MEASURING CHILD CARE QUALITY

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This paper will address the following questions and issues in measuring child care quality:

- How is quality defined and measured?
- What aspects of quality have been shown to be related to health and developmental outcomes?
- How should data on quality be collected?
- Are there potential confounding variables that influence quality?
- What is the international perspective on child care quality?

How Is Quality Defined And Measured?

In order to answer this question, I want to present in some detail the Early Childhood Program Quality Improvement Model that Dr. Susan Aronson introduced in her plenary session "APHA/AAP Standards: Assessment of the Science". (See Figure 1).

Quality can be defined according to a continuum that begins

with quality assurance regulatory systems (regulations and licensing) and finishes with quality assurance enhancement systems (accreditation). Each state in the nation has their own regulatory and licensing systems with varying degrees of comprehensiveness. The National Association for the Education of Young Children (NAEYC) has, since 1984, an accreditation system. The National Child Care Association (NCCA) has an accreditation system that is being pilot tested based upon a key indicator approach. This is an approach based upon statistical predictors of compliance that have been under development in the licensing field for the past 10 years.

These are measurement techniques or approaches in the definition of quality, but from a conceptual point of view, what defines quality? Child care quality is not a single dimension but rather a multi-dimensional characteristic of programs that co-exist in which children thrive developmentally, socially, cognitively, physically and emotionally, and supports the family in its child rearing role.

In reviewing the literature within the regulatory level, one finds that group size and adult-child ratio, caregiver training, education and experience all coexist in a positive and direct way, with positive outcomes for children (Phillips, 1987). However, as we will see in the next section, more of a structural dimension of quality doesn't necessarily mean better outcomes for children.

At the accreditation level, key predictors of quality are supported by research which strongly suggests that smaller group sizes and larger number of staff to children are related to

positive outcomes for children (NAEYC, 1991). Also, the quality of the staff is the most important determinant of the quality of an early childhood program (NAEYC, 1991).

Mechanisms to maintain quality fall into three general categories: regulatory methods, voluntary standards and other non-regulatory methods. Regulatory methods have the limitation of usually not addressing the interaction between the caregivers and the child. However, they appear to set the stage for desirable interaction and, if consistent with levels associated with quality in research studies, increase their likelihood that children receive quality care.

To be effective, regulatory methods must be clearly and unambiguously worded, deal with indicators known to effect quality, and be observable, measureable, and enforceable. Voluntary standards include accreditation, credentialing, self-review, and peer review. Other important methods for encouraging quality are: public and user education, staff training, and the provision of various types of support for the caregiver.

What Aspects Of Quality Have Been Shown To Be Related To Health and Developmental Outcomes?

Based upon research that has been completed both at the licensing regulatory level and quality enhancement level, it appears that there are several indexes of quality child care that are the best predictors of developmental and health outcomes.

These are all indicators that are easily measureable within a child care program:

- All children are properly immunized (Fiene, 1988);
- Handwashing routines are followed (Osterholm et al, 1986);
- Interactions between children and adults are frequent, verbal and educational, rather than custodial and controlling (Phillips, 1987);
- Children are not left to spend their time in aimless play together (Phillips, 1987);
- There is an adequate adult-child ratio and a reasonable group size (Use NAEYC, 1991, or AAP/APHA Standards, 1992) (Phillips, 1987);
- The caregiver has a balanced training in child development, some degree of professional experience in child care and has been in the program for some period of time (Phillips, 1987);
- The program is licensed (Phillips, 1987; Fiene, 1988).

All of the above indicators are very straight forward in that more of one is better for children. The only item that appears not to follow this sequence is if the program is fully licensed. In research (Fiene, 1985, 1988, 1991) a curvilinear relationship was discovered which indicated the following: programs that were in full compliance had lower quality scores than programs that were in substantial compliance. This finding led several states to develop licensing indicator systems in which key predictor items are used on a regular basis for making licensing decisions. (See Figure 2).

Research in the area of health suggests that large groups and large centers are associated with a higher incidence of diarrhea and hepatitus. Caregiver and child handwashing has been shown to be an important technique for the prevention of infections. In regard to the physical setting as a whole, studies suggest that a safe, orderly environment, rich in appropriate toys and materials, and with space organized in activity areas, is most conducive to responsive and sensitive caregiving and desirable child behavior.

How Should Data On Quality Be Collected?

Given a multi-dimensional approach to measuring quality, it is necessary to cross-validate all data sources (Refer to Figure 1). It is now appropriate to have providers, staff and parents engage in self-assessment as a monitoring tool. The Early Childhood Education Linkage System (ECELS) has clearly demonstrated the efficiency of self-assessment as an effective monitoring modality.

The NCCA Accreditation Project is also experimenting with having parents involved in the self-assessment of programs.

Research has suggested that parents can impact on quality when: there is open and regular communication between the caregiver and the parent; the parent acts as an observant, informed consumer; and the parent is a member of the program's board of directors or advisory group and/or participates in evaluation of the program.

However, in all the monitoring studies that have been done of state systems, probably the best means for collecting data is

through observation followed by record reviews, and the least desireable is through interviews.

Are There Potential Confounding Variables That Influence Quality?

Recent research as reported by Clarke-Stewart (1987), evidence exists that children's cognitive and language development are directly linked to their family structure, SES, home stimulation and parental values. In some cases (Kontos & Fiene, 1987) the links between these familial variables and child development are sometimes stronger than the links between child care variables and child development.

This confounding can be characterized in the following ways in which families influence their children's development through additive, interactive or correlated effects. Clarke-Stewart (1987) has suggested evidence of links between family factors and child development measures. For example, one way families influence their children's development is through simple direct effects that are unaffected by participation in child care. However, she suggests other ways in which families may influence their children's development.

One additional possibility is through their additive contribution when combined with children's child care experiences. Combining home and child care variables is more predictive of child development than using either alone.

Another possibility is interactive effects between children's

experiences at home and in child care. For example, high cognitive scores might be observed for children whose families were low in educational stimulation, but whose child care centers were high in educational stimulation.

The last possibility is that families influence children's development because family and child care variables are correlated. Parents are selective in choosing child care for their children, and more stimulating parents choose more stimulating programs (Clarke-Stewart, 1987). This last possibility is not always supported by research evidence (Kontos & Fiene, 1987).

What Is The International Perspective On Child Care Quality?

A very influential book that summarizes the latest research on child care quality is "Quality Matters In Child Care" by Gillian Doherty. This book summarizes the latest research in the United States, England, Western Europe, Bermuda and New Zealand.

Research from an international perspective shows that programs with a high global assessment of quality care are associated with children who have: greater social competency, higher levels of language development, higher developmental levels of play, better ability to regulate their own behavior and greater compliance with adults (Doherty, 1991).

Global assessment of quality is measured in two ways:
1) Combining discrete characteristics into a composite measure of "quality", for example, combining caregiver-to-child ratio,

caregiver training, and staff turnover (Kontos & Fiene, 1987) or 2) Using a global rating scale, such as the Harms, and Cryer and Clifford, Infant Toddler Environment Rating Scale (1990), Aronson, Smith, Fiene and Melnick, Early Childhood Education Linkage System Instrument (1990), or Fiene, Child Development Program Evaluation Scale (1984).

In research conducted in several countries there appears to be agreement that quality caregiving is associated with post secondary school education. However, there has been some debate as to whether the sheer amount of education or the substance of the education is the better predictor of quality. It now appears that training in early childhood education is the crucial factor.

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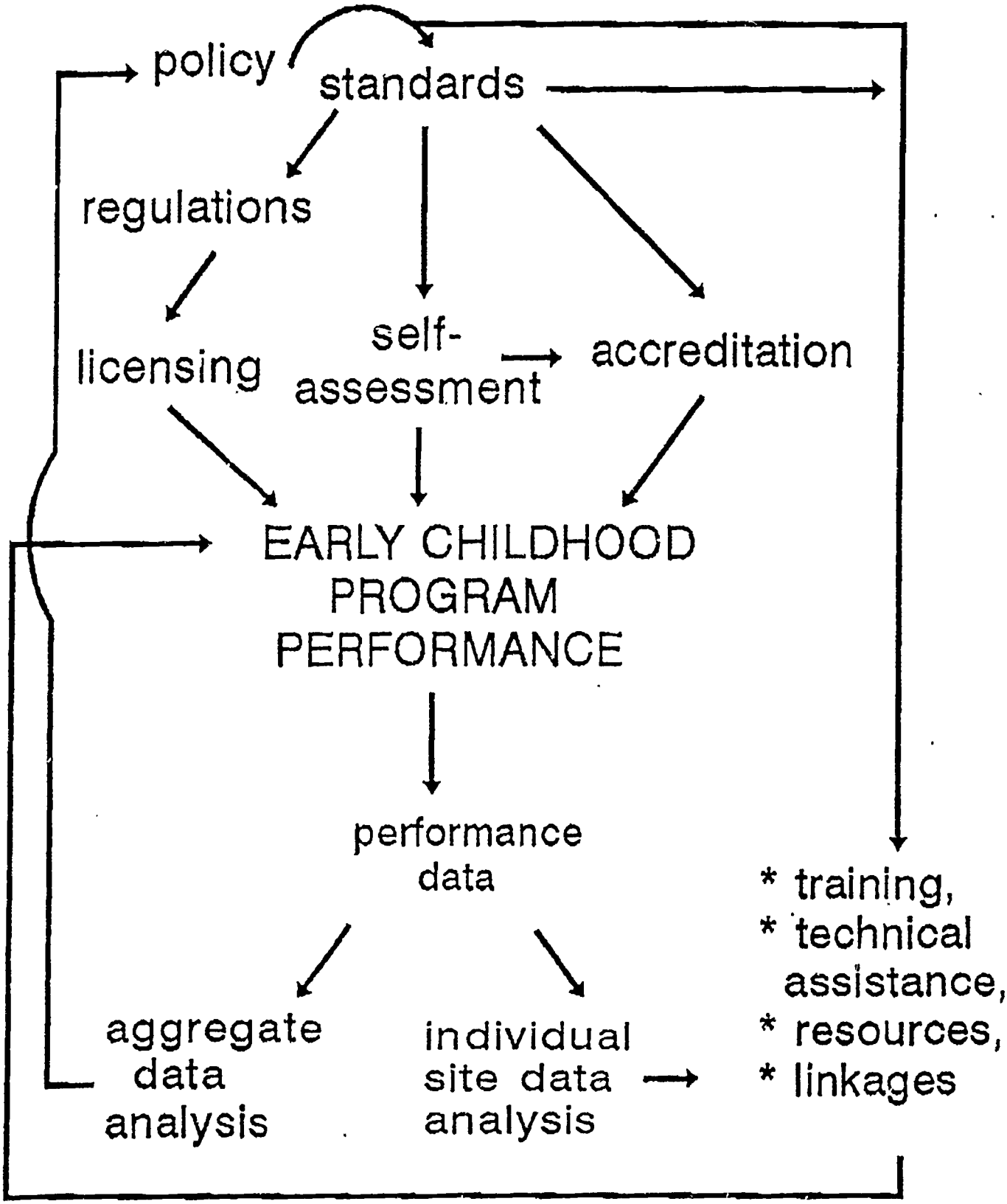

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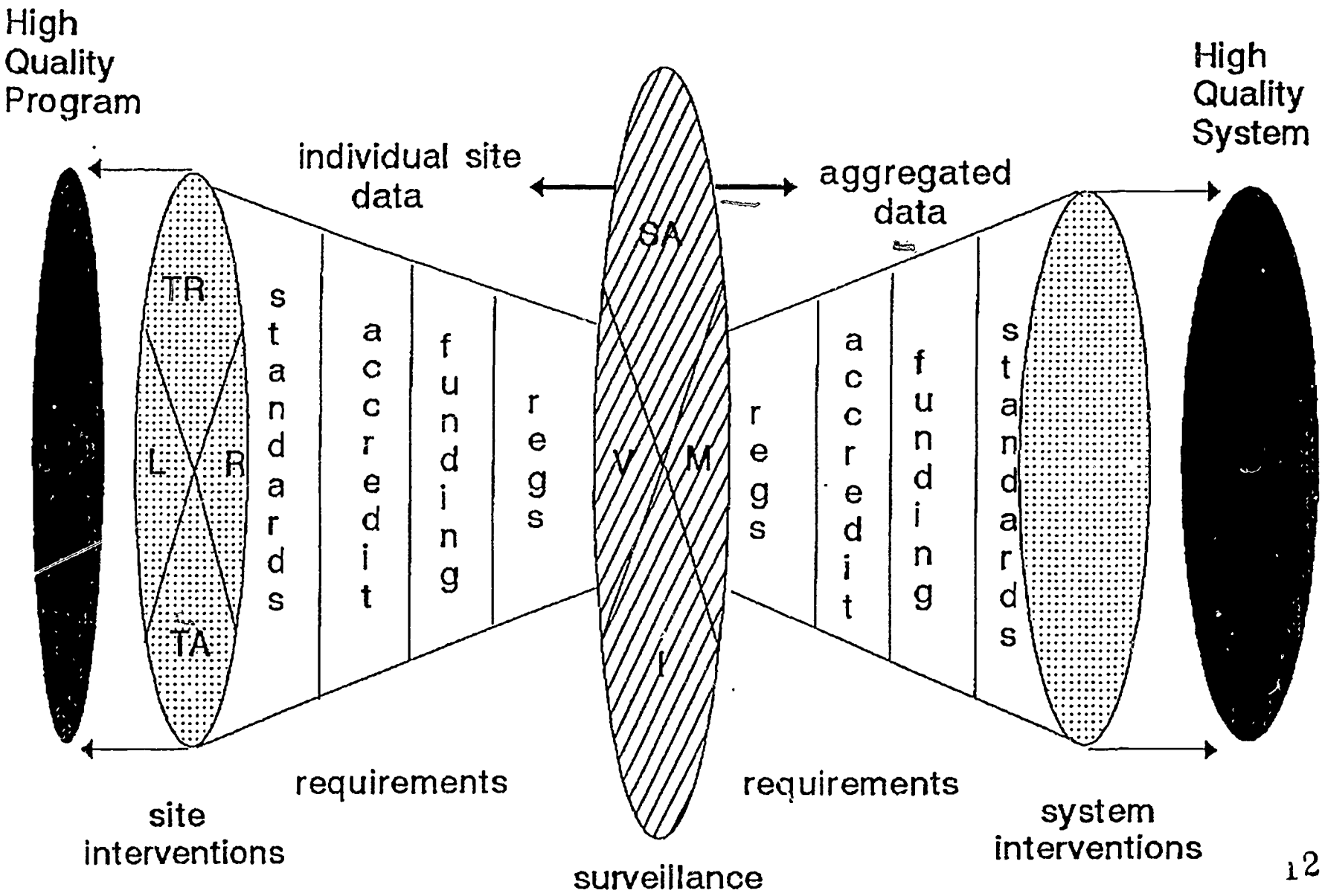

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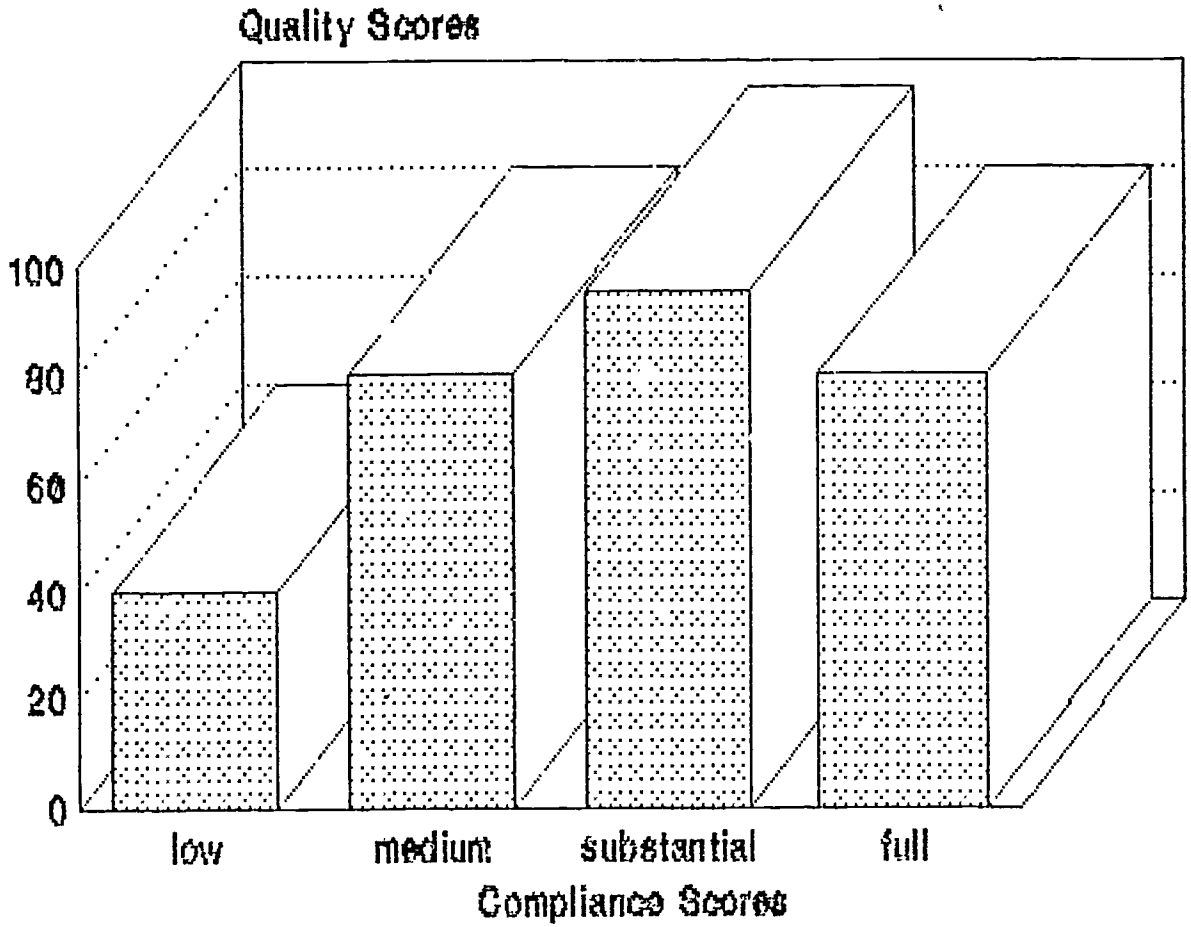

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