

**Appendix D. High Reliability Organization Learning
Network Operational Advice from the Fairview Health
Services and Allina Hospitals & Clinics Network Site
Visit**

Contents

Overview.....	3
Value in Community Collaboration.....	4
Model for Community Collaboration	5
Background.....	5
Minnesota Collaborations	5
Minnesota’s Model for Collaboration.....	7
Specific Improvements through Community Collaboration.....	8
Changing the Punitive Culture Mind-Set and Managing Media Presence	8
Standardizing Medication Concentrations and Eliminating Medication Abbreviations	10
Standardizing Surgical Site Marking Protocols.....	11
Standardizing Measurement Processes and Results Reporting	11
Creating Systems to Improve Quality of Care.....	12
Conclusion	13

Overview

This document summarizes practical suggestions on how to create a community level infrastructure for supporting improvement initiatives that are aimed at making health care services provided within that community safer and more reliable. All ideas reflected in this document were suggested by representatives of Allina Hospitals and Clinics, Fairview Health Services, participants in the statewide collaboration including representatives from the Institute for Clinical Systems Improvement, the Minnesota Alliance for Patient Safety, the Minnesota Community Measurement Project, and Safest in America, as well other healthcare systems attending the meeting as part of the AHRQ-sponsored High Reliability Organization (HRO) Learning Network.

Participants in the meeting were interested in how Allina and Fairview joined with other Minnesota health care organizations to work collaboratively towards improving quality, patient safety and reliability at the community level, as well as how those efforts could be adapted for different communities across the nation.

This document synthesizes the meeting discussion to answer three key questions about community collaboration:

- Why is community collaboration a valuable strategy for enhancing patient safety and organizational reliability?
- How do you begin developing a successful model for community collaboration?
- What improvements in patient safety and organizational reliability can be achieved through community collaboration?

The discussion of these questions will help to associate how community level collaboration can advance efforts to use high reliability organizing concepts to support health systems' efforts to improve patient safety and quality. Some specific examples are also provided to demonstrate how collaboration across a community can not only improve safety and reliability, but can also eliminate redundant work and create a more standardized approach for implementing new processes.

Other materials that were shared at the site visit, including slides from the presentations and other examples of improvement materials, are available on the HRO Learning Network extranet as well as from AHRQ and Delmarva staff.

Value in Community Collaboration

The concepts of patient safety and organizational reliability typically focus on units or hospitals or clinics within individual health care systems that are working to improve quality and reduce errors. These efforts are, however, often limited by factors at the environmental or community levels. When recommended behaviors differ across systems or when regulations or other environmental factors make it harder to do the “right thing,” efforts at the hospital and microsystem levels are more difficult to implement and sustain. Such barriers suggest that collaborations between organizations in the same community can be a very effective and rewarding strategy in working towards improvement goals.

Healthcare systems in the Minneapolis/St. Paul area began talking informally with each other and with other key stakeholders seeking to promote improvements in the quality and efficiency of healthcare. Over time, these discussions have led to a range of initiatives that have positively impacted care. Looking back on these experiences, leaders of these initiatives could identify a range of benefits of working collaboratively on key issues, including:

- **Gaining new ideas and insights.** Engaging in community collaboration with other organizations with similar quality improvement goals creates a great resource and forum for dialogue about ideas and insights regarding regional issues that can help health care systems learn and grow from each other. Instead of facing the challenge of patient safety and organizational reliability independently, collaborations can offer support and ideas for organizations that are involved.
- **Addressing environmental barriers more effectively.** Collaborating on community level barriers to improve safety and reliability through collaboration is more likely to be successful than individual organizations’ attempts to address the same barriers. By engaging all of the key stakeholders within a community, organizations have more leverage to affect change on a larger scale. Without the power of community alignment, individual organizations may falter and be more at risk in their attempts towards community-level change. For example, cross-community collaborations can make it easier to work with legislative groups and occupational oversight boards to change policies needed for a culture of high reliability. Broad-based support is critical to efforts to develop an innovative and successful system for reporting near misses and errors.
- **Achieving standardization.** Sharing a workforce among hospitals, including nurses and specialists, is great motivation for standardizing forms and processes across all institutions. This strategy has reduced variations in work patterns, as well as the potential for errors, and unnecessary re-work. Additionally, community collaborations create opportunities for standardizing the measuring and reporting of quality issues. This has made it easier to more accurately set priorities, develop consistent requirements, and to evaluate progress.
- **Building relationships.** Working collaboratively on patient safety and organizational reliability can result in strong connections between organizations in the same community. The stronger the community network, the more widespread the quality improvement efforts and those results may extend within that community.

Model for Community Collaboration

Background

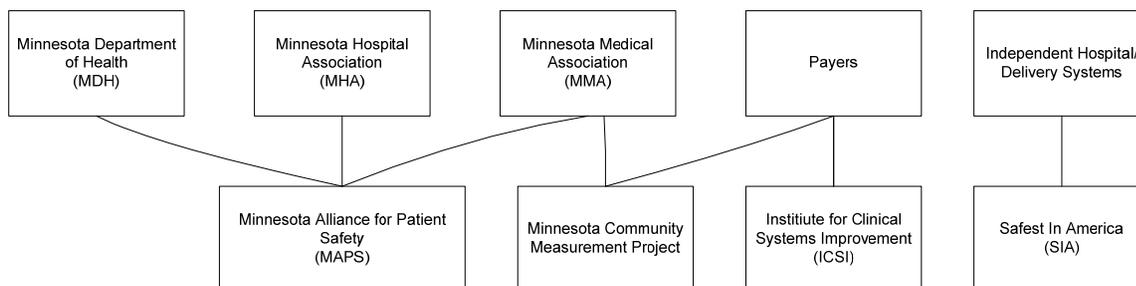
Some aspects of the current climate in Minnesota may have enabled leaders to more rapidly develop effective community collaborations. Although it is a very competitive marketplace, Minnesota does not have any for-profit HMO's or for-profit hospitals. It does have leaders for its healthcare organizations who know each other and are familiar with challenges that they and their peers are facing. Although less than 10 years ago, collaboration between healthcare stakeholders was very limited, there has been a growing awareness that it was possible to compete on aspects of care while still collaborating on safety and some quality issues in ways that would be mutually beneficial. This section offers insights into how Minnesota evolved into a market with appreciably more collaboration on quality and safety issues than exists virtually anywhere else. It addresses the following two questions:

- Which community organizations are involved in the collaborative network that has formed in Minnesota?
- What practical insights can be acquired from the work that has been done in Minnesota about how a successful model for community collaboration can be created?

Minnesota Collaborations

The past five to six years in Minnesota yielded an evolution in collaboration that was fueled by the Harvard Executive Session on Medical Error and Patient Safety. Harvard Executive Sessions bring together senior leaders to learn and act on a variety of issues through a series of dialogues to address a topic of significance. After the Harvard Executive Session on Medical Error and Patient Safety, leaders in Minnesota decided to form their own local version: The Minnesota Executive Session on Patient Safety. Once leaders were engaged, the next steps were to determine 1) which community health care providers and associations would be willing to collaborate 2) how that collaboration would provide assistance to and be beneficial for hospitals 3) how to define the role of the state 4) how to design a measurement and reporting process and 5) how to create a non-punitive culture that breeds transparency. The diagram below illustrates the current structure of the Minnesota Collaborative Network.

Diagram 1.



The following table provides more detail about the four primary organizations shown above and their role in the Network.

Table 1.

Organization	Description
Minnesota Alliance for Patient Safety (MAPS)	MAPS is a partnership among the Minnesota Hospital Association, Minnesota Medical Association, Minnesota Department of Health, and more than 50 other public-private healthcare organizations working together to improve patient safety. MAPS was formally announced at a press conference on November 1, 2000. Its mission is to promote optimum patient safety through collaborative and supportive efforts among all participants of the healthcare system in Minnesota. Its goal is to improve the culture and to mobilize community resources for patient safety. MAPS is governed by three structural bodies in order to make substantial change, share leadership, engage a broad stakeholder group, and drive action: executive committee, steering committee, and the subcommittees and task Forces. The MAPS governing principles include leadership, membership, operations, expectations of MAPS members, resources and support, and MAPS legislation review.
Minnesota Community Measurement Project (MNCM)	The Minnesota Community Measurement Project (MNCM) is a non-profit community-based organization, dedicated to accelerating the improvement of health through public reporting. MNCM has a 16-member board of directors, with representation from health plans, hospitals, physicians, employers, business groups, and consumer organizations. The organization strives to: share reliable quality information that clinicians can use for improvement purposes and consumers can use to make choices about their care; reduce reporting-related expenses for medical groups, health plans, and regulators; and communicate findings in a fair, usable and reliable way to medical groups, regulators, purchasers and consumers. Since 2002, MNCM's collaborative community approach has encouraged medical groups to improve health care quality by publicly reporting on several measures. All seven of Minnesota's non-profit health insurance plans participated in developing the initial MNCM reports. MNCM is involved in a national initiative funded by CMS and AHRQ to pool data in order to produce reliable quality measures.
Institute for Clinical Systems Improvement (ICSI)	ICSI is an independent, non-profit organization, originally focused on developing guidelines for improving quality of care, now facilitates the collaboration of 56 medical groups, hospital systems, and 6 health plans in the state of Minnesota and in adjacent areas of surrounding states. Founded in 1993 by Health Partners Medical Group, Mayo Clinic and Park Nicollet Health Services; today, the combined medical groups and hospital systems represent more than 7600 physicians. Over the years, the ICSI members realized that in order to improve care, they needed to create more than standards and to help organization understand basic quality improvement principles. Since then, ICSI has become a very successful organization for supporting improvements in quality and patient care at the community level
Safest In America (SIA)	Safest in America is a collaboration of ten Twin Cities and Rochester hospital systems and ICSI. SIA works to improve patient safety by learning from the aggregate experiences of all group members; via data sharing, highlighting best practices, and implementing evidence-based, community-tested solutions. Safest in America committees are

Organization	Description
	facilitated by ICSI. ICSI helps hospitals select topic areas, review literature for best practices, select process and outcome measures, and monitor progress. The work of Safest in America is peer review protected, meaning each hospital is committed to sharing data, maintaining each other's confidentiality, and refraining from release of their own data for competitive purposes. Protocols developed during SIA initiatives including safe prescribing, safe site surgery and hospital-acquired infections, amongst other topics, are publicly available to any interested hospital.

Minnesota's Model for Collaboration

While leaders were deliberate and thoughtful about setting the aim of improving patient safety and reliability, developing successful community collaboration in Minnesota did not happen overnight nor was the path for developing a successful collaboration always apparent. Reflections at the HRO Network meeting on the formation of the collaborative network in Minnesota over the past few years resulted in valuable insights that others just beginning to explore community collaborations might consider:

- Do not compete on patient safety.** A frequent barrier in the collaboration process is ensuring that organizations are willing to work together and share information, instead of being focused on or worried about competing with each other. Health care systems in the same community have the same market. So when these organizations first come together to begin a collaboration, it is natural for them to be hesitant about sharing quality and operational information with their competitors. It is essential to agree at the beginning of any collaboration that the organizations involved will not compete on patient safety initiatives such as wrong site surgery and medication abbreviation errors. Competing on patient safety will both derail collaborative efforts towards improvement as well as misalign individual system focus with the wrong priority. Even in areas where hospitals do compete, there still may be grounds for collaborating with each other. In Minnesota, even though there is competition related to performance on quality measures, hospitals have worked collaboratively to develop common quality metrics that can be used to measure comparative performance.
- Do not underestimate the value of incremental muddling.** Many of the successful collaborations began with informal conversations between relevant leaders about issues of potential interest. While some of these discussions did not progress, others evolved into more focused discussions and formal agreements to work together to achieve important goals. This approach to planning allows ideas to be explored without major commitments of time or resources and reduces the likelihood of a major investment in ideas that lack widespread support.
- The importance of leadership cannot be overestimated.** Having the right people in the right place, at the right time, is only half the battle. Leaders must be willing to take small steps toward collaboration even when they are not sure where it is leading. Sometimes these discussions lead to clear proposals for collaboration; other times they lead to the decision that the idea being considered is not a high enough priority to pursue at that time.

- **Local level community collaborations can be more powerful than national collaborations.** Geography is an important factor in collaboration because the people involved have a common understanding of the local conditions such as the market, transportation, and money. National collaborations are sometimes scoped too broadly to be applicable to local health care systems and practitioners. Collaboration can be very effective at the local level for this reason.
- **Building community collaborations takes time.** One criticism of collaboration is that there are so many possible focuses of work. Rather than attempting to involve all of the organizations and their leaders in all initiatives at the same time, Minnesota has been successful by developing collaborations one at a time, and including only the relevant groups for specific initiatives. Trying to do too many things too quickly is always in tension with trying to make sure particular initiatives have enough traction to be successful. Building a coalition over time and bringing in different stakeholders with different needs at the appropriate time makes collaborative work more feasible.
- **Identify at the outset where the creative tensions are going to be among the key stakeholders.** Creative tensions are sure to exist in collaborations. But by allowing the group members to work through the tensions together and giving these tensions the attention they deserve, progress will not be stifled. The value of sharing and working together over a long period of time is that trust can be built.

Specific Improvements Through Community Collaboration

After organizations in a community have formed a structure and model for collaboration, the work of improving patient safety and reliability begins. The following are a few examples of types of improvement initiatives that are possible through community collaboration. The examples provided below were taken from discussion at the site visit and from work done by the collaborative in Minnesota that helped to make processes and systems more reliable in their community:

- Changing the punitive culture mindset and managing media presence
- Standardizing medication concentrations and eliminating medication abbreviations
- Standardizing surgical site marking
- Standardizing measurement processes and results reporting
- Creating systems to improve quality of care

Changing the Punitive Culture Mindset and Managing Media Presence

Barrier: Punitive culture mindset. A common barrier to improving transparency, and in turn reliability, in health care is having a punitive culture mindset when addressing errors. Historically, health care systems blamed individuals when errors occurred. Research has led to a mindset change at many health systems who now prefer to use a learning perspective when trying to determine the reason for system related errors. Most state boards, which are responsible for regulating health care professionals, however, are still operating under the previous mindset of shame and blame. In cases where the hospital believes that a system error,

versus a staff error, has taken place and there is a staff unwillingness to come forward with errors, this differing of approaches may ultimately lead to staff termination by the board.

Collaborative approach. A few specific ideas about how to use community collaboration to reduce punitive culture mindset are described below:

- Use leverage acquired through community collaboration to engage in discussions about reliability with state boards, as well as to advocate for improved board review and approaches towards errors.
 - Baylor Health Care System is working with the Texas Medical Association to improve the Board of Nursing's approach for review of medical errors. Recently, the board changed one of their policies to include as part of the review that consideration must be given to the environment in which the practice was taking place.
- Adopt improvement concepts that focus on transparency and accountability, such as Just Culture algorithms from David Marx and James Reason, to begin educating and changing the punitive mindset both internally and externally in the regulatory environment.
 - In Missouri, the State Board of Nursing is holding its annual meeting in conjunction with a program by David Marx which will educate the nursing board about just culture.
- Look for opportunities to interact with health occupation board members outside of crisis situations, to educate them about non-punitive responses to errors and early identification of problematic processes. For example, the collaborative in Minnesota worked with the state boards to help them see that typical responses to errors from boards of nursing and medicine are based on outcomes, not on the error itself or the process through which the error was made. Thus, in the absence of adverse outcomes, boards were permitting flawed process to go on unchecked. Alternatively, when a flawed system produces an error that does not have a major adverse impact, it is much easier for these boards to focus on improving the systems rather than satisfying public pressure to penalize the person who is perceived to be responsible.

Barrier: Managing media presence and consumer perception. The media can have a huge impact on how consumers perceive an error. The presence of the media can create pressure from the community for health care systems to take more stringent action, instead of focusing on learning from the error and improving quality. Media attention and views of consumers can cause a system to worry more about their reputation than the best way to improve care. In a collaboration that involves sharing and transparency about quality issues, the presence of the media may also make members of the collaboration hesitant to disclose information that will make them look bad in the community.

Collaborative approach. While no health care system(s) can control the media, they can use the presence of the media as an opportunity to discuss quality improvement and efforts to become

more reliable, which can help consumers understand that the system(s) is actively trying to learn from mistakes. A collaborative network can support this discussion and education, as well as help systems not lose focus during a period of media scrutiny. A few ideas about how to work with the media based on lessons learned from the collaboration formed in Minnesota are below:

- Build strong relationships with the media. One on one personal education and mentoring with the media helps them to be more informed about the information being reported. Keep in mind that members of the media work at organizations with deadlines, but they are not always experts about what they are reporting on so they will be grateful when they can get expertise they can trust. Fairview now often gets calls from media members seeking to understand issues they are covering that do not involve crises or her healthcare system. This relationship makes it easier for Fairview to be trusted when media is covering an error or other crisis.
- View those strong relationships with the media as a give and take. Calling a media representative first with a good story to report will help to build trust and will provide a forum for educating the public about important health information. Remember that a good relationship will not keep the media from asking tough questions when an error occurs, but may make the reporter will be more likely to approach you first to understand what actually happened.
- Do not be afraid to invite media representatives to events. The majority of media coverage on events in Minnesota has been informative and benign. As media become more informed about the issues, however, their ability to ask fair, but very challenging questions has grown. It is important to view efforts to inform the media as useful, but not as a strategy for avoiding criticism. Such education can reduce unfair reporting, but good reporting can still be very critical if the criticism is warranted.

Standardizing Medication Concentrations and Eliminating Medication Abbreviations

Barrier: Non-standardized medication concentrations. In a community with multiple healthcare systems, patients may frequently be transferred between facilities to receive care. Critical information such as medication dosage must accompany the patient during the transfer. Because each hospital may dose medications differently, the potential for a medication dosing error exists for transferred patients.

Collaborative approach. In Minnesota, the healthcare systems recognized the potential for error given the number of patients transferred between facilities and the differences in dosage at each facility. To help reduce the probability that a medication error of this type would occur, the healthcare systems, as members of the Safest in America collaboration, worked together to create standardized drug concentrations across all hospitals so that the dosage recorded in one hospital would be equivalent to those recorded in another hospital. Because personnel often shift between healthcare systems, this initiative also has reduced the risk of these personnel making errors due to differing practices across the systems.

Barrier: Medication abbreviations. Substituting inappropriate medical abbreviations for drug names when prescribing a medication has been identified as one of the factors that may increase the risk of causing a serious medication error. In May 2005, the Joint Commission on Accreditation of Healthcare Organizations affirmed its “do not use” list of abbreviations as part of the National Patient Safety Goals. While most healthcare systems agree that the use of inappropriate abbreviations should be eliminated, the act of trying to change individual provider behavior can be difficult to do.

Collaborative approach. In Minnesota, Safest in America hospitals have adopted a common procedure to enforce the use of safe abbreviations in handwritten prescriptions in the Twin Cities and Rochester communities. Nine unsafe abbreviations were targeted for elimination. Instead of gradually phasing out the use of unsafe abbreviations, all of the hospitals in the community agreed on a “hard stop” approach in which certain abbreviations became prohibited on the same day in all of the community hospitals. This Safest in America initiative actually preceded the Joint Commission on Accreditation of Healthcare Organizations (JACHO) mandate, by three years. This approach helped to signify the importance of eliminating abbreviations and is an effective way to reinforce staff behavior, especially when a great deal of the medical staff practices at multiple hospitals in the community.

Standardizing Surgical Site Marking Protocols

Barrier: Wrong-site surgical marking. Wrong-site surgeries are devastating errors that continue to occur because many providers rely on staff to ensure the accuracy of the surgical site, instead of providing tools and standard protocols that can be used to reduce risk of errors. Although these events do not happen often, when they do occur, they can generate negative publicity and result in large lawsuits.

Collaborative approach. Through collaboration, hospitals in Minnesota have adopted a universal protocol to eliminate wrong-site surgeries and ensure that surgical site marking is occurring at the appropriate time and by the appropriate person. Through the Safest in America community, hospitals have implemented a common surgical site protocol to ensure the correct patient received the correct surgery at the correct site. The protocol requires the physician performing the surgery to mark the surgical site him or herself. Safest in America currently is working to expand the protocol to apply to outpatient procedures. A copy of the entire protocol can be accessed at the following link: www.safestinamerica.org. Additionally, the Safest in America hospitals all implemented the protocol on the same day to help avoid confusion among staff who may work in multiple hospitals, thus improving reliability, as well as to emphasize the importance of the initiative.

Standardizing Measurement Processes and Results Reporting

Barrier: Inconsistent measurement processes. A significant barrier to working in a collaboration to become more reliable is the multitude of definitions, measurements, and regulatory reporting requirements health care systems must deal with. Between internal reporting and regulatory reporting at the local and federal levels, health care systems struggle with different definitions and measures of quality issues.

Collaborative approach. Working together to standardize reporting will ensure health care systems in collaboration can compare relevant information and data, as well as help standardize reporting in the local, regulatory environment. Standardized reporting principles across providers, insurers, and employers allows for substantial analysis of quality data, which can be the basis of becoming more reliable. In Minnesota, the Minnesota Community of Measurement Project (MNCM) was created to focus on improving quality through public and standardized reporting. Between this project and a state law requiring reporting on the National Quality Forum’s 27 “never events,” Minnesota has been able to standardize measures and reporting, which has been crucial in their community efforts to improve the quality of care. A few lessons learned from the work done by MNCM include:

- Take deliberate steps and lay the appropriate groundwork. MNCM has been successful because each planning step has been deliberate. MNCM works with CMS to find additional ways in which standardized measurement protocols can be spread across the country. The key is to ensure that the focus of the work is around improvement, not competition.
- Don’t wait for all measurements and reporting methods to be perfect before beginning. The measures outlined by MNCM were not perfect when the project began. The perfecting of the measure will occur over time and to get started the measures just need to be good enough for improvement to occur.
- Building trust among stakeholders is critical. Sharing quality data can be a controversial topic for providers who are competing in the same market. In order to build trust among the health plans and providers, the groups were asked not to compete on quality, but rather to share data in a secure manner to help improve quality at the clinical levels. MNCM was established as a separate non-profit organization to ensure that privacy, security, and trust could be established.

Creating Systems to Improve Quality of Care

Barrier: Lack of organizations to help create and implement systems to improve quality of care. In most communities, traditional collaborative work to improve healthcare is focused on creating standards or regulations that are imposed on hospitals and healthcare providers as a means of tracking quality and patient safety. While creating standards and regulations is often necessary, standards alone cannot improve care. It is also important to provide hospitals and healthcare providers with training and advice about how to carry out quality improvement initiatives as well as strategies that will meet required standards and regulations.

Collaborative approach. In Minnesota, the Institute for Clinical Systems Improvement (ICSI) serves as a major resource for quality improvement. ICSI is a voluntary collaboration of 56 medical groups, hospital systems, and six health plans that was originally focused on developing guidelines for improving quality of care. Over the years, the ICSI members realized that in order to improve care, they needed to create more than standards and to help organization understand basic quality improvement principles. Since then, ICSI has become a very successful organization for supporting improvements in quality and patient care at the community level because of the following reasons:

- ICSI views itself as a coach and mentor to its members, but not as an entity driving the measurement process. ICSI provides its members with quality improvement education, training, and coaching, thus serving as a valuable resource in quality improvement. Because the resources and training that they provide are in response to stated needs from the physician community, ICSI assures that they are not attempting to “push” training onto unwilling participants. Instead, they have to deal with demand for their assistance that is exceeding their ability to provide it.
- ICSI is funded by six health plans and there is no financial charge for providers to medical groups to participate. Organizations, however, must demonstrate a commitment to quality improvement as a condition of membership:
 - ICSI members are required to participate in an annual core commitment cycle. Member groups select four or more projects or topics where they commit significant time and energy to make improvements. Groups may select a combination of clinical and service-related topics to fulfill their core commitment requirement. All ICSI members provide annual reports of progress on their core commitment cycle topics, and the reports are shared with all ICSI groups as a way of sharing information and ideas.
 - Member organizations also choose four or more ICSI guidelines to be the focus of intensive improvement efforts annually, such as diabetes or waiting time for appointments. The members set their own goals and measures for these projects and then share the results of their work with one another.
- ICSI helps develop guidelines for prevention by having clinicians from member medical organizations survey scientific literature and draft health care guidelines based on the best available evidence. Having members develop their own guidelines facilitates greater buy-in and acceptance versus adopting previously existing guidelines from other national organizations.

ICSI welcomes diverse membership because it helps to foster relationships in the community that may not have otherwise been developed. The number of organizations that can participate in ICSI has to be limited to ensure that the value currently being provided is not lost as membership continues to expand.

Conclusion

The examples taken from the collaborative efforts made in Minnesota provide evidence that considerable progress can be made on key safety and quality efforts, but this progress will require persistent effort over an extended period of time that is supported by key opinion leaders in the marketplace. It also suggests that successful projects often begin small and informally, rather than requiring up-front agreement that a major initiative should be undertaken. Finally, the Minnesota collaborations reflect the value of focusing on joint efforts that address key concerns that are widely shared and that require collaboration in order to successfully be addressed. By focusing on these types of issues, Minnesota has been able to make substantial progress in improving the safety of healthcare their market. The exact means to achieving

similar ends will need to evolve in every market, as they have in Minnesota. But this document shows what is possible when key stakeholders in a given area work together on projects of mutual concern.