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Continuous Quality Improvement and Music Therapy: An Analysis of Importance, Training, Familiarity, and Involvement

Jane E. McLaren
Western Michigan University

CONTINUOUS QUALITY IMPROVEMENT AND MUSIC THERAPY: AN ANALYSIS OF IMPORTANCE, TRAINING, FAMILIARITY, AND INVOLVEMENT

by

Jane E. McLaren

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Jane E. McLaren, M.M.

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The level of familiarity with and utilization of CQI by music therapists was studied in this paper. CQI is an objective form of measurement which focuses on process and system as the root of quality control problems.

A total of 200 surveys were mailed to members of the National Association for Music Therapy on a random basis. The survey dealt with the level of familiarity with CQI including terminology and accountability methods, as well as the level to which music therapists are utilizing CQI in their practices.

The results showed that though only 36% (n = 59)of the respondents were currently involved in CQI, 75% (n=98) felt they required more training in CQI. A significant relation was found between job site and participation in CQI, population served and implementation of CQI, and between accrediting agency and participation in CQI studies. Eighty percent of the respondents (n=103) felt that CQI was important to the profession of music therapy.

The results indicated that music therapists do consider CQI important to the profession of music therapy and that there is a need for further training in this area.

TABLE OF CONTENTS

Table of Contents--Continued

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Justification for Study

As health care becomes more competitive there is an increased focus on achievable patient/client benefits and the cost effectiveness of treatment. Patients, referral sources, and funding bodies are requiring health care professionals to be accountable to them (Gruchy & Rogers, 1990; Dziwak & Gfeller, 1988). "Externally, payors, government, and the public are demanding accountability for the cost and quality of care. Internally, health care practitioners and administrators, as always, strive to improve quality and resources" (Joint Commission on Accreditation of Healthcare Organizations [JCAHO], 1991, p. 5). Quality is becoming one of the most prevalent topics to be addressed in health care. "The cost of poor health care can amount to as much as 30% of the total operating costs of a facility. If all work processes used were done correctly, as much as 258.9 to 294.2 billion health care dollars could be saved annually" (Masters & Schmele, 1991 p. 7).

The continuous growth of healthcare costs have lead to the development of a number of systems including quality assurance, peer review, program evaluation, and utilization review (Gruchy & Rogers, 1990). These systems are designed to control costs without interfering with quality of care. Continuous quality improvement (CQI), an important factor in cost effectiveness in industry, is one of these methods (Wilson, 1992). CQI is a method of quality control that focuses on system and process as the root of most quality problems. It challenges employers and employees to seek opportunities for continuous growth and improvement of services

(JCAHO, 1992,d).

"Music therapy, and other creative arts therapy professions, have directly involved themselves in the struggle toward [cost effectiveness]" (Clark & Ficken, 1988a, p. 23). For instance, a music therapist may choose to utilize CQI in his or her department to justifying services, provide information to assist in decision making, identify problem areas, create feedback for management, and demonstrate the contribution of music therapy to quality care and the mission of a facility (MacLean, 1991). "Many music therapists, however, see their own involvement as a passive one, waiting for something to 'happen' to them as an outcome of the situation. Survival and prosperity for this profession, however, require active responses and strategies" (Clark & Ficken, 1988a p. 23).

Though information on CQI in health care journals and publications has become more prevalent in recent years, there is still a shortage of information directly related to the field of music therapy. This results in a lack of a complete and full understanding of the concepts, techniques, and benefits from planning and implementing CQI studies within the profession of music therapy. "One of the issues common in health care (in general) is the incorrect perception that [CQI] is something that is done 'for them' and different from the day-to-day operations of defining quality, building and improving a therapeutic program, clinical supervision and collaboration" (R. Scalenghe personal communication, June 17, 1992). The results of the 1991 JCAHO compliance summary form confirmed that, as compared to other disciplines, "activity, rehabilitation, and biopsychosocial rehabilitation" services (which include music therapy) perform CQI more poorly and receive lower scores. Music therapy is not listed as a department individually in these summaries but is grouped with similar services such as those listed above. The categories which

include music therapy received an unsatisfactory score nine percent of the time in long term care institutions, 22 percent of the time in hospitals, and 37 percent of the time in mental health facilities that were JCAHO accredited (JCAHO, 1992c). These were among the lowest scores for health care professionals.

The results of a pilot study aimed at assessing music therapists' familiarity with CQI revealed that, though two thirds (n=10) of music therapists surveyed were familiar with CQI, only 28 percent (n=4) could define and provide a practical example of the common terms/procedures involved in CQI. The pilot study, conducted by this investigator at the 1992 National Association for Music Therapy (NAMT) conference in St. Louis, Missouri, surveyed fifteen music therapists practising in health care. Of those surveyed, 90 percent (n=14) felt that CQI was important to their current position but only 20 percent (n=3) actively participated in CQI studies. The main focus of CQI studies, for those who were involved in them, was to improve group or individual scheduling. Justification of positions, equipment, space and budget were among the lowest scores in areas of use for CQI studies. This would appear to indicate that music therapists could benefit from further education/assistance in the area of CQI. An associate director with the department of standards at JCAHO described the competence level of music therapists as "poor at best, let alone knowledge and implementation of CQI" (R. Scalenghe personal communication, Sept. 18, 1992). This is despite the growing trend of accrediting agencies and funding sources to require CQI programs in health care. Agencies such as JCAHO will require CQI programs in order to meet accreditation standards by 1994. Other accrediting agencies, such as the Commission on the Accreditation of Rehabilitation Facilities (CARF), are following suit by establishing deadlines for implementing CQI programs in health care institutions. As CQI continues to develop

in health care and its success becomes apparent, the push to integrate CQI into all areas of health care will increase. It is clear that music therapists, as well as other health care professionals, need to be familiar with the values and benefits of CQI as well as the process involved in developing, interpreting, and utilizing effective CQI studies.

Purpose

The purpose of this study was to determine the level to which music therapists employed in health care institution were familiar with and utilizing CQI studies in their practice. It attempted to determine: (a) if music therapists participated in CQI; (b) how important CQI was to music therapists; (c) how familiar music therapists were with the concepts and techniques of CQI; (d) the areas in which music therapists were using CQI studies in their practices; (e) the extent to which music therapists were effectively applying CQI principles and techniques; (f) potential areas of further involvement for CQI studies in the practice of music therapy; (g) if music therapists working with a specific population, type of facility, or accredited by a certain agency, appeared to be more proficient at utilizing CQI studies; and, (h) if music therapists felt they required further training in CQI.

Assumptions

The study assumed that music therapists involved in health care (medical, geriatric, psychiatric, etc.) were required to implement CQI or similar quality control studies in their departments and services and that they considered such studies to be important to their profession. It further assumed that many music therapists

were not fully familiar with or fully trained in all aspects of CQI and therefore did not utilize CQI to its fullest potential.

REVIEW OF RELATED LITERATURE

History and Development

Quality assurance (QA), the predecessor of continuous quality improvement, was initially used by Florence Nightingale in Army hospitals. She used fatality and length of stay statistics to show the effectiveness of her methods. About 50 years later, in 1912, Dr. E. A. Codman, at Massachusetts General Hospital, began his "end result" assessment to improve health care. He abstracted case histories and then re-evaluated patients at least a year after their hospital stay. The results were listed as either satisfactory or unsatisfactory. The unsatisfactory results were categorized as diagnostic error, inadequate technical skill, poor surgical judgment, inadequate equipment or care, the disease process, or patient non-compliance (Laffel & Blumenthal, 1989, & Ostrow, 1983a).

In 1918, the American College of Surgeons wrote general standards for a voluntary accreditation program which stated that physicians and surgeons were required to "review and analyze at regular intervals their clinical experience..." (Ostrow, 1983a, p.24). The first accreditation of hospitals by the American College of Surgeons (in 1918) resulted in a passing mark by only 89 out of 692 hospitals.

In the 1950's, Paul Lembcke began doing what he called medical audits by scientific methods. He emphasized the need for objective measures of quality and the development of criteria for quality care that reflected the then current literature. "Lembcke and Codman's ideas serve as pre-cursors of the best patient care evaluation methodologies in use today" (Ostrow, 1983a, p.24).

During the same time period the Joint Commission on Accreditation of Healthcare Organizations (JCAHO - originally called the Joint Commission on the Accreditation of Hospitals) was founded. JCAHO was the result of a partnership between The American College of Surgeons, The American Hospital Association, The American Medical Association, The American College of Physicians and The Canadian Medical Association. This private and voluntary accrediting agency for healthcare organizations was to become an authority on quality assurance implementation in hospitals and health care organizations. Currently JCAHO is recognized as one of the foremost authorities on CQI standards in health care and are the basis for which many accrediting agencies relate their standards (Ostrow, 1983b). Throughout the 1960's, JCAHO became the preferred route for hospitals to demonstrate that they met standards for quality service.

It was not until 1972, however, that congress passed the Professional Standards of Review Organizations (PSROs). The PSROs were made up of physicians and were designed to replace the utilization review boards that were previously required under Medicaid legislation. They required both chart audit and utilization review through length of stay and admission screening. Fiscal intermediaries such as Blue Cross would not pay for services PSROs identified as medically unnecessary, and substandard care was monitored until it improved. (Ostrow, 1983a). This placed further emphasis on establishing objective methods of health care delivery. In 1975, JCAHO responded to PSRO's by introducing the Quality of Professional Services Standard. Until that time the standards referred in general terms to assessing and improving the quality of care, but did not suggest specific methodologies for the activities. This new standard required hospitals "to demonstrate that the quality of patient care was consistently optimal by continually

evaluating care through reliable and valid measures" (JCAHO, 1991, p.7). The assumptions in this statement were to remain for some time in quality-related writing and activity. Its use of the word "optimal" suggested that it was possible to improve the quality of care until it was the best that could possibly be expected, therefore implying that an end level of improvement existed. The word "demonstrate" suggested that this optimal care could be documented. "Continually" showed that the effort should be ongoing and "reliable and valid measure" implied that objective methods could be established to examine and document quality. The standard went on to require explicit, measurable criteria. The criteria, however, were not met (JCAHO, 1991).

In 1979 the Quality Assurance chapter replaced the Quality of Professional Services section in the JCAHO accreditation program. This allowed hospitals greater flexibility in the methods they chose to assess and improve the quality of care. It further emphasized the value of a coordinated, organization-wide program focusing on problems whose solutions would have significant effects on patient care outcome (JCAHO, 1991). This chapter included three elements: (1) assessment of the patients' care problems that had a substantial effect on treatment outcomes, (2) the use of objective criteria and/or standards developed by peer professionals as measures of quality of care, and (3) the elimination of impediments that restricted the benefits of care (Ostrow, 1983b; Law, Ryan, Townsend, & O'Shea, 1989). The goal of QA was to illustrate a measurable improvement in patient care (Parente, & Anderson-Parente, 1986). Patient care and delivery problems were eliminated by stating desired outcomes and monitoring progress towards achieving these outcomes (Shimeld, 1983).

Revisions to the QA standard in 1985 continued to emphasize the organization-wide QA program, but replaced the problem-focussed approach with systematic monitoring and evaluation of important aspects of patient care. The monitoring and evaluation was to address specific departments and services, and included a number of tailored QA activities. Even with these activities, the health care field continued to request assessment and methodology tools. As a result, JCAHO formulated a detailed monitor and evaluation process. From this emerged the ten-step process for monitoring and evaluating progress. This process included assigning responsibility, identifying important aspects of care, identifying indicators to monitor the aspects of care, the collection of data and evaluation of care, and taking actions to improve care (JCAHO, 1991).

In 1987 JCAHO introduced an "Agenda for Change" that included the refocusing of standards designed to facilitate the implementation of Continuous Quality Improvement. The changes included emphasizing the effective application of a wide variety of CQI tools in the overall CQI program. As stated, this resulted in a change in focus from problem identification and resolution, to implementation of ongoing improvements, and was designed to meet the needs and demands of health care payors.

Continuous Quality Improvement

Though CQI is new to the field of health care, its use in Japanese and American industry dates to the 1930's. The Japanese felt that the U.S. won World War II because of the use of statistical quality control. When the war was over they invited quality control experts to come to Japan and instruct them. The process of developing quality control in Japan started with management and worked its way

down through all the employees. It was discovered that problems related to quality and opportunity to improve quality were usually built directly into the process and not the fault of poor employee motivation or bad intentions (Berwick. 1989). Once all employees were trained in and utilizing CQI its benefits to Japanese industry became clear. This prompted the U.S. to incorporate CQI into its industries and corporations in order to remain competitive (Berry, 1991).

Traditionally healthcare has used discipline-specific subject matter knowledge as a method of improving quality. This, however, has been less than effective. "The dilemma that we face at the moment is that the demand is for a greater rate of improvement and improvement in different ways than we have produced up until this time" (Batalden, 1991, p.6). When subject matter knowledge is used to make improvements then, as previously discussed, health care experiences the same problems as industry - that of relying on staff to "try harder." Instead, the emphasis should be on the process of health care delivery, not on a program. "A process is a methodology that is developed to replace the old ways and to guide corporate activity year after year. A program, on the other hand, is typically seen by many employees as something with a beginning, a middle, and an end" (Berry, 1991, p.1). CQI involves employees, at all levels of a company, in the assessment and improvement of quality through the application of statistical process controls and other quality improvement tools and techniques. As a result of total employee involvement, employees work free of the fear of being accused of failure and in close contact with all levels of the corporation. For management this means relinquishing some of their control of quality surveillance to their employees . CQI at the management level (also referred to as TQM - Total Quality Management) has three objectives: (1) to establish requirements that employees are to meet, (2) to supply the wherewithal that

employees need to meet those requirements, and (3) to spend all its time encouraging and helping employees meet these requirements (Crosby, 1984, p. 59). The goal of CQI itself is to expect and to accept zero defects in quality.

CQI proved itself to be effective and cost efficient in industry. It is now making the transition into health care with the same results (Berwick, 1989). Health care organizations are increasingly embracing CQI as an essential objective for every level of employee and every physician (Leebov & Ersoz, 1991). It is accomplished by improving the processes by which people work. This involves identifying and monitoring aspects of care, determining clinical indicators, establishing and implementing evaluation of care to identify opportunities to improve care, and taking action to improve care on a continuous basis (JCAHO, 1991). One of the reasons that CQI is successful in health care is because there is an application and understanding of the scientific method in health care that manufacturing organizations do not have. Furthermore, the people that get into health care tend to be helping kind of people and the idea of continuous improvement is something that is very comfortable and makes a lot of sense to them (King, 1992).

JCAHO has set 1994 as the year when health care organizations accredited by their agency must have effected the change from QA to CQI, but they are not the only voice addressing CQI in health care. At the 1991 National Forum on Quality Improvement in Health Care the Institute for Healthcare Improvement was established. This organization's initial concerns are professional education, research, management support, and policy and regulatory reform (National Demonstration Project on Quality Improvement in Health Care [NDP], vol. 1(2)). This organization publishes one of many monthly newsletters as part of its ongoing effort to assist and educate healthcare professionals in CQI technique and benefits.

Differences Between Continuous Quality Improvement and Quality Assurance

CQI focuses on building quality into the process of health care to help patients achieve optimal health outcomes, reduce expenses, decrease frustration, and increase staff moral (Leebov & Ersoz, 1991). It's predecessor, quality assurance (QA), had three foci: (1) measuring performance, (2) determining whether performance conformed to standards, and (3)improving performance when standards were not met (Laffel & Blumenthal, 1989). Thus quality was achieved by inspection for deficiencies in people and programs rather than focussing on systems and processes as the root of most quality problems.

QA has been less effective than CQI because workers, forced to see that their work measured up to a predetermined standard, focused on how they could make the measure acceptable rather then what the measure could tell them about the quality of service being provided (Cyr, 1991, p. 3). This process assumed that some rate of poor outcome was acceptable (Laffel & Blumenthal, 1989). "Working in a situation where nonconformance to standards is considered unavoidable produces a consistent flow of problems" (Crosby, 1984, p. 3). Furthermore, once the work met the predetermined standard there was no further effort to improve or seek opportunities for improvement. The end result of QA was meeting the standards set up by an accrediting agency and/or by the administration of an institution. CQI differs from QA in that it involves continuous improvement and upgrading of services as opposed to inspection of current services for existing problems. "Convention says that quality is achieved through inspection and testing and checking; reality says that prevention is the only system that can be utilized" (Crosby, 1984, p. 50). CQI builds quality into the process instead of inspecting for errors (Kirk, 1992), thus CQI's focus is on

prevention, not appraisal (Crosby, 1984). Unlike QA, the end results of CQI are not simply meeting the standards set up by accrediting agencies and/or administration. Instead these standards are met within an environment that produces improved profitability and competitiveness, improved organizational effectiveness, and improved customer satisfaction.

The CQI Process

One of the first steps in the CQI process is determining the areas of care that influence quality. CQI provides employees with the "ability to not just look at what somebody else is doing and copy it, but to understand what the underlying need and value and understanding is. Then to be able to create a system, a tool, an approach for your organization" (King, 1992, p.5). This means that you must understand "exactly what you produce, who benefits from that, why they need what you produce, how they define quality about what you produce, and what prompts them to define quality that way" (Batalden, 1991, p. 6). For the music therapist this means determining, defining and selecting the areas of care (activities, programs, scheduling, staffing etc.) that are important to patient satisfaction and expectations. This includes both internal (staff, physicians, etc.) and external (patient) expectations as well as professional standards. In order to do this the therapist needs to be familiar with both the organizations' mission statement as well as the clients served. The mission statement should provide an idea of the goals and objectives of the facility and the music therapy service. This can assist in determining internal expectations. Internal expectations can also be determined by involvement in focus groups and brainstorming sessions where representatives of a variety of disciplines meet together to discuss their perceptions of "customer relations" and to present their needs and

services in relation to the disciplines with which they interact. External expectations can be determined by patient satisfaction surveys and questionnaires . These can be used to assist in highlighting patient needs, expected outcomes, and key attributes of care that are important to the patients you serve. Though the goal of CQI is not to simply meet professional standards, these standards also need to be considered with internal and external expectations. Once all of the areas of care have been determined then the next step is to develop clinical indicators.

Clinical Indicator

A clinical indicator is a measurable dimension of the quality or appropriateness with respect to an important aspect of patient care (Scalenghe, 1991, p. 32). Though it is not a direct measure of quality, a clinical indicator can describe measurable care process, clinical events, complications or outcomes, for which data should be collected to allow for comparison to the established standards (Scalenghe, 1991). Clinical indicators may include: timeliness, effectiveness (level of services and expected outcome), efficacy (level of benefit expected when health care is applied under ideal circumstances), appropriateness (does the service meet the needs of the client), efficiency, continuity, privacy, confidentiality, participation (family and patient), safety, and the supportive nature of the environment (Riley, 1991).

There is no set or predetermined list of clinical indicators. They should reflect the individual expectations of the patients, professional standards, and staff of each institution. When determining clinical indicators, music therapists might consider different philosophies of treatment, issues of information retrieval, the accuracy of reported data, resource utilization, efficacy of the program, program structure, availability to clients, levels of participation, equipment and staffing needs, etc. It is

important to remember that the clinical indicator should highlight patient satisfaction and key attributes of quality important to the patient and professional standards (Leebov & Ersoz, 1991). For instance, length between patient admission and their designation to a music therapy group (accessibility), percentage of referrals served (efficacy), average time spent per patient (timeliness), or percentage of goals achieved (effectiveness) may be important factors in successful delivery of treatment.

Once the expectations, or clinical indicators, are highlighted, the health care professional needs to translate them into operational or process requirements. This often involves the creation of flow charts which outline the chain of events that result in a met expectation and illustrates all of the steps and all of the people involved in the process. The desired outcome must be clearly described and understood before it can be studied.

Statistical Methods of Accountability

When all steps necessary for the desired outcome are identified, the process of measuring, studying, and utilizing the findings can begin. In order to accomplish this a regular schedule of measurement needs to be designed. A variety of statistical methods may be used to accomplish this measurement. Whatever method is chosen should reflect the following: (a) where - at which point in the process can you collect the information, (b) when - time frame for data collection, and (c) who - who can provide the necessary data most conveniently (Leebov & Ersoz, 1991).

When these are considered, the resulting method chosen should allow not only accurate and usable information but also provide it in a manner that is convenient and time efficient.

Statistical methods of data collection may include the following ten

accountability methods:

1. Focus Group: A facilitator led group using open-ended questions to identify requirements and expectations, solicit perceptions of performance, field test changes, etc.

2. Survey: A written questionnaire to identify customer expectations, monitor satisfaction, measure the effects of improvement, etc.

3. Check sheets: A form designed to make it easy to record data, usually a diagram or table that lets you count the frequency of an event of action.

4. Logs: Chronological records or diaries that track the sequence of events, nature of errors or complaints, and the times they occur.

5. Histograms: A bar graph which shows distribution of data points related to some measurable characteristic.

6. Pareto Chart: A vertical bar graph or column graph that displays the frequency of occurrence of various causative events. It is a cumulative percentage histogram that shows individual elements or causes as a percentage of the total in declining order.

7. Trend Chart: Performance plotters that can be used to monitor the movement in your long-range average and draw conclusions about whether performance is moving up, down, or not at all.

8. Run Chart: Similar to a trend chart , it tracks individual data points, not the average for a time period.

9. Control Chart: A run chart with one more level. It shows statistically determined limits on both sides of the average illustrating variance in performance.

10. Scattergram: Shows data between variables by plotting dots on a graph.

Statistical tools used for targeting improvements may include the following

nine accountability methods:

1. Flow Chart: A picture of a process. It shows every activity or step in a process intended to lead to an outcome.

2. Brainstorm: A tool for generating ideas, perceptions, problems, opportunities, etc., without judgment or discussion.

3. Affinity Chart: A process for generating ideas, perceptions, and opinions, and organizing them into natural clusters of related items. Builds on ideas generated in brainstorming by grouping similar ideas.

4. Relationship Diagraming: Help draw logical connections between ideas and identify which ones are drivers and which are consequences. Helps illustrate cause and effect links.

5. Cause and Effect: Identify and illustrate the relation between an effect, outcome or a problem and the possible causes or factors that contribute to it.

6. Force Field Analysis: To produce improvement you can either increase positive forces or decrease negative forces. It examines the forces contributing to current states.

7. Decision Matrix: A diagram that helps you compare and choose among alternatives, problems or solutions.

8. Tree Diagram: Shows graphically the breakdown of large questions, goals, or problems in increasingly greater detail.

9. Matrix Diagram: A grid of row and column headings. The grid is used to illustrate the interrelation between items (Leebov & Ersoz, 1991; JCAHO, d, 1992).

If of assistance, measurement work sheets may be used to organize and summarize performance. This would include a list of clinical indicators, who is responsible for each measurement, frequency of data collection, who receives data,

and required equipment (Leebov & Ersoz, p. 64). Data from this evaluation is organized and evaluated to determine the means to draw conclusions that enable you to identify improvement opportunities.

The final step is to make a process improvement. Process improvement involves everyone, not just one person. It acknowledges that the action of one person is connected to other actions and is a series of interconnected and interdependent performance steps designed to meet patient expectations (Leebov & Ersoz, 1991). All the factors that influence outcome need to be defined and described. Then the proper action can be taken, the results studied, data collection repeated and continued and continuous quality improvement can be achieved.

Null Hypotheses

The null hypotheses are:

1. Music therapists do not participate in CQI.
2. Music therapists do not feel CQI is important.
3. Music therapists are not familiar with CQI terminology.
4. Music therapists are not familiar with factors in quality health care that can be used as clinical indicators in CQI studies.
5. Music therapists are not familiar with aspects of their facility that can be assessed in CQI studies.
6. Music therapists are not using accountability methods in their CQI studies.
7. The type of facility in which the music therapist is employed does not impact on the music therapist's involvement in CQI.
8. The population served by the music therapist does not impact on the music

therapist's involvement in CQI.

9. The accrediting agency of the facility in which the music therapist is employed does not impact on the music therapist's involvement in CQI.

10. Music therapists do not feel that they require further training in CQI.

DESIGN AND METHODOLOGY

Subjects

A questionnaire was sent to 200 professional members of NAMT in the NAMT membership directory randomly selected from the following employment categories: inpatient psychiatry, inpatient hospital, nursing home, physical rehabilitation, rehabilitation and hospice. Other employment settings not typically involved with CQI were eliminated for the purpose of this study leaving a total of 485 music therapists eligible for selection. Once the total list of eligible names was assembled, 200 names were selected on a random basis to be involved in the survey. The list of available names was not balanced for gender.

Instruments

A survey questionnaire (see Appendix A) was used to determine the subjects' familiarity with and utilization of CQI format. A cover letter (see Appendix B) was sent with each survey.

The survey questionnaire was designed by the investigator. The questions were based on information from JCAHO, the American Hospital Association, R. Scalenghe (personal communication, Sept. 18, 1992), and the National Association for Music Therapy. Questions one through three were taken from the NAMT survey of its membership. These questions were used in order to determine if any relationship existed between a music therapists' work site, population served, or accrediting agency, and their level of familiarity and involvement with CQI.

Questions six through eleven were based on information from JCAHO and the American Hospital Association. These questions were designed to assist in determining music therapists' knowledge of terms, tools, and potential and current uses of CQI studies. The other questions were designed to gain information about the therapist's comfort level in designing, utilizing, and interpreting CQI as well as to determine if there is a need for further training in CQI.

After designing the questionnaire it was forwarded to an associate director, Department of Standards, JCAHO, for his perusal and to assist in establishing content validity. There was no attempt to establish internal content validity. A pilot test was then conducted at the National Association for Music Therapy conference in St. Louis, Missouri, November 1992, with fifteen people completing the questionnaire. After the pilot test was completed the instrument was revised and submitted to the committee of this study for their comments. This committee consisted of three people, two professors of music therapy (registered, board certified music therapists), and the graduate advisor for the School of Music, Western Michigan University.

Procedure

The questionnaire, a covering letter, and a stamped return envelope were forwarded to each of the 200 subjects. Each return envelope included a number on the inside of the envelope flap that corresponded with a number assigned to the survey participant. When a completed survey was received by the investigator the number from the envelope was noted and the respondent whose assigned number corresponded with the envelope number was crossed off of the list of names of subjects. A follow-up letter (see Appendix C) was sent two months later to those respondents who had not replied to the first mailing. This included all those whose

names remained on the list of subjects after all replies to the first mailing had been received. This letter encouraged those who had not yet returned their surveys to do so and included a new survey and return envelope. The return envelopes were again numbered in order to permit a third mailing if required.

Analysis

Response rates for each item were tabulated along with the total sample size and overall percentage of returns. This was done by indicating the percentage and number of respondents who selected each alternative for each item. In questions dealing with familiarity of CQI terms and accountability methods one response per item was deemed sufficient for a positive response. All items that included a five point likert scale (one being the low score, five the high score) were analyzed for standard deviation and mean score. A positive response was seen as a score of 3.0 or greater. In addition relationships between specific variables (i.e. the respondents' level of familiarity with and involvement in CQI with their place of employment, population served, and accrediting agency) were also compared. In order to complete the analysis, Quatro Pro for Windows 1.0 and Kwikstat 3.0 were used.

RESULTS AND DISCUSSION

Results

Of the 200 surveys sent in the first mailing a total of 100 (50%) were returned. The second mailing yielded a return of 44 additional surveys. Of the 144 returned three were incomplete leaving a total of 141 (70%) surveys used in the data analysis. As is usual with surveys, respondents did not answer all of the questions, hence the sample size fluctuated for each question.

Hypothesis one, "music therapists do not participate in CQI," was rejected. The results of this survey showed that music therapists did participate in CQI studies. Question eleven indicated that 69% (n=89) of the respondents worked at facilities that were involved in CQI studies. Thirty-one percent (n=40) did not. More specifically, 36% (n=50) of the respondents were involved in CQI studies while 64% (n=87) were not.

Hypothesis two, "music therapists do not appear to feel that CQI is important," was rejected. Question seven and eight of the survey used a five point likert scale to indicate the level of importance that music therapists gave to CQI. Eighty-nine percent (n=121) of the respondents indicated that CQI was somewhat to very important to their current position with a mean score of x=3.67. Only 11% (n=15) did not feel CQI was important. Similarly, 95% (n=122) of the respondents indicated that they considered CQI important to the profession of music therapy. The mean for this question was x = 4.20. Results for this question can be found in Table 1.

Table 1

Level of Importance of CQI to Music Therapists

	not important		somewhat important		very important		
	1	2	3	4	5	Mean	SD
Present Position	5	10	42	45	34	3.67	1.04
Profession	3	4	19	48	55	4.20	0.82

Hypothesis number three, "music therapists are not familiar with CQI terminology," was accepted. Though music therapists were somewhat familiar with CQI terminology the level indicated was not sufficient to reject this hypothesis. The response to question nine showed that, with the exception of Outcome (x=3.26), the mean responses were below the $x \geq 3.0$ required to indicate a positive response. In addition the average mean for these items was also below $x \geq 3.0$ (average mean, x=2.77) . Overall, one third of those surveyed (33%, n=59) indicated that they were not familiar with the CQI terminology in the question while only one fifth (20%, n=26) were very familiar with the CQI terminology. Organization variables (58%, n=77,) and patient variables (53%, n=72) were rated lowest in familiarity by the respondents. Conversely, outcome (49%,n=67) and process (41%, n=56) were rated highest. The results for this question are illustrated in Table 2 as well as Figures 1-7. Question ten of the survey, which addressed overall familiarity with CQI, also revealed a mean below x - 3.0 (actual mean for question ten, x=2.70) A total of

Table 2

Level of Familiarity With CQI Terminology

	not familiar			familiar	very familiar		
Term	1	2	3	4	5	Mean	SD
Clin. Ind.	51	11	26	17	28	2.69	1.57
Structure	46	14	26	23	24	2.73	1.51
Process	37	13	28	27	29	2.97	1.50
Outcome	32	9	25	24	43	3.26	1.53
Risk Man	41	13	28	12	39	2.95	1.59
Organiz.	55	22	23	16	13	2.33	1.36
Pt. Vari.	56	16	28	14	19	2.43	1.46

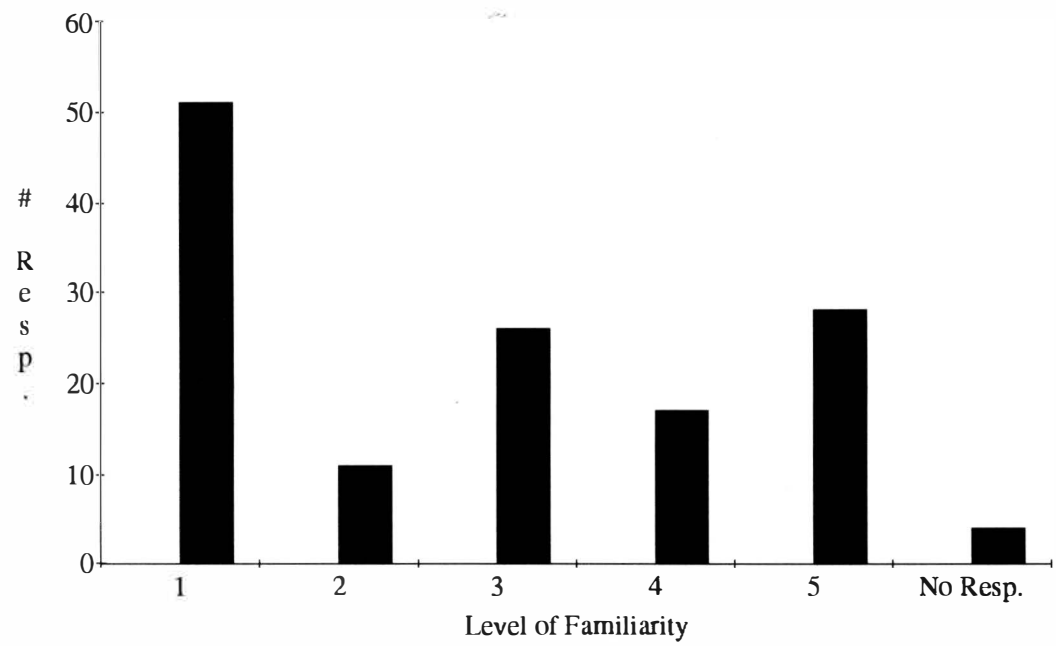

Figure 1. Level of Familiarity With CQI Terms: Clinical Indicator.

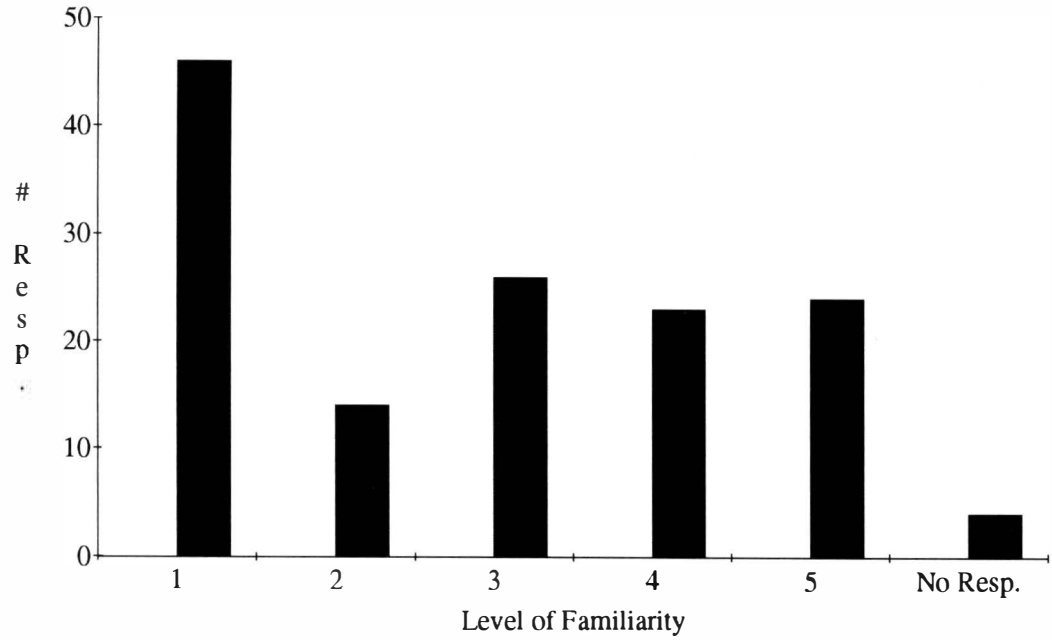

Figure 2. Level of Familiarity With CQI Terms: Structure.

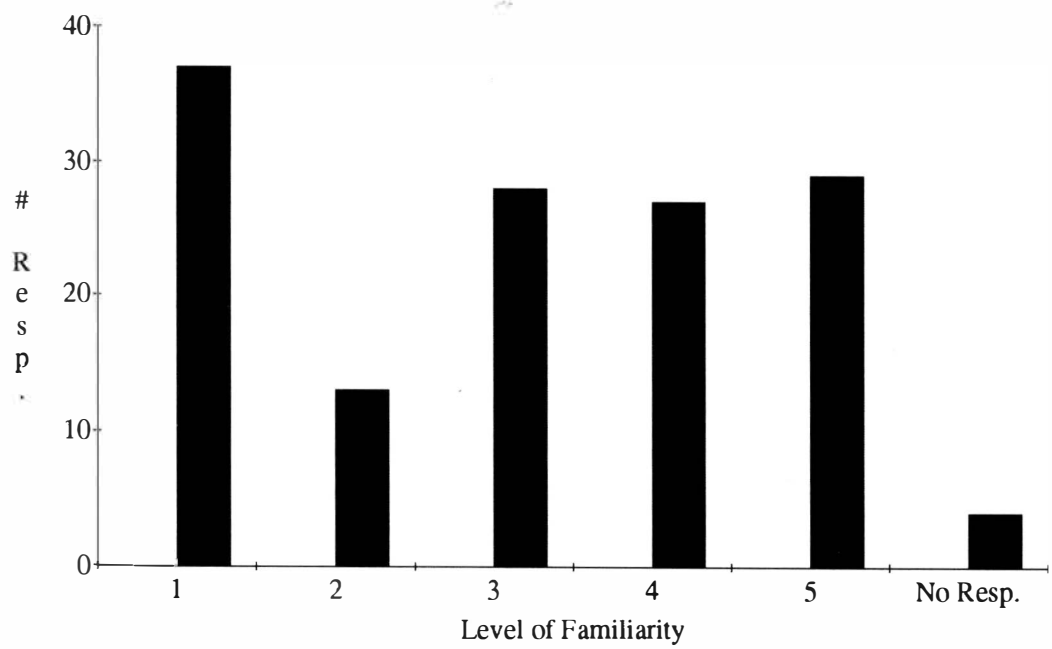

Figure 3. Level of Familiarity With CQI Terms: Process.

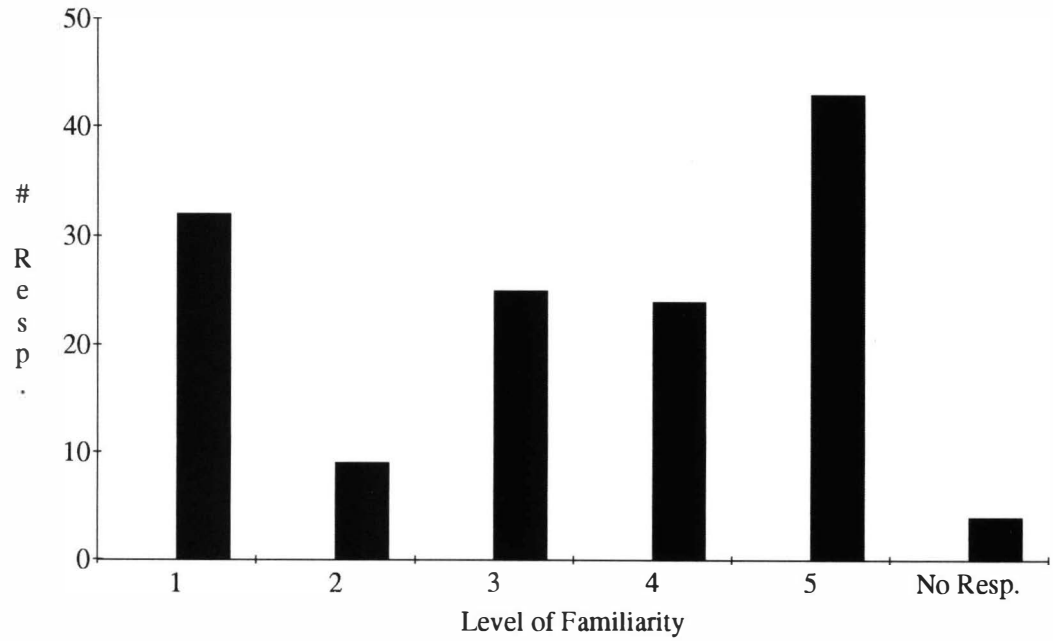

Figure 4. Level of Familiarity With CQI Terms: Outcome.

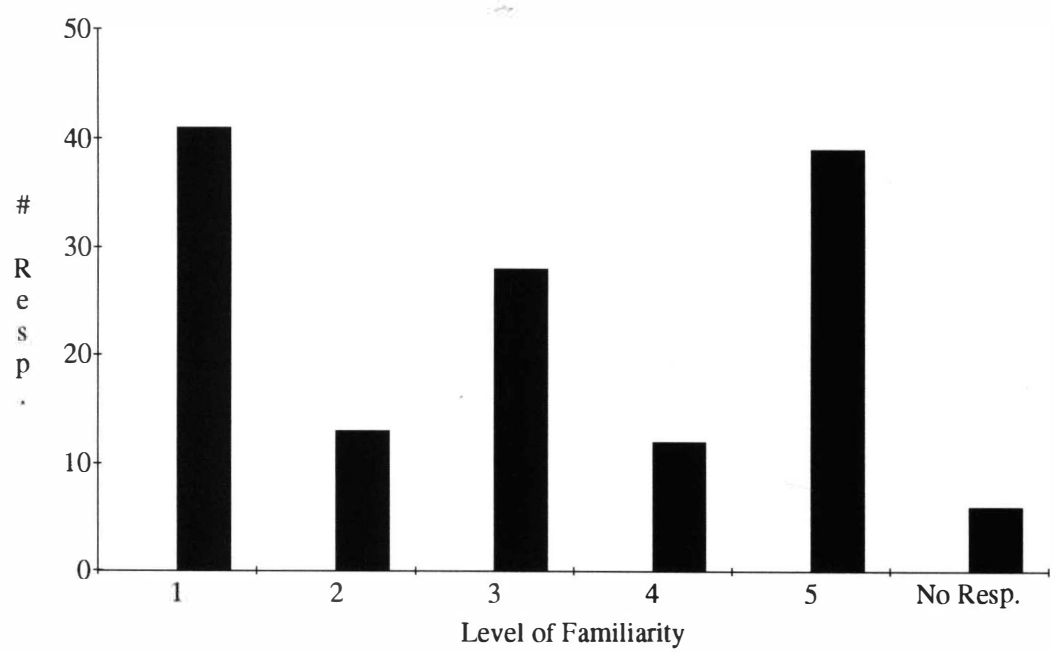

Figure 5. Level of Familiarity With CQI Terms: Risk Management.

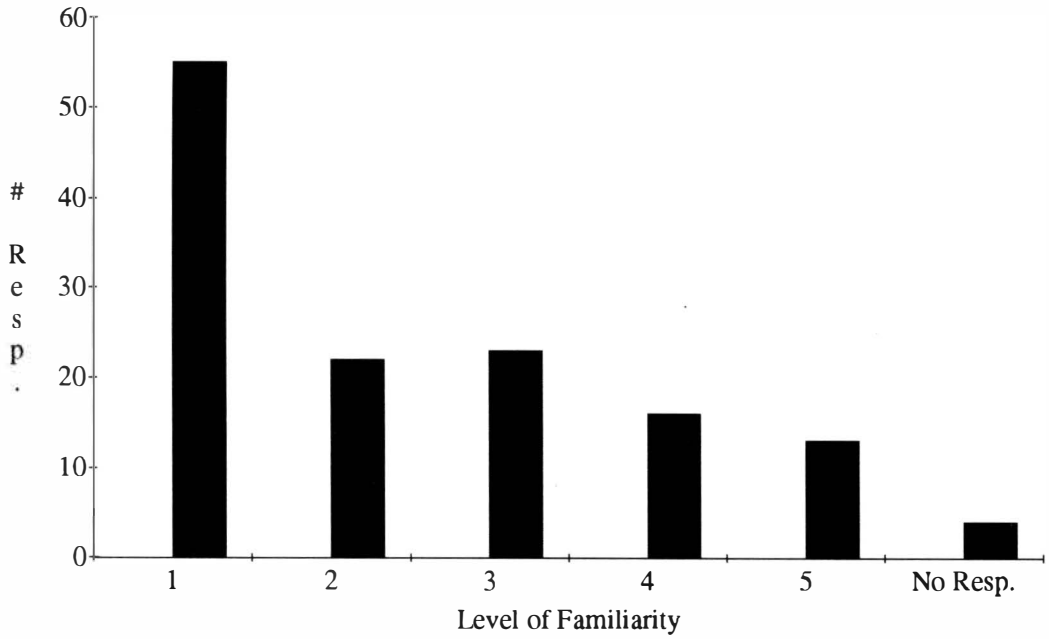

Figure 6. Level of Familiarity With CQI Terminology: Organizational Variable.

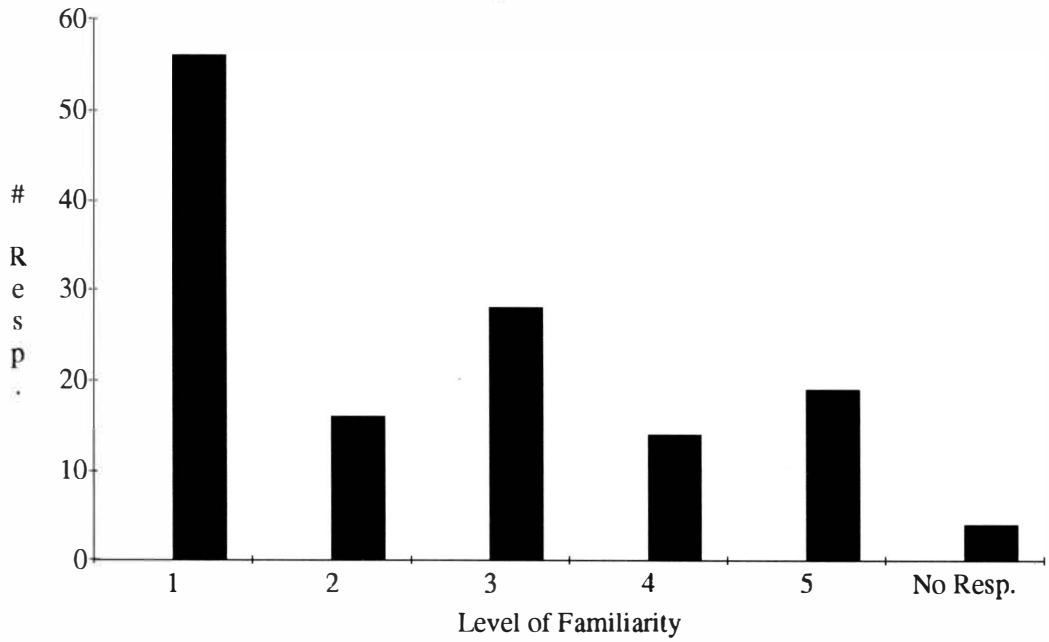

Figure 7. Level of Familiarity With CQI Terms: Patient Variable.

Table 3

Level of Familiarity With the Concept of CQI

	not familiar		familiar		very familiar		
	1	2	3	4	5	Mean	SD
Familiarity	37	25	38	21	16	2.70	1.32

seventy-three percent (n=100) of the respondents rated themselves as average to very low in familiarity with CQI. These results are illustrated in Table 3. Since both overall familiarity with CQI as well as familiarity with specific CQI terminology fell below the $x \geq 3.0$ level, hypothesis number three was accepted.

Hypothesis number four, "music therapists are not familiar with factors in quality health care that can be used as clinical indicators in CQI studies," was rejected. Each of the ten possible clinical indicators was selected by at least one of the respondents with only three of the possibilities being selected by less then five percent of the respondents. The results to this question are illustrated in Table 4.

Hypothesis number five, "music therapists are not familiar with aspects of their facility that can be assessed in CQI studies," was rejected. Question number thirteen showed that music therapists assess a broad range of areas/aspects in CQI studies. Ninety-five percent (n=56 out of 59) of the respondents indicated that more then one aspect of their facility was assessed through CQI and all areas/aspects were selected by at least one respondent. These results are illustrated in Table 5.

Table 4

Rating of Clinical Indicators by
Perceived Level of Importance

Clinical Indicator	No.	%
Timeliness	8	5
Effectiveness	49	29
Efficacy	14	8
Appropriateness	35	21
Efficiency	7	4
Continuity	17	10
Privacy	1	1
Confidentiality	5	3
Participation	29	17
Safety	5	3

Total No. Respondents = 54

Hypothesis number six, "music therapists are not using accountability methods in their CQI studies," was rejected. Questions number nineteen and twenty revealed that music therapists are utilizing a number of accountability methods. The methods used by both the respondents and the facilities in which they were employed are illustrated in Table 6. All of the methods listed were selected by at least one respondent.

Hypotheses number seven, eight, and nine looked at the relationship between the respondents' place of employment, populations served, and accrediting agency with the level of involvement in CQI. Level of participation in CQI was determined by questions fourteen, fifteen, and sixteen. The results to questions fourteen through sixteen are illustrated in Table 7. Both the level of involvement in planning and

Table 5

Aspects of Facility Assessed Through CQI

Term	Number	Percent
Hours of Work	8	14
Productivity	27	46
Pt. . Participation	42	71
Pt. Satisfaction	43	73
Goals /Obj.	35	59
Staffing	22	37
Space	11	19
Physio. Outcomes	12	20
Psych. Outcomes	23	39
Staff Perception	15	25
Process Improvements	34	58
Other	5	1
Equipment	14	24
Budget	17	29

Table 6

Accountability Methods Used by Music Therapists' and
The Facilities They Work In

	Therapist		Facility	
Method	Number	%	Number	%
Control Chart	11	4	17	5
Cause/Effect study	24	9	28	9
Flow Chart	18	7	22	7
Run Chart	4	1	11	3
Histogram	6	2	9	3
Scattergram	5	2	7	2
Logs	14	5	20	6
Pareto Chart	6	2	6	2
Trend Chart	6	2	9	3

Table 6 - continued

	Therapist		Facility	
Method	Number	%	Number	%
Focus Chart	15	6	25	8
Survey	38	14	37	11
Therapist Obs.	37	14	28	9
Behavioral Obs.	30	11	27	8
Check Sheet	26	10	30	10
Matrix Diagram	2	1	6	2
Brainstorming	25	9	27	8
Affinity Chart	3	1	4	1
Other	1	0	2	1

Number of Respondents indicating same response for both therapist and facility = 21

Hypotheses number seven, eight, and nine looked at the relationship between the respondents' place of employment, populations served, and accrediting agency with the level of involvement in CQI. Level of participation in CQI was determined by questions fourteen, fifteen, and sixteen. The results to questions fourteen through sixteen are illustrated in Table 7. Both the level of involvement in planning and implementing CQI was above the $x \geq 3.0$ level. Participation in interpreting CQI was not above the $x \geq 3.0$ level but its mean, $x = 2.95$, was very close to the level deemed necessary to indicate a positive response to the question.

Hypothesis number seven, "the type of facility in which the music therapist was employed does not impact on the music therapist's involvement in CQI," was rejected. A listing of the respondents' place of employment can be seen in Table 8.

Table 7

Level of Involvement by Music Therapists in CQI:
Planning, Implementing, Interpreting

	never		sometimes		often		
	1	2	3	4	5	Mean	SD
Planning	9	2	10	13	10	3.20	1.29
Implementing	4	3	16	17	14	3.63	1.13
Interpreting	14	6	12	7	12	2.95	1.49

Table 8

Respondents' Place of Employment

Place	No.	Percent
Comm. Ment. Health	2	1
Nursing Home	27	19
Outpatient Clinic	0	0
Drug/alcohol Prog.	0	0
Rehab. Facility	4	3
Group Home	0	0
Hospice	1	1
Inpt. Medical Unit	15	11
Inpt. Psychiatric Unit	66	47
Geriatric Facility	12	9
State Institution	6	4
Other	8	5

The majority of respondents worked in inpatient psychiatric facilities (47%, n=66)

followed by Nursing Homes (19%, n=27) and inpatient medical units (11%, n=15). Pearson coefficient correlations revealed that there was no significant relation between the job site and the level of involvement in planning, implementing, and interpreting CQI studies (see Table 9). There was, however, a significant relation (r^2 = 0.05) between the job site and whether the respondent was involved in CQI studies in general (question number 12 in survey).

Table 9

Relation Between Job Site and Level of Involvement in CQI

Variable	t value	df	r value
Participation	1.17	141	.16*
Design	-5.69	139	-0.01
Implement	0.46	141	0.06
Interpret	-0.27	140	-0.04

* significant at the .05 level

Hypothesis number eight, "the population served by the music therapist does not impact on the music therapist's involvement in CQI," was rejected. A total of 127 respondents selected more then one item for this question and 111 indicated a main population served. The majority of respondents worked with clients diagnosed with a mental illness (13%, n=84), followed by the elderly (11%, n=80), and Alzheimers' clients (9%, n=68). . Similarly mental illness (32%, n=45) and elderly persons (22%,

n=31) were ranked the highest in the category of main population served. Full results for this question can be seen in Table 10. Pearson coefficient correlations

Table 10

Populations Served by Respondents' Including Main Population Served

			Main Pop. Served	
Population	No.	%	No.	%
Behav. Disorder	47	6	5	4
AIDS Clients	25	3	0	0
Alzheimer's	68	9	6	4
Autistic	8	1	0	0
Dev. Disabled	22	3	1	1
Eating Dis.	30	4	0	0
Elderly	80	11	30	22
Forensic	10	1	1	1
Hearing Impaired	28	4	0	0
Learning Dis.	18	2	0	0
Medical Prob.	51	7	9	6
Multiply Dis.	18	2	0	0
Neuro. Imp.	33	5	0	0
Mental Ill.	84	13	45	32
Physically Dis.	36	5	1	1
Visually Imp.	24	2	0	0
Abused/Sex. Ab.	50	7	1	1
Speech Imp.	22	3	0	0
Emotionally Dist.	49	7	2	1
Other	25	3	8	6
No Response	0	0	30	22

Multiple Responses =127

revealed no significant relation between population served and level of involvement in planning and interpreting CQI studies or between population served and

participation in CQI. There was, however, a significant relation between the population served and implementation of CQI studies (r= -0.19) (see Table 11).

Table 11

Relation Between Population Served and Level of Involvement in CQI

Variable	t value	df	r value
Participation	5.09	141	0.01
Design	-0.82	138	-0.11
Implement	-1.48	140	-0.19*
Interpret	-0.89	141	-0.12

* significant at the .05 level

Hypothesis number nine, "the accrediting agency of the facility in which the music therapist is employed does not impact on the music therapist's involvement in CQI," was rejected. JCAHO was the accrediting agency for most of the respondents (n=93, 48%), with government accreditation second (n=46, 24%), and Healthcare Financing Administration third (n=23, 12%). A list of the accrediting agencies of the respondents can be seen in Table 12. The results for this question, as well as questions one (job site) and two (population served) of the survey are consistent with the results of the NAMT 1992 survey of its membership. This survey is completed yearly and is sent with the membership renewal form for NAMT members. The results are published yearly in the membership directory.

Table 12

Accrediting Agency

Agency	No.	%
Government (State/Federal)	46	24
Health Care Financing Admin.	23	12
Veterans Affairs Dept.	4	2
None - Not Accredited	2	1
JCAHO	93	48
CARF	6	3
Other	7	4
Do not know	12	6

Total No. of Respondents: 19

Pearson coefficient correlations revealed no significant relation between the accrediting agency and the level of involvement in planning, implementing, and interpreting CQI studies. There was, however, a significant relation between the accrediting agency of the respondent and the level of involvement in CQI in general (see Table 13).

Hypothesis number ten, "music therapists do not feel that they require further training in CQI," was rejected. It was evident by the results of the survey that music therapists do feel that they require further training in CQI, Though 55% (n= 72) of those surveyed indicated that their facility offered training programs for CQI only 42% (n=58) participated in training programs. A total of 75% of the respondents (n=98) felt that they still needed further training in CQI. In addition to this, question 18 asked the respondents to rate the level to which they felt they effectively utilized CQI in a variety of areas. A listing of standard deviation and means for this question can be seen in Table 14. Of the ten items, only items "a" (improving the quality of music therapy services), "f" (identifying staff education needs), "i"

Table 13

Relation Between Accrediting Agency and Level of Involvement in CQI

Variable	t value	df	r value
Participation	1.05	141	0.15*
Design	-0.46	139	-0.06
Implement	-0.54	141	-0.07
Interpret	-1.05	140	-0.14

* significant at the .05 level

Table 14

Self Rating of Effectiveness of Utilization of CQI
Standard Deviations and Means

Item number	# Resp.	SD	Mean
Quality of services	48	1.38	3.14
Performance appraisals	47	1.40	2.78
Justify staff position	46	1.44	2.11
Equipment acquisitions	46	1.34	2.43
Space allocations	49	1.26	2.12
Staff education	46	1.33	3.12
Staff orientation	53	1.21	2.59
Scheduling	47	1.22	2.80
Interdisciplinary comm.	48	1.42	3.32
Continuity	45	1.33	3.10

(improving interdisciplinary team communication), and "j" (improving the continuity of music therapy services), received a mean score of $x \geq 3.0$. The other six items received a mean of less then 3.0 with an average mean of $x = 2.75$. Therefore since the majority of respondents indicated that they required further training in CQI, and because the level of effectiveness in utilizing CQI was below $x \geq 3.0$, hypothesis number ten was rejected.

Discussion

This study addressed CQI as it was utilized by music therapists in four main areas; importance, involvement, familiarity, and training in CQI. The results revealed that music therapists consider CQI to be important to their profession and that they are involved in CQI or similar quality control studies. It also revealed, however, that music therapists' level of familiarity with CQI is low and that there was a need for further training in CQI.

Eighty-nine percent of those surveyed (n=121) indicated that they felt CQI was important to their current position. Similarly, 95% (n=122) indicated that they felt CQI was important to the field of music therapy itself. Only five percent (n=7) indicated that they felt CQI was not important. Therefore music therapists do consider CQI to be important.

Music therapists are also involved in CQI. Thirty-one percent (n=40) of the respondents worked in a facility that participated in CQI and 36% (n=50) participated in CQI studies themselves. Of those not participating in CQI, 24% (n=21) commented that CQI was being introduced into their facility. Therefore a minimum of 52% (n=71) of those surveyed were involved in CQI to some extent.

Though the respondents indicated that they were involved in CQI and

considered CQI important to the profession, only 20% (n=185) of the respondents rated themselves as very familiar with CQI terminology. Overall, only 35% (n=318) of the music therapists rated themselves high in understanding CQI terms while the other 65% rated themselves somewhat to very unfamiliar with CQI terminology. The average mean for this question was x=2.76. This was below the $x \geq 3.0$ set as the minimum level necessary to indicate a positive response to a question in this study. Therefore the results indicated that music therapists have a low level of familiarity in CQI terminology. In addition to this, when asked to select factors that could be used as clinical indicators, only two were selected by over twenty percent of the respondents; effectiveness (29%, n=49), and efficiency (21%, n=35). All other items were selected by less then 20% of the respondents with six factors selected by less then ten percent of the respondents. Similarly, of the possible accountability methods listed, only surveys, therapist observation, behavioral observation and check sheets were indicated as being used by more then 10% of the respondents. All other choices (14 in total) were selected less then 10% of the time. These results would appear to indicate that a need exists for further training in CQI terminology and techniques. This need was emphasized by the number of respondents, (75%, n=98) who felt they could benefit from further training in CQI. Only 25% (n=33) indicated that they did not feel that they required further training in CQI. Similarly 86% (n=42) of music therapists involved in CQI training at their job site also felt they could gain from further training in CQI . Only 14% (n=8) did not feel that they could benefit from further training.

Currently JCAHO has removed department sections from its accreditation manual. Information is now presented in a global, wholistic manner. This is in keeping with the whole-industry approach of CQI. As a result music therapists and

other health care professionals need to be familiar with CQI terms and accountability methods. Though information on CQI is still present in manuals, professionals need to be familiar with the "language" in order to access and utilize this information. Therefore there is an ongoing and growing need to develop and maintain a high level of familiarity with CQI.

The results of this survey indicated that music therapists do consider CQI important to the profession and that they are involved in CQI or similar studies. The study also highlighted a need for increased familiarity with CQI terms/methods as well as a need for further training in CQI. This might be accomplished by:

1. Encouraging the National, Regional, and State music therapy associations to provide workshops/training sessions on CQI for their membership. Information on CQI in health care and upcoming workshops/training seminars in CQI could also be listed in newsletters forwarded to the membership.

2. Including CQI in the education programs for music therapy students. CQI could be integrated into the training courses on observations and measurement techniques. This would assist in preparing students to be involved in CQI once they were licensed and practicing music therapy.

3. Publishing a manual or handbook on CQI which would include information and guidelines for creating, implementing, and interpreting CQI in the field of music therapy. This manual or handbook could be published by NAMT and made available to its membership as well as other music therapists and health care professionals.

Quality control in health care is an ongoing and growing concern. CQI is one method that has been utilized to encourage a continuing improvement in patient/staff services. It has proven itself to be both effective and efficient and as such is being

increasingly embraced by health care professionals. This study highlighted a need by music therapists to increase their training and familiarity with CQI. Only when CQI is fully understood and properly implemented can music therapists and other health care professionals begin to experience the continuous improvement of services and full level of benefits that CQI is designed to produce.

Appendix A

Survey Instrument

Continuous Quality Improvement in Music Therapy Practice:
Methods of Implementation

1. What is your place of employment.

a. Community mental health center
b. Nursing home
c. Outpatient clinic
d. Drug/alcohol program
e. Rehabilitation facility
f. Group home
g. Hospice
i. Inpatient psychiatric
j. Geriatric facility
k. State institution
l. Other

2. What population(s) do you serve. Please circle all that apply and place an asterisk beside the main population that you serve.

a. Behavioral disorder
b. AIDS clients
c. Alzheimer's clients
d. Autistic
e. Developmentally disabled
f. Eating disorders
h. Elderly persons
i. Hearing impaired
j. Learning disabled
k. Medical problems
l. Multiply disabled
m. Neurologically impaired
n. Mental Illness
o. Physically disabled
p. Visually impaired
q. Abused/Sexually abused
r. Speech impaired
s. Emotionally disturbed
t. Other

3. Which agency accredits your facility.

a. Government (state or federal)
b. Health Care Financing Administration
c. Veterans Affairs Department
d. None - not accredited
e. JCAHO
f. CARF
g. Other
h. Do not know

4. Do you participate in training programs for CQI?

a. Yes b. No

5. Does your facility offer training programs for CQI?

a. Yes b. No

6. Do you feel you need more training in CQI?

a. Yes b. No

7. How important do you feel CQI is in your present position?

not important		somewhat important		very important
1	2	3	4	5

8. How important do you feel CQI is to the profession of music therapy?

not important		somewhat important		very important
1	2	3	4	5

9. How familiar are you with the following terms as they relate to CQI:

	not familiar		somewhat familiar		very familiar
a. Clinical indicator	1	2	3	4	5
b. Structure	1	2	3	4	5
c. Process	1	2	3	4	5
d. Outcome	1	2	3	4	5
e. Risk management	1	2	3	4	5
f. Organizational indicator	1	2	3	4	5
g. Patient variable	1	2	3	4	5

10. Please rate your level of familiarity with the concept of CQI.

very low		average		high
1	2	3	4	5

11. Does your facility actively participate in CQI study(ies)?

a. Yes b. No

12. Do you actively participate in CQI study(ies)?

a. Yes b. No

If no, please return the survey in the envelope provided. Thank you for your cooperation.

13. What aspects of your facility are assessed through CQI? (circle all that apply)

a. Hours of work
b. Productivity
c. Patient/client participation
d. Patient/client satisfaction
e. Goals/objectives of program
f. Justification of staffing
g. Justification of space
h. Physiological outcomes
i. Psychological outcomes
j. Staff perception of service
k. Process immurements
l. Other (please specify)
m. Justification of equipment
n. Justification of budget

14. Do you assist in the planning of CQI studies at your facility?

never		sometimes		always
1	2	3	4	5

15. Do you assist in the implementation of CQI studies at your facility?

never		sometimes		always
1	2	3	4	5

16. Do you assist in the interpretation of the results of CQI studies at your facility?

never		sometimes		always
1	2	3	4	5

17. The following is a list of factors in quality care that could be used as clinical indicators. Check the three you feel are the most important for music therapists to consider in their practice.

a. Timeliness
b. Effectiveness
c. Efficacy
d. Appropriateness
e. Efficiency
f. Continuity
g. Privacy
h. Confidentiality
i. Participation
j. Safety

18. On a scale from 1 to 5 (5 being the highest), please rate the degree to which you feel you effectively utilize CQI in:

	not very often				very often
a. Improving the quality of music therapy services	1	2	3	4	5
b. Staff performance appraisals	1	2	3	4	5
c. Justify staff positions	1	2	3	4	5
d. Request/justify equipment acquisitions	1	2	3	4	5
e. Request/justify space allocations	1	2	3	4	5
f. Identify ongoing staff education needs	1	2	3	4	5
g. Improve staff orientation	1	2	3	4	5
h. Improve scheduling of music therapy individual/group intervention	1	2	3	4	5
i. Improve interdisciplinary team communication	1	2	3	4	5
j. Improve continuity of music therapy services	1	2	3	4	5

19. Which of the following accountability methods have you used in CQI? (please circle all that apply)

a. Control charts
b. Cause and effect studies
c. Flow charts
d. Run charts
e. Histograms
f. Scattergrams
g. Logs
h. Pareto Chart
i. Trend
j. Focus Group
k. Survey
l. Therapist observation
m. Behavioral observations
n. Check sheet
o. Matrix Diagram
p. Brainstorming
q. Affinity Chart
r. Other: please describe

20. Which of the following accountability methods has your facility used in CQI? (Please circle all that apply)

a. Control charts
b. Cause and effect studies
c. Flow charts
d. Run charts
e. Histograms
f. Scattergrams
g. Logs
h. Pareto Chart
i. Trend
j. Focus Group
k. Survey
l. Therapist observation
m. Behavioral observations
n. Check sheet
o. Matrix Diagram
p. Brainstorming
q. Affinity Chart
r. Other: please describe

Please feel free to add any comments you may have in the area below. Thank you for completing the questionnaire. Please return it in the envelope provided for you as soon as possible.

Appendix B

Letter Sent With Survey

Jane McLaren, RMT-BC, MTA
327 Second St. East,
Cornwall, Ontario
K6H 1Y8

May 24, 1993

Dear Fellow Music Therapist:

As health care becomes more competitive there is an increased focus an achievable patient/client benefits and the cost effectiveness of treatment. From government, to administration, to the general public, people are demanding accountability for the cost and quality of care. This has resulted in an increased focus on quality improvement in health care.

As part of my graduate study coursework, I am examining the level of familiarity and utilization of continuous quality improvement (CQI) programs by music therapists. The enclosed survey is designed to give me an overview of the utilization of CQI in the music therapy profession. It will only take a few minutes of your time to complete. Please return the survey to me on or before June 14, 1993, in the stamped envelope provided for you.

Thank you for taking the time to assist me in this matter. If you would like a copy of the results of this study please write your name and address on a separate piece of paper and return it with the survey.

Yours sincerely,

Jane McLaren
RMT-BC, MTA

Appendix C

Letter Sent With Second Mailing of Survey

Jane McLaren, RMT-BC, MTA
327 Second St. East
Cornwall, Ontario
K6H 1Y8

July 26, 1993

Dear Fellow Music Therapist:

A few weeks ago you received a survey on quality improvement in the field of music therapy. I am currently in the process of analyzing and interpreting the results of this study.

If you have not yet returned the survey, it is not too late. The survey will only take a few minutes of your time to complete. Simply circle the applicable responses and mail the enclosed copy of the survey in the envelope provided for you before August 13. The greater the number of surveys returned the better the results of the study will be!

I remind you that if you would like to receive a copy of the results of the study, please send me your name and address and I will forward the results to you as soon as they are completed.

Thank you again for your time and consideration in this matter. It is greatly appreciated!

Yours sincerely,

Jane McLaren
RMT-BC, MTA

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