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# **Abstract**

Background: The identification of patients with a life-limiting condition who might benefit from palliative care provision should be performed early to foster an utmost benefit from this modality of care. In addition to clinical judgment, there are many tools to facilitate early identification of patients in need of palliative care. Several Swiss and international tools are available, however, it is unclear which of these tools the different specialized palliative care institutions use to identify patients in need of palliative care.

Objectives: To identify the strategies and tools used in certified Swiss palliative care institutions to identify patients in need of palliative care.

Methods: A cross-sectional online survey.

Results: In total, 31/88 institutions responded (overall response rate, 35.2%: German-, 30.2%, French-, 42.9%, Italian-speaking part, 75%). All types of institutions were represented (i.e. inpatient palliative care wards, consulting services and home care). On a national level, the main identification strategy for both general and specialized palliative care situations was "clinical judgment" (74.2% and 64.5%, respectively). Clear difference in the tools used in the different language regions was observed. Clinical judgment prevailed in the German-speaking part (general and specialized, > 90%), clinical judgment and tools were used equally in the French-speaking part (general and specialized, 44.4% and 55.6%) and one tool was used consistently in the Italian-speaking part (general and specialized, 100%). The main tools used were ID-PALL©, PALLIA-10©, "Flowchart per l'identificazione del paziente con malattia in fase palliativa" and P-CaRES(-D).

Discussion: Strategies for the identification of palliative care patients differ by region. In addition to the prevailing clinical judgment approach, well-known and locally adapted tools are used for the identification of general and specialized palliative care needs.

Conclusion: Clinical judgment remains an important identification strategy to identify patients in need of palliative care in the Swiss palliative care setting. The choice of the tools depended on the language region, and locally adapted tools are mainly used. The tools differ substantially in complexity and degree of validation.

#### Background

The early introduction of palliative care (PC) has several advantages, such as improved quality of life (1-3), a reduction in psychological stress (4), and improved coordination of care (5). It should therefore be integrated early (5). PC does not affect prognosis negatively, and, conversely, it can even prolong a patient's life (6-8). Patient and caregiver acceptance of PC is high, although it is essential to find the right moment for each individual to introduce PC. Often, PC expertise is called on very late in the course of the disease, which makes it difficult to provide the full range of such care.

General and specialized PC differ (9), but explaining these differences is beyond the scope of this report. Therefore, the differences between general and specialized PC mentioned in this report focuses on the identification tools. Different wording exist to describe the identification process: In this report two variants were used interchangeably, a) identification of patients in need of PC, and b) identification of PC situations.

Many patients could benefit from PC (10, 11), but only a small percentage of those patients actually have access to it. Several barriers to palliative care delivery have been identified in the literature, including personal preference of patients or caregivers, primary care physicians' expertise to provide PC on their own, focus on disease-modifying treatments (12-16) Nonetheless, pro-active identification of the situation is often lacking. There are two strategies for Identification, namely clinical judgment and structured identification tools.

Clinical judgment depends on many individual factors (17), which can have an unpredictable (positive or negative) effect on the appropriateness of the moment of identification.

There are many structured identification tools (18, 19). Well-known international tools include NECPAL (20), SPICT (21), and GSF (22). Most of these have a common element, which is the surprise question (23, 24), and they mainly focus on adult patients. Only one tool for pediatrics, the PaPaS Scale Paediatric Palliative Screening Scale (25-27) which is currently been validated in the Swiss setting(28). The Swiss palliative care handbook (29) additionally describes the RADPAC (30) and PALLIA-10 (31). Recently, Teike et al. developed the first validated tool (ID-PALL©) in Switzerland (19, 32, 33).

The Bigorio Guideline Group initiated a consensus conference on this subject in 2017 to develop a purpose-based identification algorithm. This work was delayed because of a lack of resources, and it was decided to not continue the work, especially as a local validated tool had been developed in the interim. In general, fairly good scientific evidence exists for many PC treatments, but the unpredictable and highly individual nature of these care situations means that clinical judgement is still an important part of daily practice. In addition, the three language regions of Switzerland often have slightly different guidelines or approaches. For these reasons, the Bigorio Group decided that, rather than developing or proposing a tool, it could contribute more towards better identification of patients in need of palliative care by analysing the tools the different palliative care institutions currently use to identify PC patients and their needs.

# Research Purpose

The objective of this survey is to establish which identification strategies and tools are used by the certified PC institutions.

#### Methods

# Study Design

This cross-sectional study consisted of a purpose-built online questionnaire (hosted on SurveyMonkey™), addressed to all certified PC institutions in Switzerland. The reporting was based on the CROSS reporting guidelines (34).

#### **Data Collection Methods**

An online questionnaire was created on SurveyMonkey™. The survey was short, consisting of three sections with one question each. The first two questions were "Which tool is used to identify a general palliative care situation?" and "Which tool is used to identify a specialized palliative care situation?"

For both questions, the participant could select "clinical judgment," specify a tool, or do both. The characteristics of the participant and their institution were assessed in the last section. The questionnaire was pretested with two PC professionals and two members of the administration of palliative.ch, and it is available in Appendix 1.

The participants were the physician, administrative, or nursing heads of all the certified PC institutions who responded to the questionnaire on behalf of their institutions. Delegation of participation to any member of the institution was allowed.

#### Sample Characteristics

In total, 88 certified institutions were sampled (German-speaking region, 63; French-speaking region, 21; Italian-speaking region, 4).

## Survey Administration

The online survey was initialised by an email to the heads of the institutions on September 2, 2021, and it ran until October 3, 2021 (30-day follow-up and 2 days grace period). One reminder was sent on the September 20, 2021. The survey was not anonymous, so multiple participation was not possible. Ethical approval was not necessary because of the internal nature of the survey.

# Statistical Analysis

The statistical analysis was purely descriptive and the statistical function in Excel™ was used.

#### Results

## Respondent Characteristics

In total, there were 43 responses, 11 of which were incomplete (no information provided about the type of institution), and one was a duplication. Therefore, 31 responses were analysed. This corresponds to a response rate of 35.2% overall (German, 30.2%; French, 42.9%; Italian, 75%).

#### Descriptive Results

All types of services were represented, although they were not evenly distributed (inpatient units, 38.7%; inpatient and mobile in-hospital units, 16.1%; long-term institutions, 25.8%; mobile in-hospital units, 3.2%; and mobile out-of-hospital services, 16.1%). The proportion of certified specialised inpatient units was higher in the response from the Swiss German institutions, compared to the Swiss French and Swiss Italian respondents, although regional differences in type of service provision exist (Figure 1).

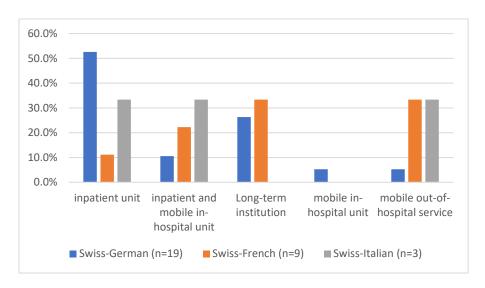


Figure 1: Distribution of the type of services by language region.

#### Main Findings

#### General Palliative Care

The prevailing method used to identify patients who need general PC was "clinical judgment" (74.2%), followed by a combination of clinical judgment and a tool (19.4%). A few used a tool exclusively (3.2%).

One institution considered all patients in their long-term care unit as PC patients (3.2%).

There were clear difference between the language regions. In the German region, "clinical judgment" was the most prominent (94.7%), whereas, in the Italian region, the use of a tool was the standard (100%). The French language region showed a balanced use of both methods (55.6% vs 44.4%) (Figure 2).

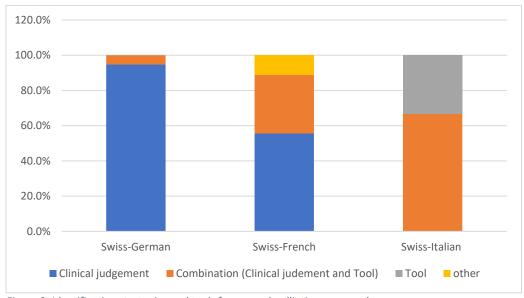


Figure 2: Identification strategies and tools for general palliative care needs.

Seven Institutions used tools. The most common of the described tools was a purpose-built tool used in the Italian language region, referred to as the "Flowchart per l'identificazione del paziente con malattia in fase palliativa" (35) (42.9%), followed by either P-CaRES or SPICT alone, SPICT in combination with P-CaRES, or ID-PALL in combination with PALLIA-10 (14.3% each). Table 1 summarizes the described tools.

The seven institutions that indicated the use of a tool to identify general palliative care situations were mainly combined inpatient and mobile in-hospital units (57.1%), followed by mobile out-of-hospital services (28.6%), and inpatient units (14.3%). The mobile in-hospital units did not use tools (Figure 4).

#### Specialized Palliative Care

The main strategy to identify patients who need specialized PC was "clinical judgment" (64.5%). The use of a particular identification tool was higher than for the general PC situation (29%: combination of clinical judgment and tool, 25.8%; tool alone, 3.2%). Two centers (6.5%) used other strategies (all patients considered PC patients, internal guidelines).

Eight institution provided valid data. As previously mentioned, there were differences between the language regions. The use of identification tools was much higher in the Italian (100%) and French regions (55.6%) than in the German region (5.3%) of Switzerland (Figure 3). The types of tool used for

specialized PC was less heterogeneous than the ones used for general PC. The Swiss-Italian tool "Flowchart per l'identificazione del paziente con malattia in fase palliativa" (35) and the French PALLIA-10 (36) were used equally frequently (37.50%), followed by ID-PALL© (37) and P-CaRES-D (iPlan©) (38) (12.5% each). Table 1 summarizes and describes the different tools.

There were slightly more inpatient units among the institutions that used tools for the identification of specialized PC situations, compared with the users of general palliative care identification tool (25% vs 14.3%). Otherwise, the distribution was similar to the general situation and, mobile out-of-hospital services or mobile in-hospital units did not use tools (Figure 4).

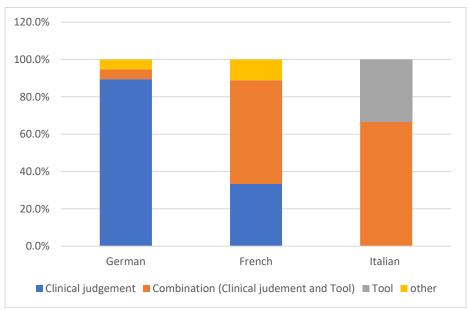


Figure 3: Identification strategies and tools for specialized palliative care needs.

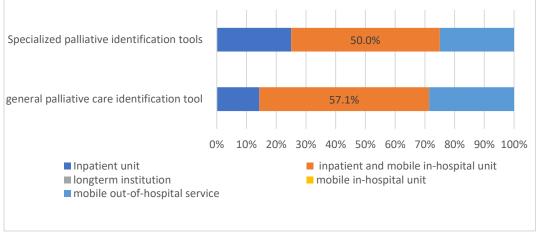


Figure 4. Types of institution using specific identification tools (general palliative care tools, n = 7; specialized, n = 8).

Tool	General	Specialized	Validation, Language	Description	Available under (public)	
ID-Pall©	X	X	Yes, French and Italian  (German /English Translation planned)	Based on a specific validation study and a Delphi process (19); two parts ID-PALL© G (general palliative care): two elements: (a) surprise question, (b) three-element assessment (4/1/1 items (dichotomic)); threshold, surprise question or one positive item in the assessment part. ID-PALL© S (specialized palliative care): 7-item assessment (dichotomic)); threshold, positive ID-Pall-G© plus one positive item.	ID-PALL - Service de soins palliatifs et de support - CHUV	
Pallia 10©		X	Yes (31) French	10 items (dichotomic): First question ("Does the patient have an incurable disease?") mandatory to continue; no surprise question; score 0–10; threshold, 3 items positive (France), 5 items (Swiss)	Pallia 10   SFAP - site internet Pallia10 -Hopital du Valais	
Flowchart per l'identificaz one del paziente co malattia in fase palliativa (I-CURPAL- 029)		X	No Italian (based on NECPAL (20) and GSF (22))	Purpose-built flowchart based on NECPAL (20) GSF (22) and a scoping review of the literature on the topic. The tool combines 4 parts in a sequence: surprise question, general indicator for decline, indicator from the underlying disease, and criteria for complexity (general vs specialised PC). No scoring, no specific threshold.	Flowchart per l'identificazione del paziente con malattia in fase palliativa -EOC	
P-CaRES-D (iPlan©)	x		partially German (based on P-CaRES (39))	Identification part of an ACP-Planning-Tool (unvalidated) based on a content validated (Msc-Thesis) German translation P-CaRES-D(40) of the P-CaRES(41). Two parts: (a) assessment of life-limiting disease (score 0–8; threshold, 1 positive item); (b) palliative care needs (score 0–5, including surprise question; threshold, 2 positive items).	iplan –(iplan-care.ch) (Modul Prognose einschätzen)	
			-	ation: not part of the answers of the survey)		
PaPaS-Scale	e x	х	partially, English	5 Domains (life expectancy, outcome of treatment, performance status, symptoms, preferences) with 13 items. Scoring 0-42; three Thresholds triggering a stepwise approach to PC treatment	Original study Ongoing Validation/Switzerland	
				International		
SPICT	х		Yes (21) Englisch	SPICT – Supportive and Palliative Care Indicators Tool		
P-CaRES	Х	(x)	Yes (39, 41) English	Content Validation of a Novel Screening Tool to Identify Emergency  Department Patients With Significant Palliative Care Needs		

Table 1: Overview of the described tools, Swiss tools at the top. Descriptions only for the Swiss validated or adapted tools. Sorted by completeness, validation, and alphabetically.

## Discussion

# Limitations

Our survey has several limitations. First, the return rate of 35.2% suggests that this survey may have a bias towards institutions that are especially motivated. Nonetheless, institutions from all fields of palliative

care were represented in the sample, and, therefore, we believe that important conclusions can be drawn from this survey. Whether the differences in the return rate is due to differences in clinical practice in the various language regions is unclear.

The ID-PALL© study ID-Pall© in the French and Italian regions of Switzerland might have increased interest for that matter in these language regions.

Second, only certified institutions were included in the survey, therefore, the practices of non-certified institutions and general PC were not examined.

Even if this decision introduced a bias into the study, it was the only possible way to clearly define the population of an internal survey. Third, some responses could not be included due to missing data on the type of institution. Partial analysis was possible of the excluded responses and they stated mainly "clinical judgment" (70%). Therefore, the tendency in the excluded answers was similar to the valid responses.

## Interpretations

To the best of our knowledge, this is the first survey of its kind in Switzerland, and, therefore, it reveals some interesting insights into the strategies used to assess the need for PC. Due to the low return rate, we focused on a descriptive interpretation.

The most common strategy used by practitioners working in certified PC institutions for the identification of patients in need of PC was "clinical judgment." The reason for this might be that the highly patient-centered approach implies a high level of clinical judgment in daily clinical practice. It would be logical to assume that this also holds true for the identification of patients. Another reason for this could be the lack of availability or knowledge of validated tools or a lack of time to apply them.

Overall, clinical judgment seems to be much more frequently used in the Swiss German region than in the French or Italian regions. Explaining this difference is beyond the scope of this study. Interestingly, however, only two participating German centers used a tool for the identification of patients in need of PC (P-CaRES-D and an undisclosed internal guideline), whereas more than 50% of all the centers in the French and Italian regions used a tool. The fully validated (French and Italian) tool in Switzerland (ID-PALL©) can be used for the identification of general and specialized PC situations and may be useful for identifying patients in those language regions.

For identification strategies in both general and specialized PC, regionally adapted or validated tools are used. In the Swiss German region, only one tool (partially validated) was mentioned by one center, namely P-CaRES-D (iPlan©) (38, 40). Clear preferences

were observed In the other language regions of Switzerland; in the Swiss French region, the validated tools ID-PALL© (37) and PALLIA-10 (36) were used, and in the Swiss Italian region, the unvalidated tool "Flowchart per l'identificazione del paziente con malattia in fase palliativa" (35) was used. This shows a certain standardization in this field, which is desirable from a public health perspective because single validated tools for the whole country would be ideal to allow comparability and benchmarking.

Long-term institutions did not report the use of any identification tools. This is not surprising, however, as they mainly care for patients for whom the identification is already clear.

The low survey return rate makes it difficult to generalize the results for Switzerland. Nevertheless, two findings seem generalizable. First, clinical judgment is always used and is the only strategy used by some institutions for the identification of patients in need of PC; second, only a limited number of tools are used in Switzerland, and the use shows a regional pattern.

To further study this subject, we suggest expanding the survey to those who deal with the general medicine population, especially GPs and home care nurses. This is important, because the survey in this study only reflects the practice in certified institutions where most patients are probably pre-selected.

# Conclusion

This survey of the actual strategies/tools used by Swiss palliative care practitioners working in certified PC institutions to identify patients in need of palliative care showed that "clinical judgement" remains an important pillar of the identification process. Among the tools reported, four tools had been adapted for the Swiss setting, namely the ID-PALL©, PALLIA-10, the Swiss-Italian institutions' Flowchart", and the P-CaRES-D. These tools cover all the Swiss languages and have either been validated or adapted to the regional setting. Nonetheless, no tool has been fully validated for both general and specialized palliative care settings and all languages. It would be beneficial if all tools could be validated and made available in all languages on a national level. Ideally, this would lead to the possibility of having only one single tool for the entire country, or at least only one per language region, in the future.

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## Additional information

#### Role of the Funding Source

As a funding source, palliative.ch provided the administrative and editorial support. They did not influence the content of this work.

# Affiliation and Conflicts of Interest

The author, ASE, works for the University Center for Palliative Care, Inselspital Bern, Switzerland. He is not involved in the development of iPlan©.

The Co-Author TF works for to the Palliative and Supportive Care Clinic, IOSI-EOCE, Bellinzona, Switzerland. She supported the development of the Swiss-Italian tool.

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English language editing of the initial draft and a volunteer similarity check by scribbr.com

# Contribution (according to JCMJE(42))

#### **Substantial Contributions**

Initials	Study Design	Analysis	Interpretation	Drafting/	Final	Accountability
	Acquisition			revising	approval	
ASE	Х	Х	Х	Х	Χ	X
TF	Х		Х	Х	Х	х
JG		Х	Χ	Х	Х	Х

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