

# Operating room rescheduling

A practice that requires careful consideration

23 January 2025

## What is it?

Surgical procedures may be cancelled for a variety of reasons (deterioration of the patient's clinical status, operating room unavailable due to an emergency or delays, staff or equipment shortage, etc.). Most of these procedures take place on a different day. (1-4)

**In this PSS, rescheduling is defined as a change of the date of a procedure, whether by postponing it or bringing it forward (merely changing the time on the same day is not considered as rescheduling).**

Although this issue has always been observed, it was exacerbated during the COVID-19 pandemic. Mass cancellations linked to operating room closures highlighted the importance of safeguarding patient rescheduling, by ensuring, among other things, follow-up until the procedure. (5-7)

Since then, the trend continues to be very prevalent: it is estimated that approximately 10% of procedures are rescheduled. (1, 2, 4, 8-10) These reschedulings are now part of the daily routine of operating rooms, or are even used as an adjustment variable to optimise scheduling in a context of medical and paramedical human resources shortages. (11)

However, these reschedulings do not always go well, and may cause care-related adverse events. These adverse events may have significant consequences: modifications of the type of procedure, knock-on reschedulings, complications, delayed care, etc.

This patient safety solution (PSS) is intended for **all professionals working in or in collaboration with operating rooms** (pharmacy, sterilisation, hospital departments, etc.). Its objective is to raise awareness of the potential risks of rescheduling a procedure and to propose tools to help avoid these risks or reduce their impact.

# Examples of adverse events associated with rescheduling

## Failure to reschedule a colonoscopy causing a loss of chance

A patient in her seventies was due to undergo a screening colonoscopy in 2016 due to family history. The procedure was cancelled because the patient had contracted pneumopathy, and **was never rescheduled** (neither by the patient who did not recontact the hospital, nor by the overstretched care team). In 2018, a colonoscopy was finally conducted due to abdominal pain and revealed the presence of sigmoid colon cancer.

## Failure to resume taking anticoagulant treatment resulting in pulmonary embolism

A patient in his seventies on long-term anticoagulant treatment received care for a total knee replacement. In line with the preoperative instructions, he stopped taking his anticoagulant treatment a few days before his procedure. The healthcare organisation fell victim to a cyberattack and the procedure was therefore cancelled. **The patient was not told by anyone that he needed to resume taking his anticoagulant treatment while waiting for the procedure to be rescheduled.** The patient had a pulmonary embolism which was treated. His procedure took place 6 months later.

## Repeated procedure postponements promoting the onset of peritonitis

A patient in his nineties was treated for rectal cancer by chemoradiotherapy. Surgery was scheduled but postponed for 2 weeks due to a delay in carrying out post-radiotherapy magnetic resonance imaging (MRI), and then by a further 2 weeks because the patient forgot to attend a cardiology consultation. **The procedure, which took place 12 weeks post-chemoradiotherapy instead of the recommended 8 weeks, was very difficult as a result** (pelvis very difficult to dissociate). The urethra was cut in the perioperative period and peritonitis following small bowel perforation occurred on D+10 requiring re-operation.

## Lack of medical device, prolonging operating time and resulting in general anaesthesia

A patient in her sixties was scheduled for a revision total hip replacement procedure. The procedure was postponed by one and half months due to a pressure sore on her heel. **To reschedule the patient, the operative record was merely moved in the software program, without any further actions or checks.** On the day of the procedure, the operating room team found out that the inserts planned had not been ordered.

Rather than cancel the procedure again (No Go), the team opted to modify the procedure, prolonging the operating time with the epidural being changed to general anaesthesia.

## Failure to stop taking anticoagulant treatment resulting in re-operation and postoperative infection

A patient in his seventies received care for a total knee replacement. The procedure was postponed three times due to a staff shortage. For the same reason, no new pre-anaesthetic or surgery consultation was arranged. **The patient was not reminded by anyone that he needed to stop taking his anticoagulant treatment at the time of the final rescheduling.** The patient was admitted to hospital the day before and clearly informed the ward that he was still taking his anticoagulant treatment, but the information was not passed onto the operating room team. Re-operation was subsequently required due to postoperative haematoma, and the patient subsequently had an infection requiring 45 days of antibiotic therapy.

## Failure to perform test resulting in cancellation of procedure

A patient in her fifties was due to undergo shoulder acromioplasty in November. At the pre-anaesthetic consultation, during the patient interview, a first anaesthetist suspected the recent occurrence of a transient ischaemic accident. He prescribed additional tests, but the software program would not allow him to place a file "on standby". Therefore, the procedure was postponed to December by the surgeon, who was not notified of the reason for the cancellation. **No one noticed that the scheduled test date was after that of the procedure.** A second anaesthetist approved the procedure at the pre-anaesthetic consultation in December. On the day of the procedure, a third anaesthetist spotted the problem and cancelled the procedure again. As of April, the procedure had yet to be rescheduled.

# A patient safety solution...

The aim of a PSS is to provide professionals with a practical tool to implement in their day-to-day work to prevent the occurrence of adverse events, eliminate the consequences of an adverse event in the making (recuperate), or reduce their impact (mitigate).

The “Operating room rescheduling” PSS is the fruit of a collective multidisciplinary project carried out with professional bodies approved for the accreditation of physicians and medical teams. It is based on lessons learned from an in-depth analysis of adverse events linked to opera-

ting room rescheduling and reported by physicians in the accreditation system feedback database. A practice survey and a literature search were also carried out.

**As part of the follow-up of this PSS, any difficulties encountered during its implementation should be communicated directly to the Haute Autorité de santé (HAS, French National Authority for Health), so that it can assess the need to revise or update it in collaboration with the approved bodies having developed it.**

## ... derived from analysis of the accreditation feedback database...

The working group analysed 215 adverse events linked to rescheduling. These adverse events were reported in 10 specialties, but mostly concern orthopaedic surgery (n = 142/215). In fact, Orthorisq has been encouraging its accredited physicians to report such events since 2022.

The number of adverse events reported in this area increased significantly during the COVID-19 pandemic, but has remained at a high level since then (n = 17 from 2017 to 2019; n = 26 in 2020; n = 47 in 2021; n = 76 in 2022; n > 41 in 2023).

The rescheduling time frames reported in these adverse events are highly variable, ranging from one procedure being brought forward because a spot had been freed in the surgery schedule, to others being postponed for days, weeks, months, or even years.

These adverse events associated with rescheduling have very varied immediate causes:

- medical device not available, most often due to a failure to order it when rescheduling, or an overshoot of the expiration date (n = 57);
- worsening of the patient's clinical status (n = 46);
- failure to discontinue a treatment, primarily anticoagulants, but also antihypertensives, biotherapies or chemotherapies (n = 28);
- longer rescheduling time frame than that sought by the medical team (n = 16);
- failure to perform preoperative tests or absence of their results (n = 13);
- scheduling error (rescheduling to a date when the surgeon is not available or without notifying the patient) (n = 13);
- procedure wording error, particularly when copied (n = 11);
- rescheduling oversight (n = 10);

- other immediate causes (n = 21) including, for example, refusal of care (n = 5), extended period of discontinuation of anticoagulant treatment (n = 4), or failure to schedule follow-up care (n = 2).

There were no consequences for 21 adverse events, because the error was detected and intercepted in time, for example when completing the “Surgical safety” checklist. For the remaining 194 adverse events, the end consequences are as follows:

- another cancellation of the procedure which had to be rescheduled again (n = 64), in some cases in the context of a No-Go decision after anaesthesia (n = 13);
- change of the procedure initially planned to a more complex procedure or one using a different medical device (n = 54);
- disruption of operating room organisation (n = 23);
- postoperative complications, with functional sequelae or bleeding in particular (n = 15);
- other consequences (n = 26), including delayed diagnosis (n = 11) in particular in cancer care, delayed care provision (n = 7) or failure to carry out the procedure (n = 6).

According to the notifiers, the vast majority of these adverse events were avoidable or probably avoidable (n = 198).

## ... and a practice survey

In January 2022, Orthorisq sent a practice survey to 1,822 accredited orthopaedists: 1,699 of them responded. Most of the respondents (n = 1,484) considered rescheduling to be an at-risk situation.

The respondents encountered different types of events:

- changes in preoperative indication, particularly due to a change in the patient's clinical status (n = 404);
- No Go decision (procedure stopped before incision) (n = 372);
- positioning errors (n = 85);
- side errors (n = 63);
- surgical site errors (n = 41);
- procedures stopped after incision (n = 30);
- other (n = 872).

Of the 366 respondents who reported a patient care error following rescheduling, 284 specified that the error was linked with misunderstanding by the patient.

In particular, this might concern:

- failure to discontinue a medical treatment (anticoagulant in particular) (n = 124);
- failure to complete a preoperative Covid test (n = 81) or invalid test (n = 75);
- failure to comply with admission times (n = 51);
- failure to perform a pre-anaesthetic consultation (n = 41);
- a change of mind about the proposed surgical technique (n = 35).

Most of the respondents recommended that only the surgeon should be able to reschedule patients, by following the exact same procedure as for the initial scheduling (n = 1,002).

# Safety prerequisites

Rescheduling is normally a backup solution when faced with organisational issues (bed or staff shortages, lack of equipment availability, etc.) or patient-related issues (intercurrent disease, inadequate preparation, etc.). Bearing in mind the adverse events that it can cause, it should be considered as a degraded response and never as an appropriate response to mitigate organisational issues in operating rooms.

---

Descheduling impacts patients (family organisation, work, anxiety, etc.). As the main party affected by rescheduling, it is important that the patient play an active role in its organisation, particularly in the choice of date.

---

Therefore, it is essential to:

- set up appropriate and effective operating room scheduling (12-18);
- monitor and analyse cancellations, in order to implement actions to avoid them, where possible.

Regardless of the reason for the cancellation ("organisational" or "patient-related" cause), professionals must pay the same attention when rescheduling and **"start over from the beginning"**. For this purpose, they must be able to use a scheduling form describing the patient's entire planned pathway.

Scheduling software programs must facilitate sharing of information between healthcare professionals (including the surgeon, anaesthetist, and the operating room team). For this purpose, they must allow the following:

- recording of the reasons for cancellation and whether rescheduling is needed or not;
- tracking in the patient record of any information relating to the cancellation, and rescheduling;
- tracking of the active list of patients awaiting rescheduling;
- easy patient rescheduling using the information from the previously cancelled procedure (no manual copying);
- view of the entire patient pathway, including requested additional tests;
- highlighting in the program of rescheduled procedures, so as to alert professionals.

So that everyone can understand each other better and pre-empt potential issues, all parties must be aware of the operation of the departments linked with the operating room (pharmacy, sterilisation, laboratory, hospital admission departments, etc.). Particular attention should be paid to the medical device circuit. (19) The "Equipment checklist 48 hours before any planned procedure" PSS (20) may also be implemented.

---

Adverse events associated with rescheduling must be the subject of a team review, collecting the patient's account beforehand if possible.

Complaints associated with reschedulings should be reviewed by the Feedback Committee, with a physician-user pair if possible.

Should a serious adverse event occur, the regulations stipulate that it must be reported to the competent authorities<sup>1</sup>.

---

---

1. [signalement.social-sante.gouv.fr](http://signalement.social-sante.gouv.fr).

# Rescheduling key points

Each organisation is free to adapt the solutions and tools provided in this PSS for optimal inclusion in their operating room organisation.

## Facilitate coordination/communication between professionals:

- in each organisation, set out who does what, in order to avoid oversight of certain rescheduling steps;
- notify all actors of the cancellation (to be performed by the professional making the decision);
- in the patient record, track the cancellation and notify all actors – along with any information about the rescheduling and any exchanges between professionals and with the patient;
- arrange between the surgeon, the anaesthetist, the operating room and the patient, and with other actors if needed (surgery administration department, pharmacy, etc.), to:
  - set a new date,
  - assess the need to have another consultation (pre-anaesthetic, surgical, specialist opinion, etc.) and its form (in-person, teleconsultation or just over the telephone) (21, 22).

---

Implementing the “Cooperation between anaesthetist and surgeons” PSS, particularly by drafting an operating and internal organisation charter, is essential not only for operating room organisation in general, but also to ensure rescheduling safety. (23)

---

## Monitor patients to be rescheduled:

- have an active list of patients awaiting rescheduling;
- set out an internal rescheduling organisation (by the surgeon concerned, by a designated officer, by a crisis unit, etc.). The list of patients to be rescheduled may be monitored on a day-to-day basis or only under specific circumstances (strike, unexpected operating room closure, surgeon absence, etc.);
- provide all the information and instructions that the patient and their caregivers need on the day of cancellation;
  - including caregivers is particularly important because the patient may be emotionally impacted by the cancellation notice, and have difficulties taking in all the information,

- use a “Cancellation of your procedure” information guide, such as that provided in this PSS, completed using information from all the professionals concerned. Its transmission procedures must be defined according to whether the cancellation occurs when the patient is already on site or before they arrive;
- assess the benefit of informing the patient at the scheduling stage that, if the conditions for a procedure have not been met, it may be cancelled and will then be rescheduled (e.g. paediatric surgery in the winter season).

## Set out common internal rescheduling rules:

- provide procedures for certain standard scenarios, possibly based on the recommendations of learned societies if available (e.g. set out the rescheduling time frame and procedure for carpal tunnel surgery with no risk factors, cancelled due to upper respiratory tract infection);
- use a “Rescheduling” checklist, which will help check whether all the scheduling stages have been validated, particularly items identified as being particularly at-risk during the adverse event review;
- reschedule within a medically acceptable time frame (variable depending on the reason for cancellation and the reason for the procedure). This time frame should not be solely dependent on the risk to life, but also on the impact on the patient waiting for their procedure. (24-26) Prioritise patients if required;
- avoid knock-on cancellations: do not postpone some patients to reschedule others, do not cancel the same patient multiple times (other than on medical grounds).

---

Where a rescheduling is indicated in the schedule, particular attention must be paid when completing the pre-anaesthetic assessment and the “Surgery safety” checklist, (27) systematically screening for any intercurrent medical event. They are the final barriers to recuperating a potential adverse event.

---



---

## **“Rescheduling” checklist**

---

*All checklist points must be checked in consultation with the actors concerned. The charter drafted based on the “Cooperation between anaesthetist and surgeons” PSS (23) indicates who checks what within the organisation. This checklist may be adapted if needed.*

### **At the time of cancellation**

The patient has been given the “Cancellation of your procedure” information guide.

- ☐ The patient and their caregivers are notified of the cancellation, its reason and the time frame within which they will be recontacted for rescheduling.
- ☐ In the event of preoperative adaptation of medication (anticoagulants, biotherapies, antidiabetics, etc.), the patient is informed of the procedure to follow.
- ☐ If required, the patient is provided with specific care while waiting for the procedure to take place.
- ☐ All the actors concerned are notified, including the primary care physician.

### **At the time of rescheduling**

- ☐ If another pre-anaesthetic consultation is required, it is scheduled.
- ☐ If the procedure was cancelled on medical grounds, this is taken into account.
- ☐ The additional opinions and tests required are requested.
- ☐ The essential professionals for performing the procedure will be available on the planned date, along with postoperative beds.
- ☐ Medical devices not in storage are ordered.

The patient is notified of:

- ☐ the date of the new procedure (and agrees to it);
- ☐ the procedure to follow to adapt their medication (particularly anticoagulants) in the preoperative period if needed;
- ☐ any preoperative tests to be repeated (imaging, COVID-19 test, etc).

### **Before the rescheduled procedure, check specific watch-points identified as particularly at-risk**

- ☐ The medical devices required are present and tested.
- ☐ The patient’s medication is appropriate.
- ☐ Recent preoperative test results are available and have been taken into account.

---

## "Cancellation of your procedure" information guide

---

To:

date of birth:

The purpose of this guide is to provide the patient and their caregivers with all the information and instructions that they need on the day of cancellation. It contains adjustable suggestions to be completed according to the patient's circumstances and department organisation. This guide may be adapted if needed.

Your procedure has been cancelled and a new date needs to be set. This document explains the terms for the rescheduling of your procedure and the actions that you can take in the meantime. With this in mind, dialogue with your care team is important.

### Why has your procedure been cancelled?

Your procedure has been cancelled because it was not possible to perform it under the right conditions today. This is because:

- ☐ you cannot be operated on due to your health state.
- ☐ your medical treatment is not compatible with a surgical procedure.
- ☐ essential test results for your procedure are not available.
- ☐ we are unable to keep your procedure due to organisational issues.

### When will your procedure be rescheduled?

You will be recontacted before XX/XX/XX by:

- ☐ the surgery department    ☐ the rescheduling officer

to set a new procedure date with you. If you do not receive a call within the time frame given, please recontact us at the number provided at the end of this guide.

Your procedure has been rescheduled for XX/XX/XX. The information required for organising the procedure:

- ☐ has been provided to you    ☐ will be provided to you before XX/XX/XX.

### What do you need to do about your medication and tests?

You will be given new prescriptions for tests or medication for your procedure.

For this purpose:

- ☐ a consultation    ☐ a teleconsultation    ☐ a phone call
  - ☐ is scheduled for XX/XX/XX    ☐ will be scheduled before XX/XX/XX
- with XXX.

While waiting for:

- ☐ this consultation    ☐ this teleconsultation    ☐ this phone call
- ☐ you should resume your treatment XXX
- ☐ you should not resume your treatment XXX.

### In the meantime, what should you do?

Keep us informed if your health state worsens, of any new symptoms, of any new medication you are taking, etc. In particular, monitor: XXX.

---

Contact us if you have any doubts, questions or information to give us:  
XXX [telephone number of a contact present to answer a call, email]

---



# Implementation of the PSS

This PSS is a useful new tool for improving the quality and safety of care throughout the medical sector. Its aim is to raise awareness among healthcare, medical and paramedical professionals of the risks associated with operating room rescheduling. Hospital managers and medical committee chairs should use it to formalise the implementation of the proposed actions.

The points set out in this PSS can be used as a tool for assessing organisational and professional practices. They help to assess existing elements, as well as deficiencies and gaps in relation to the proposed guidelines.

The results of the assessment should be used to propose an appropriate improvement plan. This may involve training, improving teamwork, reinforcing existing measures or creating new alerts and actions to put in place additional safety barriers, modifying organisations, etc. Their implementation will be monitored and, if necessary, reassessed.

## Steps in a team-based approach to improving professional practices

- Step 1: **organise your approach** (project group set-up, organisation and provisional schedule).
- Step 2: **assess the key points** of the PSS within your structure (e.g. the key point is implemented: "never"/"sometimes"/"regularly"/"routinely").
- Step 3: **draw up an overview of the initial assessment** performed<sup>2</sup> and jointly define the improvement actions to be implemented and monitored with the team<sup>3</sup>.
- Step 4: **implement the improvement actions** and monitor them.
- Step 5: **assess** the results of the actions implemented.

## Some examples of possible improvement actions:

- discussion within the operating room committee or with operating room organisation management around reasons for cancellation and issues encountered with rescheduling;
- improving teamwork (e.g. around cooperation between anaesthetists and surgeons); (23)
- awareness of operating room operation and the associated actors;
- use of a "Cancellation of your procedure" information guide;
- implementation of a "Rescheduling" checklist;
- analysis of practices by means of a grid drawn up from the PSS;
- monitoring of indicators (adverse events associated with rescheduling, avoidable cancellations, etc.).

---

2. An "Assessment overview" sheet is proposed in this PSS.

3. An "Action sheet" is proposed in this PSS.

---

## Assessment overview

---

*To be completed jointly as a team to assess the implementation of the key points of the PSS within your organisation.*

Date:

List of participants (last names, first names, positions, sector):

Analysis results, strong points, points to be improved:

Conclusion and action plan (to be completed by one or more action sheets):

---

## Action sheet

---

*Complete one sheet per action to be implemented.*

### Action implemented

Objective	
Description	
By whom?	
Calendar	
How?	
Monitoring and assessment procedures	

### Progress status

Date:	<input type="checkbox"/> Planned	<input type="checkbox"/> In progress	<input type="checkbox"/> Done	<input type="checkbox"/> Assessed
-------	----------------------------------	--------------------------------------	-------------------------------	-----------------------------------

# Drafting methodology

## Drafting the PSS

### Working method

The working method was based on the PSS drafting guide approved by the HAS Board in May 2012. (28) It combines an analysis of the data from the literature, analysis of the accreditation feedback database and consultation of a multi-professional and multidisciplinary working group (see composition below).

The work was initiated by five accredited developing bodies, who met with the HAS on 27 November 2023 to set out the scope of the PSS: CFAR (anaesthesia approved body), FCVD (gastrointestinal surgery approved body), Gynérissq (gynaecology-obstetrics approved body), OA CHIRPED (paediatric surgery approved body) and Orthorissq (orthopaedic and trauma surgery approved body).

The working group met on 30 May 2024 to talk about the solutions to be proposed in the PSS. For this purpose, the group took note of:

- the results of a survey conducted by Orthorissq among its members to define the risks associated with rescheduling;
- an overview of a literature review relating to issues around operating room scheduling (scheduling, cancellation, rescheduling);
- the results of an analysis of the adverse events associated with rescheduling taken from the accreditation feedback database.

A second working group meeting was held on 11 October 2024 to discuss the PSS presentation plan and the selected solutions.

### Survey of orthopaedic and trauma surgeons

Orthorissq conducted a survey of accredited physicians in the specialty. A link to the survey was sent by email in January 2022<sup>4</sup>. The main objective of this survey was to assess at-risk situations encountered by physicians when rescheduling, and the proposed solutions to prevent them.

### Literature search

The search was performed on the Medline and Embase bibliographic databases, the Cochrane Library and the websites of appropriate learned societies in the field studied using the key words “reprogram”, “operating room/theatre”, “(re)scheduling” and “delay/cancel operation”. The bibliographic references recommended by the working group members were also included.

The topics addressed were the following:

- scheduling circuit issues;
- main principles of good scheduling;
- pre-anaesthetic consultation;
- procedure cancellations;
- post-cancellation follow-up;
- rescheduling during the COVID-19 pandemic.

### Analysis of the accreditation system feedback database

To detect adverse events associated with rescheduling, querying using the key word “reprog” in certain fields of the report form (title, expert key words, causes, clinical data and vulnerable period) was performed. In this way, of the 63,870 events reported between 31 May 2016 and 8 November 2023, 379 events were pre-selected. These events were subsequently read to exclude any not associated with rescheduling (e.g. where rescheduling was merely a consequence or where an electric syringe pump was reprogrammed). In the end, 215 events were selected for analysis.

## PSS follow-up and updates

### Follow-up procedures over time

This PSS will be included in the annual accreditation programme and its implementation will be a prerequisite for meeting the requirements of accreditation programmes. In addition, a specific at-risk situation will be created to record adverse events on the topic and as such ensure PSS follow-up and effectiveness. Professionals will be encouraged to record the patient’s account in their reports on this theme.

It will then be possible to perform an assessment of practices based on the use of the PSS 24 months after implementation. This could take the form of a survey submitted to the accredited physicians, in terms of satisfaction (legibility, suggested improvements), knowledge (PSS content), practices and results (adverse events reported). Updates will be considered in line with changes in practices, results obtained and issues encountered during implementation.

4. Questionnaire sent out to 1,822 physicians; 93% response rate in August 2024.

## Working group composition

A working group (19 members) was formed:

- Micheline CLAES, user
- Michèle DELÂTRE-LAFIN, user
- Alain DELEUZE, digestive surgeon
- Laure DI CAPUA, health officer
- Isabelle GERMOUTY, paediatric surgeon
- Dana HARTL, ENT surgeon
- Yves HEPNER, plastic surgeon
- Nathalie JACQUES, quality coordinator
- Bénédicte JOMBART, officer
- Michèle LE GOFF, user
- Béatrice LE NIR, approved accreditation organisation manager
- Paul-Michel MERTES, anaesthetist
- Valérie MINETTI, pharmacist

- Sophie PEYRET, head assistant
- Hervé ROUSSEAU, radiologist
- Frédéric ROUX, head of care
- François SCHAUDEL, maxillo-facial surgeon
- Patrick-Georges YAVORDIOS, anaesthetist
- Marc ZARKA, orthopaedist

For the HAS, the Department for Assessment and Tools for the Quality and Safety of Care (SEvOQSS):

- Candice LEGRIS, deputy head of department
- Philippe CABARROT, medical advisor
- Marie CONIEL, project manager

### → Terms of management of conflicts of interest

All the participants in the PSS working group completed a public declaration of interests (PDI) on the DPI-Santé website ([www.dpi.sante.gouv.fr](http://www.dpi.sante.gouv.fr)). After analysis by the HAS, no conflicts of interest regarding the topic in question were detected.

# Bibliographie

1. Abeeleh MA, Tareef TM, Hani AB, Albsoul N, Samarah OQ, ElMohtaseb MS, et al. Reasons for operation cancellations at a teaching hospital: prioritizing areas of improvement. *Ann Surg Treatment Res* 2017;93(2):65-9. [dx.doi.org/10.4174/astr.2017.93.2.65](https://doi.org/10.4174/astr.2017.93.2.65)
2. Dell'Atti L. The cancelling of elective surgical operations causes emotional trauma and a lack of confidence: study from a urological department. *Urologia* 2014;81(4):242-5. [dx.doi.org/10.5301/urologia.5000050](https://doi.org/10.5301/urologia.5000050)
3. Ferreira J, Boto P. Cancellations of elective surgeries on the day of the operation in a Portuguese hospital: One year overview. *Acta Med Port* 2021;34(2):103-10. [dx.doi.org/10.20344/amp.13437](https://doi.org/10.20344/amp.13437)
4. Wong DJN, Harris SK, Moonesinghe SR, Harris SK, Bedford J, Boney O, et al. Cancelled operations: a 7-day cohort study of planned adult inpatient surgery in 245 UK National Health Service hospitals. *Br J Anaesth* 2018;121(4):730-8. [dx.doi.org/10.1016/j.bja.2018.07.002](https://doi.org/10.1016/j.bja.2018.07.002)
5. Association française d'Urologie. Synthèse des recommandations des comités de neuro-urologie, du Comité des troubles mictionnels de l'homme et de pelvi périnéologie de l'AFU [En ligne] 2020. [www.urofrance.org/sites/default/files/COVID19/tableau\\_synthese\\_reco\\_fonctionnel\\_francais\\_v2.pdf](http://www.urofrance.org/sites/default/files/COVID19/tableau_synthese_reco_fonctionnel_francais_v2.pdf)
6. Espace de réflexion éthique Région Centre-Val de Loire. Réflexions éthiques sur la déprogrammation [En ligne]. Tours: CHRU de Tours; 2021. [www.ererc.fr/assets/files/pdf/deprogrammation-ererc-022021\(1\).pdf](http://www.ererc.fr/assets/files/pdf/deprogrammation-ererc-022021(1).pdf)
7. Ministère de la santé et des services sociaux. Système de priorisation pour l'accès à une chirurgie en situation de pandémie : MSS; 2021. [publications.msss.gouv.qc.ca/msss/fichiers/2020/20-210-398W.pdf](https://publications.msss.gouv.qc.ca/msss/fichiers/2020/20-210-398W.pdf)
8. Cho HS, Lee YS, Lee SG, Kim JM, Kim TH. Reasons for surgery cancellation in a general hospital: A 10-year study. *Int J Environ Res Public Health* 2018;16(1). [dx.doi.org/10.3390/ijerph16010007](https://doi.org/10.3390/ijerph16010007)
9. Epstein RH, Dexter F. Rescheduling of previously cancelled surgical cases does not increase variability in operating room workload when cases are scheduled based on maximizing efficiency of use of operating room time. *Anesth Analg* 2013;117(4):995-1002. [dx.doi.org/10.1213/ANE.0b013e3182a0d9f6](https://doi.org/10.1213/ANE.0b013e3182a0d9f6)
10. Turunen E, Miettinen M, Setälä L, Vehviläinen-Julkunen K. Elective surgery cancellations during the time between scheduling and operation. *J Perianesthesia Nursing* : 2019;34(1):97-107. [dx.doi.org/10.1016/j.jopan.2017.09.014](https://doi.org/10.1016/j.jopan.2017.09.014)
11. Mahase E. A fifth of operation cancellations last year were due to NHS staff shortages, Labour claims. *BMJ* 2022;379:o2997. [dx.doi.org/10.1136/bmj.o2997](https://doi.org/10.1136/bmj.o2997)
12. Mission nationale d'expertise et d'audit hospitaliers. Recueil des bonnes pratiques organisationnelles observées. Gestion et organisation des blocs opératoires dans les hôpitaux et cliniques. Paris: MEAH; 2006. [www.fnro.net/documents/Officiel/ANAP/files/06BlocsOperatoires.pdf](http://www.fnro.net/documents/Officiel/ANAP/files/06BlocsOperatoires.pdf)
13. Agence nationale de la performance sanitaire et médico-sociale. Construire un programme adapté à l'activité de son bloc opératoire. Paris: ANAP; 2022. [www.anap.fr/s/article/bloc-operatoire-publication-1376?](http://www.anap.fr/s/article/bloc-operatoire-publication-1376?)
14. Agence nationale de la performance sanitaire et médico-sociale. Tableau des éléments devant figurer dans la demande d'intervention. Paris: ANAP; 2022. [www.anap.fr/s/article/bloc-operatoire-publication-1376?](http://www.anap.fr/s/article/bloc-operatoire-publication-1376?)
15. Agence nationale de la performance sanitaire et médico-sociale. Exemple de logigramme du circuit de décision de la programmation. Paris: ANAP; 2022. [www.anap.fr/s/article/bloc-operatoire-publication-1376?](http://www.anap.fr/s/article/bloc-operatoire-publication-1376?)
16. Agence nationale de la performance sanitaire et médico-sociale. Projet de staff de programmation. Paris: ANAP; 2022. [www.anap.fr/s/article/bloc-operatoire-publication-1376?](http://www.anap.fr/s/article/bloc-operatoire-publication-1376?)
17. Agence nationale de la performance sanitaire et médico-sociale. Exemple des 5 règles d'or de la programmation. Paris: ANAP; 2022. [www.anap.fr/s/article/bloc-operatoire-publication-1376?](http://www.anap.fr/s/article/bloc-operatoire-publication-1376?)
18. Gentil S. Industrialisation des soins et gestion de l'aléa : le « travail d'articulation » au bloc opératoire, déterminants et obstacles. *Annales des mines - Gérer et Comprendre* 2012;3(109):34-46. [dx.doi.org/10.3917/geco.109.0034](https://doi.org/10.3917/geco.109.0034)
19. Haute Autorité de santé. Analyse des déclarations de la base nationale des événements indésirables graves associés aux soins (EIGS) en lien avec les dispositifs médicaux. Saint-Denis La Plaine: HAS; 2024. [www.has-sante.fr/upload/docs/application/pdf/2024-07/spa\\_254\\_rapport\\_analyse\\_eigs\\_en\\_lien\\_avec\\_les\\_dm\\_cd\\_20240725\\_vd.pdf](http://www.has-sante.fr/upload/docs/application/pdf/2024-07/spa_254_rapport_analyse_eigs_en_lien_avec_les_dm_cd_20240725_vd.pdf)

20. Haute Autorité de santé. Faire la *check-list* matériel 48 heures avant toute intervention programmée . Solution sécurité patient. Saint-Denis La Plaine: HAS; 2023.  
[www.has-sante.fr/upload/docs/application/pdf/2023-03/ssp2\\_check\\_list\\_materiel\\_48\\_h\\_avant\\_chirurgie.pdf](http://www.has-sante.fr/upload/docs/application/pdf/2023-03/ssp2_check_list_materiel_48_h_avant_chirurgie.pdf)
21. Société française d'Anesthésie et de Réanimation. Délai consultation d'anesthésie et acte opératoire [En ligne] 2012.  
[sfar.org/delai-consultation-danesthesie-et-acte-operatoire/](http://sfar.org/delai-consultation-danesthesie-et-acte-operatoire/)
22. Société française d'Anesthésie et de Réanimation. Consultations d'anesthésies délocalisées, itératives ou en Télémédecine : propositions du comité analyse et maitrise du risque. Paris: SFAR; 2017.  
[sfar.org/wp-content/uploads/2017/07/Microsoft-Word-FINAL-CPA-iteratives-ou-delocalisees-CAMR-valide-CA.docx.pdf](http://sfar.org/wp-content/uploads/2017/07/Microsoft-Word-FINAL-CPA-iteratives-ou-delocalisees-CAMR-valide-CA.docx.pdf)
23. Haute Autorité de santé, Collège français des anesthésistes réanimateurs, Fédération de chirurgie viscérale et digestive, Société française d'Anesthésie et de Réanimation. Coopération entre anesthésistes-réanimateurs et chirurgiens. Mieux travailler en équipe/Poits clé et solution. Saint-Denis La Plaine: HAS; 2015.  
[www.has-sante.fr/upload/docs/application/pdf/2016-01/points\\_cles\\_et\\_solutions\\_-\\_cooperation\\_entre\\_anesthesistes-reanimateurs\\_et\\_chirurgiens.pdf](http://www.has-sante.fr/upload/docs/application/pdf/2016-01/points_cles_et_solutions_-_cooperation_entre_anesthesistes-reanimateurs_et_chirurgiens.pdf)
24. Agence régionale de santé Ile-de-France, Philippe HJ, Simon D. Recommandations régionales COVID-19. Période de confinement. Prise en charge chirurgicale Reprise de l'activité chirurgicale en phase de plateau et de début de décroissance de l'épidémie. Paris: ARS IDF; 2020.  
[www.iledefrance.ars.sante.fr/system/files/2020-05/Deconfinement-activite-chirurgicale-deconfinement-66-recommandations-ARSIDF\\_0.pdf](http://www.iledefrance.ars.sante.fr/system/files/2020-05/Deconfinement-activite-chirurgicale-deconfinement-66-recommandations-ARSIDF_0.pdf)
25. Conseil national professionnel de Chirurgie Orthopédique et Traumatologique. Recommandations du CNP à partir du 11 mai [En ligne] 2020.  
[www.sofcot.fr/sites/www.sofcot.fr/files/medias/documents/nouvelles%20recommandations.pdf](http://www.sofcot.fr/sites/www.sofcot.fr/files/medias/documents/nouvelles%20recommandations.pdf)
26. Haute Autorité de santé. Certification des établissements de santé pour la qualité des soins. Saint-Denis La Plaine: HAS; 2024.  
[www.has-sante.fr/upload/docs/application/pdf/2023-09/manuel\\_2024.pdf](http://www.has-sante.fr/upload/docs/application/pdf/2023-09/manuel_2024.pdf)
27. Haute Autorité de santé. Les *check-lists* pour la sécurité du patient [En ligne] 2024.  
[www.has-sante.fr/jcms/c\\_1518984/](http://www.has-sante.fr/jcms/c_1518984/)
28. Haute Autorité de santé. Solutions pour la sécurité du patient. Méthode d'élaboration. Saint-Denis La Plaine: HAS; 2023.  
[www.has-sante.fr/upload/docs/application/pdf/2023-09/methode\\_solutions\\_pour\\_la\\_securite\\_du\\_patient\\_ssp.pdf](http://www.has-sante.fr/upload/docs/application/pdf/2023-09/methode_solutions_pour_la_securite_du_patient_ssp.pdf)

### Developers



### Associated bodies



---

All our publications can be downloaded from [www.has-sante.fr](http://www.has-sante.fr)