Chapter II
Assessment in a Computer–Based Nursing Documentation

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ABSTRACT

*Experience in nursing practice shows that, in Austria, there are still problems with **assessment** in computer-based nursing documentation. Nursing documentation includes the various steps of the nursing process and the **nursing diagnosis**. In addition, an assessment instrument, which captures the needs for care, must also be integrated into it. This chapter describes different Nursing **Assessment** Instruments and the advantages of Computer-Based Nursing Process Documentation. Quality criteria for assessment instruments are validity, **sensitivity**, **specificity**, **reliability**, **practicability**, and the appropriateness of the instrument. Quality criteria for computer-based systems are basically software ergonomic aspects, which are not part of this study. Each country should choose for itself those specific **assessment** instruments that capture the needs for care of their clients. These data enable comparison of facilities and reliable cost estimates in connection with nursing.*

INTRODUCTION

Very few nurses in Austria are acquainted with the theme of **assessment** in nursing and the corresponding instruments. This can be explained by the fact that institutes and courses on nursing science have been established in Austria only in the last few years. **Assessment** instruments are employed and developed further in the course of scientific activity. In the following, **assessment** will be considered in the context of a computer-based nursing process documentation system. In Austria there are currently problems with **assessment** instruments due to lack of guidelines for **assessment** instruments that are integrated into computer-based nursing documentation. A problem that is caused thereby is that those who choose the documentation system have only limited knowledge of the quality criteria of **assessment** instruments. In addition, quality criteria for **assessment** instruments integrated in a computer-based nursing documentation system are often not scrutinized or the instrument is changed in an institution, and thereafter is not subjected to re-examination according to quality criteria. Further difficulties with **assessment** instruments in a computer-based nursing documentation are, that links from the **assessment** instruments to the care plan are partial incomplete or nonexistent. E.g. an instrument which assesses the risk of skin ulcers is not linked to the relevant **nursing diagnosis**. Other problems are e.g. an instrument is developed for **assessment** of patients in an acute hospital but is employed in assessing clients in nursing homes or home care. Some of the instruments used for assessing the needs of clients comprise very few items; with these, not all needs of care of clients can be captured. Another problem of **assessment** instruments in the area of nursing care is that some of the instruments currently in use are not nursing care-specific since e.g. they were developed by physicians. Examples of such instruments are the Mini Nutritional Assessment (Guigoz, Vellas & Garry, 1994) for estimating the nutritional status or the Tinetti Performance-Oriented Mobility Scale (Tinetti, 1986). These instruments cover primarily medicine-relevant areas, and nursing-relevant parts are partially missing.

In the past, a paper-based nursing documentation system was frequently introduced in nursing homes for the elderly. Ammenwerth, Eichstädter, Haux, Pohl, Rebel & Ziegler (2001, p. 66) point out the following advantages of computer-based nursing documentation: "time saving during care planning and a clear improvement in legibility and completeness of the documentation". A further result of the investigation was that physicians and nurses reported improved communication. According to Ammenwerth et al. (2002), computer-based nursing documentation increases the completeness of documentation and improves transparency of nursing services. From nursing documentation, data can be generated for management, and professionalism of nursing care can be enhanced. Presumably, a computer-based nursing documentation system has also advantages in the **assessment** of clients.

BACKGROUND

According to Gottschalck (2003), **assessment**s are carried out by nurses in order to gather basic data such as at admission of a patient to a hospital or a client to a nursing home or home care. **Assessment** serves the purpose of establishing the individual nursing needs of clients. **Assessment**s simplify nursing documentation, help avoid unnecessary measures in relation to patients, enable estimation of individual reactions of clients to nursing care and facilitate monitoring of effectiveness of nursing (Gottschalck, 2003).

Before **assessment** instruments are employed in nursing practice, they should be examined for their test-theoretical quality criteria. Quality criteria for **assessment** instruments are validity, **sensitivity**, **specificity**, **reliability**, **practicability** and the appropriateness of the instrument (Isfort & Weidner, 2001). The minimum requirement in relation to **reliability** is **interrater reliability**, since

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