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## Observation Care Units: An Essential of Emergency Departments

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Recent changes in the health care environment and the evolution of managed care have brought a number of new forces to bear on health care delivery systems, and have heightened some existing forces. Quality and appropriateness of care, patient satisfaction, and cost management remain the cornerstones of an effective system. These tenets are nowhere more applicable than in the emergency department. Emergency care requires intense resource utilization, and costs incurred to the system are therefore significant. Marshaling these resources in a framework of proper and efficient patient care is vital to the survival and continued growth of an institution.

The concept of observation care in the emergency department is not a new one, and has been practiced by default since emergency departments came into existence. In the past, hospitals typically designated a section of the emergency department for patient observation or as a holding area until borderline patients could be admitted [\(1\)](#). This practice, however, can lead to inefficient use of personnel and equipment, hinder optimal patient care, and prove to be expensive.

Contemporary observation care units/rapid treatment centers (OCUs/RTCs), either contained within the emergency department or closely associated with emergency/acute care in a given system, have more recently evolved in an effort to optimize the quality and efficiency of health care delivery. Two other factors have also contributed to the increase in OCUs/RTCs. In 1992, the Joint Commission on Accreditation of Health Care Organizations (JACK) removed the 12-hour limit for patient observation in the emergency department. This fostered the rise of OCUs/RTCs, as these units were designed to manage patients for 24 hours or more. Shortly thereafter, in 1993, the Physicians' Current Procedural Terminology manual began including physician codes for hospital-based observation care, which increased physician awareness of OCUs/RTCs and facilitated reimbursement [\(2\)](#). The OCU is a comprehensive model in which observation requires active, on-going evaluation combined with treatment, intervention, on-going assessment, case management, and clinical outcome analysis. This is a departure from the passive watching and waiting in a traditional holding unit. The OCU/RTC model seeks to reduce the time for diagnostic and therapeutic maneuvers, thereby improving quality of care and cost effectiveness [\(4\)](#).

The pros and cons of the development and institution of OCUs have been debated for some time [\(5,6\)](#). Proponents of

OCUs/RTCs in the emergency department hold that these units lead to improvement of patient care and help overworked emergency physicians, giving them more time and information to make diagnoses and treat patients, which improves outcomes and reduces costs [\(7\)](#). Furthermore, these units may reduce the risk of malpractice because patient are less likely to be inadvertently discharged with a serious condition. Critics, however, suggest that the concept is driven by the cost-control efforts of payers and managed care's drive to reduce medically unnecessary hospital admissions. Other criticisms include the assertion that the OCU/RTC increases the workload for already overburdened emergency physicians and staff, thus compromising patient care [\(4,9\)](#).

Although the number of OCUs/RTCs nationally seems to be increasing, current data on their effectiveness are limited. This study was initiated to develop a data base on current attitudes about OCUs/RTCs in the health care industry. The subsequent interpretation and analysis of these data provided insight into the development of recommendations to guide a health care institution in considering the planning of an OCU/RTC.

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## Methods

The goal of the study was to develop a planning model that may be used by emergency department directors, administrators, facility planners, and architects at institutions considering implementation of an OCU/RTC. This study is based on the premise that 'observation care' is an evolving standard of clinical care delivery and that the definition of the emergency department is in flux. The study was designed to collect qualitative data representing different marketplaces as well as sizes and types of hospital. Using various professional and hospital directories, a random selection was made of health care administrators, emergency medical directors, health care consultants, managed care medical directors, and architects/facility planners in all geographical sections of the continental United States. This group of professionals was selected to receive the study's survey instrument in order to acquire the qualitative perceptions of OCUs/RTCs from a cross-section of health care professionals who were directly or indirectly knowledgeable about this management topic.

A number of options were considered for the survey instrument, including telephone interviews, site visits, and a questionnaire mailing. The latter was selected as the optimal method because it offered the most efficient and standardized mode for data collection. The questions in the survey were established after completing an extensive literature review on OCUs/RTCs. A scaled-response questionnaire (scale 1- 5, with 1 equal to "strongly disagree" and 5 equal to "strongly agree") was developed that addressed several aspects of each of the following key elements:

- Reasons for considering establishing an OCUs/RTCs,
- Advantages,
- Disadvantages,
- Operational issues,
- Financial concerns, and
- Unit design.

Out of 375 surveys mailed, 109 responses were obtained (response rate 29 percent). The individual responses were collated and entered into a data base. These data were then analyzed to make inferences about the general consensus of the sample set in order to extrapolate guidelines for planning the implementation of an OCU/RTC.

The following report describes a survey instrument designed to explore the current consensus on the utility of OCUs/RTCs. Also included is a summary of the data collected and an analysis that provides insight into the major aspects of OCUs/RTCs that should be addressed by an institution when considering implementing

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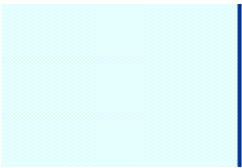
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## Results

The survey included specific questions under each of the six key elements noted above. The details of the questions were based on a review of the literature that focused on each of the key elements. Tabulated below are the aggregate responses to these questions.

### Reasons Hospitals are Implementing OCUs/RTCs in the Emergency Department

There appeared to be significant agreement among the respondents that institutions have implemented OCUs/RTCs to improve quality of patient care, increase profitability in a managed-care market, and reduce total patient cost. Other reasons included reducing inappropriate discharges and admissions, improving patient comfort and satisfaction, and allowing physicians additional time to make appropriate dispositions. The consistent agreement among respondents possibly indicates that the impetus to develop OCUs/RTCs is governed by a set of tenets that appear to be relatively widely held, at least within this sample set.

### Major Perceived Advantages

Primary perceived advantages of OCUs/RTCs include facilitating more accurate diagnosis, thereby improving patient outcomes and reducing hospital costs; focusing specialist consultation, supporting primary care physicians; and reducing malpractice liability. Also pertinent to the current health care milieu is that 82 percent of the respondents "strongly agreed" or "agreed" that OCUs/RTCs complement the goals of managed care and capitation schemes. Other advantages that the majority agreed on included improved patient satisfaction and exposure of emergency physicians to short-term patient outcomes. The relative uniformity of agreement on the advantages of OCUs/RTCs helps identify key aspects of such units that make them attractive to health care systems in the current environment. This information would clearly help support a proposal to develop such a unit in an area where managed care had a large market share.

### Major Perceived Disadvantages

Opinion was mixed among the respondents regarding the disadvantages of OCUs/RTCs. Disagreement about whether the volume of patients who would fulfill criteria for admission to an OCU/RTC would be high enough to justify implementation divided the respondents (47 percent strongly agree/agree versus 40 percent strongly disagree/disagree). A large proportion (42 percent) was unsure of appropriate reimbursement for care delivered in the OCU/RTC and a greater majority (51 percent) was unsure if hospital profitability would be adversely affected in a fee-for-service or discounted managed care market. There was agreement regarding the need for additional personnel, space,

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and equipment (86 percent strongly agree/agree); however, there was less agreement that fulfilling these needs would potentially offset cost savings (51 percent strongly agree/agree versus 30 percent strongly disagree/disagree). A negative byproduct of OCUs/RTCs that may develop involves the interaction dynamics between the emergency physician and the admitting attending physician. Forty-five percent of respondents strongly agreed or agreed that the perceived loss of the attending's control of the patient upon admission to the OCU/RTC may generate hostility among physicians. A further negative impact of OCUs/RTCs agreed upon by a large majority (87 percent strongly agree/agree) was that the unit could become a "dumping ground" if protocols clearly identifying physician responsibility for patient care and treatment documentation are not adequately defined. The points of disagreement and uncertainty indicate areas in which there are perhaps not enough published data for a consensus, or they may represent geographical/institutional variations within the sample. Whatever the reason, these areas should bear close scrutiny during the planning stages of an OCU/RTC.

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## Operational Issues

An overwhelming majority supported the use of clinical pathways and guidelines for diagnosis and treatment (92 percent strongly agree/agree) and admission to the OCU/RTC for diagnostic evaluation (93 percent strongly agree/agree). Precise admission and discharge criteria were also felt to be of significant importance. Clear delineation of the mechanics of patient transfer to other units as well as documentation of physician responsibilities for patients on the unit were also important points of agreement. The issue of admitting patients with psychosocial problems to the OCU/RTC was a source of some disagreement and possibly helps identify a problem area that would need clear definition in a given system.

Generally, there is agreement that the operation of such unit should be governed by a precise and specific set of protocols that would optimize patient care and limit ambiguity regarding appropriate and timely patient disposition.

## Financial Considerations

Sound economic health is crucial for the survival of an adjunctive unit such as an OCU/RTC. A majority agreed that established protocols would help ensure appropriate resource utilization and keep costs down. Also agreed on was the possibility of augmenting revenue from the unit by market-driven admissions and a higher rate of reimbursement justified by closer monitoring and earlier clinical decision making. Appropriate coding of procedures and services rendered in the unit were felt to be important and may require trained outpatient coders to maximize accuracy and appropriate reimbursement. The impact of Medicare managed care was perceived by the majority of respondents to increase the need for OCUs/RTCs.

The optimal design of an OCU/RTC would contribute significantly to its efficiency. There was clear agreement that the unit should be located near the emergency department and should have easy access to any hospital services deemed necessary. Ready access to computerized medical records, laboratory data, and an on-line ordering system were also clearly supported (91 percent) as vital to the efficacy of such a unit. A physician charting room and independent access to the waiting room for patients and family members were also supported by the bulk of the respondents. There was significant uncertainty regarding the calculation of the number of treatment spaces that should be allocated to such a unit. Fifty-two percent of respondents were unsure of this point. This clearly points out a pivotal aspect of unit planning that needs specific operational and facility analysis before any facility plans can be made. Accurate determination of this number will be imperative to the clinical and economic success of an OCU/RTC.

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## Unit Design Considerations



[Figure 1](#): The Placement of the unit near the emergency department allows for optimal resource allocation of staff and equipment.



[Figure 2](#): Unit should have quiet, private rooms that are separate from the emergency area.



[Figure 3](#): Unit equipment should include a monitoring telemetry system, and on-line lab reports and ordering system.



[Figure 4](#): Unit rooms should be sized to support ancillary services performed at the bedside.



[Figure 5](#): The unit should have computerized access to full inpatient and outpatient medical records.

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## Conclusions and Recommendations

Careful evaluation of the forces that govern a given health system are vital to assessing the need and viability of instituting an OCU/RTC. The prevalence of managed care and capitation in a market place, patient volume, retrospective data on the number of observation-type admissions per year, physician and patient input, and future projections for the marketplace are all important considerations for an OCU/RTC proposal. A positive overall consensus seems to exist that OCUs/RTCs provide advantages. Some of the advantages mentioned above would be weighted more heavily in specific markets; therefore, any assessment needs to be individualized within the marketplace concerned. For example, the economic constraints that define a heavily managed market may not apply to one that has less managed care and therefore could operate within more liberal financial boundaries. The consistent agreement on the advantages of OCUs/RTCs investigated in this study indicates a number of specific areas, mentioned above, that are uniformly held to be important in the health care industry. These areas should be addressed individually when developing protocols and facility plans for proposed OCUs/RTCs.

Disagreement and uncertainty regarding the disadvantages of OCUs/RTCs is indicative that these points were either poorly understood or require closer inspection. Adequate volume of patients admitted and appropriate reimbursement for services rendered are both essential for the continued viability of an OCU/RTC. However, opinions and issues vary, indicating detailed study of these factors at the planning stages of an OCU/RTC. A thorough cost analysis involving the comparison of augmented revenue against increased resource use is also key in determining the feasibility of an OCU/RTC.

Agreement on the specifics of operational and design issues focuses on maintaining optimal patient management, facilitating early diagnosis and treatment, and maximizing efficiency of the unit. Incorporation of detailed protocols and guidelines to prevent undue delay in care and ensure appropriate dispositions support the above-mentioned goals. Based on the study findings, we recommend that the determination of need for an OCU/RTC be based on:

- Current assessment and improvement of the quality of observation care;
- Current and projected volume of emergency patients;
- Assessment and status of other health delivery systems in proximity
- Retrospective analysis of observation-type admissions;
- Physician/nursing input; and
- Current status of emergency department's management of

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observation care.

Financial viability of an OCU/RTC should be assessed based on current and projected reimbursement for observation care, particularly regarding the impact of managed care plans; reimbursement for specific procedures in an OCU/RTC; increase in resource utilization costs (i.e., intensity of level of services provided); and review of medical liability and proposed reduction in exposure through the implementation of an OCU/RTC.

Operational issues that should be addressed include the following:

- Development of unit protocols and clinical pathways for patient care;
- A clear and precise definition of admission and discharge criteria and guidelines for patient transfer;
- Physician responsibility and adequate documentation;
- Defined allocation of nursing and support staff;
- Proper coding for procedures and services rendered; and
- A mechanism to periodically assess the quality of care and patient satisfaction.

Design issues that should be closely studied include the following:

- Proximity to or location in the emergency department;
- Calculation of the number of treatment spaces;
- Available space for the unit;
- Accommodation of a computerized system for medical records, laboratory data, and on-line ordering; and
- Specific design factors such as areas for physicians charting, exits to the waiting room, and so forth.

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## Recommendations for Further Study

These data have been used as a guide to the professional consensus on observation care for the purpose of obtaining some insight into the development of a planning model for OCUs/RTCs. The analysis is based on the current opinions of health care professionals active in the field. Data collected here are qualitative and should be treated as such. The low survey response rate resulted in a small sample and the data may be prone to biases. However, the recommendations are reasonably valid as general guidelines.

Two of the largest groups of respondents were health care administrators and emergency medical directors (39 percent and 37 percent, respectively). Each profession's outlook on health care has to be taken into account when interpreting the responses. Physicians may not have the same agenda as health care administrators. Thus, when polling a larger group of each profession separately, a different data set might be obtained. It should also be noted that not all health care professionals are equally deft in the various fields that were investigated by the survey and responses may vary based on expertise rather than accurate insight into the specific issue.

An exhaustive and complete analysis of all data collected has not been performed to date. Other points may surface with continued study of the data base.

This data base could be used as a nucleus to develop a more expansive and comprehensive data system, which may be updated periodically to provide health care professionals with an ongoing source of information on observation care and perhaps other evolving issues in the health care industry.

Finally, changes in managed care are variable by market size and competition. This, although unavoidable, has to be taken into account when designing a model for another geographic location where the current health care environment is dissimilar. The application of this model to the structure of a locally adjusted plan should be effective in assessing the requirement, feasibility, and future of an OCU/RTC. 🐼

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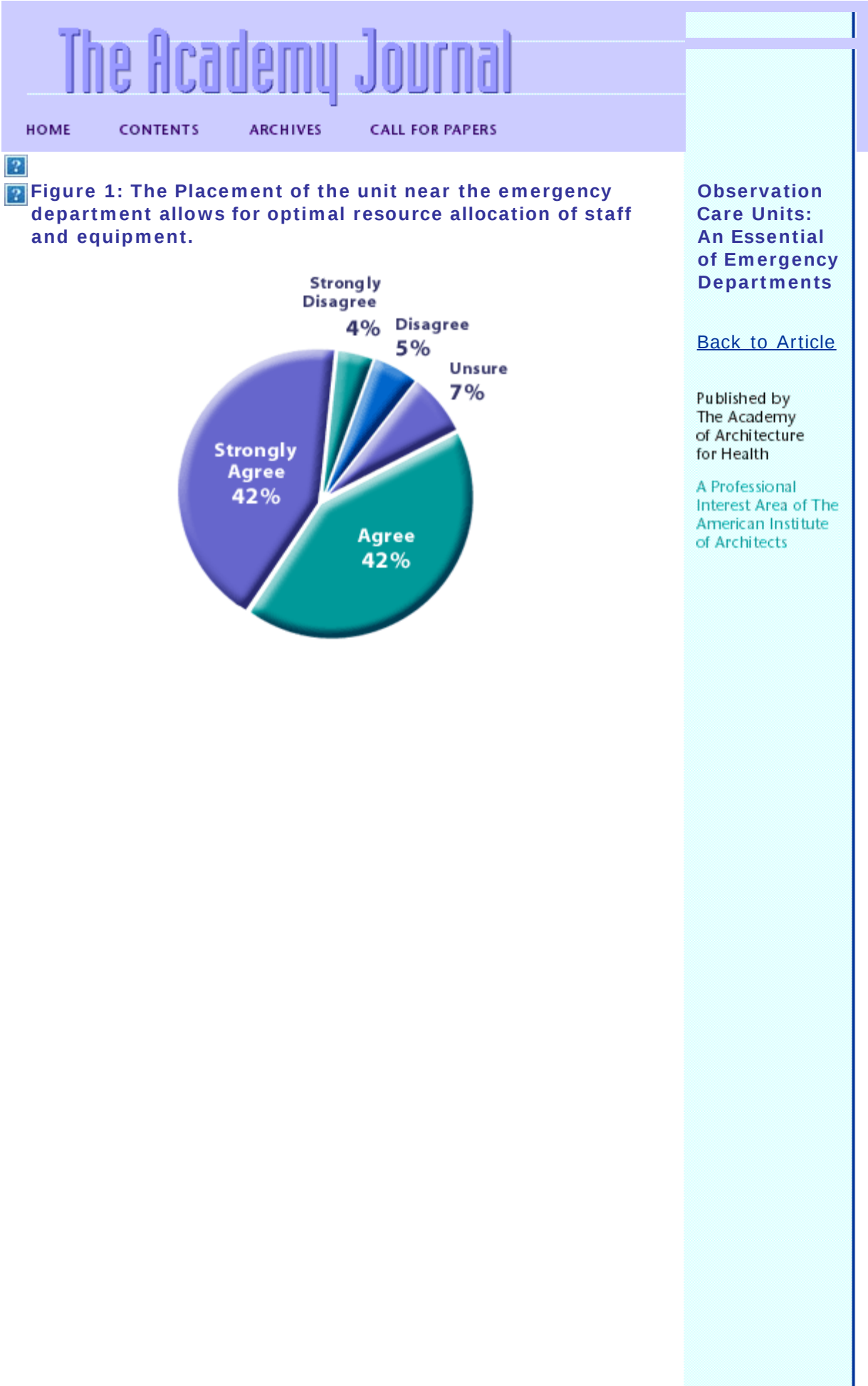
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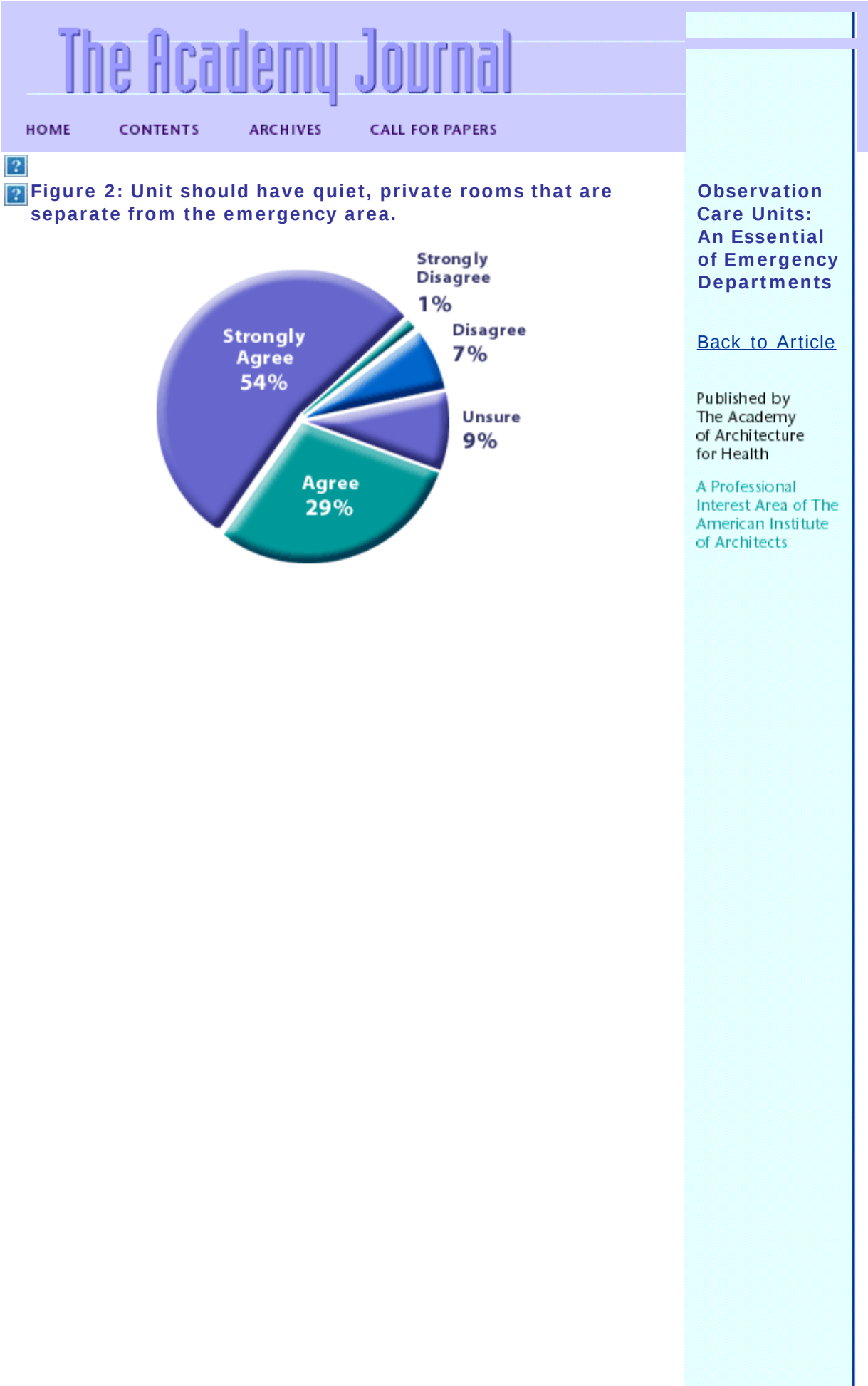
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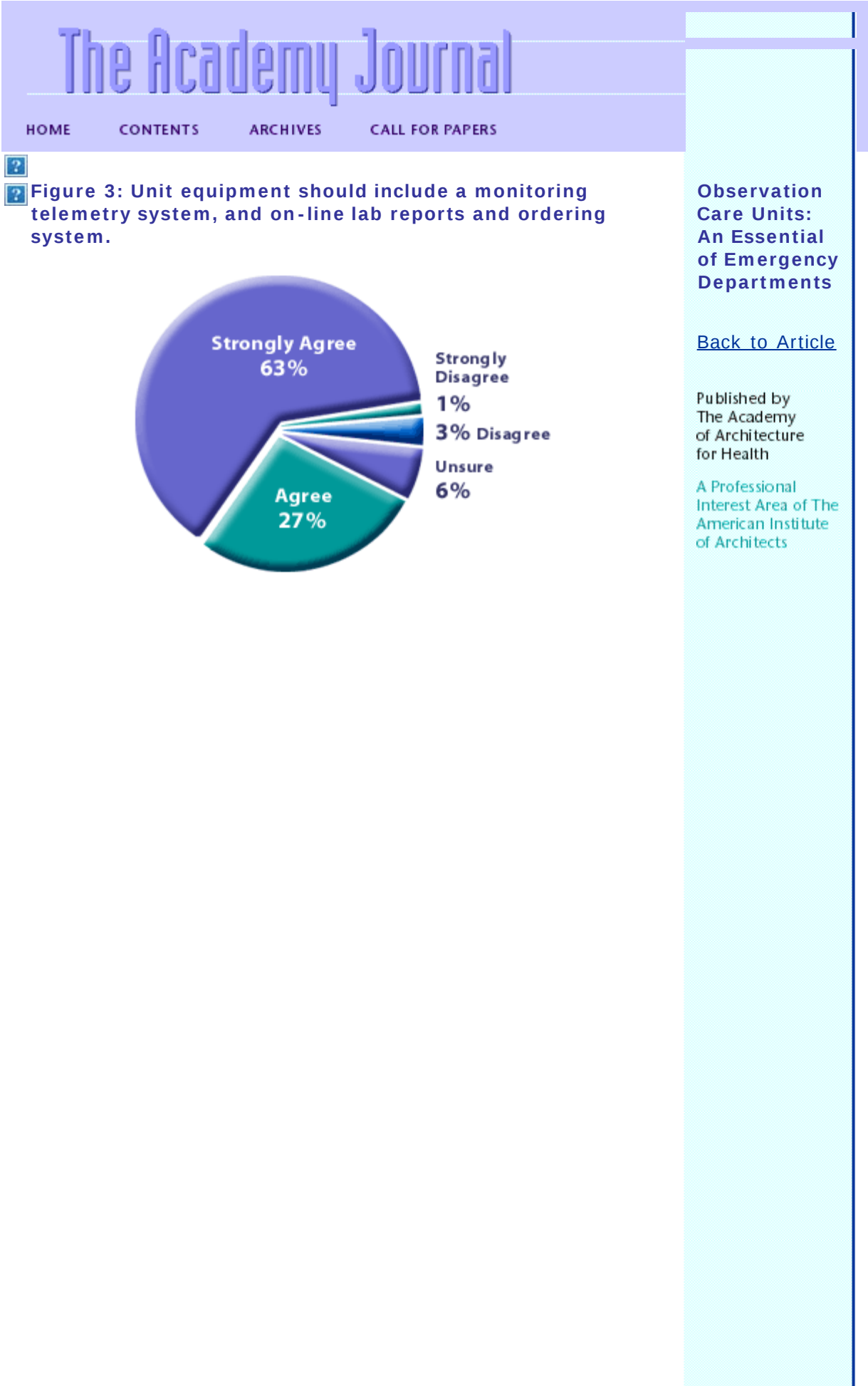
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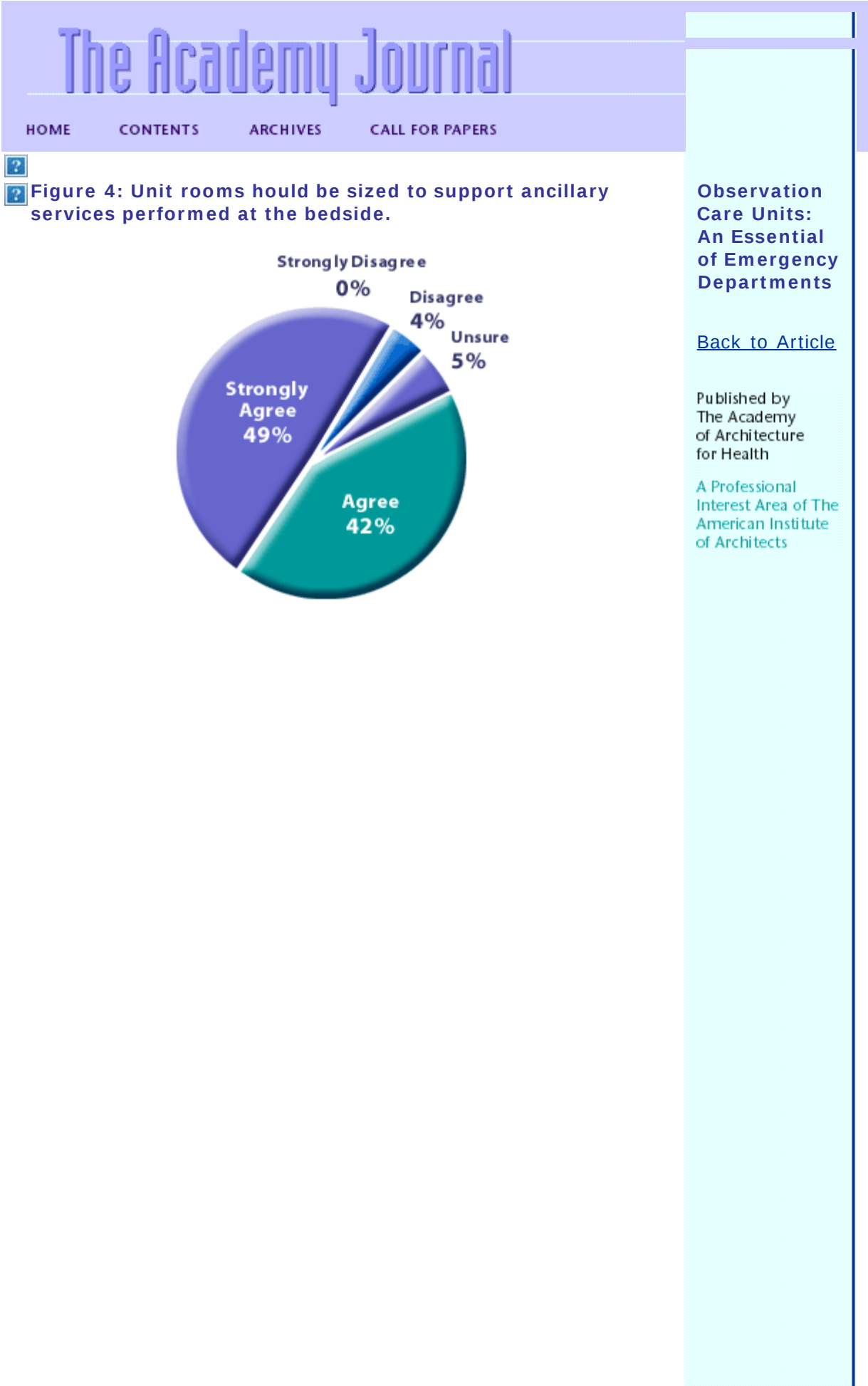
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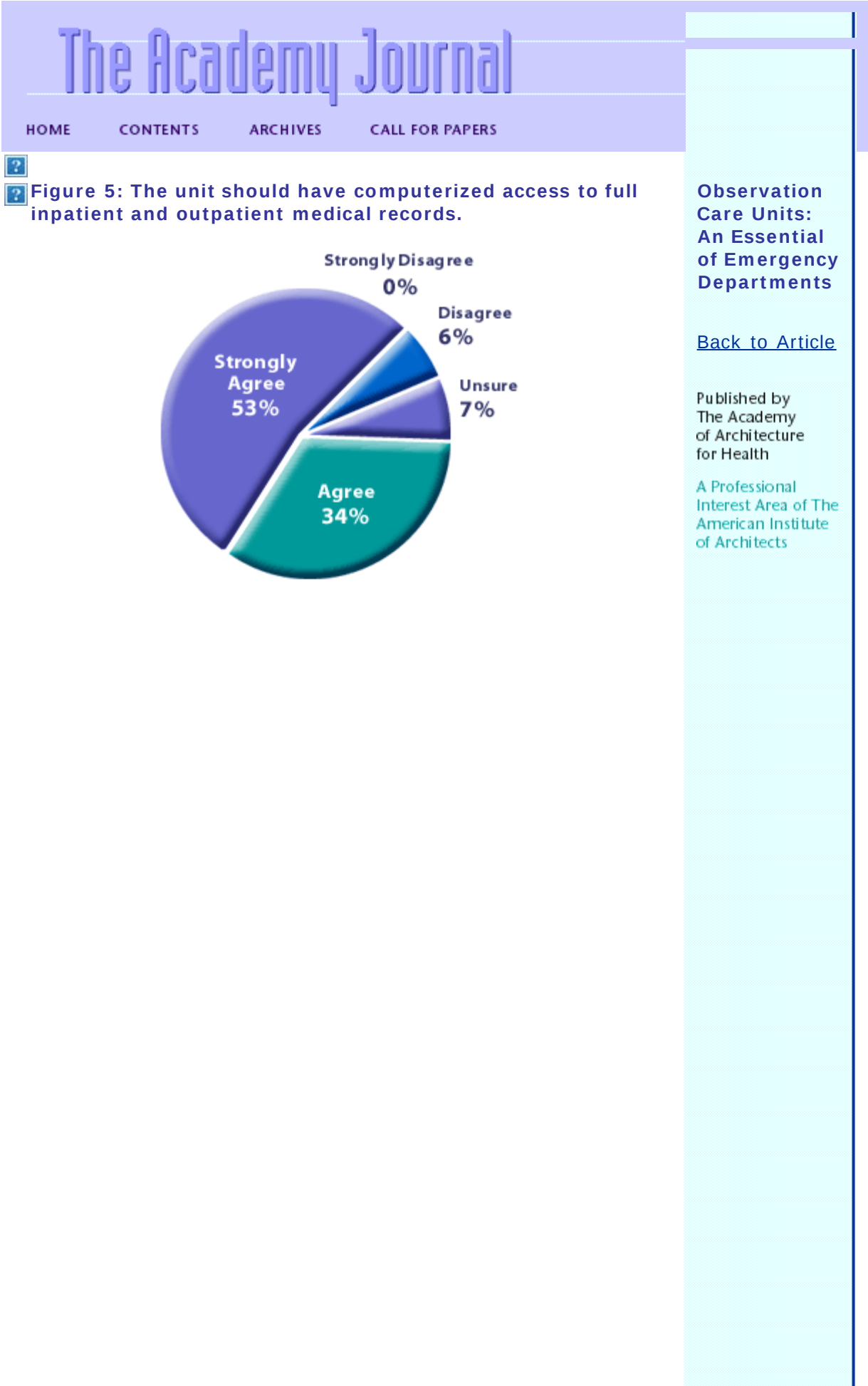
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