



## Safety Suite

The original standard for safety and efficiency in radiotherapy

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Since 2011



## From CT to end of treatment:

### Benefits for clinicians

- Reliable, powerful and high-quality tools for safe and precise daily operation
- Support through increased patient cooperation allow clear focus on core responsibilities
- Real-time overview and evaluations for efficient planning of resource utilization
- Increase in profitability and revenues, reduction of workload
- Speed, accuracy and error avoidance by high-level automation and system interoperability between OPASCA and your OIS.

### Benefits for your patients

- Trusting perception of safety due to transparent information regarding the individual status in the hospital workflow
- Individual settings and active participation increase empowerment
- Short/no waiting times, just-in-time-treatment and smooth processes.
- Always up to date through information available on demand, anytime, anywhere
- Feeling well taken care of and safe in demanding time in life

### Only one fits all

The Safety Suite features are available for all models of LINACs from Accuray, Elekta, Siemens, Varian and ViewRay (exclusive features for MRI LINACs) and use standardized, approved interfaces for data exchange with ARIA® and MOSAIQ®.

OPASCA protects both patient and staff in one closed-looped safety-workflow, fully integrated into your OIS

## Safety Suite

Integrated and comprehensive solutions for the protection of patients and staff in radiotherapy.

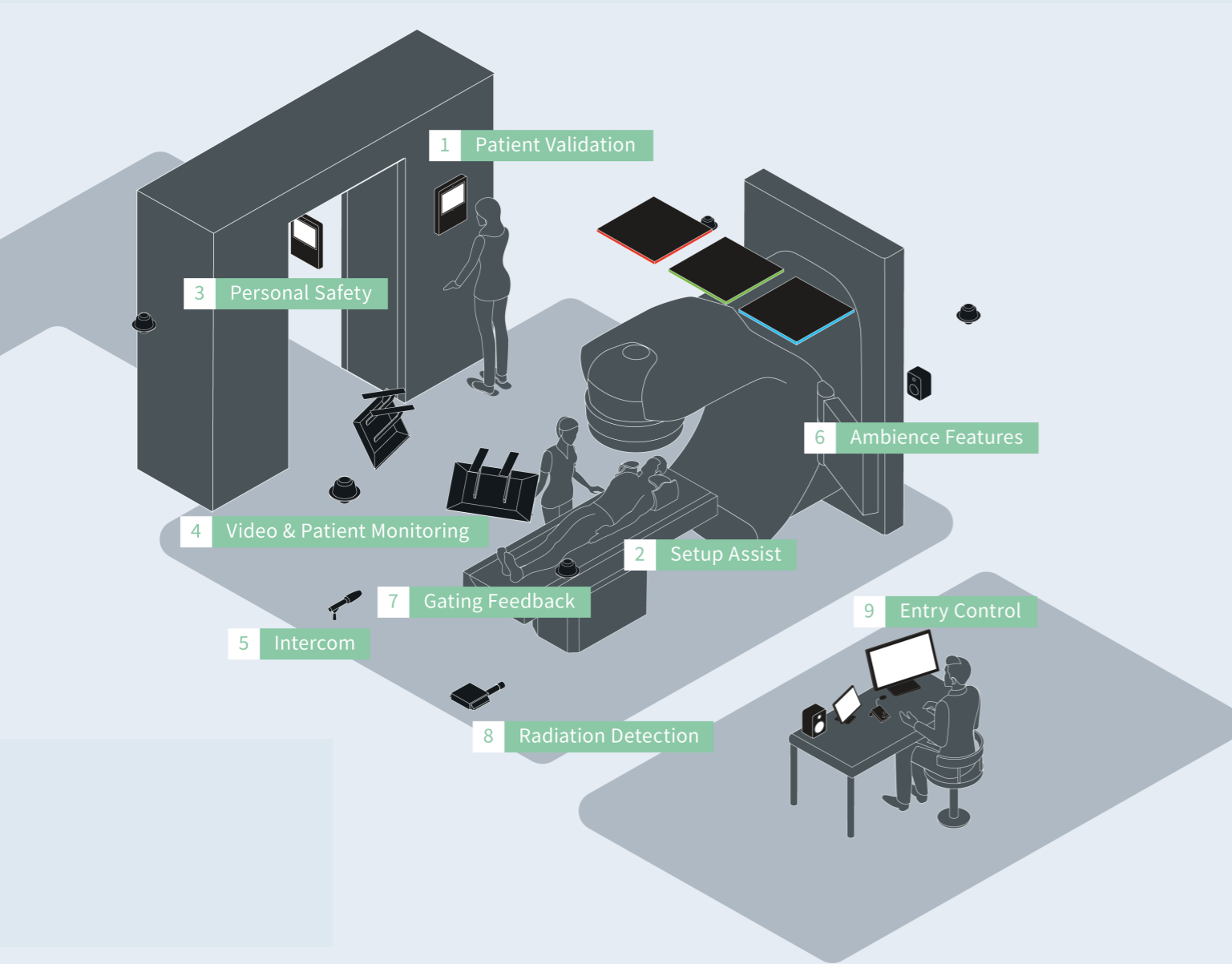
- 1 Patient Validation**  
Active validation of the patient by facial recognition avoids patient mixups and provides more safety.
- 2 Setup Assist**  
Fast and intuitive video-based setup of the positioning aid provides more safety for individual patient positioning.
- 3 Personal Safety**  
Video-based room analysis provides continuous real-time monitoring of the irradiation room and detects people and objects that should not be in the danger zone.
- 4 Video & Patient Monitoring**  
More safety and comfort for all involved through direct communication with the patient.
- 5 Intercom**  
Interference-free, bidirectional voice and audio connection between treatment room and operator station with Intercom supports communication between healthcare professionals and patients.
- 6 Ambience Features**  
With the Ambience Features of the Safety Suite, you can create an individual treatment ambience for your patients in just a few seconds.
- 7 Gating Feedback**  
Simple feedback during breath-guided treatment techniques through a color change of the room light intuitively facilitates the patient's active cooperation.
- 8 Radiation Detection**  
Personal protection through reliable in-situ measurement of current radiation levels and compliance with legal requirements.
- 9 Entry Control**  
For secure areas and also at certain times and days Entry Control offers a comfortable and integrated possibility of access control.

## Information security comes first

OPASCA is ISO 27001 certified and attaches utmost importance to the availability, confidentiality, and integrity of data. This applies not only to our own solutions, but also to cooperation with partners and includes data privacy.

## Supreme standard of safety

There are various ways to fulfill regulatory requirements and address workflow optimization in radiotherapy. But only an OPASCA solution guarantees you interoperability, automation and longevity.





**Patient Validation** relies on the most unique, unmistakable and comprehensible human features: your patient's face. Unlike palm or vein scan ners, treatment-related variations within tolerable limits are covered and the operation is very hygienic. This feature ensures that the correct treatment will be delivered to the correct patient without noticeable extra effort due to the integration into OIS. In case of deviations, you will get a clear feedback automatically requiring your approval before the LINAC-Interlock is released.

**Setup Assist** supports the correct selection and placement of the positioning aids by offering you a digital checklist linked with the OIS-ID of your patient. A reference choice of accessories can be set for different fractions. After confirming the correct selection, a report automatically is generated and transferred to OIS. In case of deviations, you will get a clear feedback automatically requiring your approval before the LINAC-Interlock is released.

This comfortable feature saves valuable time, increases the safety level for your patient and adds up to your quality assurance documentation through minimizing manual data entries and OIS-integration.

**Personal Safety** makes sure that no one but your patient remains in the treatment room. Completely without tags, no need to press any buttons in the room, not motion-dependent, it is a completely automated safety procedure und fully integrated into the LINAC-interlock.

#### More than the fulfillment of regulatory requirements:

High-quality **Video, Patient Monitoring** and **Intercom** ensure durable, uncompromising and comfortable operation thanks to radiation-hardened components.

### Automated selection of patient ID from OIS

To ensure both safety and efficiency, the Interoperability Agent automatically retrieves the selected patient ID from the Oncology Information System (OIS) via standardized and approved interfaces.

You can choose a common solution - but you only benefit from the original.



## Safety and well-being are not mutually exclusive - they are mutually dependent

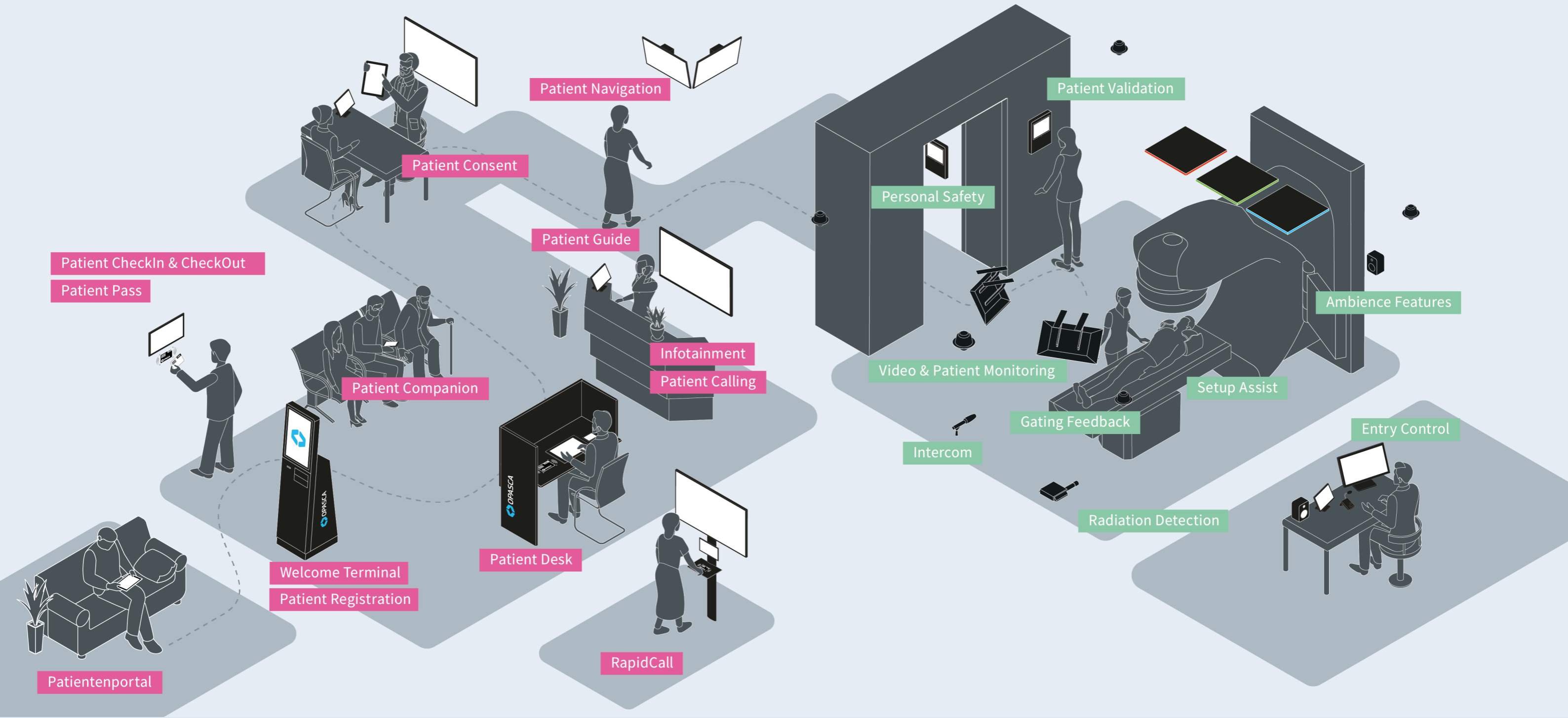
In order to increase relaxation, satisfaction and cooperation of your patients, the **Ambience Features** are smartly coordinated with the radiation process:

**Ambient Lighting** automatically switches between setup and treatment mode, Ambient Music is automatically interrupted when you speak to your patients and the inroom screens can both be used for **Face to Face** communication as well as for the **Ambient Diashow** to create an ambience of next level, patient-centered treatment atmosphere.

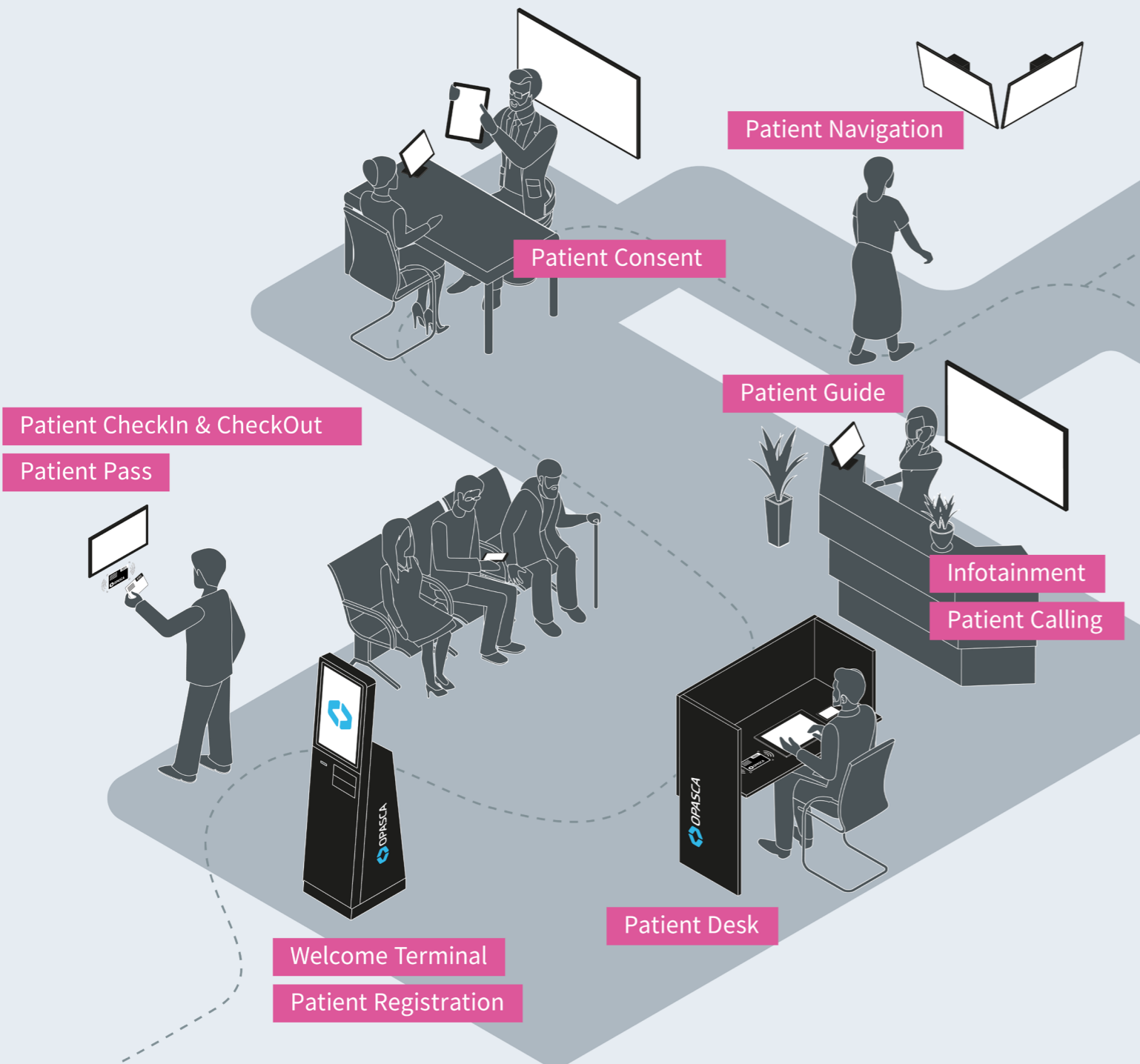
Complementary to C-RAD's Catalyst™ and visionRT's AlignRT®, Gating Feedback supports precise, breath-controlled radiations (DIBH) and Surface Guided Radiotherapy (SGRT). Automatic data exchange takes place via standard interfaces. Your patients don't need any accessories or strenuous, time-consuming training to comply with the predefined thresholds: the feedback on their breathing is most intuitive and self-explanatory, and therefore easily reproducible.



# Safety meets efficiency



## Workflow Suite InClinic Solution



Digitally supported workflows from initial consultation to consent and daily radiation reduce working times and maximize contentment

- Automated **Patient Registration** supports structured data acquisition already at the initial consultation without any personal support
- Autonomous **Patient CheckIn**, digital **Patient Request** and **Patient CheckOut** reduce the workload of the registration desk and at the same time promotes your patients' sovereignty
- The data protection-compliant **Patient Calling** protects the privacy of your patients, makes sure the right patient appears and reduces walking times at the same time
- Merging the appointment schedule with the patient's current whereabouts status ensures transparency and flexibility
- Enhanced communication between you and your patient through automated information provision on site and also via app (Mobile Solutions)

### Patient Pass: Key to autonomy, information & protection

This functional „business card“ allows your patient to check-in autonomously, grants access to their individual schedule and information, and is used for the data-protection compliant patient call.

### Over 70% of the workflow automated & digitalised

The features of the Workflow Suite seamlessly automate and digitize administrative and analogue procedures around the treatment which saves valuable time, increases safety, contentment and quality of care.



The Patient Pass is linked to your patient's OIS-ID.

## How OPASCA addresses risks for patients' and staffs' safety in radiotherapy

In 2008, the WHO (World Health Organization) published the „Radiotherapy Risk Profile - Technical Manual“, which is based on a complex and holistic analysis of reported accidents during radiotherapy treatments in the years 1976 to 2007. The aim of the study was to identify common risks during each step of treatment, rate them and recommend measures to mitigate.

Risk	Potential Impact	Safety measures recommended by WHO
Mistaken Patient identity, incorrect identification	High	<ul style="list-style-type: none"> <li>■ ID check open questions, eliciting an active response a minimum</li> <li>■ 3 points of ID</li> <li>■ Photo ID</li> <li>■ Unique patient identifier</li> </ul>
Incorrect patient positioning (e.g. incomplete, missing, or wrong, wrongly applied immobilization device)	High	<ul style="list-style-type: none"> <li>■ Planning protocol checklist</li> <li>■ Independent checkin</li> <li>■ Adequate staffing levels and education</li> <li>■ In vivo dosimetry</li> </ul>
Patient changing position during setup	High	<ul style="list-style-type: none"> <li>■ Visual monitoring during treatment</li> </ul>
Misinformation or errors in (manual) data transfer	Medium	<ul style="list-style-type: none"> <li>■ Clear documentation and protocols</li> <li>■ In vivo dosimetry</li> </ul>
Illegible handwriting for manual transfers	High	<ul style="list-style-type: none"> <li>■ Clear documentation and protocols</li> </ul>
No independent check	High	<ul style="list-style-type: none"> <li>■ Clear documentation and protocols</li> </ul>
Poor patient handling and care	Medium	<ul style="list-style-type: none"> <li>■ Competency certification</li> </ul>

## OPASCA solutions

- Prior to treatment: dataprotection-compliant Patient Pass linked to OIS-ID for Patient CheckIn and Patient Calling supports patient autonomy and reduces workload at reception.
- In the treatment room: Patient Validation through unique facial features, linked to OIS-ID to prevent mix-ups and increase safety level.
- Interface-based integration with Oncology Information System for automated retrieval of patient selected in OIS supports efficiency.
- Patient photo added to appointment overview by PhotoIn for additional verification simplifies usability for high user acceptance.
- Reference setting of setup and necessary accessories, automatically linked to OIS-ID and retrieved at each following session for easy reproduction.
- Interlock integration requires confirmation in case of deviations to increase safety level
- Automated protocolling of interaction, confirmed setup and transfer to OIS minimizes manual data entries.
- High-quality, high resolution video surveillance with zoom-in option through Video and Patient Monitoring supports optimal operation and usability.
- Patients' relaxation and compliance through a comfortable atmosphere created with Ambience Features promote positive outcomes.
- Extended communication with videophony by Face to Face, also for accompanying persons, facilitate the treatment process.
- Automated data transfer based on standardized interfaces between the Interoperability Agent and OIS ensure smooth workflows.
- Automated retrieval of reference data linked to OIS-ID for easy reproduction and workflow efficiency.
- Integration in LINAC interlock to force recheck in case of doubt or deviation from reference in Patient Validation, Personal Safety, Radiation Detection and Setup Validation Advanced increase safety level.
- Automation and patient engagement reduce the workload of the specialist staff and leads to more time for personal interaction.
- Patient engagement from CheckIn to Patient Validation and CheckOut increase contentment and cooperation.
- Patient well-being is supported through Ambience Features.





## We consider ourselves your long-term partner, not a one-off vendor

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Our strength is knowledge and awareness of clinical processes and our ability to adapt our solutions according to practical use cases of your everyday life.

OPASCA's technology offers concrete added value, and it adapts to people, not vice versa. Even if complex software processes run in the back-ground, the operation is intuitive and self-explanatory.

By consistently focusing on people and constantly developing our solutions according to the requirements of our users' everyday lives, we have gained a clear advantage over supposed alternative providers.

Together with you, we shape the future of healthcare and accompany you on this journey in the long term

## One partner for all your concerns

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- Consultation & planning
- Assessment & adaptation
- Project management & coordination with all parties involved
- Delivery, installation & commissioning
- Instruction & training
- Service & maintenance
- Refinements & developments

## More than 140 successful projects in over 10 years

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From a specialised practice to a university hospital, our solutions offer concrete added value for all scopes of application to achieve increased safety level, workflow efficiency and comprehensive patient involvement.

## Dr. Alexej Swerdlow, founder & CEO of OPASCA

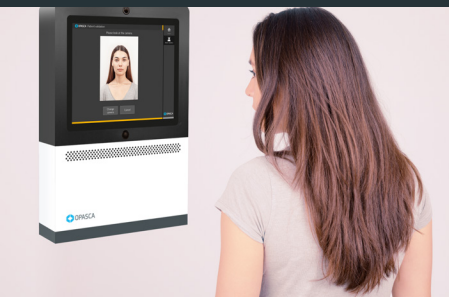
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You can achieve a lot alone, but together you always achieve more. This is how we approach collaboration with our clients: We listen, we understand, we implement. And the result brings us all further.

**Available for all**  
usual LINAC models & OIS

## Safety solutions for radiotherapy from OPASCA

Ionizing radiation can be a health hazard both to people working in radiotherapy and to patients being treated. The safety of all persons involved is the highest priority. The Safety Suite offers your patients and your personnel a range of safety mechanisms for your clinical routines. Individual modules such as Video Monitoring, Radiation Detection or video-based Patient Validation and Setup Validation can be combined to form an integrated safety system that protects all persons involved in the process and optimises your workflow. Our products comply to the latest standards, both legal and monitoring, and ensure patient safety even in areas that are temporarily inaccessible to caregivers. This way, your employees feel safe and your patients always feel well cared for.



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We care for digital healthcare.