

The Organization And Interaction Of Fairview Hospital

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Introduction

Modern hospitals depend on more than skilled physicians, advanced equipment, and specialized treatment facilities. They also require an organizational structure that allows knowledge to move accurately and efficiently among clinicians, departments, patients, and outside healthcare organizations. When information is incomplete, delayed, or misunderstood, the consequences may include medication errors, unnecessary testing, delayed treatment, duplicated services, and preventable harm. Effective communication is therefore not merely an administrative responsibility. It is a central component of patient safety and clinical quality.

Fairview Hospital is a Cleveland Clinic hospital located on the western side of Cleveland, Ohio. Founded in 1892, it has developed into a large, multispecialty community teaching hospital. The hospital is accredited by The Joint Commission and operates a certified Level II Trauma Center. Its major clinical areas include heart care, cancer treatment, maternity and birthing services, surgery, emergency medicine, and trauma care (Cleveland Clinic, n.d.-a). These services require professionals from different disciplines to coordinate decisions across busy and sometimes high-risk clinical environments.

The organization of Fairview Hospital can be understood through three connected elements: communication, knowledge management, and health information technology. Intrahospital communication connects professionals and departments within the hospital, while interhospital communication allows Fairview to exchange information with external hospitals, clinics, rehabilitation centers, emergency services, and other organizations. Electronic health records, health information exchange, structured handoff methods, and clinical decision support tools strengthen these interactions.

This essay examines how Fairview Hospital can organize and communicate clinical knowledge through the Data-Information-Knowledge-Wisdom model, health information technology, clinical decision support, organizational learning, professional education, and patient-centered communication. It argues that technology improves healthcare only when it is combined with professional judgment, standardized communication, strong leadership, and a culture of continuous learning.

Fairview Hospital as a Complex Healthcare Organization

A hospital is a complex organization because it brings together professionals with different responsibilities, forms of expertise, and decision-making authority. Fairview Hospital's workforce includes physicians, nurses, pharmacists, radiologists, laboratory professionals, therapists, technicians, administrators, information technology specialists, and support staff. Each group contributes different information to a patient's care.

For example, a physician may establish a diagnosis and treatment plan, while a nurse monitors the patient's response and identifies changes that require immediate attention. A pharmacist evaluates medication doses and possible drug interactions. Laboratory and radiology departments produce diagnostic evidence, while case managers arrange discharge services and follow-up care. No single professional possesses all the information needed to manage a complicated patient independently.

Fairview's organizational structure must therefore support multidisciplinary teamwork. Clinical departments need clear reporting relationships, but they must also be able to collaborate across traditional departmental boundaries. A patient admitted through the emergency department may later receive treatment from surgery, cardiology, radiology, pharmacy, nursing, rehabilitation, and social services. Although these departments perform different functions, their work must form one coordinated care process.

Fairview also serves as a teaching hospital and participates in Cleveland Clinic-sponsored programs in anesthesiology, internal medicine, pediatrics, radiology, and sports medicine. It maintains teaching leadership in departments such as emergency medicine, family medicine, internal medicine, obstetrics and gynecology, pediatrics, and surgery (Cleveland Clinic, n.d.-c). This educational role makes knowledge exchange especially important because experienced clinicians must communicate not only with one another but also with residents, students, and other healthcare trainees.

Intrahospital and Interhospital Communication

The terms *intrahospital* and *interhospital* describe two different levels of organizational communication. Intrahospital communication occurs within Fairview Hospital. It includes shift reports, consultations, team rounds, electronic messages, laboratory notifications, medication orders, emergency alerts, discharge planning, and transfers between hospital units.

Interhospital communication occurs between Fairview and outside organizations. Examples include the transfer of a trauma patient to another specialist center, the receipt of records from a community clinic, communication with rehabilitation facilities, and the exchange of information with other hospitals in the Cleveland Clinic network.

Table 1

Intrahospital and Interhospital Communication at Fairview Hospital

Communication Type	Main Participants	Common Examples	Major Risks	Recommended Safeguards
Intrahospital communication	Physicians, nurses, pharmacists, laboratories, radiology teams, administrators, and support staff	Shift handoffs, consultations, patient transfers, test-result notifications, multidisciplinary rounds, and discharge planning	Missing information, misunderstood instructions, delayed responses, and unclear accountability	Standardized handoffs, read-back procedures, electronic documentation, team huddles, and closed-loop communication
Interhospital communication	Fairview Hospital, outside hospitals, clinics, emergency medical services, rehabilitation centers, and long-term care facilities	Referral records, transfer summaries, medication lists, imaging reports, and follow-up plans	Incompatible systems, incomplete records, duplicate testing, privacy concerns, and delayed access	Interoperable records, secure information exchange, standardized transfer documents, consent procedures, and medication reconciliation

Both forms of communication are important, but they address different risks. Intrahospital failures often occur during handoffs between shifts, departments, or levels of care. Interhospital failures are more likely when a patient moves between organizations that use different systems, documentation practices, or communication procedures.

Structured communication can reduce these risks. The Agency for Healthcare Research and Quality's TeamSTEPPS program recommends tools such as Situation-Background-Assessment-Recommendation, commonly known as SBAR, closed-loop communication, check-backs, call-outs, huddles, and structured handoffs (Agency for Healthcare Research and Quality [AHRQ], 2023).

Müller et al. (2018) found that SBAR can improve patient safety by organizing essential information into a predictable sequence, particularly during telephone communication. More recently, McCarthy et al. (2025) concluded that SBAR and I-PASS probably improve patient safety during hospital handoffs.

Their review found stronger evidence for I-PASS, a structured approach that communicates illness severity, a patient summary, an action list, situational awareness, and confirmation by the receiving professional.

These methods are valuable because healthcare communication should not depend on memory alone. A clinician completing a long shift may know a patient well, but important details can be lost unless they are transferred systematically. Standardization does not eliminate professional judgment. Instead, it provides a reliable framework within which judgment can be communicated.

The DIKW Model and Clinical Knowledge Management

Fairview Hospital's management of clinical knowledge can be examined through the Data-Information-Knowledge-Wisdom, or DIKW, model. The model explains how isolated observations become meaningful clinical decisions (McGonigle & Mastrian, 2017).

Data are unprocessed facts. In a hospital, data include temperatures, blood pressure readings, laboratory values, medication doses, imaging measurements, symptoms, allergies, and nursing observations. A single heart rate of 120 beats per minute is data, but it has limited meaning without context.

Information develops when data are organized and interpreted. When the heart rate is considered together with fever, low blood pressure, laboratory abnormalities, and the patient's history, the care team gains information about a potentially serious condition.

Knowledge emerges when clinicians combine information with scientific evidence, professional education, experience, and clinical guidelines. The team may recognize that the patient's findings are consistent with sepsis and that rapid intervention is required.

Wisdom involves selecting and applying the most appropriate action for the individual patient. A clinician must consider the patient's age, medical history, kidney function, allergies, treatment preferences, current medications, and response to earlier interventions. Wisdom is therefore more than following an automatic alert. It is the careful use of evidence and judgment in a particular clinical situation.

The model demonstrates why collecting large quantities of data does not automatically improve care. Data must be accurate, timely, relevant, and available to the appropriate professional. They must then be interpreted correctly. A poorly documented allergy, an outdated medication list, or a laboratory result filed under the wrong patient can weaken every later stage of the DIKW process.

Knowledge management at Fairview should therefore include accurate documentation, accessible clinical guidelines, multidisciplinary consultation, staff training, incident reporting, performance

measurement, and the review of patient outcomes. Knowledge must also move in both directions. Leaders communicate policies and evidence-based practices to staff, while frontline clinicians report workflow problems, safety concerns, and practical lessons to leadership.

Health Information Technology and Electronic Records

Health information technology provides the infrastructure through which much of Fairview Hospital's clinical knowledge can be recorded, retrieved, and exchanged. An electronic health record is not simply a digital replacement for a paper chart. It can bring together diagnoses, medication histories, laboratory results, imaging reports, allergies, clinical notes, care plans, and discharge instructions.

The Office of the National Coordinator for Health Information Technology describes electronic health records as real-time, patient-centered records that make information securely available to authorized users (ONC, n.d.-a). This accessibility is particularly important when multiple departments are caring for the same patient. A pharmacist reviewing a prescription, for example, needs access to allergy information, kidney function results, current medications, and the physician's treatment plan.

Electronic documentation can improve legibility, reduce lost records, support medication reconciliation, and make previous results easier to find. Tubaishat (2019) reported that nurses associated electronic health records with improved documentation, data completeness, and medication safety. However, electronic records do not automatically guarantee accuracy. Copy-and-paste practices, outdated problem lists, excessive alerts, confusing interfaces, and incomplete entries can create new risks.

Fairview must therefore treat data quality as an organizational responsibility. Clinicians need training in accurate documentation, while information technology teams must monitor system performance, access controls, and workflow usability. Leaders should also establish clear policies concerning who may enter, correct, review, and share patient information.

Patient privacy must remain central to this process. Access should be limited to people who require the information for legitimate clinical, administrative, or legal purposes. Secure authentication, audit trails, encryption, and staff education can reduce the risk of unauthorized access. At the same time, privacy protections should not prevent authorized professionals from obtaining information needed for safe treatment.

Interoperability and Health Information Exchange

Interoperability is the ability of different information systems to exchange data and use the information received without unreasonable effort. It is especially relevant to interhospital

communication because patients frequently receive care from more than one organization.

A patient arriving at Fairview's emergency department may have undergone tests at another hospital, received prescriptions from several physicians, or recently completed treatment at a rehabilitation center. If these records are unavailable, clinicians may repeat imaging, overlook medication interactions, or make decisions without a complete history.

Health information exchange can reduce these gaps by allowing authorized providers to send, receive, locate, and incorporate clinical information. The ONC states that information exchange can improve communication between providers, reduce delays, support care coordination, and limit duplicative treatment (ONC, n.d.-b).

Research supports these potential benefits, although outcomes depend on how systems are designed and used. Hersh et al. (2015) found evidence that health information exchange may reduce duplicate laboratory and radiology testing, emergency department costs, and some hospital admissions. However, the authors also noted that the overall quality of evidence was limited. This caution is important because technology should not be presented as a guaranteed solution.

Li et al. (2022) similarly found that interoperable electronic records were associated with improvements in several dimensions of care quality and safety. Nevertheless, interoperability requires more than a technical connection. Information must be complete, standardized, understandable, and incorporated into clinical workflows. A system may technically transmit a document, but the exchange has little value if clinicians cannot locate the relevant information or if the document contains outdated data.

Fairview should consequently evaluate interhospital communication by asking practical questions: Did the receiving team obtain the medication list? Were pending laboratory results clearly identified? Could radiology images be viewed without unnecessary repetition? Was responsibility for follow-up assigned? These questions connect technical interoperability to actual patient outcomes.

Clinical Decision Support and Patient Safety

Clinical decision support refers to computerized tools that provide relevant information or recommendations during clinical work. AHRQ defines CDS as providing "timely information, usually at the point of care" to support decisions about a patient's treatment (AHRQ, n.d.).

CDS can take several forms. Examples include drug-interaction warnings, allergy alerts, dose recommendations, reminders for preventive screening, abnormal-result notifications, order sets, diagnostic guidance, and prompts for follow-up care. A system may warn a clinician when a medication dose is unsafe for a patient with reduced kidney function or remind staff that a patient is overdue for an important laboratory test.

At Fairview, well-designed CDS could support emergency care, surgery, cancer treatment, maternity services, medication management, and discharge planning. It could also help staff identify patients who need follow-up appointments, pre-visit testing, vaccination, or monitoring for chronic conditions.

CDS is most effective when it provides the right information to the right person at the right point in the workflow. An alert that appears after a decision has already been made may have little value. Similarly, an alert that interrupts clinicians too frequently may contribute to alert fatigue. When staff encounter too many low-priority warnings, they may begin dismissing alerts automatically, including the important ones.

Clinical decision support should therefore assist rather than replace professional judgment. Recommendations must be based on reliable evidence, reviewed regularly, and adjusted to the clinical environment. Clinicians should be able to understand why an alert appeared and determine whether it applies to the individual patient.

It is also important to distinguish clinical decision support from financial or operational decision support. Hospital systems may use financial analytics to monitor costs, staffing, budgeting, and resource utilization. Those functions are valuable for management, but they are not identical to patient-specific CDS. Clear terminology prevents an organization from confusing financial performance tools with clinical safety systems.

Organizational Learning and Professional Education

Knowledge management becomes sustainable when a hospital learns from its daily experience. Organizational learning involves collecting information about performance, examining successes and failures, changing practices, and sharing lessons across the institution (Moingeon & Edmondson, 1996).

The National Academy of Medicine describes a learning health system as one in which “science, informatics, incentives, and culture are aligned for continuous improvement” (National Academy of Medicine, n.d.). This description is relevant to Fairview because the hospital combines patient care with professional education and participation in Cleveland Clinic training programs.

A learning hospital does not treat an adverse event as the failure of one person without first examining the surrounding system. Leaders investigate whether policies were unclear, staffing was inadequate, technology was poorly designed, communication was interrupted, or responsibilities were not assigned. The goal is accountability, but it is also prevention.

Fairview can promote organizational learning through morbidity and mortality conferences, quality-improvement meetings, safety reporting systems, simulation exercises, clinical audits, peer review,

and interdisciplinary education. Short team debriefings after difficult cases can identify problems while details are still fresh. Larger trends can be examined through dashboards and periodic performance reports.

Psychological safety is essential in this environment. Staff members must be able to raise concerns, admit uncertainty, and question a decision respectfully without fearing humiliation or retaliation. A nurse who notices an unusual medication dose should feel authorized to stop the process and seek confirmation. Similarly, a trainee should be able to ask for clarification when a handoff is incomplete.

Blood Management as an Example of Coordinated Knowledge

Fairview Hospital's blood-management services provide an example of how communication, evidence, and organizational learning can support patient care. Patient blood management aims to reduce avoidable blood loss, improve a patient's own blood supply when possible, and make transfusion decisions carefully. Cleveland Clinic describes blood management as a patient-care approach that may reduce the need for transfusion and help patients understand available options (Cleveland Clinic, n.d.-b).

Effective blood management requires collaboration among surgeons, anesthesiologists, nurses, laboratory personnel, pharmacists, hematology specialists, and patients. Before surgery, the team may identify anemia and consider treatment. During a procedure, clinicians may use strategies to reduce blood loss. Afterward, laboratory results and symptoms guide further decisions.

This approach illustrates the DIKW process. Laboratory values provide data, trends provide information, clinical evidence creates knowledge, and individualized treatment decisions represent wisdom. It also shows that organizational knowledge must be shared. A blood-management program cannot succeed if its principles remain within one department.

Patient and Family Participation

Communication should not occur only among professionals. Patients and families are important sources and users of clinical knowledge. They may identify medication discrepancies, describe earlier reactions, clarify treatment preferences, and notice changes that are not immediately visible to staff.

Clinicians should explain diagnoses, procedures, medications, risks, and follow-up plans in understandable language. Teach-back can be used to confirm comprehension by asking patients to explain instructions in their own words. This is more reliable than simply asking whether they understand.

Patients should also know whom to contact after discharge, which symptoms require urgent attention,

when laboratory tests are due, and how medications should be taken. A technically accurate discharge document is inadequate if it is too complicated for the patient to use.

Patient portals can strengthen communication by providing access to test results, appointment details, medication lists, and secure messages. However, Fairview should also consider patients who have limited internet access, language barriers, disabilities, or low health literacy. Digital services should expand access rather than create new inequalities.

Challenges and Recommendations

Fairview Hospital's communication and knowledge systems face several continuing challenges. The first is information overload. Clinicians receive large amounts of data, but not every detail has equal importance. EHR displays and CDS alerts should prioritize information according to clinical urgency.

The second challenge is fragmentation. Separate departments may develop different documentation practices and communication cultures. Hospital-wide standards for handoffs, medication reconciliation, critical-result reporting, and discharge summaries can reduce variation.

The third challenge is overdependence on technology. Electronic systems can fail, contain errors, or become temporarily unavailable. Fairview should maintain downtime procedures and ensure that staff remain capable of direct verbal communication and manual documentation when necessary.

The fourth challenge is maintaining data quality. Duplicate records, outdated medication lists, copied notes, and incomplete transfer documents can mislead clinicians. Regular audits and clearly assigned documentation responsibilities are necessary.

Finally, communication systems must be evaluated continuously. Fairview should examine whether new technology reduces errors, saves time, improves outcomes, or creates unintended burdens. Useful measures may include handoff-related incidents, duplicate-test rates, medication discrepancies, delayed results, readmissions, clinician workload, patient understanding, and staff satisfaction.

Conclusion

Fairview Hospital's ability to deliver safe and effective care depends on the organization and movement of knowledge throughout the institution. Its clinical services, trauma responsibilities, and teaching activities require coordinated participation from many departments and professions.

Intrahospital communication supports teamwork within Fairview, while interhospital communication connects the hospital with outside providers and facilities. Both forms of interaction are strengthened by structured handoffs, interoperable records, health information exchange, and clear accountability.

The DIKW framework demonstrates how raw clinical observations become informed and patient-centered decisions. Electronic health records and clinical decision support can make that process faster and more reliable, but only when the underlying information is accurate and the technology fits clinical practice.

Ultimately, Fairview Hospital should be understood as a learning organization rather than a collection of separate departments. Its most valuable resource is not data alone but the ability of clinicians, patients, educators, and leaders to interpret information, communicate openly, learn from experience, and convert knowledge into safer care.

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