



Minnesota Stroke Registry Program Evaluation Final Report 2009

Introduction

The Minnesota Stroke Registry Evaluation Plan (2007-2012) was finalized in June 2009. Following guidance from the CDC's recommendations for developing evaluation plans, this plan included evaluation questions that were defined to address several domains regarding hospital participation in the program. The first proposed phase was to conduct an evaluation project designed to assess the processes currently being carried out by the Minnesota Stroke Registry (MSR). This project was outlined in the MSR Evaluation Plan 2009. (see Appendix)

With the intent of furthering continued involvement of hospitals in the MSR at the same time expanding participation throughout the state, data were collected to address the MSR's current efforts. The purpose of this evaluation project was to advance the MSR program and better accommodate current and future participating hospitals. Data collection was gathered from the 18 hospitals participating in the MSR as of June 2009 regarding their involvement in the registry.

Methods

Evaluation questions were developed and defined in such a way that the program could address issues hospitals have had or are currently experiencing. These questions were developed with guidance from CDC and RTI, Inc (contract organization to CDC for evaluation). (see Appendix for evaluation questions) The questions aim to assess various activities being performed by the registry staff and include: the benefits that the MSR program offers hospitals, the methods currently being used to recruit, orient, and train hospitals, the challenges being faced by hospitals, and the methods being used to ensure successful participation in the program.

In June and July 2009, interviews were conducted by a student intern with each of the 18 participating hospitals either in person or through a teleconference call. Interviews were conducted with each hospital's primary contact person and any other contributing staff who were available.

The same questions were administered to each of the 18 participating hospitals; however, because the program protocols for recruitment through training have evolved since the program's inception, specific questions were tailored to be relevant to the hospitals based on their experiences with recruitment, orientation, and training. Recruitment of the original cohort of hospitals (in fall 2007) was different than hospitals recruited in fall/winter 2008-2009. Orientation to the MSR was done for the original cohort together (at a conference), while hospitals joining since summer 2008 have been oriented individually in

person. Abstraction training also occurred in a group-session with original cohort; hospitals since the initial training have been trained in person, over teleconference or recently via web conferencing.

Interview responses were documented and stripped of identifiers in order to maintain anonymity. The results reported in this final report are summarized by topic area. These qualitative data were synthesized for this report, drawing out key conclusions, suggestions, and issues within each topic area.

Results

REASONS FOR VOLUNTEER INVOLVEMENT

The motivation to participate stems from interest in taking part in the opportunities that the MSR presents. Since respondents indicated that they are already supportive of the state's initiatives to improve the quality of care for acute stroke patients, the MSR is viewed as an additional positive influence on their hospitals. The MSR program specifically opens up the possibility for hospitals to contribute to the tracking of patient data across the state that will hopefully lead to improved stroke patient care statewide.

In addition, participation in the MSR offers the opportunity for collaboration among hospitals where methods for improvement can be shared. Hospitals are eager to learn how they can improve their patient care, and the program offers them guidance. Moreover, most hospitals indicated that they value the ability to view benchmarking data in order to compare themselves with other hospitals locally and statewide. Several hospitals reported that their motivation to participate is due to their desire to obtain Primary Stroke Center (PSC) certification by the Joint Commission (TJC) in the future, which they believe the MSR can help them achieve. Since half of the hospitals participating in the registry are already certified TJC PSCs, most felt that the requirements of TJC dovetail with the initiatives set forth by the MSR.

Finally, hospitals strive to provide the best outcomes for the patients they receive. Hospitals feel that they are truly benefitting the patients they treat by contributing to the registry, and that their involvement is in the interest of their patients.

Summary:

- The Minnesota Stroke Registry offers opportunities to implement quality improvement work
- Hospitals are able to collaborate with other institutions around the state
- Participation allows for comparisons and benchmarking of data between hospitals in Minnesota
- Acute stroke patients will benefit from the improved treatment, management, and care as a result of hospital participation

RECRUITMENT METHODS

None of the hospitals provided negative feedback regarding the recruitment process; instead, several mentioned how impressed they were by the effort put forth by the MSR staff. The objectives of the program were said to be clearly identified. The expectations – both of the program itself as well of the hospitals – were, for the most part, understood. Several hospitals thought that it might be beneficial to explicitly lay out expectations in a document to which they could continue to reference. A bulleted listing of expectations upon joining, with updated additions communicated through monthly emails, was of interest.

Hospitals commented on their initial concerns before joining the MSR. Generally speaking, hospitals commented on the organization and logistical planning that was necessary for their administration to address. Patient privacy was an issue for some hospitals. Several commented on their initial concern about the lack of staff resources possibly hindering their participation. Initial concerns were appeased as the MSR staff ensured patient privacy and were available to help answer questions regarding any logistical issues.

Summary:

- Recruitment methods have been effective and sufficient
- Suggestion given to provide written documentation of program expectations upon initial contact
- Hospitals eager to participate once logistics of program have been addressed by administration

ORIENTATION PROCESS

The orientation process varied across hospitals, but generally speaking, all provided positive feedback. The orientation process was felt by many as a chance to meet and connect with the other participating hospitals. Information that was presented was thought to be informative; however, some hospitals taking part in the group-organized orientations would have liked the opportunity to have an individualized orientation with just MSR staff. A couple of hospitals indicated that an individualized orientation can be less intimidating. Respondents varied on whether they preferred a group orientation or an individual orientation. Hospitals would like to see orientations tailored to meet the needs and requests of a particular hospital, taking into account the amount of prior knowledge the hospital has of the MSR. For hospitals with more knowledge, the orientation can skip past basic information; for other hospitals, the amount of information provided can be simplified and reduced in other ways.

Regarding training methods, most found them to be sufficient and effective. Since many hospitals upon joining were already taking part in other programs and registries requiring data abstraction, some felt the training to be tedious. Hospitals new to data abstraction though found the trainings to be extremely helpful

and found the MSR staff to be very responsive to questions as they first began abstracting data. Many hospitals commented on wanting additional trainings now, due in large part to the recent and upcoming changes to the core measures. Some hospitals mentioned not feeling current on all of the necessary requirements. Several of the hospitals who were in the first round of initial hospitals to join the MSR were interested in having a “refresher” training, as several changes have been made since joining in 2008.

As the trainings included going step by step through the data abstraction questions, hospitals felt they learned the necessary tasks needed. Many still find it difficult to identify patient populations to be included as not all cases are easy to define. Still, all felt that their questions are answered by MSR staff.

Summary:

- MSR staff clearly identified responsibilities of both themselves and the hospitals for participating
- The group-orientation process offered an opportunity to meet other participating hospitals and gain insight from other’s questions brought forth
- Suggestion made to have orientations tailored to the wants and needs of each hospital
- Proposal made to have more training opportunities available in the future
- MSR staff were and still are easily approachable for answering questions

HOSPITAL’S PLANNING PROCESS FOR SUCCESSFUL PARTICIPATION

Activities during the planning process varied among hospitals and depended on such factors as hospital size, presence of a stroke unit, and the level of staffing for stroke patients. In order to participate in the MSR, the hospital administration needs to be on board, and the necessary number and type of staff resources need to be sufficient and identified. Duties must be distributed accordingly to staff. Staff must be updated regularly with changes and additions that affect the care they provide.

Several hospitals already had stroke committees in place within their hospital, so education and discussion regarding the new adoption of the MSR program was not difficult. For hospitals new to having a stroke program, it took more planning and training of staff in order to have successful participation in the MSR. In order to effectively participate, hospitals rely heavily on their staff resources and the time commitment that is required of them. Along with the time commitment, financial resources are needed to accommodate the necessary personnel for not only data abstraction but also time needed for staff meetings, training, and frequent communication with the MSR program staff.

About one-half of the participating hospitals in the MSR currently are also participating in GWTG–Stroke. Hospitals participating in both programs were asked to identify the differences they personally experience between the two. In general, hospitals commented mainly on the level of responsiveness they obtain from MSR staff specifically, and their satisfaction with it. Most hospitals feel that there is no extra work to

participate both programs, since only a handful of data elements vary between the two programs. In general, these hospitals feel there are only slight differences, and that there are advantages and disadvantages to each.

Summary:

- Identification of staff and responsibilities of each member by hospitals is necessary for planning and preparation to participate in the MSR
- Time commitment and financial resources are required for successful participation
- Additional effort by hospitals participating in the MSR in addition to GWTG–Stroke is minimal

CHALLENGES EXPERIENCED WITH PARTICIPATION

Challenges experienced by hospitals vary and are related to issues both internal and external to the hospital. Several hospitals have experienced financial challenges regarding staff expenses, as data abstraction for several of the larger hospitals is quite time consuming. Almost every hospital commented on the economic burden that their hospital is facing and the budget cuts that in turn are affecting their participation in the program. Even though each hospital finds value in participating in the MSR and other stroke programs, it is difficult to carry out the necessary tasks to perform at a level they wish to reach.

Several hospitals have also voiced their confusion regarding the changes to the core measures that have occurred and will continue to occur in the upcoming months. It has been hard for hospitals to understand the differences relating to MSR, TJC, GWTG–Stroke, and data vendors that many use to report core measures. Hospitals reported that data definitions and elements differ among the programs and some have had challenges understanding which ones are specific to which program and how interpretation of data elements affects abstraction of patient charts.

However, most challenges being faced have been and will continue to be addressed by MSR staff. Internal challenges have for the most part been addressed personally by each hospital, but hospitals reported receiving the guidance and support from MSR staff when they have asked for it. When asked how MSR staff members can help resolve challenges, hospitals have asked that the MSR can continue to be a resource for them and be open to answering questions that arise.

Summary:

- Hospitals are faced with financial struggles to accommodate staff expenses
- Hospitals are experiencing confusion regarding the core measure changes
- Hospitals are having difficulty abstracting data and identifying certain patients
- MSR has been identified as being helpful and efficient in addressing individual hospital challenges

FINANCIAL THOUGHTS AND CONCERNS

After discussing financial concerns with each hospital, it was felt by the majority of the hospitals that the funds being granted to them by the program are not sufficient for successful involvement. However, several hospitals reported that they understand the benefits of the program aim to outweigh the costs incurred by participation in the MSR. The financial expenses incurred by the hospitals vary depending on each stroke patient volume and the resources required for participation. Hospitals reported that the funds granted do not cover the necessary staff expenses for participation. While hospitals are presently managing their expenses, many have voiced concerns for what the future entails for their hospital. The results obtained from the financial questions asked of the hospitals are summarized below.

The estimated financial costs incurred by hospitals ranged from zero to \$70,000 annually. Included within the estimated costs are equipment, staff hours required to attend MSR meetings and teleconferences, and most importantly, staff hours required to complete data abstraction. Many hospitals feel that the program should consider the amount of patients one hospital receives when determining grant awards. Several felt that it does not appear to be fair to have a large volume hospital receiving the same funding as one that sees only a couple of stroke patients in a given year. With this in mind, the issue of compensation on a per case basis was queried.

- Nine (9) of 16 hospitals reported that they did not feel they had sufficient funding. 3 of 16 reported that they currently have enough funding to participate now, but that come next year they probably will not. 3 of the 4 hospitals that said they have sufficient funding have less than 150 beds.
- Thirteen (13) of 16 hospitals are interested in having compensation on a per case basis. 8 of the 13 have greater than 400 beds. Only 1 of 9 large hospitals was not interested in compensation on a per case basis. 2 of 7 small hospitals were not interested in compensation on a per case basis.

Only one hospital participating in both GWTG-Stroke and MSR said it did not want compensation on a per case basis. Most hospitals found that the funds given from the MSR covered the software costs of GWTG, but was not sufficient to accommodate staff resources. A couple of hospitals not participating in the GWTG program reported that they receive a slight net gain of about \$300 by not having to pay GWTG fees, but this \$300 still does not support staff time.

Hospitals are very interested in how the MSR can better accommodate the staff expenses they incur to perform registry activities. Several hospitals asked if it would be possible to have the MSR provide a data abstractor, or if it would be possible to reduce the number of charts expected to be abstracted in a given time period. With budget cuts occurring everywhere, including in every hospital department, many

hospitals feel stretched in meeting registry requirements. The financial concerns being reported will thus have to be a topic of discussion for the future of the program.

Summary:

- General consensus that funds granted to the hospitals are not sufficient for successful participation
- Hospitals voiced concerns about lacking the necessary financial resources to successfully participate in the registry
- A majority of hospitals, both large and small volume, are interested in compensation on a per case basis

Conclusions

The feedback obtained during each of the interviews with the 18 currently participating hospitals was mainly positive. Hospitals were eager and willing to offer input and respond to this evaluation. While hospitals reported concerns or challenges, they indicated continued support of the MSR mission: to increase public awareness of stroke treatment and prevention, to improve the quality of care for acute stroke patients, and to decrease the rate of premature death and disability through secondary prevention. Hospitals believe that by participating in the MSR, they not only are benefitting their own patients, but that they are also benefitting acute stroke patients statewide.

Next Steps

The MSR staff will aim to improve in areas of concern identified during the interviews. The questions, comments, and suggestions that were raised during each of the interviews have been documented. The MSR staff intends to address these through the following ways

- Using monthly emails from principal investigator to hospitals to answer specific questions
- Clarification of issues, expectations, and other questions through new program information documents and postings on the program website
- Prioritizing issues for discussion among MSR staff and the MSR Advisory Committee
- Taking appropriate actions for programmatic adjustments and changes as needed and as appropriate

Appendix A. Evaluation Questions

Area: Recruitment and Retention

REASONS FOR VOLUNTEER INVOLVEMENT

1. What motivated your hospital to join?
2. What incentives or valued interests contributed to your participation?
3. What kinds of information should a new hospital considering joining have and why?
4. What areas of concern your did your hospital face initially before entering into the registry?
5. What motivates your hospital to stay involved?
6. What can the registry staff members at MDH do to keep hospitals involved?

RECRUITMENT METHODS

1. What did your hospital think of the recruitment process: What part(s) of this process helped make your hospital decide to join?
2. What did your hospital like about the recruitment process? Dislike?
3. Were the objectives of the program clearly identified during the recruitment process?
4. Were the program expectations clearly identified during the recruitment process?
5. How can MDH most effectively communicate the program's expectations to hospitals?

ORIENTATION PROCESS

1. Was your hospital sufficiently oriented when you joined the program? Did the orientation adequately prepare your hospital for participation in the program? Why or why not?
2. What should be added or changed to the orientation process?
3. What did your hospital think of the training for data abstraction? What were the important things learned and were then able to be used from the trainings?
4. Were the training methods effective and useful for your hospital? Why or why not?
5. How can the trainings be improved?
6. What other trainings are still wanted or needed?

Area: Registry Implementation

PLANNING PROCESS FOR INVOLVEMENT

1. What are the key steps that must be undertaken by or available to a hospital for successful participation in the stroke registry? What activities did your hospital undertake to begin its involvement?
2. What kinds of work must be done by hospitals to ensure successful participation?
3. What types of resources do hospitals need in order to collect and report data to the registry?
4. What are the major differences in participating in the stroke registry versus GWTG-Stroke?

CHALLENGES EXPERIENCED

1. What are the challenges in trying to participate in and implement the stroke registry?
2. What processes were used or will be used to try to resolve the challenges?
3. What challenges have not been successfully resolved? Why?
4. What can the registry staff at MDH do to help resolve challenges?
5. Are hospitals overly burdened by the registry? What can the registry staff do to help?
6. Would it be beneficial to have online access for participating hospitals to share information and advice?

FINANCIAL THOUGHTS/CONCERNS

1. What are the financial costs incurred by your hospital to participate in the stroke registry? Are the funds granted sufficient enough for successful involvement?
2. What resources would be ideal for the registry to provide?
3. What are the expenses your hospital incurs regarding staff time expenses or estimated hours/month spend on registry-related activities?
4. Would it be beneficial to have compensation on a per case basis?