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An Audit of Dietitians' Documentation – Comparing the Level of Agreement Between the Audit Instruments Diet-NCP-Audit and NCP-QUEST

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Abstract. To explore the inter-rater reliability of the Swedish translation of NCP-QUEST in a Swedish context and investigate the level of agreement between Diet-NCP-Audit and NCP-QUEST in assessment of documentation quality. A retrospective audit was conducted of 40 electronic patient records written by dietitians at one University Hospital in Sweden. NCP-QUEST showed good interrater reliability for the quality category (ICC = 0.85) and excellent inter-rater reliability for total score (ICC = 0.97).

Keywords. Documentation Quality, Medical Record, Dietitian, Nutrition Care Process

1. Introduction

The dietetic profession is young and how the nutrition care provided by dietitians should be documented in patient's health records is under constant evolvement. During the last decade, the Diet-NCP-Audit [1] has been the only validated audit tool available to evaluate the quality of dietitians' documentation. However, in 2021, a new validated audit tool was published: NCP Quality Evaluation and Standardization Tool (NCP-QUEST) [2]. NCP-QUEST is an update of Diet-NCP-Audit and both instruments are designed to evaluate if the documentation covers the four steps of the Nutrition Care Process (NCP) which is a profession specific working process with an accompanying terminology [2, 3]. NCP-QUEST comprises some NCP terminology updates and was recently translated into Swedish, but its inter-rater reliability and agreement with Diet-NCP-Audit is yet to be explored. To explore the inter-rater reliability of the Swedish translation of NCP-QUEST in a Swedish context and investigate the level of agreement between Diet-NCP-Audit and NCP-QUEST in assessment of documentation quality.

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2. Method

A retrospective audit was conducted of 40 electronic patient records written by dietitians at one University Hospital in Sweden. All patient records were audited with both Diet-NCP-Audit [1] and NCP-QUEST [2] and given a score of the quality of documentation for each instrument. Depending on the score given, the patient records were placed into a quality level (A=high, B=medium, C=low). Subsequently, a Cohens Weighed Kappa analysis was performed to assess the level of agreement between the instruments. A value between 0-0.2 indicate no agreement, 0.21-0.39 minimal, 0.40-0.59 weak, 0.6-0.79 moderate, 0.8-0.9 strong and >0.9 almost perfect agreement [4]. Ten patient records were selected for the assessment of inter-rater reliability between two coders which was made by an intraclass correlation coefficient (ICC) analysis. An ICC value between 0.75-0.9 indicate good reliability and > 0.9 indicate excellent reliability [5].

3. Results, Discussion and Conclusions

NCP-QUEST showed good inter-rater reliability for the quality category (ICC = 0.85) and excellent inter-rater reliability for total score (ICC = 0.97). The audit with Diet-NCP-Audit showed that 70% of the patient records had high quality and 7.5% had low quality (Table 1). When the same dietetic records were audited with NCP-QUEST, only 17.5% had high quality, whereas 47,5% had low quality (Table 1). The two least documented items according to NCP-QUEST concerned if standardized NCP terms were used. Nutrition goal and prescription were the two least documented items according to Diet-NCP-Audit. The level of agreement between the instruments was weak (K value = 0.16).

Table 1. Proportion of diabetic records placed in the three different quality categories by using the audit instruments NCP-QUEST and Diet-NCP-Audit.

Quality level	NCP-QUEST		Diet-NCP-Audit	
	n	96	n	96
A (High)	7	17,5	28	70
B (Medium)	14	35	9	22,5
C (Low)	19	47,5	3	7,5
Total	40	100	40	100

The Swedish translation of NCP-QUEST is a reliable audit tool and had a weak agreement with Diet-NCP-Audit. This indicates that the criteria for what is considered high documentation quality differ between the two instruments. Even if higher documentation quality is achieved with both instruments when documenting according to NCP, maximum scoring with NCP-QUEST requires a strict adherence to NCP steps and specific terminology.

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