



# Quantitative Evaluation of an Ethics Guideline for End of Life Decisions Implications for Implementation

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## Background and aims

An ethics guideline "Allow natural death (AND)" – based on a 2005 guideline from Erlangen University – was authored in a 400-beds-hospital in 2010. The project group consisted of senior physicians and senior nursing staff with a focus on intensive care medicine.  
Essential parts of the guideline were 2 documentation forms: "AND" and "Do not resuscitate (DNR)". The first form was to be used when the turning point from curative to palliative care was reached. The second could be applied to curative patients for whom resuscitation and possibly other (invasive) treatment was no longer an option.  
The guideline was introduced to all physicians with a presentation in the regular team meetings and to the nursing staff in written form.  
The basic objective was to evaluate the impact of the ethics guideline and especially the forms after 1 year. This was done as a qualitative evaluation by questioning staff mainly involved in end of life decisions and as a quantitative evaluation described in the following.

## Methods

The hospital is using SAP medical information system (i.s.h.med). Both forms were made easily system available for all physicians as wordcontainer documents. The forms are patient associated and the number of forms used can be counted.  
The medical specialty accessing the forms, further differentiating in intensive care unit (ICU) or regular ward (RW), are registered.  
11 months after presenting the guideline the computer assisted evaluation was executed.



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## Results 2011 (01.05.2010 – 30.05.2011)

119 documentation forms were printed via SAP in these 11 months:

119	35 AND-Forms	22 ICU	15 internal
		13 RW	7 surgical
			13 internal
	84 DNR-Forms	71 ICU	47 internal
			17 surgical
			7 others
		13 RW	9 internal
			4 others

## Conclusions

- With 119 completed forms in 11 months in a 400-beds-hospital the ethics guideline for end of life decisions has been well accepted by the medical staff.
- Hypothesis I: Implementation of the guideline has been furthered by developing it with key senior medical staff.
- 78% were used in the ICU. This is probably mainly due to the severity of patients diseases. Nevertheless there are quite a few severely ill patients especially in regular internal wards as well.
- Hypothesis II: Form usage in regular wards was low because there was a focus on intensive care medicine in the selection of the project group creating the guideline and forms.



Guideline "Allow natural death"

### Bibliography:

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## Update results 2013 (01.06.2011 – 17.02.2013)

504 documentation forms were printed via SAP in these 20,5 months:

504	128 AND-Forms	61 ICU	47 internal
		67 RW	11 surgical
			3 others
	376 DNR-Forms	231 ICU	52 internal
			4 surgical
			11 others
		145 RW	167 internal
			40 surgical
			24 others
			113 internal
			13 surgical
			19 others

### Comparison Results 2011 to 2013:

- Similar proportion "AND" and "DNR" (approx. 1:3)
- More forms used per month (25 versus 11)
- More forms used in regular wards (42% versus 22%)

AND = Allow natural death  
DNR = Do not resuscitate  
ICU = Intensive care unit  
RW = Regular ward

Coloured proportions of categories approximately

Documentation form "Allow natural death (AND)"

Documentation form "Do not resuscitate (DNR)"