In this section, you will find a variety of resources to help you improve outcomes and reduce costs in adult cardiac surgery in your organization:

- Reducing the Burden of Heart Disease in the Community
- Cardiac Surgery Site Visits: Guidelines for Successful Visiting
- Annotated Bibliography
- What To Do Next
Reducing the Burden of Heart Disease in

Increasingly, successful cardiac surgery programs are looking beyond the walls of the hospital to the needs of the communities they serve. The ideal cardiac surgery program understands that an important part of its mission is to decrease the burden of coronary artery disease in the community.

The organizations in the Collaborative worked in their communities in a variety of ways, including the following:

**Outreach Educational Sessions**

Scott & White Memorial Hospital, Clinic and Health Plan conducts a regular Women’s Heart Conference, in which cardiac surgery staff and outside speakers address the risks and prevention of coronary artery disease.
the Community

**On-site Educational Programs**

Inova Fairfax Hospital has constructed a special operating room called “the Dome,” with a viewing area so that groups can watch the surgery. The cardiac surgery department has created a complete educational program around the viewing experience, explaining coronary artery disease and its prevention. After the surgery, visitors can ask the surgeon questions. This program hosted 4,000 visitors in 1997. Reservations for the program are now booked months in advance.

**Childhood Education**

Providence St. Vincent Medical Center has developed heart care coloring books, which they distribute to schools around the city, so that children can begin learning about heart disease at a young age.

**High School Screening and Education**

In order to educate young people about issues surrounding heart disease, clinicians at Ohio State University Medical Center visit local high schools, giving lectures on smoking cessation, nutrition, stress reduction, and exercise. The clinicians also screen high school students, evaluating their cholesterol levels, blood pressure, body mass, dietary fat intake, stress, family history, and lifestyle habits such as smoking, nutrition, and exercise. The clinicians then provide students with results, counseling, and follow-up testing—and continue to monitor them throughout high school.
Cardiac Surgery Site Visits: Guidelines

One of the best ways to accelerate improvement is to visit other organizations and study their cardiac surgery systems. Such visits expose teams to new insights that might otherwise be unavailable. Discovering the differences between your organization’s processes of care and another organization’s leads to a rich list of changes to test.

The following guidelines can help an organization arrange and conduct a site visit. Keep in mind that both teams need to be prepared to learn and to teach. The visitors have as much to offer as the hosts.

Deciding on the Host Site

• Decide what process you are interested in improving.
• To identify an organization that excels at this process, check the literature, ask colleagues, or examine benchmarking data—parameters such as length of stay, ICU length of stay, operating room time, and extubation time—and compare it to your institution’s data.
• Contact that organization and set up a site visit.

Preparing for the Site Visit

• Set specific goals for the visit. State objectives, generate a list of topics to be covered, and create an agenda in advance.
• Exchange copies of your materials—policies, protocols, and guidelines—with your hosts.
• Create a multidisciplinary visiting team that includes all owners of the process you are focusing on. Do not go on a visit until surgeons, perfusionists, nurses, physician’s assistants, anesthesiologists, cardiologists, and intensivists are available to attend. Some teams find it useful to include a “medically naive” technology management specialist and a senior leader in the visit.
for Successful Visiting

Running the Visit

• Begin each visit with a general meeting to review the goals, objectives, and agenda. The host institution should make every effort to conduct business as usual and provide full access to visitors. Visitors should devote much of their time to observing a normal day’s activities. Each team member should attend to their own specialty “i.e., OR Nurse observers, OR Nurse.”

• Focus on processes of care. As team members walk through the entire process, observe all critical aspects including the following:

  Process ownership and process leadership. Who is responsible for a particular process, who seems to be in charge, and who actually does the work?

  Communication. Are communication paths clear and effective? Are there mechanisms for feedback? Is there potential for confusion?

  Decision making. Is there confusion about who will make the decision? Are decisions timely? Are all relevant parties present at decision time?

  Use of data. What data are recorded? What data are available to support decision making? How are data used?

  Variability. Are there obvious situations in which a given process can be performed in different ways? Does individual style introduce variability into the process?

  Process attributes. How do staff fatigue and environmental characteristics such as temperature, lighting, variation of equipment and facility design, storage of supplies, use of checklists, and logging of activities affect outcome?

• Record your observations, focusing on similarities to and differences from your processes of care, rather than attempting to record all the day’s events. For example, use a table with your process in one column and the host’s comparable process in the other.

• Keep the use of data in perspective. Use data only as tools to understanding the effects of changes that have been made; remember, they are a means to improvement, not an end.

• Debrief together at the end of the day. Review impressions and observations, resolve uncertainties, critique the visit, and make plans for follow-up.

Following Up after the Visit

• Meet with visiting team members to debrief for one hour immediately after the visit to help capture the key observations.

• Have visiting team members write a report of their observations and share it with the host organization.

• Arrange a follow-up conference call within 10 days of the visit.

Thanks to Joseph F. Kasper, ScD, MBA, Adjunct Professor of Community and Family Medicine and Engineering, Dartmouth Medical School, for helping the Adult Cardiac Surgery Collaborative refine a strategy for site visiting.
Annotated Bibliography

GENERAL LITERATURE ON CARDIAC SURGERY


APPROPRIATENESS OF CARDIAC SURGERY


ATRIAL FIBRILLATION


EARLY EXTUBATION AND FAST-TRACK RECOVERY


IMPROVING CARDIAC SURGERY


**MEASUREMENT**


**MORTALITY AND RISK ASSESSMENT**


**PRACTICE GUIDELINES AND CRITICAL PATHWAYS**


VISITING


GENERAL LITERATURE ON QUALITY IMPROVEMENT

As the title suggests, the authors link theory to practice in continuous quality improvement, based on their experience implementing quality management at the University of Michigan Medical Center. Chapter 7 explores the role of physicians.


Provides a summary of the work of leading researchers in health services research, with an editorial commentary at the end of each chapter.


This book provides critical knowledge about improvement and formed the basis for many ideas in this Guide.


The Guide is based on the work of 27 health care organizations that worked together for a year to reduce delays and waiting times in surgery, the emergency department, and clinics and physicians’ offices, and to increase access to care.


The Guide is based on the work of 37 health care organizations that worked together for a year to reduce costs and improve outcomes in adult intensive care.
What To Do Next

This Guide is full of ideas for change and examples of organizations that have tested those ideas and made real strides in improving outcomes and reducing costs in adult cardiac surgery. But knowing what changes to make and actually making them are two very different things.

The following checklist can help you take what you have learned and put it into action:
Set an aim related to improving outcomes and reducing costs in adult cardiac surgery.

Make the aim ambitious, precise, and feasible.
Meet with senior leaders to ensure that the aim meets with the strategic mission and has their specific support.
See Part 3, Setting Aims, p. 86.

Form a team.

Think about the different areas that will be affected by the aim, and make sure the team has the right mix of people (system leadership, technical expertise, and day-to-day leadership) to get the job done.
See Part 3, Forming the Team, p. 88.

Identify a measure and track it over time.

Establish a way of measuring that will tell you if the changes you are testing are helping to achieve the aim. Choose a measure that relates directly to the aim and plan a simple way to collect the data.
See Part 3, Establishing Measures, p. 92.

Develop a good idea for change.

Use the changes in Part 1 and the change concepts in Part 4 to help you come up with good ideas for changes.

Test the change on a small scale.

Remember, all improvement requires making a change. Begin testing a change on a small scale as quickly as possible.
See Part 1, Changes to Improve the Cardiac Surgery System, p. 1, for many examples of changes tested by organizations in the Collaborative.