## Anne Kari Knudsen:

Place of care at end of life and place of death among cancer patients in a rural district in Norway

### **Background**

Studies have shown that palliative care offered early in the cancer disease trajectory may improve a series of outcomes for patients and their families. Many advanced cancer patients prefer to be cared for at home, and also to die at home. Time spent at home, and death at home, may be quality indicators of palliative care. The aims of the present project were to investigate how many days advanced cancer patients in the Orkdal region spent at home the last three months of life, where the patients died, and if they were cared for and died according to their preferences at inclusion.

#### Methods

A prospective controlled intervention trial including adult patients with any cancer diagnosis with non-curative treatment intention was designed, "the Orkdal Model". The model consisted of an integrated cancer and palliative care outpatient clinic collaborating closely with 13 municipalities, and a complex intervention consisting of a standardized care pathway, an educational programme, and an information strategy. Inclusion period was Nov. 2014 to Dec. 2017. Follow-up ends Dec. 2019. The present study reports preliminary data from the intervention group. Patient-reported data on socio-demographics, preferred place of care (POC) at end of life, and preferred place of death (POD) as well as HCP-reported data about the disease and use of health care services, were applied. Not all patients were asked about POC and POD at inclusion, but all were asked each 12 weeks during follow-up. Time spent at home was calculated by applying date of death and the number of days being hospitalized in hospital and/or nursing home during the last three months of life. STATA version 15.0 was used for the statistical analyses.

# **Results**

Hundred-and-twenty-nine patients were included. By Nov. 7 2018, 94 patients (72 %) were dead. At inclusion these were characterised as follows: mean age 69.3 years, females 56 (59.6 %), males 38 (40.4%), 60 (65.2%, (2 missing)) were living with a partner, mean Karnofsky performance status 80.5 %, 83 (88.3%) had metastatic disease. Mean number of days from inclusion to death was 338.5 (SD 279). Mean number of days staying at home during the last three months of life was 63.4 days (SD 22.9), in nursing home 13.7, and in hospital 12.8. At inclusion 47 patients reported preferred POC at end of life to be: 35 (74.4%) at home, 3 (6.4%) in nursing home, and 9 (19.1%) in hospital. Twenty patients (21.3 %) died at home, 36 (38.3 %) in nursing home, and 38 (40.4 %) in hospital. At inclusion in total 70 patients reported preferred POD to be: 45 (64.3%) at home, 3 (4.2 %) in nursing home, and 18 (25.7%) in hospital (4, 5.7% reported "other").

# Conclusion

The majority of patients preferred to be cared for at home, and on average they spent more than 2/3 of the last three months of life at home. Home was also the most commonly preferred place to die, however, only about 1/5 died at home. To investigate patients' preferences regarding end of life care and to plan accordingly, are important factors to improve quality of care. Early integration of oncology and palliative care as well as structured collaboration and education across health care levels may facilitate the process of advance care planning.