



STROKE NETWORK of Southeastern Ontario

Geographic Consolidation of Acute Stroke Care Improves Outcomes for Three Communities



Brockville
General Hospital



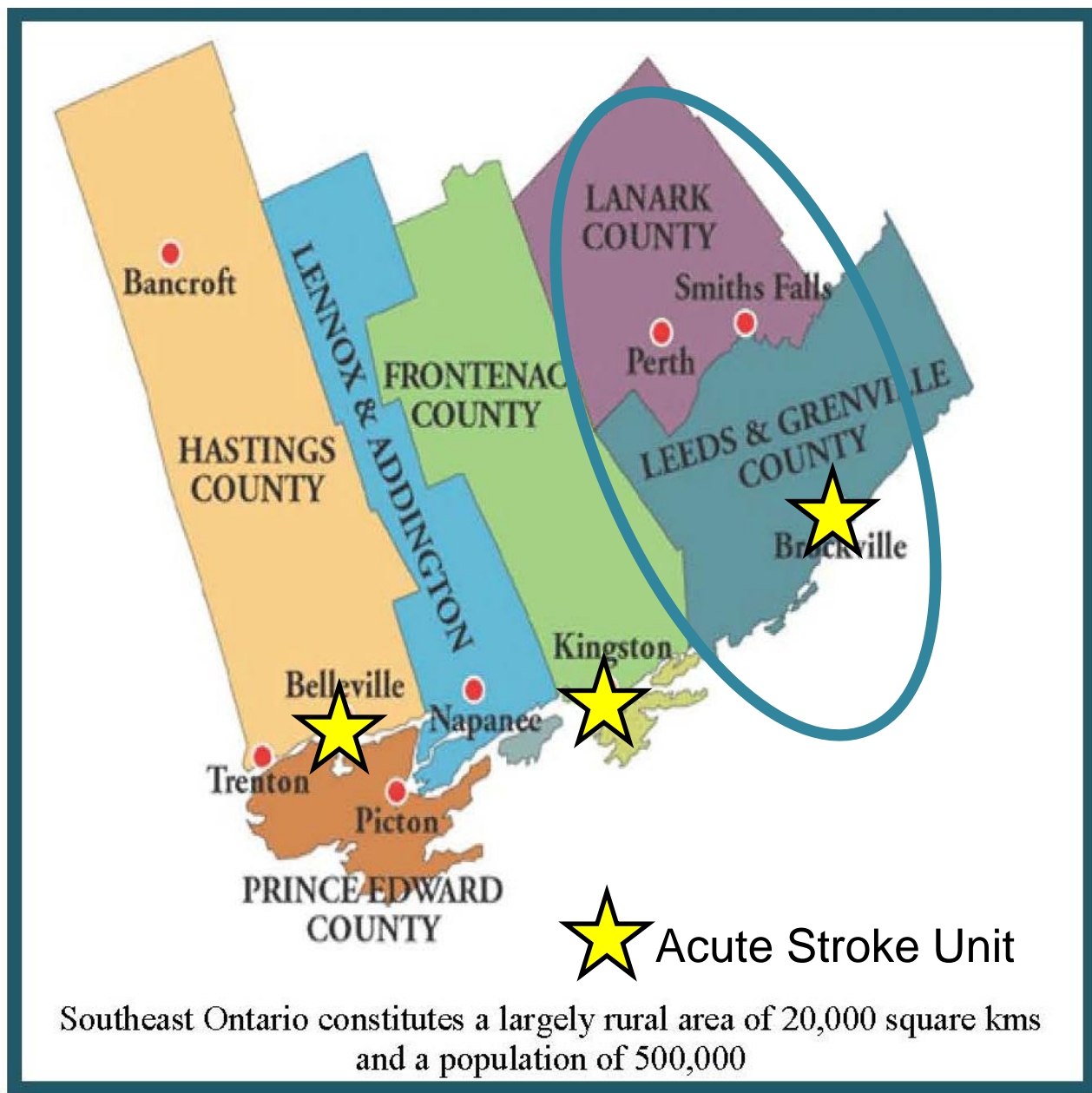
Perth and
Smiths Falls
District Hospital

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1. Stroke Network of Southeastern Ontario 2. Kingston Health Sciences Centre 3. Retired 4. Perth and Smiths Falls District Hospital 5. Brockville General Hospital 6. South East Local Health Integration Network 7. Queen's University 8. Stroke Survivor

Background

Two community hospitals across three sites in Southeastern Ontario (Brockville and Perth and Smiths Falls) worked together to improve stroke mortality rates. This was achieved through the collective aim: “75% of all patients admitted with stroke in the Lanark, Leeds and Grenville (LLG) area will receive care by an interprofessional team in a geographically consolidated acute stroke unit (ASU)”.



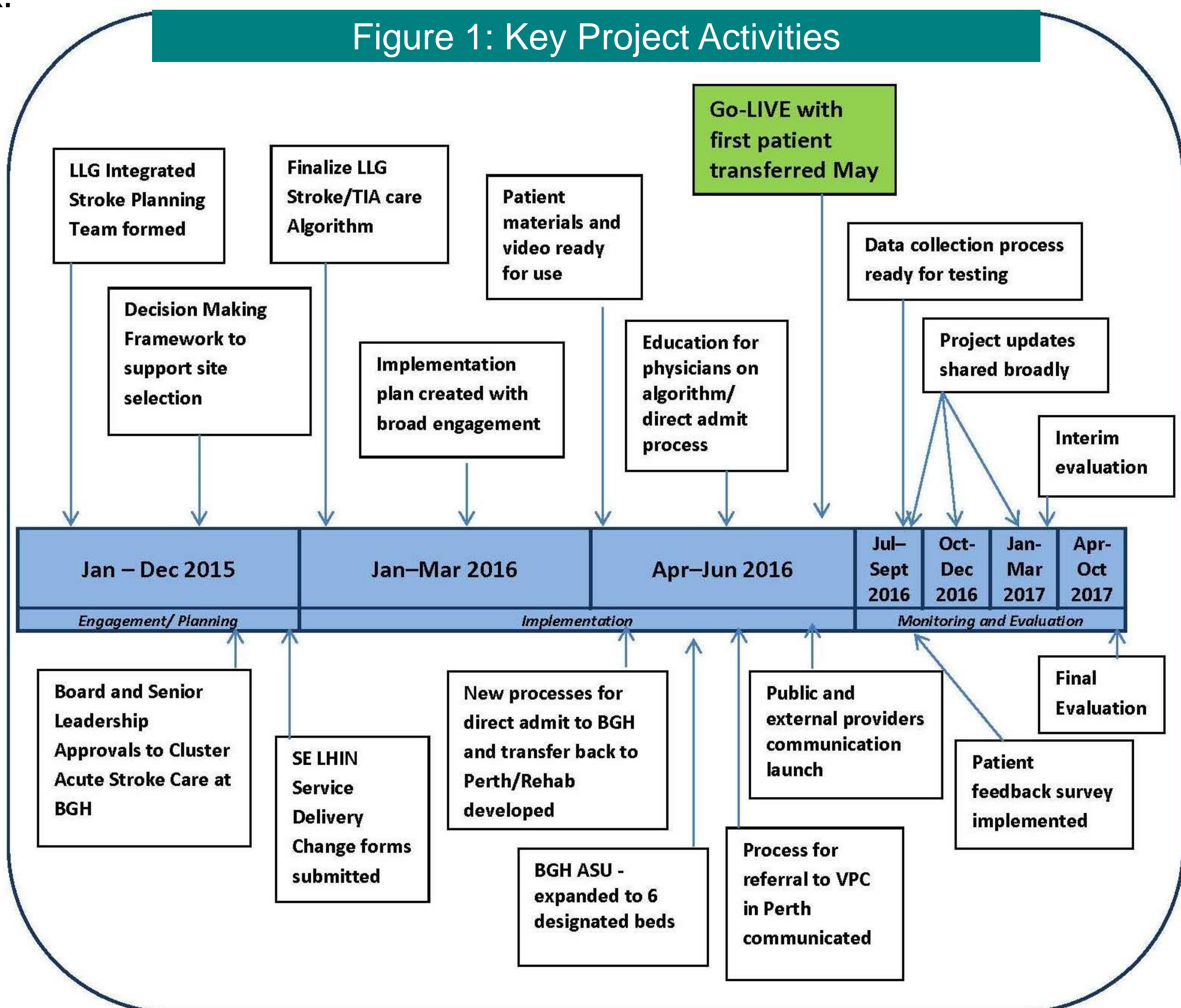
Methods

An Integrated Stroke Care Planning Team including patient advisors led completion of a project plan between January 2015 and launch in May 2016.

Project Components (Figure 1):

1. Decision making framework for ASU site selection;
2. Algorithms to support ED flow to the mutually chosen ASU site at Brockville General Hospital;
3. Referral processes for return to local community or hospital site;
4. Communication plan;
5. Plan for financial transfer;
6. Evaluation plan including patient/family and provider feedback.

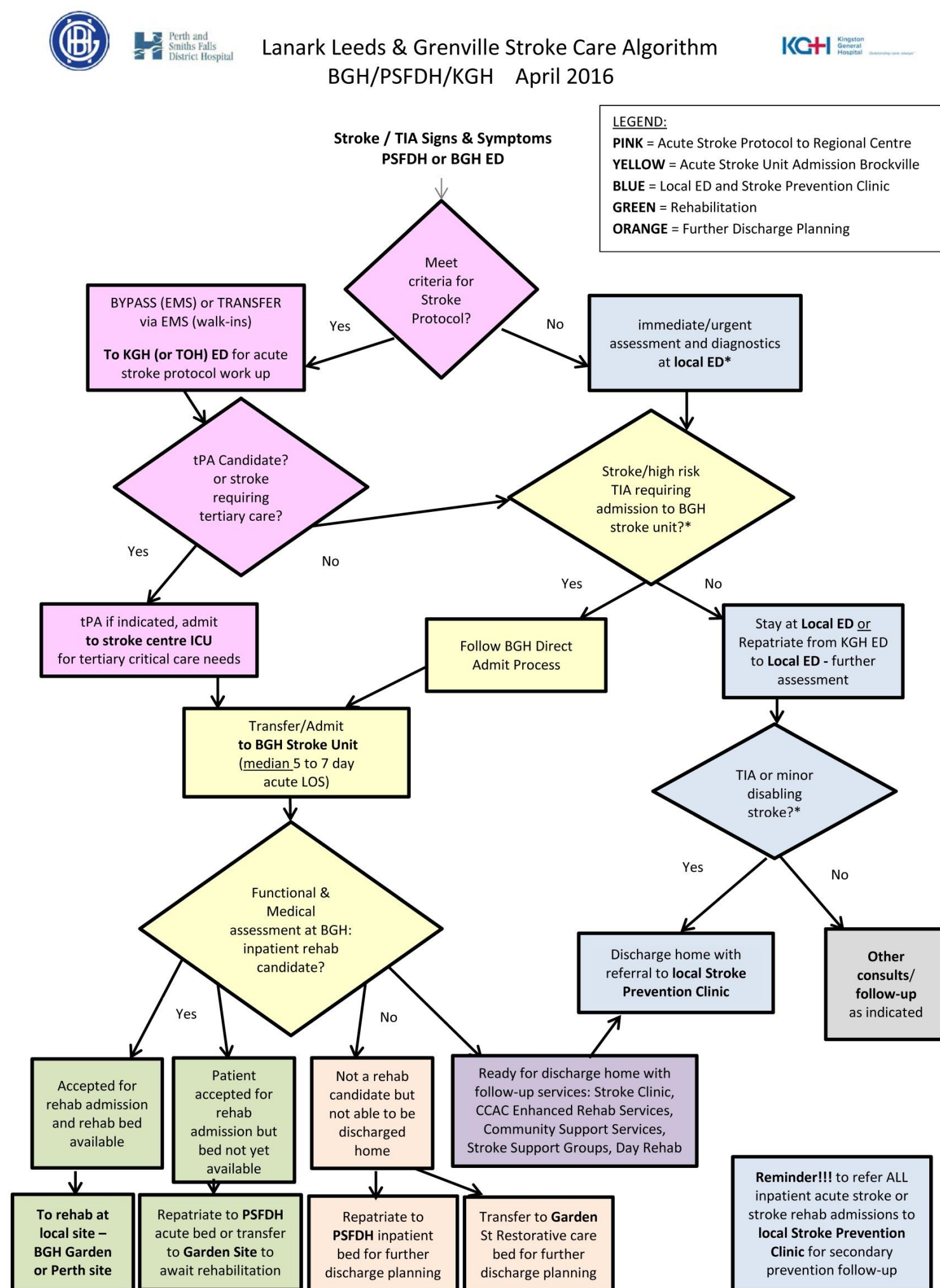
Figure 1: Key Project Activities



Methods

Following Board approvals, multiple engagement sessions were held with frontline staff to seek input into planning. This led to development of new processes (Figure 2), patient and provider learning materials, and education to prepare for first patient transferred. The communication plan included a media release and a celebratory launch.

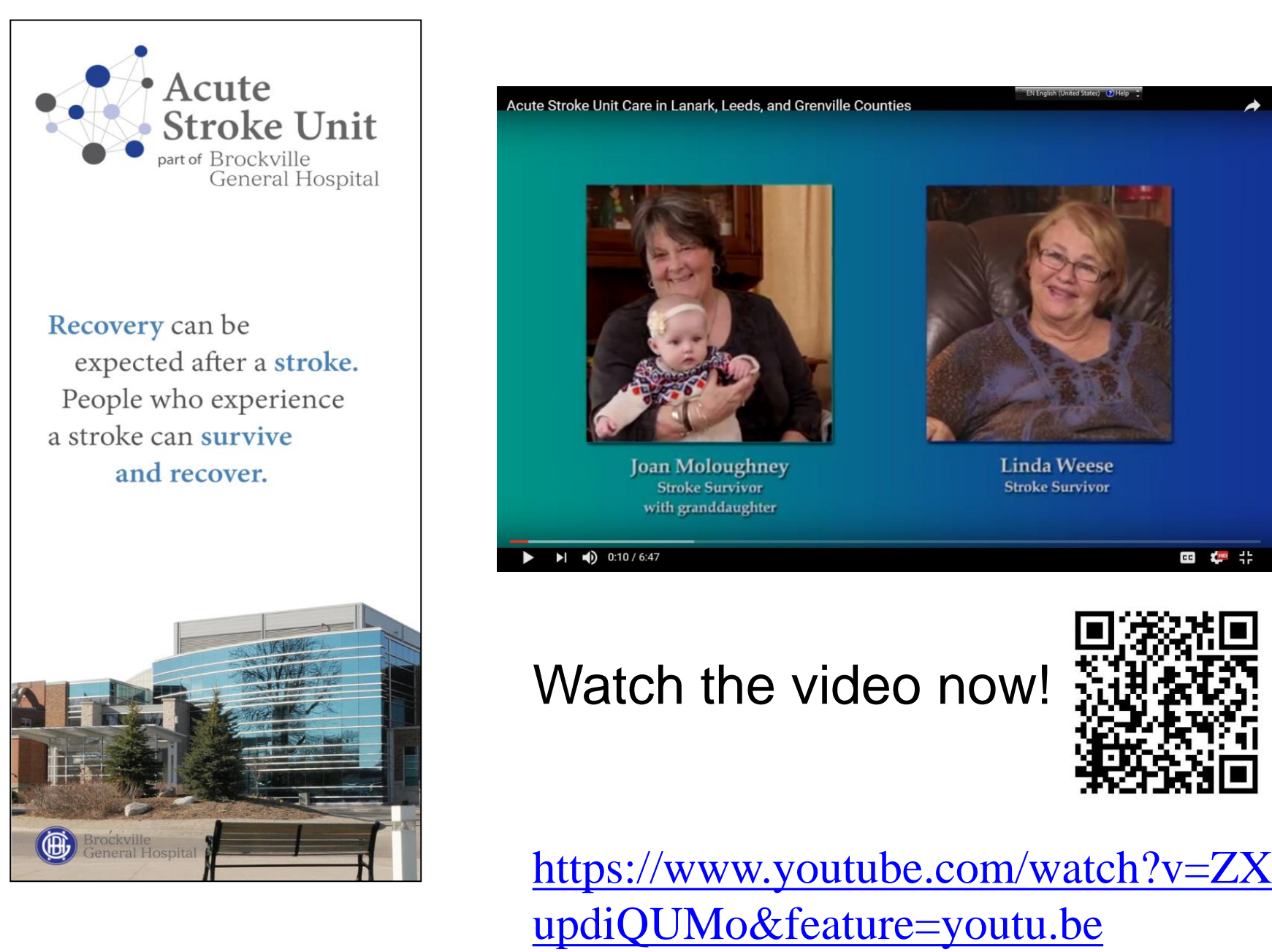
Figure 2: Transfer Algorithm



Patient Advisors

Patient Advisors assisted in the creation of educational materials for patients, families and providers. These included a brochure and video describing the benefits of the ASU (Figure 3).

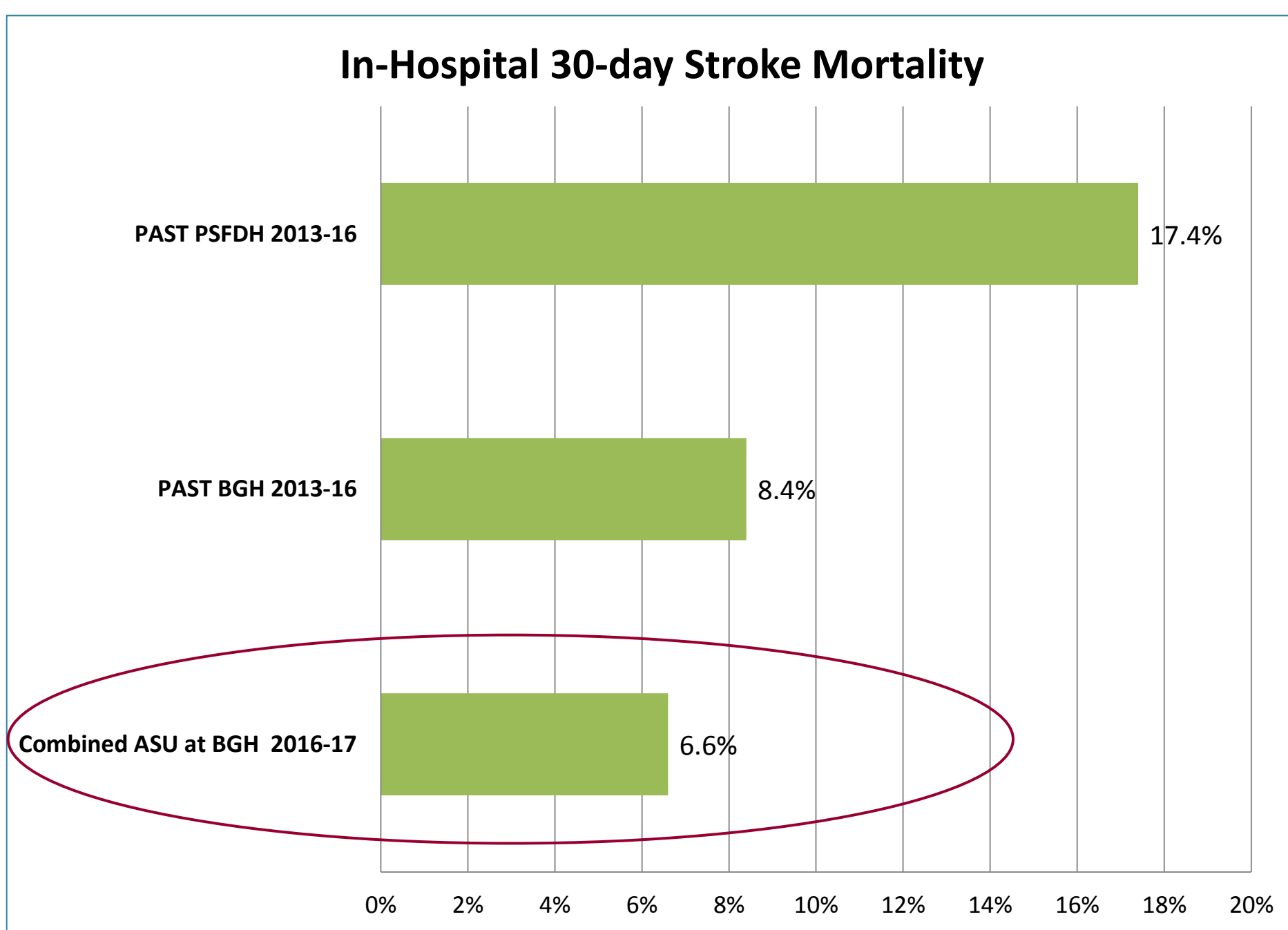
Figure 3: Education Materials



Results - Outcomes

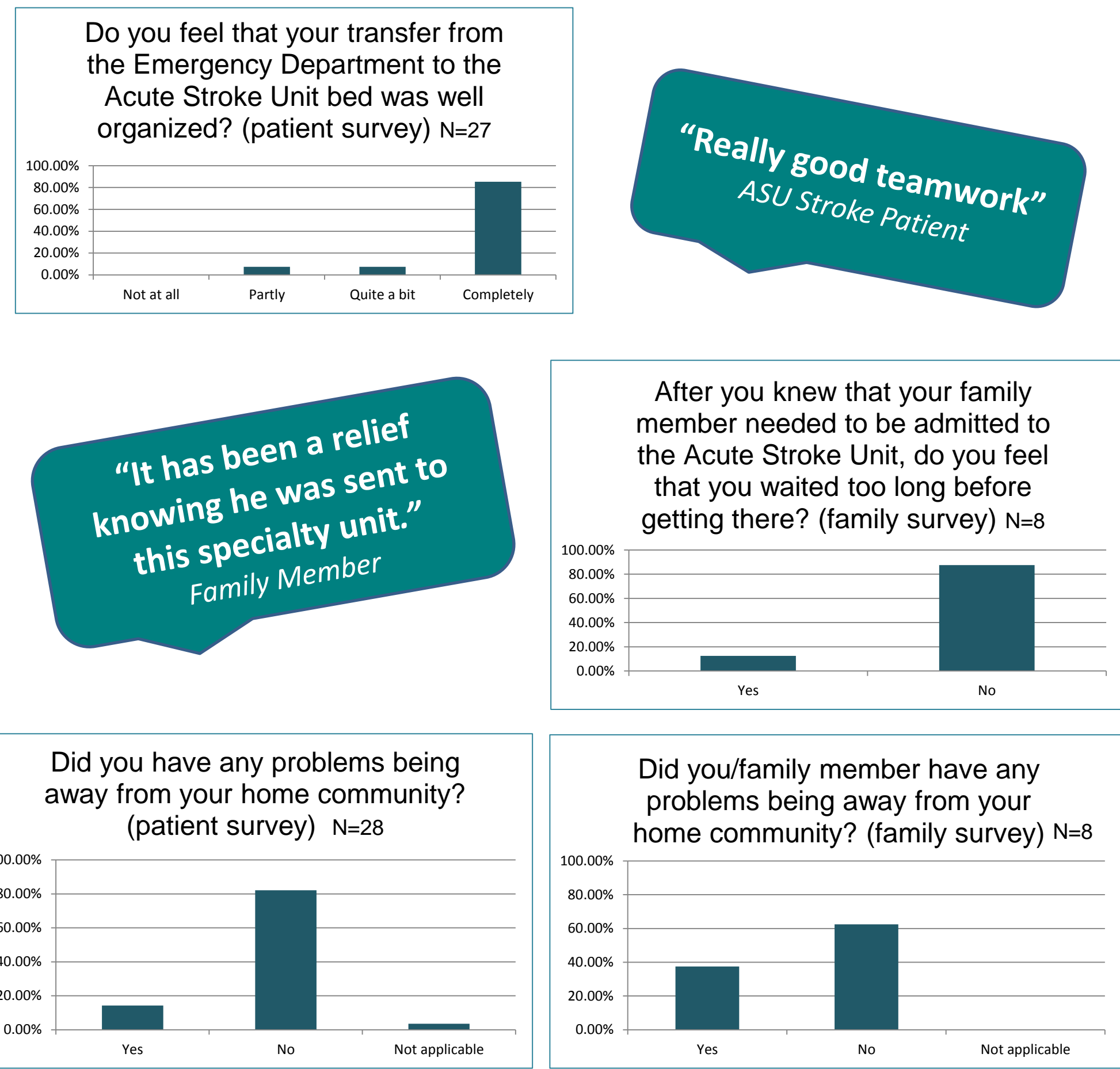
On May 2, 2016 the Acute Stroke Unit at Brockville General Unit began receiving transfers from Perth Smiths Falls District Hospital. As of March 31, 2017, 53 patients received ASU care that previously would not have had access to the stroke unit. Over the past year, the combined ASU provided care to 226 patients from across LLG Counties with an 88% stroke unit utilization rate. Interim data showed that in-hospital 30-day all-cause mortality rates decreased from 17.4% (Perth and Smiths Falls) and 8.4% (Brockville) for the three years pre-implementation to a current combined rate of 6.6% (Figure 4).

Figure 4: Mortality Rates



Patient/Family Feedback

Patients and families were satisfied with the transfer and care. Responses were received from 29 patients transferred from Perth and Smiths Falls and 8 of their family members. Generally, both groups were satisfied with the process, however family members noted a slightly higher concern than patients about being away from their local community.



Provider Feedback

42 provider surveys were collated at six months and 18 surveys at one year. Providers supported process changes and continuous improvements. Key themes are described below.

What's working well?	What could be improved?
<ul style="list-style-type: none">• Patients accessing timely best practice stroke care• Collaborative planning and implementation• Joint problem solving	<ul style="list-style-type: none">• Detailed patient information on transfers• Access to CT prior to transfer• Afterhours processes

Conclusions

Collaboration to create a shared local ASU across three hospital sites 45 to 60 minutes apart is feasible and effective. Results demonstrate patient, family and provider satisfaction and improved patient outcomes.



ASU interprofessional stroke team now available to all LLG patients.