CHAPTER 2
REVIEW OF THE LITERATURE

This literature review will consider record keeping in healthcare and education, the role of occupational therapists at LSEN schools and their administrative duties. It will also consider the importance of record keeping in terms of assessment and treatment, communicating findings, evidence-based practice and research.

2.1. RECORD KEEPING

Record keeping serves many functions, but primarily it serves to support patient care[7].

> *"South Africa recognizes that access to health information is central to effective decision-making. Regular and effective use of routine data for the purpose of strengthening management and informing decisions remains a challenge in South Africa. It is necessary to set standards to assure high quality of data collected from patient records"* (p1115 *)* [8]

The pursuit of quality healthcare requires measuring and monitoring the health status of the population and ensuring that decision-makers are given feedback on information generated. Ameh and Shehu indicate that patients' records should therefore be easily accessible and ensure continuity of care and fulfil legal requirements[9].

Health professionals are responsible for maintaining and improving records[7]. Structuring the records effectively influences the ease of information retrieval. This can bring direct benefits to patients by understanding the patient's history, improving patient outcomes and health professional's performance[7, 10].

Inadequate record keeping with regards to filing, storing and retrieving records of patients is of concern because:

- Patients make choices about the provider and the service based on their experience at the care interface[8].
- Failure to retrieve patients' records could lead to a compromise in the quality of care provided[8, 11].
- It may increase the cost of care through the repetition of procedures[8].
- It leads to inappropriate allocation and utilization of resources[11].
- It hampers audits of professional competence and clinical training[11].
- Records are required in cases of professional litigation[8].
- It compromises clinical and epidemiological research[11].
- It compromises the development of a national health information system[11].
- Undergraduate students are exposed to poor record keeping practices [11].

As Abraham points out health researchers have consistently cited the importance of maintaining patient records that are of a high quality[12]. When records are not maintained it is difficult to determine the impact of healthcare interventions and subsequently to define the quality of the service provided or to plan for continuous quality improvement[11].

The patient record is a legal document that may be used to provide evidence for procedural investigations e.g. assault, child abuse. According to M'kumbuzi, et al it may also be used for defence in cases of professional litigation[11]. It is estimated that one in three health professionals would be involved in some kind of legal proceeding at some point in their career[8].

However, record keeping underlies not only the integrity and quality of individual therapy practice but that of the entire profession in the validating the effectiveness of therapy.

The challenge for the profession is to continue to define what it is that occupational therapists do, while demonstrating that what they do is effective[13]. Occupational therapists should use records to detail the functional outcomes of treatment as a framework for daily practice, to determine the effectiveness of specific interventions and as guide clinical decision-making. Records should therefore be based on the

use of valid and reliable measures so that both the quality and effectiveness of therapy services can be demonstrated [14].

2.2. EVIDENCE-BASED PRACTICE

The effectiveness of therapy can be established by using records to reflect evidence-based occupational therapy according to Law and Baum. Evidence-based practice is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients[15]. This practice uses research evidence together with clinical knowledge and reasoning, within the context of the practice to make decisions about interventions that are effective for a specific client[16], as well as bringing the client's preferences into consideration[15]. Current health practise require occupational therapists to translate research findings and evidence for individual clients – interpreting the likely effect of disease, intervention or prevention for the individual[17].

Evidence-based practice is a process which involves searching for, appraising and then using research findings to guide clinical practice. It is about using rather than doing research. The process of evidence-based practice encourages health professionals to identify client groups most likely to benefit from their services and interventions most likely to produce positive results[18].

Evidence based practice is achieved by following steps:

1. Formulation of clear clinical questions.
2. Searching the literature for relevant scientific evidence.
3. Critically appraising the evidence.
4. Integrating the findings into practice and teaching.
5. Evaluation and monitoring of changes to practice[18].

Evidence-based practice is important because it aims to improve client outcomes, clients expect it, it improves the occupational therapist's knowledge, and it communicates the profession's research base, stimulates clinically relevant research and improves accountability[15]. Due to evidence-based practice there is a

sudden drive of research agendas by clinical occupational therapists in collaboration with academics. Accurate and efficient record keeping underpins the research that contributes to evidence-based practice.

2.3. CLINICAL AUDITS AND QUALITY ASSURANCE

All of the above require some form of audit process to take place. A clinical audit is a quality improvement process that seeks to improve the patient care and outcomes through systematic review of care against explicit criteria and the implementation of change[19]. This may include audits of records of treatment structure, inputs, processes and outcomes. M'Kumbuzi et al point out that such audits have been conducted in various disciplines, including medicine, pharmaceutical care and extensively in nursing care, but to a lesser extent in rehabilitation care, particularly in Africa[8].

The term 'clinical audit' appears to be used in a similar way to which 'quality activities' are broadly described[20]. Quality activities also aim to monitor and improve local clinical practice, by providing data which show what actually happens, and how it compares with a predetermined standard of best possible practice[20]. Standards of practice are an important baseline for quality activities. These standards should reflect known good or best practice[20].

Many versions of the quality activity cycle exist in the literature. At the most simple and linear level one can identify a common thread that is represented by one of the following questions: "Where are we now?", "Where do we want to get to?", "How will we get there?" and "How will we know we have got there?"[20].

A step-by-step version of a quality assurance process is as follows:

1. Planning for quality assurance.
2. Developing guidelines and setting standards.
3. Communicating standards and specifications.
4. Monitoring quality.
5. Identifying problems and selecting opportunities for improvement.

6. Defining the problem operationally.
7. Choosing a team.
8. Analyzing and studying the problem to identify its root causes.
9. Developing solutions and actions for improvement.
10 Implementing and evaluating quality improvement efforts[21].

Quality improvement is often viewed as a cyclical process where the cycle may be repeated to monitor the effects of changes[20]. Therefore the quality assurance program addresses both quality control (activities which seek to identify and eliminate individual professional performance falling below acceptable standards of competency) and quality improvement (systematic processes of activities intended to improve individual professional performance in order to maintain and improve competency)[22].

There are many advantages of quality activities and quality assurance activities, such as:

- Clinicians can step back from individual interactions to review the quality and adequacy of their services.
- Clinicians can constructively utilise research and best-practice evidence to evaluate their process and methods of care.
- The efficiency of individual client care can be enhanced.
- Specific issues can be identified to inform clinical research.
- Clinicians often find that the end of one quality thread may lead to other questions and the generation of more quality activities[20].
- Promotes confidence, improves communication and fosters a clearer understanding of community needs and expectations[21].
- Offers health workers an opportunity to excel, thereby increasing their job satisfaction and status in the community[21].
- Has the potential to improve primary health care programs without requiring additional supplies, logistical support, or financial and human resources[21].

Audits of this nature require a functional record keeping system in order for them to be meaningful. Unless adequate systems are in place to file, store and retrieve records of patients, the data that contributes to the development of a standard of

quality of records will be seriously compromised[8]. According to Wilson, Sperman and Hill the data used for quality assurance studies includes: direct observation, surveys, clinical records, and abstracts of clinical records. Of these, documentation in the clinical record was reported as the most common data source. The clinical record provides tangible evidence of the health care provided. How well health personnel documented what was done so that it could be reviewed also represented a critical measure of their willingness to be accountable for the care provided[23]. The retrieval of these records is also necessary to contribute data to national health and education information systems which are essential to the planning of the national policy on health and education. Both affect the position of occupational therapy in South Africa[8] in the planning of service delivery (consultation, monitoring and direct service) that is needed amongst others, by the learner in a LSEN school[24].

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2.4. OCCUPATIONAL THERAPY IN LSEN SCHOOLS

The Western Cape Education Department indicates that although school-based occupational therapists engage in therapy, their role also includes academic, administrative, educational and disciplinary aspects which form part of any health professional's responsibilities as well as the added obligations of organising extra-curricular and co-curricular activities to promote education of learners[5].

2.4.1 Expected Role Change

At present the two primary roles of occupational therapists working in public schools are assessment and intervention[25]. Occupational therapists perform initial and ongoing assessments, develop and modify adaptations to the education context and provide occupational therapy intervention to learners who qualify for these services. Thus the occupational therapist is often part of the initial process of determining whether learners are eligible for special education services[26].

The intervention provided by school-based occupational therapists includes the following:

- Improve gross and fine motor skills[27, 28].
- Improve sensory-motor integration function[27, 28] e.g. the use of neuromuscular, sensory-motor and perceptual skills[26].
- Improve ability in activities of daily living[27] and self-help skills[28] e.g. dressing, personal hygiene and eating[24] and school-related personal care needs[26] e.g. preventing drooling, turning book pages, handwriting and holding pencils or scissors[24].
- Improve muscle strength, joint range of motion and endurance[27].
- Improve function using assistive devices[27].
- Making therapeutic adaptations for learners e.g. adapting the classroom in order to facilitate independence in educational tasks[26].
- Prevent developmental disability, dysfunction and deformities[26, 27].
- Increase socialisation[27].
- Increase vocational skills[27].
- Increase school adjustment[27].

Even within this limited role, because of time constraints and lack of skilled occupational therapists, there is a move for school-based occupational therapists to focus on evaluating learners and providing consultation only.

This trend is challenging occupational therapists to move away from curative problem-orientated approaches in their therapy to more relevant approaches within the South African education context and to extend the nature of their professional activities[29]. They are being encouraged to increase their involvement in multiple areas and levels of support at the district and school level. Engelbrecht feels that this will include primary, secondary and tertiary prevention efforts, specific direct and indirect interventions, facilitation of change, individual and group intervention and lifespan development[29]. This move to provide community-based, family-centred services is to ensure continuity of care, minimise service fragmentation and increase service coordination. Occupational therapists will thus take responsibility in the prevention of secondary disabilities by focusing on teaching healthy behaviour and self-advocacy as part of the therapeutic process, by considering long-term benefits and outcomes[14].

There will, therefore, have to be a continued move from a biomedical approach to a socio-medical context in order for therapists to take a more active role in building healthy communities[14].

The current role of occupational therapists, which is focused on evaluating learners and providing direct therapy and consultation, will change and therapists may see learners less frequently to monitor progress, develop home and class instruction or issue equipment[14]. There are several challenges associated with moving beyond individual, one-on-one practice. These include:

- Lack of time for planning and collaboration.
- Limited training and understanding of how to work in classrooms.
- Other school professionals' unfamiliarity with the role of the occupational therapist in schools.
- Parent, teacher and therapist preference for a specific service delivery model and how service delivery is written into the IEDP[30].

In response to these new practice demands, aspects like increased accountability, changes in contemporary practices and service models, ongoing implementation of family-centred services and changing population demographics must be responded to by the therapists. The professional attitudes, skills and strategies necessary to meet these demands include more extensive administration duties and the ability to justify the effectiveness of occupational therapy by incorporating research into practice that is specific to the South African context[14].

2.4.2 Administration, record keeping and reporting

At present the administrative duties of an occupational therapist at LSEN schools, with regards to direct intervention, is to report on an ongoing basis on the learner's developmental progress by planning, coordinating, controlling, administering, evaluating and re-evaluating therapy and making changes to the intervention strategies as needed[5]. This includes recording home programs that are developed and monitored to provide carryover of skills learnt in therapy to the home[5].

Traditional record keeping most often includes student demographics, grades, test scores and attendance to therapy. McIntire indicates that additional information gathered from learners, teachers and parents should also be recorded as this could help the therapist in the targeting of appropriate services and support[31].

In light of the holistic approach to clients, which underpins the practice of occupational therapy, where the emphasis is placed on functional outcomes and evidence-based practice, additional information that should be included in any record is:

- Program participation: Learners participation in curricular and extracurricular programs including tutoring, sports, and arts programs [31].
- Discipline: Information about when and where disciplinary incidents occured[31].
- Surveys that ask parents, learners and staff for their opinions on the occupational therapy intervention. These surveys show where priorities differ between administrators, parents and learners[31].

- Information indicating that the learner has the ability to improve function, maintain function or slow the rate of regression of function with occupational therapy intervention[28].

Occupational therapists need to view their records as a means of ensuring the continuous quality of their therapy and as a means of evaluating the learner's improvement. There is evidence that inadequate record keeping by rehabilitation therapists in the public health sector may be as a result of the inadequacy of existing systems in monitoring and storing of records[8]. Another problem related to poor record keeping is that a poor role-model is presented to undergraduate students exposed to this environment. Thus, there is a danger of a ripple effect of future inadequate record keeping practices[11].

The absence of adequate records, according to Nicholson et al, makes it difficult for occupational therapists to justify the cost of their services. They are also unable to prove that they provided appropriate care, should they be asked to do so in a professional or legal hearing[32].

Records also play a role in the maintenance of professional standards, as they are the method of communication between health and education professionals as reports are constructed from the records of any given professional. Effective healthcare integration is underpinned by clinical information transfer that is timely, legible and relevant[33]. The writing of progress and assessment reports is the responsibility of occupational therapists working in the educational setting for their professional co-operation with colleagues in order to maintain good therapeutic standards and monitor progress among learners.

The occupational therapist needs to identify, respond and report to the teacher and parent within the therapist's specific area of expertise. As Bundy points out, it is important to share and report to the teacher and parents on such topics as assessment, behavioural analysis and management, functional independence in school, realisation of academic potential, compensatory strategies and effective interaction[24]. In order to demonstrate to parents, teachers and administrators that

their intervention is effective, the occupational therapy goals should be set in partnership with them and the improvement must reported regularly.

2.4.3 Occupational therapy outcomes

According to Royeen and Marsh, occupational therapy goals for disabled learners have in the past been stated in biophysical rather than educational terms. Thus the relationship of these goals, in terms of the educational progress of a learner, has not been evident to administrators, teachers and parents[24].

Functional independence should be the most important occupational therapy outcome and this is the aspect that should be reflected in clinical occupational therapy records and reports. This outcome in the school situation should cover goals that include dressing, buttoning, tying, toileting and eating skills. Additional areas related to performance in school that are appropriate for achieving functional independence include preventing drooling, turning book pages, handwriting and pencil grasp and scissor skills. By concentrating on these areas, the therapist facilitates the learner's functioning in the classroom and allows the teacher to concentrate on teaching academics[24].

Occupational therapy services would therefore address the learner's performance within an educational context, including classroom lessons and activities, by identifying and recording change in self-help skills, prevocational and vocational abilities, play and leisure involvement and social skills. These outcomes would clarify the role that the occupational therapist plays in the improvement of learner's participation in the general educational curriculum, their access to the school environment and their participation in extracurricular activities to all parties involved with the learner, according to Dimatties et al [30].

Occupational therapists should be aware of the importance of integrating their therapy into the educational setting because with the increasing emphasis on inclusive mainstream settings[1], interventions will become an integral part of the total educational program rather than an isolated activity that occurs outside the classroom[26].

Inclusive education has been the vision of the Department of Education since 2001[1], but at present LSEN schools still cater exclusively for learners with special needs. Referrals to LSEN schools are generally the result of a team member in a mainstream school identifying educational activities that the learner is having difficulty with. Thus, referrals are based on the learner's observable behaviour, the end product or outcomes of their performance[26].

2.5. STRUCTURES AND RECORD KEEPING AT LSEN SCHOOLS

According to literature, occupational therapists in LSEN schools provide school-based services in a variety of ways, including:

- Working with learners individually in the therapy room or classroom and at other schools.
- Leading small groups in the therapy room or classroom.
- Consulting with a teacher about a specific learner.
- Providing in-service training for educational personnel.
- Serving on a curriculum committee or at some other systems level[30].

Jirikowic et al pointed out that many occupational therapists are faced with challenges such as: limited space, equipment and budgets, high caseloads that limit time to provide direct services and inconsistent expectations regarding the responsibilities of occupational therapists in educational settings[14]. There is also the added responsibility of fulfilling the new expected role of providing community-based, family-centred services.

As a result of the challenges facing the therapists in this setting, record keeping is not a priority. There is evidence of poor record keeping in the education sector where occupational therapists are more concerned with ensuring that learners requiring their services obtain them, rather than ensuring that their record keeping practices which support the learner treatment are in place[11].

Record keeping should be in accordance with the performance standards in the Integrated Quality Management System for School-Based Education Therapists[34]. This states that it is not necessary for therapy sessions to be written out, but planning of the therapy session must be clear. Kamens feels that in order to satisfy minimum expectations of the Integrated Quality Management System essential records, containing evidence of treatment planning and learner progress should be available. It is necessary to have some evidence of modification of therapeutic intervention strategies based on assessment results[34]. This data must be recorded regularly for it to be useful in decision-making[31].

Processes that are available to streamline record keeping can foster administrative efficiency for the occupational therapist and the school[5]. By collaborating on the development of Individual Educational Development Plans (IEDP's) therapists can increase the meaning and relevance of record keeping as the IEDP assists in directing, documenting and facilitating collaboration in the learner's education[35]. This should result in making the ongoing, but crucial, occupational therapy role of reporting to parents, educational staff, administrators and others involved in the learner's educational program, more effective [26].

The availability of computer-based record keeping systems at LSEN schools could also increase health professionals and the educational team's satisfaction with the service. Computerised records are generally more understandable, legible and contain more information[36]. Yet, without the improvement in the therapist's attitude towards record keeping and standards in keeping quality paper records the full benefits of computerisation are unlikely to be realised. According to Mann and Williams the onus for improving records lies with individual health professional[7] and even in practices that make extensive use of electronic recording, clinical data is usually incomplete[37].

2.6. FACTORS TO BE CONSIDERED IN AN AUDIT OF RECORDS CHECKLIST

No singular literature source provided a comprehensive list of items that should be included in a learner's records, therefore the checklist was compiled from various

sources. All possible items from literature were condensed into the checklist in order that the checklist be as comprehensive as possible. These items were obtained from articles regarding record keeping in other professions within the educational and health institutions such as nursing, physiotherapy and educators and literature regarding the role of occupational therapists in schools.

Transactional data is the day-to-day operational data of an organization that helps it run efficiently. School transactional data most often includes the learner's demographics (for example their home address), grades, academic results and attendance. A broader vision of data collection includes program participation (the learner's participation in curricular and extracurricular programs including tutoring, sports, arts programs and summer school), discipline (information about when and where disciplinary incidents occur) and user satisfaction[31].

According to Mlambo, Amosun and Concha, personal and socio-economic histories of patients should be documented. Occupational therapists need to take a comprehensive background information about the patient as the plan of treatment should be appropriate to the individual's age and developmental level, gender, education, cultural and ethnic background, health status, functional ability, interests, personal goals and service provision setting[38].

Occupational therapy outcomes should be directed toward improved student participation in the general education curriculum, access to the school environment and participation in extra-curricular activities. Therefore the learner's performance within the general educational curriculum, access to the school environment and participation in extra-curricular activities should be documented[30].

The name of the occupational therapist working with the learner was one of the items required by the core standards of the College of Occupational Therapy in Britain[22].

The researcher condensed the transactional data / background information into 3 categories, namely Personal Information, Socio-economic Information and Medical History.

Within the Personal Information category the items that were included were the learner's name, gender[38], date of birth[38], address[31], home language[38], population group[38], religion, referred by whom to LSEN school, reason for referral, emergency contact numbers[31], grade / phase[31], academic results at the end of each grade / phase[31, 28], interests[38], extra-mural participation[31, 28], discipline and consequences[31] and the name of the occupational therapist[22].

In the educational context, socio-economically related factors contribute to high teacher-learner ratios, shortages of textbooks and other resources and limited provision of school and district based educational support[29].

According to the College of Occupational Therapy in Britain the details of family members is one of the items that was required by the core standards[22]. The number of children and ages of the children should be documented[38]. Therefore the category Socio-economic Information includes the parents' information such as their names, occupation, medical or disability history, education and contact numbers was included in the checklist. Information such as the age, gender, education and medical history of siblings was also included in the checklist.

According to Mlambo, Amosun and Concha the type of dwelling the learner lives in, the quality of the dwelling and the ownership of the dwelling and the area of residence of patients should be documented[38]. Relevant history was one of the items required by the College of occupational therapy[22]. Therefore the type of dwelling and ownership and relevant client history (with a few examples) were included in the checklist.

The items that were included in the medical history included diagnosis, pregnancy history, birth history, developmental milestones, operations, illnesses, present health status, onset of diagnosis and allergies.

Assessment and intervention are two of the primary roles of occupational therapists[25]. Therefore a category for assessments was included in the checklist.

According to Royeen and Marsh it is important to share and discuss assessment, behavioural analysis and functional independence[24].

Referrals to LSEN schools and for occupational therapy intervention are generally the result of a team member identifying educational activities that the child is having difficulty performing[26]. The occupational therapist may be part of the initial process of determining whether children are eligible for special education services[26, 28]. Occupational therapy is often required to assist students benefit from special education[28].

Therefore the referral information for occupational therapy intervention, pre-admission assessments and screening were items included in the checklist.

Various assessments that are part of the occupational therapists role in schools were included these include:

- Gross and fine motor abilities[27, 28, 38].
- Speech and language[28, 30, 38].
- Sensory awareness[26, 27, 38].
- Perception[38].
- Cognition[38].
- Emotional / behaviour problems[24, 38].
- Functional abilities[24, 26, 27, 28, 38].

The functions of school based occupational therapists also include improving muscle strength and endurance, improve function using assistive devices, prevent developmental disability and dysfunction, prevent deformity, increase joint range of motion, increase socialization, increase vocational skills and increase school adjustment[27], visuomotor, perceptual motor, sensory integrative performance, individual and environmental adaptation[28]. Therefore “Other” was added in order to include the above assessments if they are included in the files or if the occupational therapists believe that they are important.

Assessments should be reported clearly and logically, including the method of assessment and the findings[22]. The use of formal and informal evaluation methods that focus on the educational needs of the child is essential in identifying effective intervention strategies[26]. The occupational therapist must use as many standardized tests as appropriate from which age scores can be obtained or converted. To supplement these tests, the occupational therapist may use clinical data; file reviews, consultations with teachers and parents and observations made in the classroom, playground and school cafeteria[28].

Therefore the checklist included an item indicating that standardised and non-standardised tests should be report in full.

Interview is another powerful assessment tool. Interview of a student, teacher and parent yields information that cannot be gathered in any other way. In a half hour interview, members of the educational team can paint a verbal picture of the student that saves hours of observation and formal assessment time. Interviews are also one of the best ways to learn how the student's difficulties are affecting other's abilities to parent or teach the student[25]. Therefore interviews with the referring teacher, the child and the parents were included as items within the checklist.

Before the occupational therapist is involved discrepancies between a student's performance and other's expectations become apparent or are anticipated. These discrepancies in turn give rise to questions about the cause, degree or ways to minimize or eliminate the. The primary purpose of assessment is to answer those questions[25]. Therefore discrepancies between a child's performance and other's expectations was included as an item in the checklist.

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The teacher's expectations were also included as an item in the checklist because prior to beginning occupational therapy intervention, both the teacher and the occupational therapist consciously or unconsciously formulate expectations about the intervention process. These expectations play an important role in enabling occupational therapist and the teacher to prepare for intervention. The expectations must be revised regularly[25].

Assessment and intervention are two of the primary roles of occupational therapists[25]. With the increasing emphasis on inclusive settings, interventions are now an integral part of the total educational program rather than an isolated activity that occurs outside the classroom[26]. An intervention programme should be implemented according to the developed intervention plan. This makes it vital for occupational therapists to ensure that each patient has a documented intervention plan[38]. Therefore Treatment Plan was included as one of the categories within the checklist

Refining the problem is necessary to effective intervention[25] but there is also a need to focus on individualization and children's strengths[35]. Therefore the items “Problem areas identified” and “strengths identified” were the first items to be included in the category Treatment Plan.

With regards to outcomes, goals and objectives the goals and objectives must be observable and measurable[35]. Goals of intervention were also required to be documented by the core standards of the College of Occupational Therapy in Britain[22].

The College of Occupational Therapy in Britain has various core standards with regards to documentation. These include documentation of the client's knowledge of and agreement to the goals set and that goals should be written with time scales or review[22] and therefore these items were included in the checklist.

According to Royeen occupational therapy services provided to learners must have a relationship to the educational goals identified for each student in the individualized education program[27]. Therefore it is important that the goals should be written in educational terms.

According to the core standards of the College of Occupational Therapy in Britain the outlines of interventions should be clearly documented with the interventions clearly relating to a specific problem, the outcome of each intervention should be documented and if the goals were not achieved there should be an explanation of the reasons for non-achievement. The view of the client and his / her carers should

also be documented and there should be evidence of progress records[22]. Therefore these items were included in the checklist.

Surveys regarding user satisfaction may show where priorities differ between administrators, parents or students. Therefore it is beneficial to distribute surveys that ask parents, learners and staff for their opinions[31].

Occupational therapists rarely assume all possible roles for any learner. Their role is determined in response to the goals and objectives specified in a student's educational plan and the expertise of other educational personal. In the best of all situations the team works together to articulate the most important things a student will know or be able to do differently at the end of the school year. Then one or more team members take responsibility for each objective[25]. The IEP is the foundation of instruction for individuals with disabilities. The importance of the IEP in directing, documenting and facilitating collaboration of a student's education cannot be minimized or ignored[35]. Therefore it is necessary to document the collaboration with other professionals and the occupational therapists contribution to the learner's individual educational plan.

With respect to occupational therapy, four important plans emerge from the IEP meeting: a list of carefully selected goals and educational objectives for the student, specification of the educational placement, determination of the need of OT and determination of the most effective types of service delivery[25]. Therefore items were that were added to the checklist included "recommendation regarding placement" and "determination of the most effective types of service delivery".

There are various modes of occupational therapy service delivery. These include consultation, monitoring and direct service and are influenced / dictated the learner's needs[24].

With regards to direct service the expected outcome is improved learner skill. The learner changes in order to meet the expectations of the environment[25].

With regards to consultation the expected outcome is that the school environment changes in ways that enable a learner to succeed in school despite the limitations imposed by a disabling condition[25]. The occupational therapist consults once or twice a month with the teacher or parents while the student is present. The goal is one that can be met in the classroom or at home. A daily program is carried out by the teacher or parents with the occupational therapists supervision[28].

There are three outcomes associated with indirect service. These are: the learner refines a skill, the learner maintains function and parents & educators learn to implement a necessary procedure (e.g. positioning, feeding). In indirect service the OT teachers a procedure to the teacher, aide or parent (implementer), the implementer administers the procedure to the student[25].

Consultation occasionally includes suggesting adaptive equipment or alternative materials as a means of modifying the environment so that it better fits the needs of the student[25]. Therefore the equipment used was also included in the checklist as one of the items.

In a study on the quality of occupational therapy records on stroke patients the recording of treatment sessions was included. Only sessions done for purposes of treatment of patients dysfunctions were considered, this means the initial assessment session and the discharge summaries were excluded[38]. Documentation of treatment sessions is crucial as the courts of law often take the viewpoint that if treatment is not documented then it was not given. Clients may refuse to pay bills if they know that the sessions were not documented. Institutions may also be sued for negligence as there would be no evidence to prove otherwise[38]. Therefore the documentation of treatment sessions was included in a separate category to treatment planning.

According to Mlambo, Amosun and Concha the frequency and duration of occupational therapy services should be documented. Also each treatment session should be recorded together with regular progress notes based on the results of ongoing re-evaluation[38]. Etsel-Wise and Mears agree by saying that each time an abnormality is observed through informal or formal assessments detailed

documentation must be completed and maintained and such documentation must include all contextual variables including, but not limited to name, date, time, weather, activity, equipment used, noticeable fluctuations in mood or temperament leading up to behaviour or performance, detailed description of the exact behaviour or performance[39]. Therefore the following items were included in the category for treatment sessions: time and / or duration of session, group sessions, individual sessions, session aims, behaviour during session, activities used during session, performance of activities, outcome of session, amount of sessions recorded per year, ongoing re-evaluations and attendance.

In a study on the quality of occupational therapy records on stroke patients the recording of the physical, social and psychological status at discharge was included. The occupational therapist was also required to document the changes between the initial and current status of functional ability and deficit in performance areas and performance components[38]. Therefore documenting the learner's physical, functional, social and psychological status at the end of occupational therapy intervention and after leaving school was included in the checklist. The reason for discontinuing occupational therapy and reason for leaving school were also included as items within the checklist.

There is a need for a discharge plan and a discharge summary that would give the learner's functional status at the time of discharge together with changes that were made throughout the course of occupational therapy intervention. In addition, the plan should also include follow-up occupational therapy services if needed[38]. The discharge report should include overviews of outcomes, treatment, aims, problems and assessment according to the core standards of the College of Occupational Therapy[22]. Therefore a discharge report, details of placement and follow-up information after discharge, changes between initial and current status of functional ability, deficits with regards to performance areas and components and a discharge plan were included as items within the checklist.

The core standard of the College of Occupational Therapy in Britain for record keeping relates to the content, access, confidentiality, storage and disposal of records and includes a recommendation that record keeping is audited[22].

Therefore a final "General" category was included in the checklist which included items such as "would records be understood by people who are not health professionals?", confidential, access, ease with which to file patient records, ease with which to locate patient records, good storage facilities, disposed confidentially and is it easy to locate items within the records of each section.

The use of language according to the core standards of the College of occupational therapy require that slang and colloquialisms should not be used and that abbreviations / acronyms should be explained[22]. Therefore the use of slang / colloquialisms and use of abbreviations – should be explained in full the first time that they are used in occupational therapy records were also included as items in the checklist. The legibility of handwriting was one of the core standards on record keeping of the College of Occupational Therapists[22] therefore this was also included in the checklist.

The Health Professions Council of South Africa (HPCSA) also sets out guidelines for the keeping of patient records[40] similar to those discussed above. Their guide for good practice in record keeping includes the following suggestions:-

- Records should be consistent and complete, but concise[40].
- Unsolicited comments should be avoided[40]
- A standardised format should be used and should include the history, physical findings, investigations, diagnosis, treatment and outcome[40].

They indicate that practitioners who do not to follow their guidelines

> "must be prepared to explain and justify their actions and decisions to patients and their families, their colleagues and, if necessary, to the courts and the HPCSA." [40] (p8)

2.7. SUMMARY

The importance of record keeping, as part of the responsibilities of a health professional and in relation to occupational therapy, is often not understood by the practitioners themselves. Record keeping is essential for demonstrating the

effectiveness and quality of therapy and forms the basis of evidence-based practice and research.

In LSEN schools in South Africa therapists site a number of challenges which affect the ability to keep adequate records. These include the changing role expected of the occupational therapist with a move towards community based services and away from a biomedical approach, high caseloads and inconsistent expectations regarding their responsibilities in the educational setting.

Although the role of the occupational therapists in terms of record keeping is clearly defined, therapists are not using functional outcomes to report the effectiveness of their treatment to parents, teachers and administrators. This aspect needs to be improved in view of the increasing emphasis on an inclusive education policy in South Africa.

By collaborating on the development of Individual Educational Development Plans (IEDP's) therapists have the potential to improve the effectiveness and quality of their record keeping. Another possibility in achieving this is the provision of technology to encourage the use of computer based record keeping but this needs to be accompanied by a positive attitude and good practices in recording the outcomes of assessment and treatment.