This booklet provides a description of 14 projects which were awarded funds during fiscal year 1987 for collaborative research in long-term care to find new ways to treat long-term care patients in Illinois nursing homes. It includes the organization or institution receiving the award, an abstract of the research proposal, and the name of the project director and principal investigator. Included are abstracts for projects dealing with family participation and improvement of care in nursing homes; model programs of nursing home management; deinstitutionalization; Project Elder Find; caring for the chronically mentally ill; case management and facility management; a model continence training program; care planning, personnel management, and quality assurance in long-term care facilities; nurse aide turnover; Alzheimer's disease; habilitation planning; case planning; pressure sore management; and quality care indicators for long-term care facilities in Illinois.
NEW HORIZONS IN LONG TERM CARE
A Report on the Long Term Care Research and Demonstration Projects
Dear Conference Participants:

Funds for collaborative research in long term care were appropriated in the Public Aid budget in Fiscal Years 1986 and 1987 to find new ways to treat long term care patients in Illinois nursing homes. The total $2.3 million appropriated in these two years enabled the State, academic institutions and providers of long term care to pool their talents for the first time.

The Governor's Task Force on Long Term Care selected the following areas for funding: treatment practices, case management and facility management. This booklet has been compiled to provide a description of the projects awarded funds during Fiscal Year 1987. It includes the organization or institution receiving the award, an abstract of the research proposal, and the name of the project director and principal investigator.

We are very proud of this joint effort by universities and nursing homes. Copies of the final reports and "how to" manuals describing outcome and implementation of the projects are available from the Department of Public Aid by writing to Jo Ann Day, Ph.D., Long Term Care Research and Demonstration Project Director.

Sincerely,

Edward T. Duffy
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FAMILY PARTICIPATION AND IMPROVEMENT OF CARE IN NURSING HOMES

Section of Geriatric Medicine
Department of Medicine, University of Illinois at Chicago
and
Med/Impact Corporation

V. Tellis-Nayak, Ph.D., Principal Investigator

Families are very much present in nursing homes. They may be the nursing home's best ally in improving the quality of life for its residents. Sadly, however, families are involved too little in achieving this common goal they share with the home.

The old myth is alive and going strong. It holds that our families are not as devoted caregivers of our aging parents as were our forebears of their elderly. But all the evidence points in the opposite direction. The modern family, in fact, carries a burden unmatched by generations gone by. And the family certainly does not dump the older relatives into nursing homes. After giving unstinted care, it often comes to the limit of its ability, and it then looks to the nursing home as the last resort. After the placement, the family sustains its contact over time.

But ironically, anxiety and guilt haunt the family. The family feels it has not done enough, that somehow it should be doing more. A troubled family perturbs the resident and frustrates the staff.

Clearly, family visits have therapeutic implications. Whether the family promotes the resident's care or not depends very much on how the nursing home relates to the family. If the staff considers the family a hindrance, then it starts a vicious negative cycle. The family's anxiety and frustration rise, the resident is adversely affected, and the care suffers.

On the other hand, if the nursing home approaches the family as an ally, addresses its feelings of guilt, and draws it into the care process, then the staff will have won a valuable resource. In a multitude of ways the family can help improve the quality of life in a nursing home.

This study looks at how families can become partners in care. To that end, we combed the literature, consulted with experts, surveyed 239 nursing homes in Illinois, and interviewed many families in those homes. The data was then compiled and computer-analyzed where necessary.
The outcome is a resource and guidebook written in five parts with the families and the nursing homes in mind. The first part sketches in broad strokes the demographic backdrop that has created the geriatric imperative, and its impact on health care.

The second part examines the role of the family in giving care to our elders. Historically and cross culturally it debunks the myth that the modern family has abandoned its frail elderly. It considers the burden that the family bears today.

The third part looks at the way the nursing home relates to the family. It contends that the family is both a patron of the nursing home and its partner as well. It details the advantages of drawing the family into the life of the nursing home.

The fourth part moves to the practical level. It first sketches the five basic principles that should guide the nursing home in involving the family in its life. Then it presents a variety of practical family-oriented programs and activities the nursing home could institute.

The last part lists a variety of sources that could help the nursing home in its programs for the family: readings and guides, organizations and resource centers.
The quality of nursing home care and the quality of daily living in nursing homes is a concern that involves a growing number of individuals and families as our population ages and as the number of persons needing long term medical care increases. Many professionals in the field of long term care -- including nursing home owners and administrators -- are bringing fresh ideas and practices that are dramatically changing both the quality of nursing care and the quality of daily living in long term care facilities.

This project presents, by way of a documentary film, a look at the daily operations of a quality nursing home and a behind the scenes look at the management style and philosophy that creates that quality.

Filmed primarily in one nursing home (Burgess Square in Rockford, Illinois) recently taken over by an owner dedicated to providing quality care, the film also documents the way in which the new owner goes about upgrading the nursing care and the quality of daily living in the facility.

The documentary was shot unobtrusively in the facility by a small crew over several days time. The total time period covered was 9 months.

What the film reveals is a philosophy on the part of the owners and the administrators that:

- Puts the needs, choices and care of the residents first;
- Places a strong emphasis on restorative nursing (that is accomplished both through formal programs and by consistently encouraging residents to do as much as they can for themselves rather than having the nurse's aide do it for them);
- Gives personal one-to-one attention to each of the residents.
The film also reveals a management style that:

- Creates teamwork: (The priority of all staff including supervisory staff is to work together to meet the needs of the residents. The phrase "that's not my job" is not allowed.);
- Provides a high degree of staff training;
- Promotes high expectations of all staff;
- Gives positive recognition of all staff;
- Uses the "permanent assignments" concept;
- Creates a high profile in the community, and encourages the participation and feedback of the families of the residents.

This film can be used as a resource to encourage the further upgrading of nursing home care. It can also be used to demonstrate to the public that excellence and quality do in fact exist in certain nursing homes, and to encourage families and relatives to expect such care as a norm.

Written materials outlining these basic management policies, guidelines and philosophy of caregiving shown in the film, as well as suggestions on how to implement them, will be developed to accompany the film.
FACILITATION OF THE RETURN TO HOME OF SKILLED NURSING HOME RESIDENTS

Marianjoy Rehabilitation Center

Ross W. Lambert, Jr., M.D. and Richard F. Harvey, M.D., Principal Investigators; Larry D. Sulton, Ph.D., Co-Investigator; and Selwyn W. Becker, Ph.D., Co-Investigator, The University of Chicago

IDPA and Marianjoy Rehabilitation Center have developed an extremely cost efficient method of returning patients to the community who would, for the most part, never be rehabilitated or would ordinarily be permanent long term Skilled Nursing Facilities residents. Intermediate Rehabilitation is a program in a host nursing facility which has been shown to be effective in facilitating the return to home of patients who were not thought to have home potential. It also provides a cost effective rehabilitation program for patients not requiring the capital intense hospital based rehabilitation.

IDPA and Marianjoy Rehabilitation Center have developed a rehabilitation program which successfully rehabilitates patients who normally would have required inpatient hospital based rehabilitation for approximately one third the cost to the state and the taxpayers. This program was developed on the model of Marianjoy Rehabilitation Center and was run under the tight supervision of the Intermediate Rehabilitation team. This grant tested the factors which will help transfer this service delivery technology to the health care market place of Illinois.

IDPA, Marianjoy Rehabilitation Center, and Skilled Nursing Facility providers cooperated in a program in which patients were recruited and solicited using materials developed in this grant. Patients applying for admission were screened by the Marianjoy Rehabilitation Center developed special screening device. Patients eligible for admission to an inpatient facility, but not requiring 24 hour nursing, physician, and laboratory services are eligible for Intermediate Rehabilitation. In this program, specially trained Marianjoy Rehabilitation Center assessment instruments are administered via telephone to screen admissions for appropriateness.
Staff were trained and prepared with the Intermediate Rehabilitation training manual developed for IDPA and with a series of two day training sessions and quarterly refreshers.

Patients assigned to Skilled Nursing Facilities Intermediate Rehabilitation program constitute the treatment group. The treatment group received the Intermediate Rehabilitation program. The direct comparison is made of rates of return to home.

The data lead to the preliminary conclusion that the benefits of an Intermediate Rehabilitation program are considerable. A comprehensive program for education and dissemination of the results is planned. Careful quality control and adherence to protocol standards is needed. Multiple levels of checks, quality assurances, and benchmarks are required for continued success.

Techniques and methodology for implementation are presented. The report comprises an operation manual for ease of implementation.
"Project Elder Find" is a therapeutic model of nursing home care designed to "find elders" who show capacity for more independent functioning and to plan and deliver targeted rehabilitation to reduce their dependency and need for care. The model involves multidomain assessment of level of function, including physical, cognitive and psychosocial domains, as well as resident satisfaction and morale. Interdisciplinary team review of the assessment leads to development of a comprehensive, individualized care plan and rehabilitation activities aimed toward improving function, increasing autonomy in meeting essential care needs, and facilitating, as appropriate, transfer to home or less-intensive settings.

Phase II of Project Elder Find was designed to test the generalizability of this model of care to a nursing home population as a whole, with residents representing varying levels of illness and functional capacity. The efficacy of the model was demonstrated in Phase I by the discharge, mainly to people's own homes, of 44% of a selected, target group, and improvement in level of function for 76% of the target group, overall. Phase II sought primarily to determine the effectiveness of the model when applied across the entire range of residents in a nursing home and whether some types of residents benefit more than others.

Thus, an experimental design was used in Phase II. Pre-test assessment, using a series of validated scales for measuring physical, cognitive and psychosocial function, and subjective well-being, was completed for 100 residents of Heritage Manor Nursing Home in Springfield in December, 1986. The residents were then randomly assigned to either an Elder Find treatment group (N=50) or control group (N=50). The treatment group was subdivided, with one-half randomly selected to receive the "Executive Board System" technique for organizing and managing care delivery. The EBS is a self-management technique designed to help residents regulate their own activities and increase self-help behaviors. Each of the selected residents was given an "Executive Board," a sturdy, wall-mounted poster board holding two columns of plastic pockets which contained "job-cards" describing tasks to be carried out daily or weekly by the resident for himself or herself, or by staff for the resident.
The Elder Find intervention, consisting of assessment-based care planning and rehabilitation, was provided for the treatment group for the following six-month period, January through June, 1987. Unlike Phase I wherein the intervention was carried out by the project team, in Phase II, regular staff of the facility provided the nursing care and rehabilitation activities, assisted and monitored by project staff. Post-test assessment, using the same scales as at pre-test, was completed for all 100 residents in July, 1987.

The final report of the Project contains a detailed analysis of the data comparing the results for the treatment and control groups. In general, the post-test results indicated slightly improved or stable levels of function for the treatment group compared to decline or no change for the control group.

Among the noteworthy findings of the study were:

1. The treatment group had 30% fewer hospitalization days, on the average, than the control group during the period of the intervention, representing considerable cost-savings.

2. Depression is extremely prevalent in the nursing home population but is underdiagnosed and undertreated. More than 80% of both the treatment and control groups met DSM III criteria for major affective disorder, yet relatively few were receiving anti-depressant medication.

3. There is a high prevalence of dementia in the nursing home population that is not adequately diagnosed. More than 80% of residents in the treatment group were found to have measurable dementia and most of these could be given a specific diagnosis as to cause.

4. Residents' own view of their health is highly related to their overall morale. Moreover, view of health is, for some, independent of objective health status based on Activities of Daily Living (ADL) scores.

5. Outcome based on change in ADL scores was not statistically significantly related to any of the pre-test assessment measures nor demographic characteristics. Outcome was, however, related to level of resident satisfaction. Those who were worse on the post-test had, on average, lower resident satisfaction on the pre-test than those who were stable or those who were improved.

The study concluded that the Elder Find intervention can be used with all residents of a nursing home but not with equal effectiveness. Also, it can achieve cost-savings, but those savings will be maximized by targeting the intervention rather than attempting to apply it to the population as a whole.
The last twenty years have seen a dramatic growth in general nursing home placements for persons who are chronically mentally ill (CMI). Estimates from the National Institute of Mental Health indicate that nursing homes currently represent the largest single residential care environment for the CMI. In Illinois, nursing homes provide the majority of CMI community care placements.

Recent research suggests that many CMI residents have lifelong needs for residential care, and that clients' functional improvement is related to ongoing involvement with active treatment programs. Nursing homes can offer clients an ongoing therapeutic relationship as well as the permission to be appropriately dependent in an environment where dependency is not equated with failure or maladjustment.

Despite their importance in serving CMI clients, nursing homes are typically oriented to serving geriatric and physically disabled populations. The CMI resident, on the other hand, is generally younger and more active than the typical geriatric resident and needs programs emphasizing independent living skills and help with emotional and behavioral problems. The field has done little to support facility administrators in developing programs specifically for CMI residents.

To help fill the gap in program resources for CMI care, this project has developed a training manual for use with nursing home staffs. The development of the manual is the first of a two-part demonstration to develop, field-test, and evaluate training materials for long term care facilities.
The manual consists of the following chapters:

1. Managing Resident Behavior Through the Level System
   This chapter guides facility administrators in developing a system to manage residents' behaviors. The system employs levels of privileges that residents can earn by adhering to facility standards for appropriate behavior.

2. Care Planning
   This chapter provides step-by-step guidance to facility staff in developing individualized care plans.

3. Social Skills Training Program
   This chapter presents a highly structured method to help residents relearn specific social behaviors important for greater independent living.

4. Case Management
   This chapter presents a program for linking residents with community resources.

Each chapter is divided into four sections. Section one presents basic definitions, key elements, intended benefits and a program overview. Section two discusses all program components in detail, including staffing requirements and needed materials. Section three presents complete, step-by-step approaches to program implementation. Section four describes required inservice training activities.
The overall purpose of this project was to determine whether the quality of life for long term care residents in nursing homes is improved through resident care planning by installing a computer-based information system. The project was premised on the belief that the operation of a computerized information system will:

- reduce staff time spent on paperwork
- increase staff time spent with residents
- increase the usefulness of information
- decrease the cost of information
- improve staff motivation and morale
- improve the coordination and integration of resident care

By accomplishing these goals, the benefits will be:

- improved resident satisfaction
- improved quality of life for the residents

This project was divided into two phases: Phase I - Planning and Pilot Study and Phase II - Implementation and Evaluation. Out of Phase I came a recommended choice for software and hardware, Applied Micro Management, a recommended experimental site, Lifecare Center of Benton and a validated survey instrument. Four control sites were also selected in Enfield, Eldorado, McLeansboro and St. Elmo. The five sites were determined to be from the same population located in rural areas of Illinois.

A treatment and control experimental model was used for the evaluation design in which the experimental site would receive a treatment (the installation and operation of a computer-based resident care information system).
The intended benefits of this research project have been realized although total benefits will not occur until a period of transitional adaptations is completed. This assessment of benefits is based on pre- and post-test surveys at the experimental site and the four control sites, on-site interviews and review of the computer system documents. The new computer system provides significant benefits to the residents and staff of the Lencon Lifecare Center. The major findings are:

A computer system can be successfully installed in a small long term care facility in a rural area;

There was much increased awareness of the resident care plan and its importance;

There was no significant change in the amount of time spent on paperwork at this point, though there should be a decrease as familiarity with the system increases;

There was an increased sense of optimism by the staff, expressed in their expectation that irksome paperwork would be reduced;

There was confidence that more time will be available to spend with residents;

There was increased reliance and trust in written communication;

There was an appreciable increase in the QUIP evaluation Parts IV - Resident Satisfaction and Part V - Care Plans. Since the computer system is still in a transition phase, reliance on this early QUIP evaluation should not be stressed.

The costs of the computer system have been reasonable and should be affordable by any long term care facility. Computer fears and credibility of information are critical factors to overcome in the installation of a computer assisted resident care information system. Staff trust in the system is the prime limiting factor to the effectiveness of a computer system.

The successful revamping of resident care planning through a computer driven system demonstrates that the software used has the potential for improving staff morale, motivation, resident care planning and resident care. Such improvements should lead to more resident satisfaction at a modest increase in cost.
DEVELOPMENT OF A MODEL CONTINENCE TRAINING PROGRAM

Illinois Foundation on Long Term Care

Nancy Poe, R.N., Project Director and Warren Bock, Ph.D., Principal Investigator, Bock Associates, Inc.

In collaboration with Bock Associates, Inc., staff from the Illinois Foundation on Long Term Care developed a comprehensive program to address the needs of the incontinent resident in the nursing home setting.

The program includes the area of comprehensive assessment of the incontinent resident, decision rules to best categorize the type of incontinence for treatment, protocols that address five types of incontinence commonly encountered in the nursing home setting, guidelines for individualized care planning, staff development and program evaluation.

In addition to a comprehensive assessment tool used to evaluate residents participating in the Continence Management Program, a screening tool was also developed to assist facilities in assessing the level of continence of all residents, and to plan staff intervention at the appropriate level. Residents screened who did not meet the criteria for more advanced evaluation were those who: required a two person assist to move from chair to toilet; were bedfast; had stage III or IV decubitus ulcers in the sacral or buttock areas with catheters; became extremely upset or combative with toileting attempts; could not be positioned safely on a toilet (due to weakness, contractures, non-voluntary body movements) and refused to participate.

The length of the assessment tool was reduced after the pilot results were analyzed and once more during the course of the study. The final page assumed a format more helpful to providers in guiding care planning interventions.

Staff development materials included orientation classes for both certified nurse aides and licensed nurses. During the pre-tests administered before these inservices, evidence of helpless or resigned attitudes towards the incontinent resident and lack of clinical knowledge became glaringly evident. The classes sought to dispel some myths about incontinence, and to inform staff of evaluation, intervention and documentation procedures.

Manuals were developed to guide the staff development nurse in her ongoing efforts to educate staff during orientation and throughout the year on the causes, evaluation and interventions for the incontinent resident.
A manual was also developed for the Liaison Nurse, the nurse who is responsible for guiding the program on a day to day basis in the facility. This person turned out to be a key factor when predicting how successful such a program would be.

The documentation materials underwent some revisions, but became very popular in one of the two facilities participating in the study, replacing current documentation for incontinence, regardless of whether or not the resident was on the program as part of the study.

Although 75 residents underwent complete assessment in the two facilities, 50 actually participated in the study (due to hospitalization, identification of a minor, correctable problem on assessment, or refusal to participate). Of those residents who did participate, half experienced significant improvement in their level of continence ranging from a 30 - 50 % reduction in individual incontinent episodes to complete continence.

The importance of administrative support and the designation of a nurse within the facility to implement and monitor the program cannot be over emphasized. The role and responsibilities of the charge nurse in becoming involved in the assessment and care planning process, as well as evaluation on a shift to shift basis, is equally important.

This study confirms our hypothesis that accurate assessment and individualized interventions can yield favorable results in incontinent residents in nursing homes. Screening for appropriate candidates, strong leadership within nursing, individualized care plans developed from assessment information, staff education and follow up, as with any other types of care, are needed for desired results.
CARE PLANNING, PERSONNEL MANAGEMENT, AND QUALITY ASSURANCE IN LONG TERM CARE FACILITIES

School of Social Work
University of Illinois, Urbana

Michael A. Patchner, Ph.D., and Pallassana R. Balgopal, D.S.W., Co-Principal Investigators

The focus of this research project was on the following dimensions of long-term care facilities: the care planning process, personnel management and quality assurance. Nine facilities identified by the Illinois Department of Public Aid as exemplary in these dimensions participated in the research project.

The objective of the project was to identify aspects of exemplary practices and procedures for care planning, personnel management and quality assurance in long-term care facilities.

The project resulted in the development of manuals to be used by nursing home administration and staff, one manual for each of the three dimensions. In addition to the manuals, a training module for care planning was developed for IDPA nurse-consultants.
The purpose of this project was to develop and test a system for analyzing the turnover of nurses aides in nursing homes. On-site observations, interviews and questionnaires were used to obtain information about turnover in three Chicago area nursing homes. A manual for conducting such analyses to help a facility correct the situation was developed as a product of the project.

The analysis revealed that the causes of turnover in these homes were consistent with factors previously found to influence turnover from studies conducted last year for the Illinois Department of Public Aid. According to the data provided by this survey the average facility turnover rate for nurses aides was 71.9%. The rate ranged form a low of 3% to an astonishing 411%. Almost half of the facilities had turnover rates over 58%. One estimate of the overall U.S. turnover rate in 1979 for aides and orderlies was 75% (Stryker-Gordon). While the average rate for Illinois is slightly under that estimate, it is extremely high compared to most other industries.

Factors affecting turnover included the following:

Of the respondents to this survey 68% of the nursing homes in Illinois are proprietary organizations; 31% are nonprofit.

When average rate of turnover was analyzed for these two groups, nonprofit facilities had a significantly lower average rate (51.4%) than proprietary homes (82.3%). Nonprofit facilities identified as church-related had an even lower rate (44.4%).

Facilities were asked whether they were a member of a group of homes operating under one general authority or general ownership. Responses indicated that 51.4% percent of the facilities are not members of a group and that their turnover rate was significantly lower (51.4%) than the rate (87.6%) for facilities that were members.

When administrators were asked if other organizations in the area competed strongly for the same type of employee, the average turnover rate for those who said yes was significantly higher (82.7%) than for those who said no (59%).
Facilities that provide fringe benefits to nurses aides consistently had lower average rates of turnover than facilities that do not. Two benefits that contributed to turnover rates for providers that were significantly different than for non-providers were paid sick leave and health insurance.

Administrators were asked how many hours nurses aides were normally paid for the day shift. Ninety-six (38%) reported that they paid for less than 8 hours. Those homes had a significantly higher rate of turnover (88.6%) than homes that paid for a full eight hours (62.5%).

Facilities in which directors had three years or less experience had average turnover rates over 84%, while facilities in which directors had been employed over three years had average turnover rates 61% and less.

Directors of nursing were asked if their facilities had a program to recruit nurses aides. Facilities that have recruitment programs have a significantly higher rate (84.3%) of turnover than the rate (64.9%) for homes who do not have a program. These findings probably indicate that homes with lower turnover rates would not perceive themselves as needing a recruitment program.

When facilities were asked about nurses aide hiring and orientation practices there was a significant difference in the average turnover rate for these facility categories as seen below:

1. Homes that do not hire uncertified aides had an average turnover rate of 62.7%

2. Homes that hire untrained aides and provide a different orientation program had an average turnover rate of 71.4%

3. Homes that hire untrained aides but do not provide a different orientation program had an average turnover rate of 86.7%.

There was one new twist to the problem of nurse aide turnover discovered in this year's project while we were field testing the nurse aide turnover assessment manual. The issue, in one home, was that turnover was associated with only a small percent of the aides. A large hard core pool of aides had an average length of employment of 2 to 5 years. A smaller group of aides was constantly turning over.
Alzheimer's Disease is recognized to be the leading cause of severe intellectual impairment of residents in long term care facilities. Alzheimer's Disease afflicts about five (5) percent of Americans over 65, and twenty (20) percent of those over 80. It accounts for half of the cases of dementing illness and for more than a quarter of the long term care residents in nursing homes.

The preponderance of residents in long term care institutions suffering from Alzheimer's Disease is growing steadily. Because of this the medical staffs, e.g. registered nurses and certified nurse assistants, are not adequately trained to understand the dementia of the afflicted resident nor to attend to his/her services in a responsive and productive way. The disease may be considered to be a contemporary one in that only in the most recent decade has there been a major focus on the study of its conditions and the development of treatment modalities to be used on the resident. This lack of information and skill in administering care to the Alzheimer's resident poses a great deal of stress on the caregiver. The nature of the disease also demands that a quiet, kind, sensitive, patient, understanding, and calm approach be used in administering care. Yet another problem is created by the high attrition of employees among CNA staff produces a population of caregivers who are untrained to give care to the demented. This makes it imperative to develop an in-house curriculum for in-service training for new staff and continued training of others. The project developed a series of training modules which can be used within the nursing home to train the staff. The training package is designed for self-study or classroom instruction.

Training packages and learning modules have been developed for training in areas where nursing home staff were determined to be deficient in care skills. Among the self-staining modules are units on "What is Alzheimer's Disease", "Care Strategies", "Communication", "Family Burden", "Sensory Loss," and "Death and Bereavement". Each learning module contains an instructor's guide, study guide with objectives and actions, narrative, and, a test exercise for the participant.
Quasi-Experimental Pre-and Post-Tests were administered to personnel from the Jackson County Nursing Home (JCNH), the experimental group, and Randolph County Nursing Home (RCNH), the control group. Two self-administered questionnaires were used. Questionnaire I contained four specific dimensions that were used to gather the data. These are 1) Knowledge of Dementia; 2) Understanding about Responsibility for Tasks regarding resident care; 3) Degree of Work Satisfaction; and 4) Attitude toward working with the cognitively-impaired residents.

The second questionnaire, the "Sliding Person Measure (SPM)", also a self-administered instrument, was submitted both in the pre-and post-test form to both the experimental and control population. The "Sliding Person Measure" assessed the self-esteem of the nursing home staff. This instrument is a rating scale and included ten equivalent item statements.

Several analytical techniques were used in this evaluation study for both the experimental (JCNH) and control groups (RCNH). First, a univariate analysis of respondents background variables; Knowledge score; Responsibility for Tasks; Work Satisfaction; Attitude toward Alzheimer's resident care; and Self-esteem was performed. The univariate analysis also included item-wise descriptive statistics on each of the dimensions of Questionnaire I and Questionnaire II. Second, a bivariate analysis was performed involving the background variables of respondents with Knowledge, Task, Work Satisfaction, Attitude, and Self-esteem scale scores. Third, both independent and dependent T-Tests were performed for the training group (JCNH) to measure the significance of difference between the pre- and post-test mean scores on all four dimensions included in Questionnaire I and the self-esteem measure in Questionnaire II.

Dependent T-Tests were used to test the significance of mean score changes between pre- and post-test measures for the experimental and control group separately.

The training programs organized for JCNH staff had several desirable effects. First, their satisfaction for working with demented residents improved significantly after the training. Secondly, the kind of knowledge required to care for the afflicted persons also increased. Before the training, most of the participants from JCNH showed a considerable amount of knowledge about AD, but after the training their knowledge increased further. Third, the proper knowledge of various tasks and positive attitudes toward Alzheimer's Disease afflicted residents were important prerequisites for satisfactory care. On both of these dimensions, the training group showed substantial improvement after training. Finally, it was shown that caregivers must have a high, positive self-esteem attitude. In this regard, the training group showed a reasonably improved self-esteem level after the training.
This training program was not, however, without limitations. One of the limitations pertains to the voluntary participation in the training by the JCWH staff. For the purpose of this evaluation, this was acceptable, yet it lowered the sample size substantially. This factor also precluded the possibility of random selection of the subjects for this research. From the training point of view all staff members involved with AD resident care should have participated in the training program without any exception. Future training programs should address this problem and seek more cooperation from the nursing home administration. With better coordination between the group responsible for training and the nursing home administration a larger sample would have been available for the research.

A second problem essentially follows the first one. That is, there had been some variations in the attendance of the training sessions. Some of the staff members participated in all of the sessions, but in some cases, the attendance varied from one to six sessions. Since the study only compared the mean differences of pre- and post-test scores related to various scale scores, the overall result might have been affected for the nature of participation mentioned above. Full participation in all sessions by the training group as compared to no participation by the control group could have shown a sharper difference between the two groups with regard to post-test measurements.
HABILITATION PLANNING AND IMPLEMENTATION:
THE CLIENT CENTERED APPROACH

Exchange Rehabilitation Service

Myron Birky, Project Director

The purpose of this project is to increase the level of program delivery and individual habilitation for Developmentally Disabled persons residing within long term care facilities in the State of Illinois. Through an assessment and consultation with administrators, a plan of action was developed for the nursing home to follow.

A review of the consultation services was performed by this project. It consisted of a questionnaire and interview of administrators of 9 facilities for the developmentally disabled to assess which information had been helpful and the topics in which they felt a need for further consultation.

Several of the administrators expressed frustration about the financial viability of their programs. They have capital rate reimbursement problems. They would like consultation in staff training and program development, including staff training for direct care staff in the delivery of active treatment programs.

Administrators would also appreciate help in implementing active treatment programs. They recognize that it is the one thing to understand the concept and another to be able to implement it.

Areas Where Consultation is Still Needed

Assessment. All of the facilities need training of staff on what assessments are required and how those evaluations translate into meaningful goals and objectives. Without meaningful evaluation and assessments, active treatment cannot be carried out.

Treatment Planning. The facility staff must have complete understanding of active treatment, including habilitation planning and the function of an interdisciplinary team. The staff need several hours of intensive training on this subject and follow-up training to assist them in carrying out what they have been taught.

Training on assessment of and programming for the residents who exhibit maladaptive behaviors is needed. Federal standards require that such problem behaviors be assessed and that a treatment plan to address those behaviors be designed.
Training is needed for direct care staff on treatment, including behavior management techniques and data collection techniques. The principles of normalization and least restrictive environments also need to be included in the training.
CASE MANAGED CARE PLANNING

College of Nursing
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Gloria Henderson, M.S.N., R.N., Project Director and Principal Investigator; Dorothy Camilleri, Ph.D., R.N., Co-Principal Investigator; Joyce Johnson, Ph.D., R.N., Co-principal Investigator; Eva Smirn, Ph.D., R.N., Co-principal Investigator.

This study evaluated the effect of a facility wide Case Managed Care Planning system. Case Managed Care Planning is based on the logic that nursing care planning is an integral part of the desirable case managed nursing care, and that the resultant nursing care plans are an excellent vehicle for both assuring and evaluating quality of care. There were four components to the project plan:

1. A staff development/educational program emphasized the elements of resident-centered care, and the process of care planning. All nursing staff personnel were involved in staff development activities appropriate to their level.

2. The staffing and assignment patterns were arranged to maximize the stability of staff/resident contact, and to allow for joint planning and consultation for day and evening staffs. Case management nurses were accountable for the development of care plans.

3. A care plan and chart audit tool was devised and tested for evaluating care plans. This tool was based primarily on standards of care as reflected in the State of Illinois Quality Incentive Program, the Federal Long Term Care Survey, and the American Nurses' Association Standards of Gerontological Nursing Practice.

4. Measurements were taken on selected organizational variables including cost of providing care, staff turnover and absentee rates, and resident census. From individual staff members, data were collected about their satisfaction with certain aspects of their jobs, and their perceptions about Quality of Life care.

A private long-term care facility, with a high percentage of residents utilizing Medicaid was chosen as the site for this project. The sample consisted of 1) a systematic randomized sample of the nursing care plans and charts of the residents, and 2) all nursing staff who agreed to participate in the study.
Both before and at the termination of the treatment variables (the staff development/educational program and the staffing pattern), the facility staff's responses to the two questionnaires, the Organizational Commitment to Quality of Life Nurse Care and the Sparks, Slavitt, Piedmont and Haase Job Satisfaction Scale, were collected. Residents' care plans and charts were audited pre- and post-treatment. Sociodemographic baseline data and organizational data and costs were also collected.

Results of the project indicated a small but measurable improvement in the staff's ability to develop individualized resident care plans. Neither the Job Satisfaction Scale nor the Quality of Life Nurse Care questionnaire indicated substantial changes in staff attitudes or perceptions of their jobs or the quality of care.

Although the organizational data indicated there was a decrease in staff turnover and a small increase in the cost nursing services, this could not be directly related to the project. Interesting descriptive data related to staff education and motivation and the organizational context of care delivery indicates further study is warranted.

This project resulted in a tested methodology and audit tool which facilities can adapt for use in their own quality assurance programs. It provided a prototype for staff development/educational programs to maximize quality of care in a cost effective manner.
A pressure sore manual has been developed explaining the current diagnostic and therapeutic methods employed by experts in the area of wound care to those colleagues, professionals and lay persons involved in the management of pressure sores.

An original nomenclature was devised and applied specifically to the description of pressure sores. It is based upon the recognized standard and accepted method which defines the depth of injury or degree of lesion in burn wounds. Sores are thereby described qualitatively and quantitatively in degree of injury depending upon the depth of the tissue plane penetrated by the ulcer, the anatomic strata of vascular supply affected and the volume of tissue comprised.

The manual includes:

1. Increased emphasis on standard nomenclature for describing wounds through the nomenclature established in the 1985-1986 grant.

2. Educational direction as to recognition of the patients at risk for the development of pressure sores and the implementation of all preventive measures. These measures include: dietary supplementation, scheduled mobility and exercise, and personal hygiene consideration.

3. Comprehensive wound care management for all levels of wounds to include performance recommendations at all levels of care from nurse aid to the practicing physician.

4. Measures to achieve increased compliance with aseptic technique in the care of incontinent patients and the use of saline rinse for pressure sores rather than abrasive antiseptics.
A pressure sore management information system describes the degree of the lesion which in turn reflects which of the tiers of strata or vascular plexi in the tissues have been compromised. This diagnostic basis unfolds into a prognostic format which predicts the likelihood of the wound healing by conversion to normal anatomic features with an intact epithelial surface or progressing to a bed of poorly vascularized scar tissue that is subject to repeated breakdown. From such a prognostic view, a plan of therapeutic intervention is deduced which utilizes medical/surgical principles of assisting wound healing.

Through this standardized treatment protocol which is based on contemporary concepts of wound care management, physicians, nurses, nurse aides and other health care professionals and personnel who attend the pressure sore patient will be able to communicate with one another in the management process in a universally understood and meaningful manner.
EVALUATING AND RECOMMENDING QUALITY CARE INDICATORS FOR LONG TERM CARE FACILITIES IN ILLINOIS

Abt Associates, Inc.

Margot Cella and Mary Gabay

Three types of measures are used when evaluating care provision in long term care facilities: structure, process, and outcome measures. Each type of measure can be used to investigate a facility's adherence to professionally recognized standards, although any single type will not provide a comprehensive assessment of care received by nursing home residents. When used together, however, a satisfactory determination of the quality of care provided can be made.

Structure measures use the human, organizational and material resources of a care facility to measure the facility's capacity to provide good quality care to its patients. Structure measures reflect such things as the training, experience, and number of facility staff, the safety of the building in which patients reside and the adequacy of the facility's equipment. Many studies have used structural measures as indicators of quality of nursing home care because they are the most objective measures available and the easiest for which to collect data. Further, data collectors need not be nurse reviewers or other experienced health professionals, since no professional judgment is required.

Availability of the capacity to provide good quality care, however, does not mean that this capacity is used to the best advantage of the facility's residents (or even used at all), and this is the major problem with structure measures. Several studies have attempted to empirically estimate the relationship between structure measures and the process or outcome of nursing home care. Few significant relationships have been consistently uncovered. In general, structure measures can identify quality in facilities' physical environment but do not measure quality care in such areas as patient activities, social services, and outcomes.

Process measures look at procedures used and the activities and services provided in the delivery of care to LTC patients. Use of process measures is not as common as use of structure measures, due in large part to the subjectivity of the measures. Processes are harder to agree upon and data collection is expensive and time consuming. However, since process measures are more directly related to a patient's health status, they do possess more validity for measuring quality of patient care than do structure measures.

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Most data used for defining process measures comes from patient medical records; and as such, documentation becomes a critical issue. Procedures performed but not documented are treated just the same as procedures which are never performed. This can be compensated, of course, through direct observation of daily activities in the facilities by professional reviewers and interviews with patients and staff. This however, increases the expense and time cost of using these measures.

Outcome measures of quality of care directly relate to patients' health status. These measures are the changes in the physical, functional and psychosocial status of patients. They reflect the observed consequences of the care provided. Specifying outcome measures requires knowledge of the expected response to the treatment protocol for the patient when considering the age, physical status, and mental status of nursing home residents. Outcome measures must be assessed on an individual patient level since a patient's initial health status and potential for recovery or improvement will effect outcomes just as much as the quality of care provided.

The outcome observed by itself indicates very little about the quality of care provided. Death is a patient outcome which often occurs in nursing homes; however, since one of the functions of the nursing homes is to provide care for severely ill or dying patients, an outcome of death is not necessarily an indicator of poor quality care. Outcomes such as (1) living or dead; improved, the same, or deterioration of functional abilities; and (2) discharged, still in the nursing home, or admitted (or readmitted) to the hospital; can only be meaningfully measured when compared against a baseline measure of each individual's prognosis (expected outcome). Outcome measures may also reflect specific patient conditions (such as development of decubitus ulcers, urinary tract infections, etc.) rather than overall functional ability.

Illinois' use of these three types of measures in its Inspection of Care (IOC) and Quality of Incentive Program (QUIP) has been compared to quality measures used by Wisconsin's Quality Assurance Project and New York's Sentinel Health Events. To facilitate an item-by-item comparison, quality indicators from each state system/demonstration were placed into eight categories: physical plant, quality of life, indirect patient care, custodial services, skilled nursing care, therapies, social services/activities and staff/management.

Illinois' IOC process and QUIP collect a wealth of information from which quality care indicators can be constructed. The IOC review of Medical Assistance nursing home residents provide data on many of the process and outcome type of measures which are particularly important when evaluating the quality of care residents receive. The QUIP assessments collect a lot of data on quality of life indicators in addition to quality care indicators. Since for many residents the nursing home is their home, quality of life indicators are very important. Together, the two Illinois surveys provide a large amount of information on important aspects of quality care.