

# Nurse-Led Consultations (NLC) in Oncology: Financial Impact and Productivity Gains

## Nursing, Supportive & Palliative care, Rehabilitation & Survivorship

Roger von Moos<sup>1,2</sup>, Barbara Stoffel<sup>1</sup>, Sabrina Fasciati-Zortea<sup>1</sup>, Flurina Collenberg<sup>1</sup>, Rosaria Tino-Corrado<sup>2</sup>, Daniel Ineichen<sup>3</sup>, Oliver Kessler<sup>4</sup>

<sup>1</sup>Department of Oncology/Hematology, Cantonal Hospital Graubünden (KSGR), Chur, Switzerland, <sup>2</sup>Cancer and Research Center, Cantonal Hospital Graubünden, Chur, Switzerland, <sup>3</sup>Department of Medicine, Cantonal Hospital Graubünden (KSGR), Chur, Switzerland, <sup>4</sup>Lucerne University of Applied Sciences and Arts, Lucerne, Switzerland

### Background and Objective

The increasing demand for oncology services and staffing shortages have led to a need for more efficient care models. NLC offer a potential solution to improve productivity, patient satisfaction, and cost management. This study evaluates the financial impact of NLC using Tarmed with a tax point value of CHF 0.83.

### Methods

A financial analysis was conducted at KSGR using a simplified model focusing solely on salary costs. Salaries for an Expert in Oncology Care (Advanced Federal Diploma of Higher Education) and a senior physician were used, excluding infrastructure costs, as the same rooms were used in both models. Assistant physicians could not delegate their patients to NLC to ensure proper training. The conventional physician-led model was the baseline (100%) for revenues and costs, and productivity gains were assessed based on the reallocation of physician time with 50% and 100% utilization of freed-up hours.

### The NLC model boosts efficiency and addresses staff shortages, but needs nurse training and tariff adjustments for sustainability.

#### Results

Tbl 1: Total taxpoints in all patients (calculated as the sum of all taxpoints in each individual patient and visit)

TarMed (Position und Zeit)	Anzahl TarMed Position	TP-Wert CHF	Total CHF	
Nichtärztliche Behandlung erste 15 min.	00.1430	409	CHF 47.38	CHF 19'380.34
Nichtärztliche Behandlung weitere 15 min.	00.1440	1'663	CHF 20.31	CHF 33'775.70
Konsultation erste 5 min. AL	00.0010	409	CHF 8.65	CHF 3'537.28
Konsultation erste 5 min. TL		409	CHF 6.80	CHF 2'780.26
Konsultation weitere 10 min. AL	00.0020	409	CHF 17.30	CHF 7'074.55
Konsultation weitere 10 min. TL		409	CHF 13.60	CHF 5'560.52
Konsultation letzte 5 min. AL	00.0030	409	CHF 4.32	CHF 1'768.64
Konsultation letzte 5 min. TL		409	CHF 3.40	CHF 1'391.83
Behandlung durch FA Onkologie 20 min. AL	00.1530	409	CHF 34.59	CHF 14'149.11
Behandlung durch FA Onkologie 20 min. TL		409	CHF 31.01	CHF 12'682.60
Kleine körperliche Untersuchung 10 min. AL	00.0415	205	CHF 17.30	CHF 3'545.93
Kleine körperliche Untersuchung 10 min. TL		205	CHF 15.50	CHF 3'178.40

Tbl 2: Income/costs regular visits

TP Pflege und Ärzte	Zeitaufwand	CHF/h	Total CHF
Total TL Pflege			CHF 53'156.04
Total AL/TL Ärzte			CHF 55'669.12
Total			CHF 108'825.16
Kosten Arztkonsultation und Pflegezeit			
Pflege	397 h	100	CHF 39'700.00
Ärzte	272 h 50 min.	180	CHF 49.109.94
Total			CHF 88'809.94
Erlös nicht ONCO-1			CHF 20'015.22

Tbl 3: Income/costs Nurse led consultation

TP Pflege	Zeitaufwand	CHF/h	Total CHF
Total TL Pflege			CHF 53'156.04
AL erste und letzte 5 min. (Vorverordnung)			CHF 9'478.00
Kosten Pflege ONCO-1	499 h 15 min.	100	CHF 49'925.00
Erlös ONCO-1			CHF 12'709.04

Tbl 4: Net income, if physician fully occupied with other patients

Erlöse	CHF
ONCO-1	CHF 12'709.04
Ärzte minus ärztliche Kosten	CHF 6'559.18
ONCO-1 inkl. zusätzliche Arztkonsultation im freien Slot	CHF 19'268.22

### Results

NLC generated 57.5% of the revenue compared to the conventional model (100%). Salary costs were reduced to 56.2% of the conventional model. Consequently, profitability under the nurse-led model was 63.5% of the conventional model. However, considering productivity gains from reallocating physician time: At 50% utilization, profitability increased to 96% of the conventional model. At 100% utilization, profitability rose to 129%.

### Conclusion

NLC offer a financially viable solution, improving cost efficiency and productivity, while addressing staff shortages. However, the model's productivity gains rely on excess demand for services. In a fully utilized or overcapacity setting, the benefits are maximized. In contrast, in an underutilized system, the model may lead to reductions in physician staff. To ensure sustainability, structured nurse training and tariff adjustments are essential.

### Supported by

