorities

The systematic and evidence-based tool was clearly valued by users, with one Senior Occupational Therapist saying:

*"I chose the tool as it appeared to provide the data collection we required in a systematic way and working as an interdisciplinary team it should highlight which service was required, it also stopped us re-inventing the wheel."*

Another user said:

*"We felt GM-SAT was the best choice to meet the requirements of National guidelines and commissioners of service".* (Stroke Occupational Therapist).

#### Learning point for HPs and QI

The tool was clearly piloted, evidence-based and mapped against NICE Guidance, which made it attractive to potential users

#### Learning point for HPs and QI

The tool was broad enough to be used by non-clinical staff, widening the pool of potential users.

#### Learning point for HSR

Having a multi-channel dissemination strategy helps uptake, as users hear about the tool from multiple sources.

## What were people using GM-SAT for?

Most respondents explained that the tool was being used to conduct 6-month reviews with stroke survivors. However, additional uses were also described:

- 6 months reviews with vulnerable adults (NHS Wakefield)
- Part of long term community care planning (East Coast Commissioning, NHS Wakefield)

- Developing an evidence base about local need for commissioning in the future (NHS Wakefield, NHS Ealing)
- Continuing professional development for practitioners using the tool (NHS Wakefield)
- Assisting local services to provide better referrals (NHS Luton)
- Using tool to develop competencies to train multi-disciplinary teams. (NHS Barts and the London)

While these were not *a priori* aims of the project, these additional impacts demonstrate the versatility and flexibility of the tool. One of the tool's strong points was considered to be how easy it was to tailor to local needs. One provider added in questions about quality of sleep, driving, and whether the patient was a carer themselves.

Several respondents indicated that they had tweaked the tool to signpost local referral agencies, or to reflect local priorities (such as neurological conditions). Several providers have used SystmOne as an interface for the tool. There is a user group for all SystmOne GM-SAT users – for further details please contact the GM CLAHRC.

Most respondents reported that the tool was being used by specialist stroke nurses carrying out 6-month reviews, and stroke teams more widely. Health and wellbeing development workers and generalist nurses were also described as using the tool with patients.

The tool was developed to be able to be used by a range of professionals in addition to specialist clinicians, and this was noted as a strength of the tool by many respondents:

*“The tool is used by members of our team. Often it is the Stroke nurses, (who see most of the patients on our team list,) or it may be that the OT, Physio or speech therapists complete the tool. We tend to choose whoever is seeing the patient most at the time the review is due, and will identify who is to complete it at our regular MDT meetings. We have access via computer to a list of patients who are coming up for 6 month GM-SAT review so we are able to ensure we are up to date with completion (Senior Stroke Occupational Therapist)”*

While not all respondents reported on the setting, several claimed to use the tool in patient's homes, over the phone, and in acute settings. The strengths of the tool were perceived to be in its breadth, that the questions were evidence-based and that it could be used by non-clinical staff.

#### Learning point for HSR

The tool was used for a much wider range of activities than originally anticipated. Collecting information on the uses of the tool may allow us to support the development of tailored resources.

#### Learning point for HSR

Identification of local priorities may allow CLAHRCs to respond to local need by tailoring and supporting modification of resources

### Learning point for HSR

Collating information on the ways people use research outputs may help us to design tools with long-lasting impact.

## What problems did participants identify with the tool?

Problems with the tool as reported by respondents were mainly technical, such as being unable to edit text boxes on the on-line version. Several respondents explained they used a Microsoft Word version instead for this reason. The tool was designed as a PDF to be downloaded, probably explaining this problem, because of variation in versions of Word available across the NHS.

The tool was considered to be too long by some, and there was some concern that this could add to the burden of work for nurses. However, this was probably associated with the introduction of the practice of carrying out 6-month reviews for all patients after stroke, which was a change of practice encouraged at the time. Some reported difficulty in engaging GPs and other clinicians. There was also discussion about the difficulty of having services put out to tender and multiple providers which militated against normal practice.

Specifically about the tool, some respondents highlighted areas of the tool or of patient need which were not comprehensive enough – e.g. continuing deterioration, depression and anxiety, and so on. However, in general most participants felt that the tool was flexible enough to be easily tweaked to fit local priorities.

### Learning point for HSR and QI

Respondents described using the tool in a range of formats, preferred by different people. People interested in developing tools should consider producing multiple formats, and advice or support for tool uses.

### Learning point for HSR and QI

There are organisational challenges in introducing new ways of working into clinical practice, which need to be recognised when implementing or evaluating change.

Several respondents named other tools that performed similar tasks. One was the Longer-term Unmet Needs after Stroke (LUNS) study, which aimed to develop a needs assessment tool while embedded in an ongoing randomised controlled trial (RCT) ([http://www.lotscare.co.uk/luns\\_study.html](http://www.lotscare.co.uk/luns_study.html), accessed 18.02.2013) although at the time this was only available to services taking part in the trial.

## 5. What lessons were learned for future projects?

For the CLAHRC, impact on patients and practice is central to the programme. While it has not been possible to measure changes in patient outcomes or in practitioner behaviour, we have described how a sample of users are utilising the tool.

### Learning for Stroke and health care professionals

- The GM-SAT was well-received and perceived positively by health professionals. Commissioners found the tool useful and there was significant effort to introduce the tool more widely.

- The tool was considered reliable and useful, because it was piloted, evidence-based and mapped against NICE Guidance, increasing the credibility of the tool.
- The tool could be used by a wide range of professionals, enabling different professional groups to work together to provide more holistic care for patients.
- Working across multiple providers can be challenging, especially where integrated service delivery is the ultimate goal.

## **Learning for Health professionals with an interest in quality improvement**

- Change in workplace is achievable, and works well when supported by targeted dissemination that is tailored to specific workplace communities.
- Multidisciplinary teams can be fostered using technological and procedural tools such as the GM-SAT which can be used by a range of professionals
- Credibility and reliability of intended practice change can be increased by basing the proposed change on commonly accepted evidence and guidance.
- Additionally, having change in practice sponsored or championed by field leaders can provide credibility and profile.

## **Learning for Health Services Researchers**

- Active and targeted dissemination of research outputs in a range of formats helps the output to be taken up more effectively.
- Targeted events help to raise the profile of the research output.
- Collating information on the ways people use research outputs may help us to design tools with long-lasting impact.
- Having a multi-channel dissemination strategy helps uptake, as users hear about the tool from multiple sources.
- Staff continuity is an important factor in creating and sustaining uptake of evidence-based projects and CLAHRC outputs.
- The tool was used for a much wider range of activities than originally anticipated. Collecting information on the uses of the tool may allow us to support the development of tailored resources.
- Identification of local priorities may allow CLAHRCs to respond vigorously to local need by tailoring and supporting modification of resources.

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