



Banner Health®

*Care Management
2003 Report*

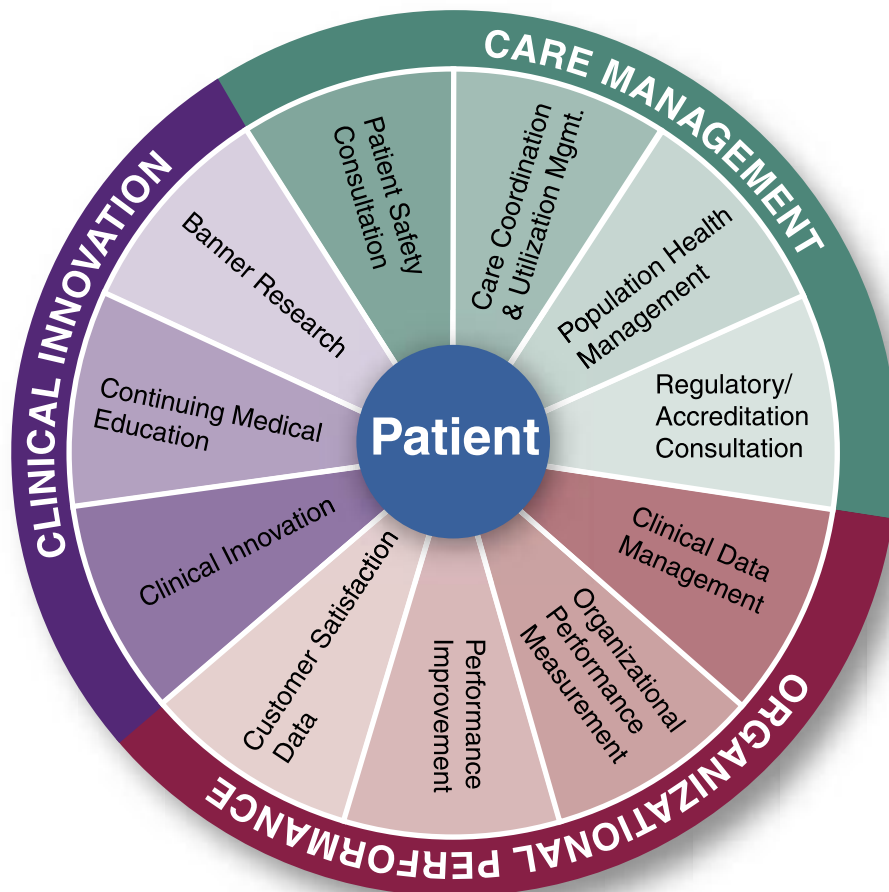
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Care Management Overview

Care Management supports Banner Health's mission of making a difference in people's lives through excellent patient care. It provides leadership for excellence in clinical care and patient safety that is coordinated across Banner Health system. Now with two full years of experience regarding improvement around strategic clinical initiatives, Care Management is poised to move forward in 2004 with more ambitious goals for improving clinical care. By 2006, Care Management efforts will help Banner be positioned at the 75th percentile nationally for selected clinical performance and quality measures. By 2010, Banner should be a leader in setting national standards of care. To achieve this goal, Care Management will help Banner "raise the bar" in terms of performance standards in the next three years; in 2007, Banner aspires to be setting the pace nationally for clinical care.

Care Management has harnessed the expertise and enthusiasm of some 300 people throughout the Banner organization. Together we are working better, smarter and faster to improve clinical quality. Care Management functional teams and work groups worked diligently to accomplish extraordinary things in 2003 and will continue doing so in 2004. Sharing knowledge and replicating proven practices has been accomplished through the Care Management website and through virtual meetings with representation from across the system. The meticulous attention to analysis, the constant monitoring of results, and the coaching for improvement when needed by work group and team members, led to some exceptional results in 2003. The interaction and collaboration were again listed as important accomplishments by team and work group members who worked with colleagues throughout Banner Health during the year.



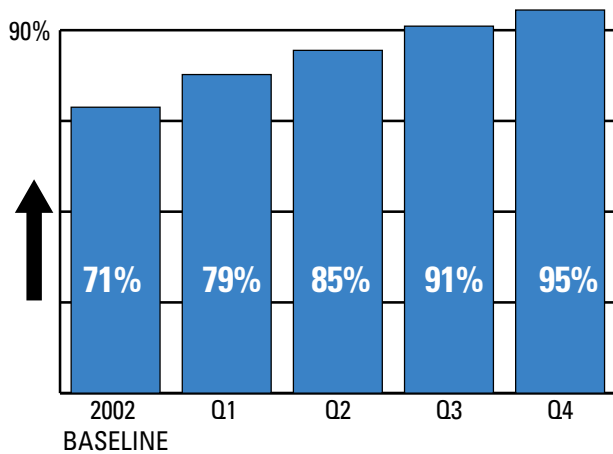
Care Management areas of focus were included in the 2003 system initiatives. These were:

- Patient Perception of Safety and Security
- Reduction in Systemwide Cost Variation in DRG 373 (normal vaginal delivery)
- Reduction in Systemwide Cost Variation in DRG 209 (total joint replacement)
- Reduction in Facility Specific Cost Variation in Selected DRGs (each facility selected its own DRG to focus on in terms of performance improvement)
- Compliance with Antibiotic Guidelines for Pneumonia Patients

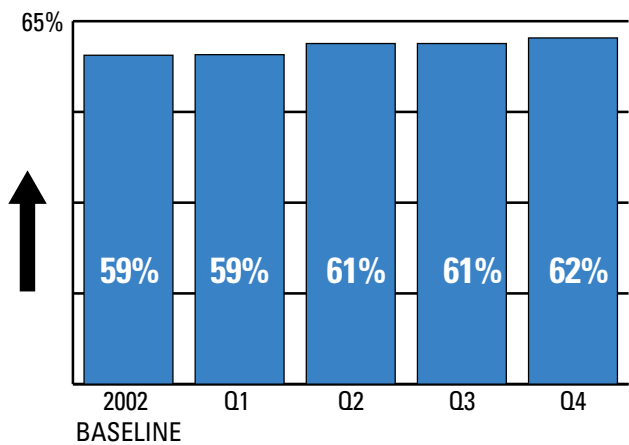
Oversight of these initiatives resided with three Care Management teams. The Patient Safety Team monitored improvement of the patient perception of safety and security initiative; the Care Coordination and Utilization Team worked with the reduction in cost variation for the DRGs; and the Population Health Management Team provided guidance to the antibiotic guidelines for pneumonia patients initiative. The results for the four initiatives are:

2003 CM Initiative Measure Quarterly Report

2003 Compliance with Antibiotic Guidelines for Pneumonia
System Target- 90% in Q4

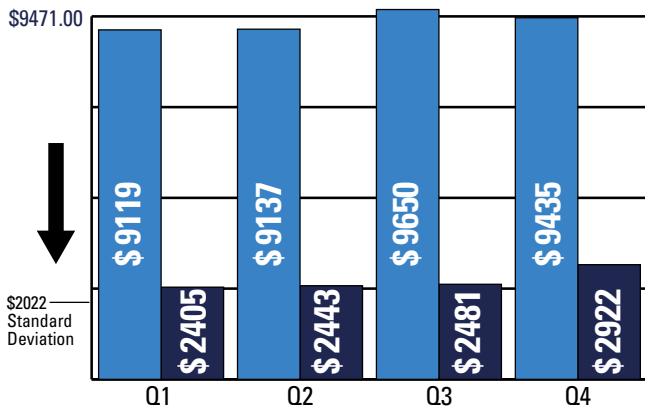


2003 Patient Perception of Safety and Security Combined Questions: Extent to which nurse checked identification on arm band safety and security felt in the hospital
System Target- 65% in Q4, top box score (Top box score= responses of "very good" in Press Ganey Patient Satisfaction Survey)



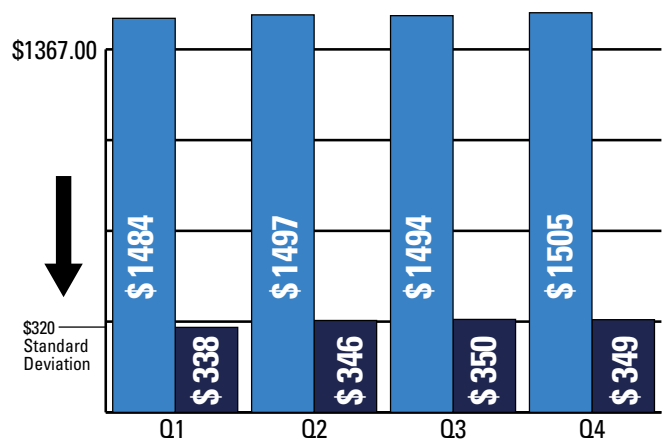
DRG 209
2003 Systemwide cost variation reduction in DRG 209 (Major joint replacement)
System Target- \$9471 with standard deviation or \$2022 in Q4

■ Median cost ■ Standard deviation



DRG 373
2003 Systemwide cost variation reduction in DRG 373 (Normal vaginal delivery)
System Target- \$1367 with standard deviation of \$320 on Q4

■ Median cost ■ Standard deviation



Highlights of 2003 Care Management Accomplishments

Population Health Management

- Monitored improvement efforts and compliance with administration of appropriate antibiotic protocol to patients who present with community acquired pneumonia.
- Evaluated outcomes and improvement activities for pneumonia and AMI populations. Sought opportunities for improvement in CVT surgery, DVT prophylaxis, obstetrics and heart failure.
- Recommended and implemented a smoking cessation counseling program for inpatients who are smokers. Counseling is now documented in patient charts.
- Implemented systemwide guideline to ensure that pneumococcal and influenza vaccines are offered to eligible patients before discharge. Developed and provided a toolkit with educational materials to facilities to assist with this effort.
- Reviewed data regarding pharmaceutical VTED (Venous Thromboembolic Disease prophylaxis) for orthopedic patients 40+ years of age and recommended this be reported regularly as an indicator of clinical performance for the system.
- Implemented structured review of AHRQ mortality data for the system and directed follow-up on statistically significant results for specific diagnoses and procedures by facilities.
- Developed and distributed information pamphlet for medical staff on use of ACE Inhibitors for AMI and CHF patients, and use of statins for AMI patients.

Patient Safety

- Monitored efforts regarding strategic initiative to improve hospitalized patient perceptions of safety and security. Promoted facility efforts at improving scores and shared successful practices with other facilities for replication.
- Unveiled Leadership Safety Excellence program at the spring Leadership Conference. Presentation content from conference was developed into a toolkit that supported Safety WalkArounds and a non-punitive culture, one that proactively examines issues dealing with patient safety. Presentations regarding Safety Excellence were made throughout Banner Health and administrators at all facilities are now rounding with an eye toward improving safety.
- Developed and implemented a standardized reporting methodology regarding incidents and sentinel events throughout the organization.
- Implemented MedMARX software throughout the system to track and evaluate medication errors, compare performance against a nationwide database, improve processes and reduce risk of errors.
- Sought and received systemwide approval for Invasive Site Identification Policy compliance and provided monitoring tools to assist with this effort.

Achieving Results

Better, Smarter, Faster and Together

Two years ago, Dr. Larry Spratling, along with Diana Palmer, co-led the Pneumonia work group of the Population Health Management team. They were charged with improvement efforts to reduce the amount of time it took to administer antibiotics to patients who present with community acquired pneumonia. The target was set at two hours and thirty minutes. The system not only met the target, it surpassed the target by 20 minutes.

In addition to reducing median time, Dr. Spratling believed there was a better way to deliver care. He brought the idea of a pneumonia antibiotic treatment guideline to the work group; their work resulted in the pneumonia guideline that became a 2003 system initiative. The guideline ensures that the appropriate antibiotic is given to pneumonia patients. A target of 90% compliance was established. At the end of the fourth quarter, the target had not only been met, but exceeded; it was 95%

The Pneumonia work group continued to meet during the year to help monitor improvement efforts. In addition to including the protocol with standing orders, other improvement efforts included flagging charts for patients thought to have pneumonia and presenting in the ED for faster triage; tracking of all pneumonia patients by clinical pharmacists for analysis of compliance by individual physicians; in-service education sessions for physicians and physician groups; and posting of monthly compliance data with staff communication, among other efforts. "It was, from my perspective," Spratling said, "our first success at any systemwide implementation of a Care Management guideline." He considers one of the great achievements of this collective effort "getting doctors to change their prescribing behavior to follow the evidence base in the medical literature."



Care Coordination and Utilization Management

- Provided guidance and oversight to improvement efforts regarding cost reduction for DRG 373, normal vaginal deliveries and DRG 209, total joint replacement, both of which were strategic system initiatives.
- Sponsored first Care Management Summit where more than 80 people including medical directors, case management directors, finance leaders and analysts learned about new tools provided by Care Management and TSI that could help them better understand the use of data for clinical decision making. They also learned how to better manage length of stay and shared proven methods of improvement with each other. At the summit, facilities identified cost reduction opportunities with DRGs they selected for improvement efforts. These were measured and monitored on a monthly basis.
- Developed and implemented an improved methodology for assessing Medicare Length of Stay.
- Provided oversight to clinical documentation team that coordinated efforts between case managers and HIMS coders to improve the specificity of physician documentation to assign accurate DRG to a patient so that Banner would be correctly compensated and reimbursed for the services provided.

Regulatory/Accreditation

- Coordinated 2003 systemwide triennial JCAHO survey which led to accreditation for all Banner facilities that participate in JCAHO.
- Developed Physicians Minimum Dataset reports for medical staff credentialing.
- Renewed Core Measures vendor (HCD) contract.
- Developed and implemented regulatory findings reporting process to enable all facilities to view each other's regulatory issues so that they can be addressed proactively.

Performance Improvement

- Supported the systemwide Throughput initiative by designing and facilitating a collaborative experience based on the IHI model with seven Banner facilities. Representation from cross-functional departments at each of these facilities met three times throughout the year for learning sessions and to share successes in process improvement. Professor Jeff Cochrane from Arizona State University provided academic rigor to the effort with his "Science of Throughput" lectures and counsel. Collaborative efforts to improve time and process will continue in 2004.
- Coordinated the Performance Improvement recognition event at the Leadership Conference. Performance Improvement efforts at all 20 Banner facilities were evaluated and judged at the conference and winners were designated in several categories.
- Held a Performance Improvement Visioning Retreat with individuals throughout the system. The group developed the following Performance Improvement goal for the system: *Banner will be a leader in healthcare performance*

improvement by applying disciplined, data-driven methodologies within a culture of responsibility to achieve excellence.

- Established a Quality Awards strategy that builds, in phases, submissions to local, regional and national quality awards. These will showcase Banner's efforts toward providing clinical and organizational performance excellence.
- Developed tools for implementation of the HFMEA methodology; these were distributed and implemented by the Patient Safety Consultation Team.

Clinical Data Management

- Designed and produced quarterly Care Management and Quality Report that included facility profile information, clinical outcomes and numerous other indicators to gauge the organization's clinical performance.
- Developed critical clinical elements related to the Business Intelligence project being led by IT.
- Significantly enhanced audit process for TSI related to clinical data fields.
- In collaboration with Finance, developed training module in TSI to assist those working with clinical data to better use and understand the system.
- Defined "benchmark" and related terms. Identified potential sources of comparative and benchmark data.
- Analyzed DRG initiative data to identify key areas of opportunity for 2003 Strategic Initiatives.

Customer Satisfaction Measurement

- Standardized Banner's method for surveying behavioral health patients. Implemented new Press Ganey behavioral health survey and expanded to include units at Banner Mesa, Fairbanks and North Colorado Medical Center.
- Proactively distributed Spanish language surveys at several Arizona facilities (Banner Good Samaritan, Banner Desert Samaritan, Banner Thunderbird Samaritan) with plans to expand to additional facilities.
- Completed implementation of Press Ganey surveys at all Banner facilities.
- Redesigned outpatient surveys and expanded implementation to requesting facilities.
- Implemented specialized surveys including neonatal intensive care, inpatient rehabilitation, home medical equipment and home care at a number of Banner facilities.
- Updated all surveys for new Banner logo and names in support of branding activities.

Clinical Innovation

- Reviewed and recommended clinical projects for funding through the Imagine Grant process, in which employees submit their good ideas for clinical enhancement and

improvement efforts.

- Developed a formal process for reviewing and adopting new technologies and supplies.
- Received approval for the development of a process to fund Innovative Clinical Technology outside Banner's capital process.
- Scanned emerging technologies and evaluated Banner proposals for new technology in collaboration with Strategic Development.

Organizational Performance Measurement

- Linked with Strategic Development for Balanced Scorecard Approach to measure organizational performance.
- Developed measurement definitions and data collection process for system Throughput initiative.
- Produced initiative reporting process "report card" that represents a more automated, sophisticated approach toward a Balanced Scorecard for the organization.

Research

- Concluded collaborative research project with Arizona State University on Knowledge Management regarding how to organize, collect and disseminate knowledge about Care Management expertise, processes and proven practices. Recommendations for improvement in how Care Management manages knowledge are in the process of being implemented.

Public Reporting Project

- Care Management provided leadership to the CMS Public Reporting Pilot Project. Arizona is one of three QIOs chosen (Maryland and New York are the others) by CMS to encourage voluntary hospital reporting of certain data related to clinical care and patient satisfaction.

Joint Sponsorships

Collaborations with other functional areas that have mutually beneficial goals with Care Management are known as joint sponsorships. Two are ongoing. They are:

CRI – Clinical Risk Intervention. In coordination with Risk Management and Care Management, CRI uses historical claims data to examine areas for clinical improvement with the outcome of reducing or eliminating error to increase patient safety. Four focused areas of improvement have been identified: Labor & Delivery; the Emergency Department; Operating Rooms; and Intensive Care Units. During 2003, two teams were chartered: ED and Labor & Delivery. The ED group focused their work on discharge issues in the ED and the Labor & Delivery group determined that the fetal monitoring process represented an opportunity for improvement.

Care Transformation. A cooperative effort that grew from the partnership of Care Management and IT, Care Transformation is the synthesis of rapid cycle work redesign and information technology that is coupled with cultural change

Measuring Patients' Perceptions of Safety and Security

Supported with creative stickers such as IDIDID (I did ID) and buttons that say, "21 or not, we are going to check your ID band," efforts to increase awareness of hospitalized patients' perceptions of safety have been going on at various Banner facilities during 2003. Under the auspices of the Patient Safety Team, the IDIDID signs, for example, were placed in every patient room at Banner Mesa to remind both staff and patients about the importance of checking ID bands to ensure correct patient identification. At Banner Desert, interdisciplinary rounds have included a focus on safety and security and post discharge calls by the Service Excellence team have included questions that elicit feedback from patients regarding their perception of care. At McKee Medical Center, a "Great Catch" campaign has been implemented to recognize and reward employees for reporting patient safety issues and near misses. Staff members who do so are recognized at monthly managers' meetings and receive a certificate, pin and baseball jersey to recognize their assistance with "catching" issues that could potentially affect patient safety. At Page, nursing staff identify themselves upon entry to a patient room and check ID bands. Additionally the nursing supervisor and administrators at Page are rounding daily to talk about the importance of safety and security with patients. At Sterling Regional Medical Center, a facility wide CLUE game as well as a patient safety newsletter help promote patient safety goals. At Banner Good Samaritan, the Shared Leadership team developed a script to educate staff about telling patients that when their bracelets were being checked, it was to assure patient safety.

The goal for improvement was a stretch – moving "top box" or "excellent" ratings regarding two questions on the Press Ganey patient satisfaction surveys: 1) safety and security felt in the hospital and 2) extent to which nurses checked ID – to 65% While the target was not met, the 62% rating marked considerable improvement over the 59% baseline. Anita Hancock, co-leader of the Patient Safety team with Dr. Dave Edwards, notes that "lack of sufficient patient identification is a leading cause for medication errors that can harm patients, adversely affect staff, increase length of stay and the cost of care. It can also significantly impact the trust patients have in us. Emphasizing the critical process for identifying patients and tracking patient perception is very important work." The Patient Safety Team will continue its focus on improvement efforts related to patient identification.

First Care Management Summit

Sponsored by the Care Coordination and Utilization (CCUM) team, the first care management summit brought together more than 80 participants from across Banner Health – including medical directors, case management directors, finance leaders and analysts with the purpose of having attendees better understand how to use data for clinical decision making. Attendees gained new knowledge about managing Medicare patients' length of stay and worked on selecting at least one facility specific DRG for focused efforts on reducing variation and cost. They also gained greater understanding about the various and complex interrelationships between medical care and finance. There were two tracks of education. The first, "Let's Save Some Money: Achieving Excellence in Clinical Efficiency," was geared for case managers, medical directors and others who make clinical care decisions. The second track, "TSI Tools & Methods for Cost Reduction in Care Management" was aimed more for financial analysts and others using financial data. In addition to learning new concepts and techniques, participants again commented on the importance and value of networking, working together, and sharing knowledge across Banner Health.

and the development of clinical knowledge and content. Care Transformation work efforts are coordinated in a systemwide fashion. The current focus is on development of a "franchise model" to be implemented first at Banner Estrella Medical Center and then migrated to other Banner facilities. This approach will help Banner implement standardized, evidence-based clinical best practices.

The Care Management Team, comprised of Case and Quality Management teams, developed franchise model processes at the Rapid Cycle meetings for Care Transformation. The teams evaluated various software solutions that have the capability of interfacing with Cerner. The SoftMed software application was selected and teams were assembled to design the workflow processes and functionality of the franchise model. The group will install, train and implement the SoftMed application in accordance with the franchise model by end of the second half of 2004.

Care Management & Organizational Performance Council — 2003

Chuck Berry Materials Management/Pharmacy
Joan Brambert Care Coordination and UM
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Karen Chaudiere Performance Improvement
Patsy Colwell Regulatory/Accreditation Consultation
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