## TITLE: Can NVP part 2d replace LCP as a care plan for the dying patient and improve the quality of palliative care?

BACKGROUND: The Swedish Register of Palliative Care (SRPC) is a national quality register with quality indicators of the end-of-life care of dying patients. In October 2017, the National Board of Health and Welfare (NBHW) established target levels for the quality of palliative care at the end of life based on quality indicators from the SRPC. By retrieving data from SRPC, the palliative care can be analysed, improved and evaluated. At the Oncology clinic's ward in Karlstad, a newly developed standardised individual care plan for dying (NVP part 2d) was implemented 2018 to replace Liverpool Care Pathway (LCP).

AIM AND OBJECTIVE: The study aims to evaluate NVP part 2d and its effect on the quality of palliative care compared to LCP at the Oncology clinic's ward in Karlstad, Sweden. The objective is to reach the newly established target levels for the quality of the palliative care in the end of life.

METHODS: Data registered for patients who died on the ward during September to November 2017 with LCP was compared with data for patients who died during September to November 2018 when NVP part 2d was used. Data was retrieved from SRPC and through a journal study and related to the target levels of the NBHW.

RESULTS: 31 patients died in the study period 2017 and 41 patients died in the study period 2018. The size of the study does not allow a statistical analysis, but two main differences were found – more patients have been assessed for pain and oral health in the last week of life with NVP part 2d (69%;78%) compared with LCP (23%;57%). The target levels are not reached. The target level for breakpoint dialogue with the patient (98%) was not reached with neither LCP (71%) nor NVP part 2d (75%). There is a tendency for longer nursing time on NVP part 2d (average 3d) compared with LCP (average 2d). The median nursing time was 1 day for both. 10% of the patients were only in the ward for less than a day before they died.

DISCUSSION: One reason to the difference in pain assessment is that NVP part 2d, in contrast to LCP, encourage the use of assessment tools. The main reason though is probably related to an update of the SRPC 2018. Due to the lack of validated assessment tools for dying patients, the use of a validated tool was no longer required. The target level of breakpoint dialogue with the patient is set very high (98%). Many patients had very short nursing times on the ward. If the death was assessed as expected it counts in the data from the SRPC. Acute deterioration and limited time on the ward put great demands on the nurses and doctors to perform and prioritize all parts of the palliative care to reach the target levels of the quality indicators. No matter what care plan is used, diagnosing death in time is a prerequisite for having a breakpoint dialogue with the patient. There must be an improvement in diagnosing death in time, and courage and support to communicate about it.

CONCLUSION: In this study, there is no evidence for superiority of neither LCP nor NVP part 2d. The data retrieved from the SRPC is more in favour of NVP part 2d than LCP, but the number of patients and the differences are small and an update of the SRPC during 2018 might explain the difference. The target levels for most of the quality indicators are not reached.