

## The German Perioperative Procedural Time Glossary – Update for the outpatient area

A joint recommendation by the BDA, BDC and VOPM

2020 Edition

### Summary

The “German Perioperative Procedural Time Glossary” was first published in 2008. It contains a unified definition of procedural times and key performance indicators in relation to OR processes, agreed upon by the Professional Association of German Anaesthesiologists (BDA), the Professional Association of German Surgeons (BDC) and the Professional Association of OR management (VOPM) [1]. Two updates, published in 2016 and 2020, were necessary due to the development of OR management. These were consented not only by the German Professional Associations, but also by Austrian Associations (VOPMÖ, ÖGARI) and the Swiss Association SFOPM [2,40]. The intention of the glossary is “to provide valid standardised definitions of perioperative performance parameters suitable for the current requirements of OR operations”, as the authors wrote in the 2020 publication of the glossary.

Today, there is a need to include procedural times and key performance indicators for specific requirements in the outpatient surgery center. This is a conclusion drawn from governmental attempts to increase the number of outpatient surgical operations. The document presents the outpatient adaptation to the glossary and invites everybody involved in outpatient surgery to use it. The update includes the following additions:

- Entering the outpatient surgery centre (P0)

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- Leaving the outpatient surgery centre (P11)
- Presence time of the surgeon (K10a)
- Duration of patient care in the outpatient surgery center (K35)
- Duration of patient care in the OR-suite (K36).

The time a patient is present in the outpatient surgery centre can be documented by using the time stamps P0 and P11. These times can be analysed with the aid of the key performance indicators (KPI) K35 and K36. KPI K10a shows the surgeons patient binding time.

In addition to these newly introduced time stamps and key performance indicators, there are some observations relating to the definitions given in the glossary of 2020, e. g., patient arrival in the operating suite (P2), Start of postoperative care unit (P8c), End PACU unit (P8e), End OR Hours of Operation (S2), Surgeon’s operative measures prior to incision (K7b), Room occupancy time (K17a), and Recovery room period (K33). The explanations added are meant to assist using the KPI in the setting. The intention of these additions is to avoid inconsistent interpretations in facilities serving inpatients as well as outpatients.

Since the first publication 15 years ago, the glossary is not meant to be a collection of all existing procedural times and key performance indicators, but a set of those which are most relevant in the German speaking regions. The first and most important responsibility of (OR) management is making decisions

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on the type of information that is needed for steering OR processes successfully.

A recommendation for the documentation of time stamps applied by BDA and BDC in completes the revision of the glossary.

## Introduction

In the foreseeable future, government policy aims to bring about a large-scale relocation of operations previously conducted as inpatient surgery to the outpatient setting.

This greatly increases the significance of steering perioperative medical procedures. While there is plenty of evidence for the benefits of perioperative process flow control and coordination, this necessitates the use of suitable process performance indicators.

In Germany, the publication of the German Perioperative Procedural Time Glossary in 2008 first provided a set of uniform definitions for the procedural times and performance indicators for perioperative processes (Bauer et al 2008). Both the importance of this Glossary for the processes and its acceptance in hospitals are very high, not least because it is published and backed by the domain expertise of the Professional Association of German Anaesthesiologists (BDA), the Professional Association of German Surgeons (BDC) and the German Operation Management Association (VOPM). This is utilised by the associations to offer an online benchmarking and reporting service in a partnership with digmed GmbH that compares perioperative process flows between hospitals. An updated version of the Glossary was published in 2020 (Bauer et al 2020).

Within the German speaking counties, the Glossary has since established itself as the standard reference work for a comprehensive description of perioperative inpatient process flows.

From a German perspective, in light of the shifting of medical procedures to outpatient settings planned by health policy/policy makers, there is an urgent need to update and supplement proce-

dural times and performance indicators from the 2020 Glossary to reflect aspects of particular relevance to structures in outpatient and low-complexity care.

This document presents these updates and additions with the aim of making these available to all stakeholders involved in outpatient surgery processes. By this way, the Glossary authors wish to rapidly advance the Glossary to the same level for outpatient OR processes that it has already attained in the inpatient setting.

A subsequent version of the 2020 Glossary, binding on all associations in the German speaking counties, will be issued at a later point in time, following the orderly completion of the formal approval process.

## The shift to ambulatory care

For many years now, health insurers in particular have criticised not only the above-average density of hospital beds in Germany but also the above-average frequency of treatment in the inpatient – and therefore cost-intensive – setting. Germany is at the top of international league tables when it comes to pro capita expenditure on inpatient surgical procedures. Over the last 30 years, this situation has fundamentally remained unchanged, despite the increasing number of opportunities provided to hospitals by policymakers for providing treatment in an outpatient setting.

The fact that compensation for inpatient care may be considerably higher than for similar treatment cases in the outpatient setting is considered to be a key reason here. Although the German AOP Catalogue (a list of operations performable in an outpatient setting, and other interventions and treatments replacing inpatient equivalents according to section 115b of the German Social Code), which covers operations and interventions performable in hospitals and by physicians in an outpatient setting under the same conditions, has existed for around 15 years, little has changed. This AOP Catalogue, as well as a uniform schedule of compensation for

hospitals and panel physicians for the procedures listed within it, is published by the three autonomous organisations for the healthcare sector: the Federal Association of Panel Physicians (KBV), the National Association of Statutory Health Insurance Funds (GKV) and the German Hospital Federation (DKG).

With the entry into force of the Health Fund Medical Services Reform Act (MDK-Reformgesetz) in 2020, German legislator took a further step towards moving more inpatient services to the outpatient setting. A substantial expansion to the AOP Catalogue, which has remained largely unchanged since its introduction, was envisaged. Previously listing 2,879 services, a further 208 OPS (operation and procedure key) codes were added to the AOP Catalogue in early 2023. Nine ‘context factors’ have also been introduced: a full description of these must be given if an operation from the AOP Catalogue is rendered as an inpatient procedure. Compensation for the service will be refused if these context factors are omitted.

Furthermore, an expert opinion from the IGES Institute recommends defining additional OPS codes for services to be primarily rendered in an outpatient setting. IGES lists 2,476 services (by OPS code), which would expand the 2022 AOP Catalogue by 86 percent to a new total of 5,355 services.

According to the IGES, the operations and procedures now recommended as an expansion to the AOP Catalogue were carried out as inpatient-only procedures roughly 15 million times in 2019, and therefore made up over a quarter of the 58 million inpatient-only services provided in that reporting year. If permitted by the treatment context, the aim is to have these services provided primarily as outpatient procedures in the future. On the strength of available data, the AOP services can be assigned to around 6.1 million outpatient and around 2.7 million inpatient treatment cases.

Even if this ‘outpatient potential’ were to be achieved only in part in the future, this would nonetheless constitute far-reaching changes to OR process structu-

res. Hospitals receive no compensation for a substantial proportion of the patients they have previously treated in an inpatient setting while panel physician service providers are already reaching their limits of their capacities. Considering the increasing shortage of personnel resources, achieving this shift in patient care to the outpatient setting will be very challenging.

### Procedural times and performance indicators in outpatient OR processes

This article aims to provide all participants in outpatient OR processes with a straightforward selection of relevant procedural times and performance indicators focused on the outpatient setting, for use in both internal process reporting and external benchmark comparisons.

To this end, the following lists the individual updates and additions to the 2020 Glossary, supplemented by an annex presenting the 2020 Glossary with all of the new material included and which, as a version approved by the BDA, BDC and VOPM, is now considered the binding version for use in Germany.

## Additions

### Patient logistics

- P0** ● **Entry Practice/Outpatient Surgery Centre**  
 Def.: Patient present at registration point in practice/outpatient surgery centre. The OR process commences with registration.  
 Com.: Intervention-specific preparations – especially patient information and consent to the required standard – which took place in preceding days are added normative.  
 For outpatient operations, this procedural time is relevant for the ‘**Duration Patient Care in Outpatient Surgery Centre (K35)**’ indicator, the total period of time a patient is present.
- P11** ● **Exit Practice/Outpatient Surgery Centre**  
 Def.: The patient is discharged and leaves the practice/outpatient surgery centre. The patient-related OR process ends when the patient leaves the practice/outpatient surgery centre.  
 Com.: For small-scale interventions, individual occupancy times may not be required.  
 For outpatient operations, this procedural time is relevant for the ‘**Duration Patient Care in Outpatient Surgery Centre (K35)**’ indicator, the total period of time a patient is present.

### Performance Indicators

- K10a** ● **Presence Time of Surgeon**  
 Def.: **Start Measures by Surgeon (O4a)** to **End Follow-up Surgical Measures (O11)**.  
 Com.: In an outpatient setting, this performance indicator describes the time spent with the patient by the surgeon.  
 For outpatient operations, ‘**Surgical Lead-in Surgeon (K7b)**’ and ‘**Surgical Lead-out (K9)**’ can also be recorded in a standard, intervention-specific manner.
- K35** ● **Duration Patient Care in Outpatient Surgery Centre**  
 Def.: **Entry Practice/Outpatient surgery centre (P0)** to **Exit Practice/Outpatient Surgery Centre (P11)**.  
 Com.: The **Duration Patient Care in Outpatient Surgery Centre** performance indicator is the total time a patient is present in an outpatient healthcare facility for a surgical intervention.
- K36** ● **Duration Patient Care in OR Suite**  
 Def.: **Patient Arrival at OR Suite (P2)** to **End PACU (P8e)**.  
 Com.: The **Duration Patient Care in OR Suite** indicator is the period of time of closer patient monitoring.

## Updates

### Patient logistics

#### P2 ● Patient Arrival at OR Suite

Def.: Arrival of the patient at the operating suite, e. g. OR transfer room, PACU or holding area.

Com.: P1 and P2 may be identical, e. g. if the patient enters the OR autonomously or was waiting in the OR waiting area. In the outpatient setting, the patient arrives at the OR suite autonomously or with support from the waiting room in the practice/outpatient surgery center, or the pre- and/or post-operative rooms to be assigned to the OR suite.

For outpatient operations, this procedural time is relevant for the 'Duration Patient Care in OR Suite' (K36) performance indicator – the period of closer patient monitoring.

#### P8c ► ● Start PACU

Def.: Arrival of the patient at the unit providing postoperative care.

Com.: If postoperative care is provided in a recovery room, this point in time is relevant for the **Anaesthesia Time** (K14) and **Recovery Room Time** (K33) performance indicators. Routine documentation is required.

In consideration of patient safety and the need for handover between medical practitioners, this procedural time should be prior to or simultaneous with **End Presence Anaesthesiologist** (A12).

For outpatient operations, arrival at the unit providing postoperative care can be considered equivalent to the patient exit from the OR.

#### P8e ► ● ‡ End PACU

Def.: The patient is picked up or transferred from the PACU by personnel providing in-hospital transport.

Com.: If postoperative care is provided in a recovery room, this point in time is relevant for the **Anaesthesia Time** (K14) performance indicator as a component of the setup time as well as **Recovery Room Time** (K33). For outpatient operations, this procedural time is relevant for the **Duration Patient Care in OR Suite** (K36) performance indicator – the period of closer patient monitoring.

### Performance Indicators

#### K7b ► ● Surgical Lead-in Surgeon

Def.: 'End Patient Preparations by OR Nursing Staff' (O3b) to 'Incision' (O8).

For outpatient operations, Surgical Lead-in Surgeon can be recorded in a standard, intervention-specific manner and included in **Incision-to-Closure Time** (K8).

#### K9 ► ● ‡ \* Surgical Lead-out

Def.: **Closure** (O10) to **End Follow-up Surgical Measures** (O11).

Com.: This indicator also forms part of the **Perioperative Time** indicator (K10).

For outpatient operations, 'Surgical Lead-out' (K9) can also be recorded in a standard, intervention-specific manner.

#### K17a ► ● Room Occupied Time

Def.: **Patient in OR** (P5) to **End OR Cleaning** (P10).

Com.: This indicator describes the minimum extent of patient-related OR blocking that occurs with parallel working processes. Routine documentation, at least during core operating time, is recommended.

For outpatient operations, subsequent cleaning and disinfection of the OR can be specified in a standard way, and end the 'Room Occupied Time' (K17a).

#### K18 ► ● ‡ OR Capacity (synonym: Block Time)

Def.: OR Capacity = S2 - S1.

Com.: This indicator describes the planned hours of operation of an OR in minutes within the core resource time. OR hours of operation are therefore defined as the interval from 15 minutes prior to the first incision time target to 20 minutes after the final closure time target, in accordance with structural data.

Defined in this way, OR capacity is independent of the actual working hours of the participating departments and refers to the maximum possible utilisation of the OR within the core resource time. The inclusion of a 15-minute interval prior to the first intended incision and a 20-minute interval following the final intended closure is a pragmatic approach, which aims to also cover the required minimum patient-related preparation

time for the first operation and the minimum patient-related follow-up time for the last operation within the context of OR capacity. This indicator will be undercut or overshoot by individual departments and patient cases.

To limit the effort required here for the outpatient setting, basic OR hours of operation of 395 min (6 × 60 min + 15 min before the first incision time target and + 20 min after the final closure time target) can be used. Other OR hours of operation can be specified.

### K33

#### ► ● Recovery Room/PACU Time

Def.: **Start PACU** (P8c if care provided in a recovery room) to **End PACU** (P8e if care provided in a recovery room).

Com.: This indicator is a component of **Anaesthesia Time** (K14, part of setup time) and therefore recommended for inclusion in routine documentation.

In an outpatient setting, the end of column time ('Patient Out of OR', P7) to 'End PACU' (P8e) can also be documented instead.

## 2020 Glossary – including outpatient area update

### Preamble

Within the centres providing services, the various professions represented should agree upon a written consensus with regard to the process steps listed hereinafter. Amongst other things, this consensus should define the following:

- What each step of the process entails
- Who is responsible for each step of the process
- Which qualifications the person executing the steps must hold and which formal preconditions they must fulfil
- Precisely how each step of the process should be executed
- How (and by whom) each step of the process should be documented
- Which steps are to be taken if deviations from the standard occur

The procedural steps and times named hereinafter map out the perioperative process for the patient and the involved surgeons, anaesthesiologists, nursing staff, and personnel involved in providing cleaning and logistics services as precisely as possible. Everyday practice, however, shows significant differences in the way perioperative processes are implemented by different hospitals and outpatient operating centres. The Glossary authors do not intend to impose or propagate a certain process, but instead are seeking to provide uniform and consistent definitions as well as syntax that can be used to describe OR processes in each and every unit.

To fulfil the aim of being suited to precisely depicting the large number of process variants and sub-processes as well as research issues with regard to OR management, the Glossary includes many more procedural times and key performance indicators than will be documented routinely in most hospitals. The procedural times are split into three categories, pertaining to patient logistics (P), anaesthesia (A) and the operation (O).

The procedural times and performance indicators that are particularly recommended for routine documentation with regard to quality assurance and the economic evaluation of OR processes are marked as follows for the three DACH countries: with '►' (in-patient care) and '●' (outpatient care) for Germany, with '⚡' for Austria and with '\*' for Switzerland. However, this approach is not intended to limit the use of any other times or indicators.

When calculating staff time on the basis of the procedural times and durations stated here, the reader is advised that only processes with a direct patient relationship are exhaustively categorised by this Glossary. There are numerous additional activities and time requirements pertaining to the various groups of employees that are directly related to the OR yet not listed here. These include the time requirements for OR planning, quality assurance, documentation, supervision and basic or advanced training, as well as for logistics and preparations between

surgical procedures or when switching locations, etc. Furthermore, the costs for prescribed hygiene measures, training required by law with regard to radiation protection, fire protection, the use of medical devices or hazardous substances, and to instrument reprocessing, and so on, cannot be assigned to individual interventions directly. These may need to be declared separately using the format of a general overhead per department.

### Defining terminology: procedure, operation, session and case

Problems with delimiting the terms procedure, surgical measure, intervention, operation, surgery, session and case are often encountered within the perioperative context. The following hierarchical definitions enable consistent use of the terms to their full potential and are utilised as such in this Glossary.

- **Procedure** (synonyms: **surgical measure, intervention**):  
A procedure is a medical measure that can generally be encoded with an OPS code.
- **Operation** (synonym: **surgery**):  
An operation consists of one or more procedures that are characterised by common incision-to-closure times. Operations performed by interdisciplinary teams are referred to as combined operations.
- **Session**:  
A session consists of one or more **operations** that are characterised by

a common **Room Occupied Time** (K17a) but multiple ‘Closure-to-Incision’ times (K16). Operation and session mean the same thing if only one operation is performed within the room occupied time. When more than one operation is performed within a session, these can be simultaneous or parallel. According to EBM, the German outpatient billing system, a simultaneous operation is one that takes place in the same session as the initial operation but whose diagnosis and route of surgical access differ to those of the first operation. When operations are performed at the same time by different departments, these are classified as parallel operations.

- **Case:**

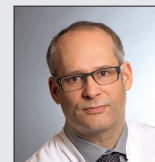
A case consists of one or more (in the case of multi-session surgery) individual sessions.

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## Supplement – Procedural times \*

### Procedural Times for Patient Logistics

- P0** ● **Entry Practice/Outpatient Surgery Centre**  
 Def.: Patient present at registration point in practice/outpatient surgery centre. The OR process commences with registration.  
 Com.: Intervention-specific preparations – especially patient information and consent to the required standard – which took place in preceding days are added normative.  
 For outpatient operations, this procedural time is relevant for the ‘Duration Patient Care in Outpatient Surgery Centre (K35)’ indicator, the total period of time a patient is present.
- P1** ► **Patient Sent For**  
 Def.: Point in time at which patient is sent for.  
 Com.: The type of upstream unit from which the patient is dispatched should be documented (regular ward, OR holding area, day-surgery waiting area).

\* The previous names for times and indicators are retained for systematic reasons. New entries for times and indicators are marked by the use of sequential letters (e. g. P4a), while deletions result in entries no longer being present.

- P2** ● **Patient Arrival at OR Suite**  
 Def.: Arrival of the patient at the operating suite, e. g. OR transfer room, PACU or holding area.  
 Com.: P1 and P2 may be identical, e. g. if the patient enters the OR autonomously or was waiting in the OR waiting area.  
 In the outpatient setting, the patient arrives at the OR suite autonomously or with support from the waiting room in the practice/outpatient surgery centre, or the pre- and/or post-operative rooms to be assigned to the OR suite.  
 For outpatient operations, this procedural time is relevant for the ‘Duration Patient Care in OR Suite’ (K36) performance indicator – the period of closer patient monitoring.
- P3** ▶ **Start Transfer In**  
 Def.: The patient is transferred from the ward bed or gurney to the OR table.  
 Com.: This procedural time is relevant for the ‘Anaesthesia Time’ performance indicator (K14).
- P4** **End Transfer In**  
 Def.: Following transfer, the patient is on the OR table.  
 Com.: At this point in time, the patient’s identity must have been verified and the necessary documents inspected.
- P4a** ▶ **Arrival at Anaesthesia Induction Unit**  
 Def.: Arrival of the patient at the location where anaesthesia will be induced.  
 Com.: This place may vary from hospital to hospital and from OR to OR (central induction area, induction room, OR itself, etc.).
- P5** ▶ ‡ \* **Patient in OR**  
 Def.: The patient is on the OR table, in the OR.  
 Com.: This time is part of **Column Time** (K17) and **Room Occupied Time** (K17a), which should be documented as regards the physical occupancy of the OR – especially since the location where anaesthesia will be induced may well vary from one hospital to another.
- P6** **Registration with Post-Anaesthesia Care Unit (PACU)**  
 Def.: Scheduling of capacity for postoperative care of the patient.
- P7** ▶ ‡ \* **Patient Out of OR**  
 Def.: Patient is transferred out of the OR.  
 Com.: This time is part of the **Column Time** (K17) indicator, which should be documented as regards the physical occupancy of the OR.
- P8** **Transfer to Bed**  
 Def.: The patient is transferred from the OR table to a ward bed or gurney (only valid for OR suites where the PACU is located **within** the OR suite).
- P8b** ‡ **Transfer Out**  
 Def.: The patient leaves the OR suite.  
 Com.: Only valid for OR suites where the PACU is located **outside** the OR suite.
- P8c** ▶ ● **Start PACU**  
 Def.: Arrival of the patient at the unit providing postoperative care.  
 Com.: If postoperative care is provided in a recovery room, this point in time is relevant for the **Anaesthesia Time** (K14) and **Recovery Room Time** (K33) performance indicators. Routine documentation is required.  
 In consideration of patient safety and the need for handover between medical practitioners, this procedural time should be prior to or simultaneous with **End Presence Anaesthesiologist** (A12).  
 For outpatient operations, arrival at the unit providing postoperative care can be considered equivalent to the patient exit from the OR.
- P8d** **Cleared for Discharge from PACU**  
 Def.: Further monitoring of the patient in the PACU is no longer necessary. The responsible physician has cleared the patient to be discharged from the PACU.



**P8e** ▶ ● ‡ **End PACU**

Def.: The patient is picked up or transferred from the PACU by personnel providing in-hospital transport.

Com.: If postoperative care is provided in a recovery room, this point in time is relevant for the **Anaesthesia Time** (K14) performance indicator as a component of the setup time as well as **Recovery Room Time** (K33).

For outpatient operations, this procedural time is relevant for the **Duration Patient Care in OR Suite** (K35) performance indicator – the period of closer patient monitoring.

**P9** **Start OR Cleaning**

Def.: Start of cleaning and disinfecting measures as per the cleaning schedule.

**P10** ▶ **End OR Cleaning**

Def.: End of cleaning and disinfecting measures as per the cleaning schedule. At this point in time, the OR must be ready for use with the next case (e. g. surface drying times observed).

Com.: For parallel work sequences, this indicator marks the end of the minimum patient-related room occupied time.

**P11** ● **Exit Practice/Outpatient Surgery Centre**

Def.: The patient is discharged and leaves the practice/outpatient surgery centre. The patient-related OR process ends when the patient leaves the practice/outpatient surgery centre.

Com.: For small-scale interventions, individual occupancy times may not be required.

For outpatient operations, this procedural time is relevant for the '**Duration Patient Care in Outpatient Surgery Centre** (K35)' indicator, the total period of time a patient is present.

**Procedural Times for OR Logistics****S1** ▶ ‡ **Start OR Hours of Operation (syn.: OR Opening Time)**

Def.: 15 minutes prior to the first incision-time target (O8) in accordance with predefined, hospital-specific internal arrangements.

Com.: This is a pragmatic definition that permits consistent registration of OR capacities. As such, OR hours of operation are based on processes rather than on staffing considerations.

**S2** ▶ **End OR Hours of Operation (syn.: OR Closing Time)**

Def.: 20 minutes after the final closure-time target in accordance with predefined, hospital-specific internal arrangements.

Com.: Patient-centric surgical measures related to the intervention (applying a dressing, plaster cast; O11) and initial decommissioning of the OR are brought to a close within the above timeframe.

In contrast to the previous version, the definition of OR hours of operation now no longer references 'End Follow-up Surgical Measures' (O11) but the 'Closure' (O10) of the last planned case. This is due to the fact that reliable documentation is often only available for the incision and closure, and a deviation between target and actual seems important.

This is a pragmatic definition that permits consistent registration of OR capacity (K18). As such, OR hours of operation are based on processes rather than on staffing considerations.

**Procedural times for anaesthesia****A1** **Start Preparations by Anaesthesia Nursing Staff**

Def.: Anaesthesia nursing staff commence the necessary preparations for anaesthesia.

Com.: As regards the first anaesthesia of the day, it is important to observe sufficient time for technical preparations, such as testing the anaesthetic apparatus.

**A2** **End Preparations by Anaesthesia Nursing Staff**

Def.: End of all necessary preparations for anaesthesia.

Com.: This point in time should be reached prior to the arrival of the patient at the unit where anaesthesia will be induced.

Preparation of the anaesthesia workplace is typically not conducted as a continuous process but is instead performed as numerous individual steps (which may have lengthy intervals between them). As such, the procedural times A1 and A2 cannot be used to determine valid figures for actual anaesthesia nursing staff time.

- A4 \* Start Presence Anaesthesia Nursing Staff**  
 Def.: Point in time at which anaesthesia nursing staff commit to the patient.  
 Com.: For medicolegal reasons, the point in time at which the patient is assigned for continuous monitoring by the anaesthesia nursing staff should be documented.
- A5 Start Presence Anaesthesiologist**  
 Def.: Point in time at which the anaesthesiologist commits to the patient.  
 Com.: This procedural time is relevant for the **Presence Anaesthesiologist** (K12) indicator.  
 For medicolegal reasons, and to enable calculation of the simultaneity factor for dual presence in accordance with the German InEK costing handbook, it may be advisable to facilitate the documentation of the presence of other anaesthesiologists who are participating outside of a purely supervisory role.  
 Literature: [5].
- A6 ▶ ‡ \* Start Anaesthesia**  
 Def.: Point in time of injection of the first anaesthetic or, for regional anaesthesia, skin puncture.  
 Com.: This procedural time is relevant for the 'Net Anaesthesia Time' indicator (K13).  
**Start Anaesthesia** (A6) must be later than **Patient Arrival at OR Suite** (P2). Upstream measures performed in other areas of the hospital (emergency room, intensive care, etc.) must be documented separately.  
 Consensus has been reached that, in addition to the above definition, medically indicated invasive anaesthesiologic measures performed on the awake patient directly before the operation (e. g. insertion of an A-line for invasive BP monitoring) also satisfy the definition of **Start Anaesthesia** (A6).
- A7 ▶ ‡ \* Anaesthesia Ready**  
 Def.: The anaesthesiologist declares the patient ready for surgical measures. These surgical measures, which may include the positioning of extremities, body hair removal, removal of a plaster cast, cleansing of contaminated wounds prior to entering the OR, etc., may be performed in parallel to final anaesthesiologic interventions, such as the insertion of additional peripheral venous catheters, a gastric tube or suturing a central line.  
**Anaesthesia Ready** cannot be declared until the patient is located in a place where preparatory surgical preparations can take place, such as in an induction room.  
 Com.: This procedural time is relevant for the 'Perioperative Time' indicator (K10). Routine documentation is required.
- A8 End Induction of Anaesthesia**  
 Def.: Point in time at which all anaesthesia induction measures are complete.  
 Com.: Although **End Induction of Anaesthesia** is in principle the same as **Start Patient Preparations by OR Nursing Staff** (O3a), it is advisable to record these procedural times separately. Otherwise, delays between **A8** and O3a would then go undetected. The two times may be identical in some cases, however.
- A9 ▶ ‡ \* End Anaesthesia**  
 Def.: End of patient monitoring by anaesthesiologist in the OR/emergence area. For patients provided solely with regional anaesthesia, this end-of-monitoring time is identical to **End Follow-up Surgical Measures** (O11). For patients who remain ventilated, this procedural time is the point in time at which the patient is handed over to the unit assuming care of the patient.  
 Com.: This procedural time is relevant for the 'Net Anaesthesia Time' indicator (K13).
- A10 End Presence Anaesthesia Nursing Staff**  
 Def.: End of commitment to the patient by anaesthesia nursing staff.
- A12 ▶ \* End Presence Anaesthesiologist**  
 Def.: Completion of handover of the patient to medical or nursing staff in the PACU (recovery room, IMC or ICU).  
 Com.: This time may be identical to **End Anaesthesia** (A9) when handing over a ventilated patient.  
 This procedural time is relevant for the **Presence Anaesthesiologist** (K12) and **Anaesthesia Time** (K14) indicators, and should be documented accordingly.
- A13 Anaesthesiologist Ready**  
 Def.: Following the end of patient commitment and any necessary return transit through the OR suite, the anaesthesiologist is ready to commit to the next patient.  
 Com.: Units with a decentralised physical structure are advised not to equate this time with the End Presence Anaesthesiologist (A12) time.
- A14 End Follow-up by Anaesthesia Nursing Staff**  
 Def.: All work to be performed following anaesthesia has been completed.

## Procedural Times for Operations

- O1 Start Preparations by OR Nursing Staff**  
 Def.: Start of non-patient-centric preparations by OR nursing staff.  
 Com.: As regards the first operation of the day in an OR suite, it is important to observe sufficient time for OR setup.
- O2 ▶ End Preparations by OR Nursing Staff**  
 Def.: End of non-patient-centric preparations by OR nursing staff in the respective OR.
- O3a ▶ \* Start Patient Preparations by OR Nursing Staff**  
 Def.: Start of patient-centric preparations pertaining to surgery by OR nursing staff (e. g. positioning the patient, skin disinfection, draping, etc.).
- O3b ▶ End Patient Preparations by OR Nursing Staff**  
 Def.: End of patient-centric preparations pertaining to surgery that are performed exclusively by OR nursing staff.
- O4a ▶ \* Start Measures by Surgeon**  
 Def.: Start of measures performed by a physician affiliated with the department performing the operation. These may include: patient positioning by the surgeon, skin disinfection by the surgeon, application of a Mayfield clamp, insertion of navigation pins, preoperative X-ray, preoperative manipulation under anaesthesia, rigid bronchoscopy prior to thoracoscopic lung surgery, closed reduction of a fracture or dislocation.  
 Synonyms: **Start Surgical Measures, Start Operation.**
- O7a Preoperative Team Time-out**  
 Def.: The OR team performs a preoperative interdisciplinary and interprofessional check using a checklist as a quality assurance measure related to the surgical intervention ('sign in').  
 Com.: Although the point in time for performing the preoperative check can be defined internally, it must be performed prior to **Incision** (O8).  
 This does not affect other (or additional) team time-out checks (e. g. 'sign out').
- O8 ▶ ‡ \* Incision**  
 Def.: Incision of the skin after the surgeon has approached the OR table.  
 Com.: This time is relevant for the **Incision-to-Closure Time** (K8) indicator and therefore an essential part of routine documentation.  
 For procedures that do not involve incising the skin (e. g. isolated closed reduction), the time of incision is the same as **Start Measures by Surgeon** (O4a).  
 For interventional procedures (e. g. cardiovascular diagnostics, neuroradiologic coiling), incision time is the point in time at which percutaneous vascular access is obtained.  
 No incision or closure times should be documented for transport-only measures (e. g. moving an ICU patient to CT) and other cases not involving an incision (e. g. patient care given in the ER). In these cases, **Start Anaesthesia** (A6) and **End Anaesthesia** (A9) as well as **Start Presence Anaesthesiologist** (A5) and **End Presence Anaesthesiologist** (A12) must be documented instead.  
 For simultaneous or parallel operations, the **Incision** procedural time should be documented more than once.
- O9a Start Console Time**  
 Def.: For robot-assisted surgery, the point in time at which the surgeon starts patient-related work at the computer console.  
 Com.: Together with time O9b, this procedural time constitutes the **Console Time** (K8a) and is used to record the duration of robot-assisted surgery.
- O9b End Console Time**  
 Def.: For robot-assisted surgery, the point in time at which the surgeon ends patient-related work at the computer console.  
 Com.: Together with time O9a, this procedural time constitutes the **Console Time** (K8a) and is used to record the duration of robot-assisted surgery.

- O10** ▶ ‡ \* **Closure**  
 Def.: Completion of final surgical suture.  
 Com.: This time is relevant for the **Incision-to-Closure Time** (K8) indicator and therefore an essential part of routine documentation.  
 For operations without an incision and for interventions (e. g. cardiovascular diagnostics, neuroradiologic coiling), closure is defined as the end of all operative manipulations.  
 For simultaneous or parallel operations, the **Closure** procedural time should be documented more than once.
- O11** ▶ ‡ \* **End Follow-up Surgical Measures**  
 Def.: Completion of all patient-centric surgical measures related to the intervention (applying a dressing, plaster cast).  
 Com.: This procedural time is relevant for the **Perioperative Time** indicator (K10).  
 Synonyms: **End Surgical Measures, End Surgery.**
- O12** **End Follow-up OR Nursing Staff**  
 Def.: All work to be performed following surgery has been completed, including tray logistics and any documentation pertaining directly to the case.

### Performance Indicators

- K1** **Transfer Time**  
 Def.: **Patient Sent For** (P1) to **Patient Arrival at OR Suite** (P2).  
 Com.: An indicator suitable for evaluating patient flow to the OR suite in the context of process analyses.
- K1a** **OR Transfer Room Time**  
 Def.: **Patient Arrival at OR Suite** (P2) (P1 when using an upstream holding area) to **'Arrival at Anaesthesia Induction'** (P4a). Literature: [6].
- K2** ▶ ‡ \* **Anaesthesia Induction Time**  
 Def.: **Start Anaesthesia** (A6) to **Anaesthesia Ready** (A7).  
 Com.: This indicator also constitutes part of the **Anaesthesia Lead-in** indicator (K4).  
 Overlapping induction is anything but unusual in modern anaesthesia practice. This may lead to the discontinuous induction of anaesthesia (i.e. a peridural catheter may be placed earlier on, with later induction of general anaesthesia). As a consequence, the citation of K2 may not accurately reflect the actual time required for anaesthesia induction. Ideally, the time required for each sub-process would be found by totalling the individual K2 records, although not generally possible with current operation management information systems (OIS). Literature: [7,8].
- K3** ▶ ‡ \* **Anaesthesia Emergence Time**  
 Def.: **End Follow-up Surgical Measures** (O11) to **End Anaesthesia** (A9).  
 Com.: This interval of time is a component of the **Anaesthesia Lead-out** indicator (K5). Where A9 takes place before O11, a value of '0' should be documented for K3: this is because a negative value would influence mean values without actually representing time saved.
- K4** \* **Anaesthesia Lead-in**  
 Def.: **Start Presence Anaesthesiologist** (A5) to **Anaesthesia Ready** (A7).  
 Com.: This indicator also constitutes part of the **Anaesthesia Controlled Time** indicator (K6).
- K5** \* **Anaesthesia Lead-out**  
 Def.: **End Follow-up Surgical Measures** (O11) to **End Presence Anaesthesiologist** (A12).  
 Com.: This indicator also constitutes part of the **Anaesthesia Controlled Time** indicator (K6).
- K6** **Anaesthesia Controlled Time**  
 Def.: **Anaesthesia Lead-in** (K4) + **Anaesthesia Lead-out** (K5).  
 Com.: This indicator is influenced by anaesthesia and infrastructure but does not include processes related to surgery.  
 Literature: [9–12].

- K7** ▶ ‡ \* **Surgical Lead-in**  
 Def.: **Anaesthesia Ready** (A7) to **Incision** (O8). If **Patient in OR** (P5) is after A7, then P5 to O8 must be used instead.  
 Com.: This indicator also forms part of the **Perioperative Time** indicator (K10).  
 This indicator can be subdivided into K7a and K7b for use in process analyses (see below).
- K7a** **Surgical Lead-in OR Nursing Staff**  
 Def.: **Anaesthesia Ready** (A7) to **End Patient Preparations by OR Nursing Staff** (O3b). If **Patient in OR** (P5) is after A7 or for cases without anaesthesia, use **Patient in OR** (P5) to **End Patient Preparations by OR Nursing Staff** (O3b).
- K7b** ▶ ● **Surgical Lead-in Surgeon**  
 Def.: **'End Patient Preparations by OR Nursing Staff'** (O3b) to **'Incision'** (O8).  
 For outpatient operations, **Surgical Lead-in Surgeon** can be recorded in a standard, intervention-specific manner and included in **Incision-to-Closure Time** (K8).
- K8** ▶ ‡ \* **Incision-to-Closure Time**  
 Def.: **Incision** (O8) to **Closure** (O10).  
 Com.: Routine documentation is required together with the main OPS code.  
 This indicator also forms part of the **Perioperative Time** indicator (K10).  
 For multiple operations within one session, multiple incision-to-closure times must be documented.  
 Literature: [13].
- K8a** **Console Time**  
 Def.: **Start Console Time** (O9a) to **End Console Time** (O9b).  
 Com.: This indicator is used to record the duration of robot-assisted surgery.
- K9** ▶ ● ‡ \* **Surgical Lead-out**  
 Def.: **Closure** (O10) to **End Follow-up Surgical Measures** (O11).  
 Com.: This indicator also forms part of the **Perioperative Time** indicator (K10).  
 For outpatient operations, **'Surgical Lead-out'** (K9) can also be recorded in a standard, intervention-specific manner.
- K10** ▶ ‡ \* **Perioperative Time**  
 Def.: **Anaesthesia Ready** (A7) to **End Follow-up Surgical Measures** (O11). For cases without anaesthesia, **Patient in OR** (P5) to **End Follow-up Surgical Measures** (O11).  
 Com.: This indicator is dependent on anaesthesiologic procedures, the availability of staff and infrastructural circumstances (overlapping processes, central induction area, etc.).  
 For correct calculation of K10, A7 must not precede P10 in the case of overlapping induction.  
 Literature: [9,11,12]
- K10a** ▶ ● **Presence Time of Surgeon**  
 Def.: **Start Measures by Surgeon** (O4a) to **End Follow-up Surgical Measures** (O11).  
 Com.: In an outpatient setting, this performance indicator describes the time spent with the patient by the surgeon.  
 For outpatient operations, **'Surgical Lead-in Surgeon'** (K7b) and **'Surgical Lead-out'** (K9) can also be recorded in a standard, intervention-specific manner.
- K11** **Presence Anaesthesia Nursing Staff**  
 Def.: **Start Presence Anaesthesia Nursing Staff** (A4) to **End Presence Anaesthesia Nursing Staff** (A10).
- K12** **Presence Anaesthesiologist**  
 Def.: **Start Presence Anaesthesiologist** (A5) to **End Presence Anaesthesiologist** (A12).
- K13** ▶ ‡ **Net Anaesthesia Time**  
 Def.: **Start Anaesthesia** (A6) to **End Anaesthesia** (A9).  
 Com.: This indicator can be used for calculating internal service charges based on anaesthesia minutes.  
 Literature: [14–19].

- K14** ▶ **Anaesthesia Time**  
 Def.: **Start Transfer In** (P3) to **End Presence Anaesthesiologist** (A12) + setup time\*.  
 Com.: The German InEK costing handbook cites this indicator as the definitive metric for case-related cost allocation in anaesthesia practice.  
 \*The InEK costing handbook defines the pre-/post-processing setup time for anaesthesia as comprising the following staffing measures:
- Premedication/obtaining informed consent by anaesthesiologist
  - Donning scrubs and hand hygiene
  - Postoperative patient care in the recovery room (P8e–P8c)
  - Postoperative visit by the anaesthesiologist
  - Documentation
- In practice, notification of this occasionally controversial metric by hospitals reporting data to InEK is generally based on internal calculations of the setup time, as electronic records of the time spent on the above factors are not widely available. Literature: [15,20].
- K14b** \* **Anaesthesia Care Time**  
 Def.: **Start Presence Anaesthesia Nursing Staff** (A4) to **End Presence Anaesthesia Nursing Staff** (A10) and/or **End Presence Anaesthesiologist** (A12).  
 Com.: **Anaesthesia Care Time** is equivalent to the anaesthesia service period in accordance with REKOLE® by HPlus, and forms the basis for the internal and external costing of anaesthesia in Switzerland.
- K15a** ▶ **Turnover Time OR Nursing Staff**  
 Def.: End Follow-up Surgical Measures (O11) for the preceding patient case to **End Preparations by OR Nursing Staff** (O2) for the following patient case.  
 Com.: Surgical break.  
 For process analysis use, only turnover times between consecutive sessions (without planned or unplanned breaks at the end of the previous and/or start of the following session) are accounted for.
- K15b** ▶ ‡ \* **Turnover Time Anaesthesia**  
 Def.: **End Follow-up Surgical Measures** (O11) for the preceding patient case to **Anaesthesia Ready** (A7) for the following patient case.  
 Com.: Synonym: **Perioperative Turnover Time**.  
 This indicator depends on anaesthesia and infrastructure but does not include procedural components under the operative control of OR staff and/or surgeons – it is therefore a useful adjunct to **K15a** or **K16**. For process analysis use, only turnover times between consecutive sessions (without planned or unplanned breaks at the end of the previous and/or start of the following session) are accounted for.  
 Where A7 takes place before O11, a value of ‘0’ should be documented for K15b: this is because a negative value would influence mean values without actually representing time saved.  
 This indicator cannot be used to derive avoidable waiting times. Literature: [8,21,22]
- K16** ▶ ‡ \* **Closure-to-Incision Time**  
 Def.: **Closure** (O10) for the preceding session to the **Incision** (O8) in the current session.  
 Com.: This indicator is influenced by the surgeon, anaesthesia, OR nursing staff, and the patient, materials, cleaning and OR logistics and infrastructure. As such, it describes the entirety of all turnover processes.  
 This indicator cannot be used to derive avoidable waiting times. Literature: [8,11,12,21]
- K17** ‡ \* **Column Time**  
 Def.: **Patient In OR** (P5) to **Patient Out of OR** (P7).  
 Com.: This indicator describes the actual physical occupancy of the OR.
- K17a** ▶ ● **Room Occupied Time**  
 Def.: **Patient in OR** (P5) to **End OR Cleaning** (P10).  
 Com.: This indicator describes the minimum extent of patient-related OR blocking that occurs with parallel working processes. Routine documentation, at least during core operating time, is recommended.  
 For outpatient operations, subsequent cleaning and disinfection of the OR can be specified in a standard way, and end the ‘**Room Occupied Time**’ (K17a).

**K18** ▶ ● ‡ **OR Capacity (synonym: Block Time)**

Def.:  $OR\ Capacity = S2 - S1$ .

Com.: This indicator describes the planned hours of operation of an OR in minutes within the core resource time. OR hours of operation are therefore defined as the interval from 15 minutes prior to the first incision time target to 20 minutes after the final closure time target, in accordance with structural data.

Defined in this way, OR capacity is independent of the actual working hours of the participating departments and refers to the maximum possible utilisation of the OR within the core resource time. The inclusion of a 15-minute interval prior to the first intended incision and a 20-minute interval following the final intended closure is a pragmatic approach, which aims to also cover the required minimum patient-related preparation time for the first operation and the minimum patient-related follow-up time for the last operation within the context of OR capacity. This indicator will be undercut or overshot by individual departments and patient cases.

To limit the effort required here for the outpatient setting, basic OR hours of operation of 395 min ( $6 \times 60\ min + 15\ min$  before the first incision time target and  $+ 20\ min$  after the final closure time target) can be used. Other OR hours of operation can be specified.

**K 18a** ▶ ‡ **Core Operating Time**

Def.: Core operating time describes the interval from the earliest **Start OR Hours of Operation** (S1) to the last **End OR Hours of Operation** (S2) for a particular department.

Com.: For a specific department, core operating time defines the maximum window of time within which it can provide its OR capacity (K18).

**K20** **OR Utilisation Incision-to-Closure Time (%)**

Def.: **Incision-to-Closure Time** within **OR Capacity** (K8 in K18, cumulated by OR suite and observation period)/**OP Capacity** (K18, cumulated by OR suite and observation period).

Com.: This indicator should be interpreted within the context of the type of surgical department and the average length of surgery.

The indicator does not provide any indication of the profitability of OR time used. Literature: [21–23]

**K21** **Underutilisation (%)**

Def.:  $S2 - (O10 + 20\ min)$  last operation (cumulated by OR suite and observation period)/OP Capacity (K18, cumulated by OR suite and observation period)

Com.: Synonym: Underutilisation.

This indicator describes unused OR capacity at the end of the OR schedule and is essential for the purpose of identifying additional usable OR capacity.

The indicator provides details of how many OR hours of operation could in theory be recruited following the closure for the last operation if planning and processes were optimised. The value for this indicator may be underestimated in the event of premature closure of the OR and later reopening. Literature: [24,25]

**K22** **Overutilisation (%)**

Def.: **Incision-to-Closure Time** (K8) outside **OP Capacity** (cumulated by OR suite and observation period)/**OP Capacity** (K18, cumulated by OR suite and observation period).

Com.: Synonym: Overutilisation.

This indicator specifies the extent of overutilisation of OR capacity: it only includes incision-to-closure times outside OR hours of operation that result from elective sessions with an incision within the OR hours of operation.

For obvious reasons, this indicator is heavily dependent on the type and length of surgery or the department as well as the duration of OR capacity per OR. Literature: [24,25]

**K23** **OR Efficiency**

Def.:  $K21 + x * K22$ .

Com.: Synonym: OR Efficiency.

This indicator, which is commonly applied in the US, is targeted towards avoiding overutilisation and instead recruiting underutilised OR capacity by means of planning process optimisation. For this indicator, under- and overutilisation are combined, whereby a coefficient  $x$  is defined to describe the relationship of the two utilisation factors to one another. US sources typically describe a coefficient  $x$  of 1.75, as overutilisation is assumed to have negative effects on staff satisfaction. Literature: [24–27]

- K24** ▶ ‡ **Incidence of Emergencies**  
 Def.: Percentage of emergencies per priority, including both ‘**number of emergencies per priority over total number of sessions**’ and ‘**sum of all OR minutes dedicated to emergencies per priority over total number of minutes for all sessions**’.
- K25** ▶ **Ratio Cancelled Sessions**  
 Def.: Percentage of cancelled sessions in relation to the total number of planned elective sessions.  
 Proportion of sessions that were included in the finalised OR schedule as published the previous day but which were ultimately not performed the following day.  
 Documenting the reasons for cancellation is considered advisable. Literature: [28].
- K26** **Integration of Emergencies**  
 Def.: Percentage of emergencies per priority within the planned and executed OR hours of operation in relation to the total number of planned elective sessions.
- K27** **Planning Precision Incision-to-Closure Time**  
 Def.:  $\text{Incision-to-Closure}_{\text{ACTUAL}} / \text{Incision-to-Closure}_{\text{PLAN}}$ .  
 Com.: Since overestimation and underestimation are equally unfavourable, the average of the absolute values of deviation should be used.  
 Planning can be optimised by incorporating historical data.  
 Visualisation as an x/y plot can help detect systematic planning errors.  
 This indicator can also be calculated for other process parameters, such as K10: **Perioperative Time**, K12: **Presence Anaesthesiologist**, K13: **Net Anaesthesia Time**, etc. Literature: [21,29,30]
- K28a** ‡ **Deviation Patient Arrival at OR Suite**  
 Def.: Deviation of the **Patient Arrival at OR Suite** time (P2) for the first scheduled operation in an OR from the planned value, in minutes.  
 Com.: Visualisation using a distribution graph is advisable.  
 Training staff in time discipline plus process adjustment can help reduce delays occurring in the morning.  
 Literature: [31–34]
- K28b** ▶ ‡ **Deviation Anaesthesia Ready**  
 Def.: Deviation of the **Anaesthesia Ready** time (A7) for the first scheduled operation in an OR from the planned value, in minutes.  
 Com.: Visualisation using a distribution graph is advisable.  
 Training staff in time discipline plus process adjustment can help reduce delays occurring in the morning.  
 Literature: [31–33,35]
- K28c** ▶ ‡ **Deviation Incision**  
 Def.: **Deviation of the Incision time** (O8) for the first scheduled operation in an OR from the planned value, in minutes.  
 Com.: Visualisation using a distribution graph is advisable.  
 Training staff in time discipline plus process adjustment can help reduce delays occurring in the morning.  
 Literature: [31–33,36]
- K29** **Waiting Time Anaesthesia Controlled Time**  
 Def.: Waiting time within the **Anaesthesia Controlled Time** indicator (K6, cumulated by OR suite and observation period).  
 Com.: In the context of detailed analyses, this indicator can be broken down into its two component indicators **Anaesthesia Lead-in** (K4) and **Anaesthesia Lead-out** (K5).  
 Documenting the underlying causes together with this indicator is recommended. Literature: [21,22,37]
- K30** **Waiting Time Perioperative Time**  
 Def.: Waiting time within the **Perioperative Time** indicator (K10, cumulated by OR suite and observation period).  
 Com.: In the context of detailed analyses, this indicator can be broken down into its component indicators **Surgical Lead-in** (K7), **Incision-to-Closure Time** (K8) and **Surgical Lead-out** (K9).  
 Documenting the underlying causes together with this indicator is recommended. Literature: [21,22]



- K31** **Waiting Time Logistics**  
 Def.: Waiting time outside the scope of the indicators **Waiting Time Anaesthesia Controlled Time** (K29) and **Waiting Time Perioperative Time** (K30).  
 Com.: Documenting the underlying causes together with this indicator is recommended. Literature: [21,22]
- K32** **Waiting Time Patient Pickup from OR Suite**  
 Def.: **Patient Out of OR** (P7) to **Transfer to Bed/Transfer Out** (P8 or P8b).
- K33** **▶ • Recovery Room/PACU Time**  
 Def.: **Start PACU** (P8c if care provided in a recovery room) to **End PACU** (P8e if care provided in a recovery room).  
 Com.: This indicator is a component of **Anaesthesia Time** (K14, part of setup time) and therefore recommended for inclusion in routine documentation.  
 In an outpatient setting, the end of column time (**Patient Out of OR, P7**) to **End PACU (P8e)** can also be documented instead.
- K34** **Waiting Time Patient Pickup from Recovery Room**  
 Def.: **Cleared for Discharge from PACU** (P8d) to **End PACU** (P8e).  
 Com.: The **Waiting Time Patient Pickup from Recovery Room** indicator is positively correlated with the number of beds required in the recovery room. Literature: [38].
- K35** **• Duration Patient Care in Outpatient Surgery Centre**  
 Def.: **Entry Practice/Outpatient surgery centre (P0)** to **Exit Practice/Outpatient Surgery Centre** (P11).  
 Com.: The **Duration Patient Care in Outpatient Surgery Centre** performance indicator is the total time a patient is present in an outpatient healthcare facility for a surgical intervention.
- K36** **• Duration Patient Care in OR Suite**  
 Def.: **Patient Arrival at OR Suite (P2)** to **End PACU** (P8e).  
 Com.: The **Duration Patient Care in OR Suite** indicator is the period of time of closer patient monitoring.

### ▶ ‡ Surgical Priority Classification

- N0** **Highest Priority**  
**Recommendation for OR management:** Immediate surgery, to be performed if required at the patient's current location (e. g. ER, ICU, delivery room).
- N1** **Very High Priority**  
**Recommendation for OR management:** Surgery to be performed in the next available suitable OR, irrespective of department.
- N2** **Surgery to Commence ≤6 h After Request**  
**Recommendation for OR management:** Surgery to be performed in the next available OR for the affiliated department responsible for the patient.  
 Com.: If possible, delay until patient has fasted. However, lack of fasting does not justify postponement (e. g. initial trauma surgery).
- N3** **Surgery to Commence After Scheduled Elective Operations**  
**Recommendation for OR management:** Integrate into out-of-hours schedule.
- N4** **Urgent Surgery Within 24 h**  
**Recommendation for OR management:** Integrate into OR schedule for the following day even if planning has already been concluded. Preserve the first scheduled case.  
 Com.: N4 is relevant e. g. with regard to quality assurance for hip fractures, etc.
- N5** **Elective Surgery**

### ▶ ‡ Caesarean Section Classification

The potential maternal and/or foetal risk involved in obstetrics justifies defining a separate **Caesarean Section Classification** in addition to the aforementioned **Surgical Priority Classification**. This risk requires special considerations, including procedural requirements, to be taken into account. This caesarean section classification implements the classification from the current S3 **Guidelines on Caesarean Section** published by the German-language Societies of Obstetrics and Gynaecology [39] while applying OR management terminology and process logic.

- Cat. 1**     **Emergency Caesarean Section for Immediate Threat to Life of Mother or Foetus**  
Com.: **Recommendation for OR management:** C-section to begin immediately without delay, skipping the standard preparations for surgery.
- Cat. 2**     **Urgent Caesarean Section for Maternal or Foetal Distress Without an Immediate Threat to Life**  
Com.: **Recommendation for management during OR hours of operation:** C-section to be performed as soon as possible while completing usual preparations for surgery.
- Cat. 3**     **Prompt Caesarean Section Without Maternal or Foetal Distress**  
Com.: **Recommendation for management during OR hours of operation:** Unplanned C-section, which can be performed following coordination of required resources and while completing the usual preparations for surgery.
- Cat. 4**     **Elective Caesarean Section**  
Com.: **Recommendation for management during OR hours of operation:** Planned C-section that has been scheduled for surgery no later than the day prior to surgery.