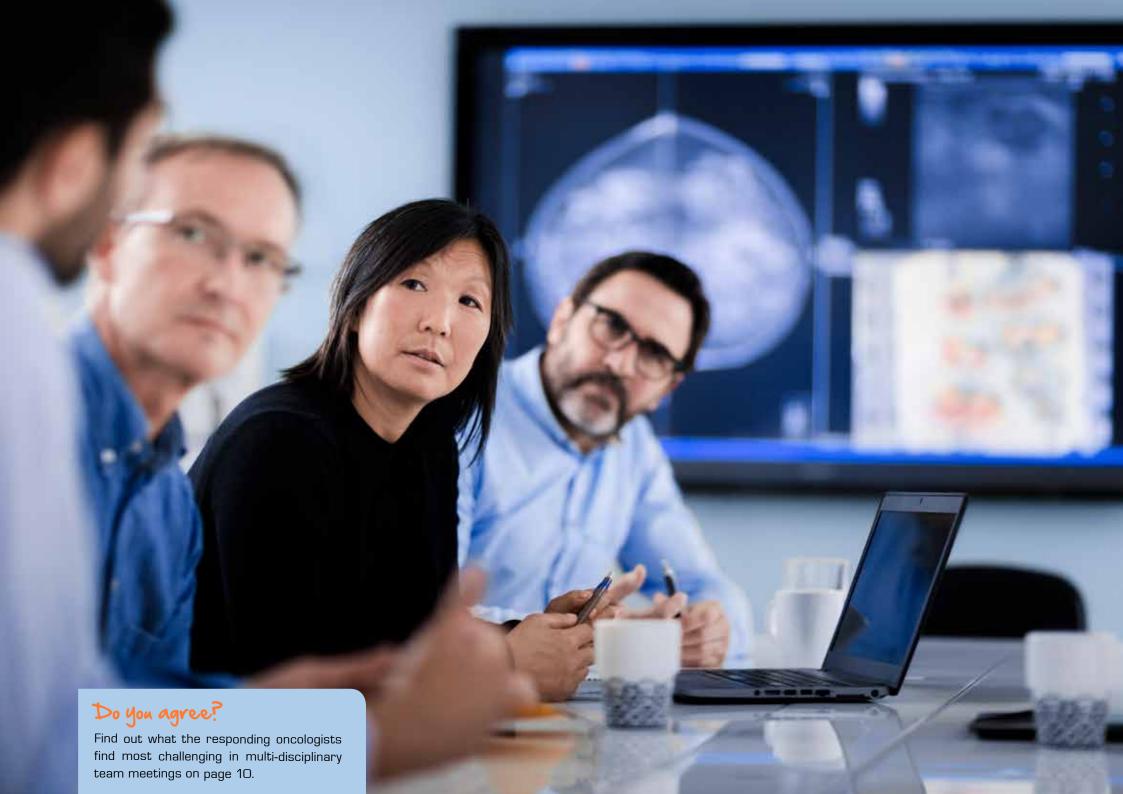
## Report:

How can radiology improve its service to oncologists?



**SECTRA** 

Knowledge and passion



iven radiology's central role in the patient pathway, radiology efficiency and an ability to communicate actionable reports are key to patient outcomes. As the number of cancer cases increases and cancer cases become more complex, radiology is spending more and more time providing service to oncologists. As such, oncologists are becoming an increasingly important group of referring physicians for radiology to support. This is not only true because of the sheer size of the number of requests they send to radiology. The level of radiology services is particularly important in cancer care, as diagnoses are often time-critical, the cases are complex, and the treatment chain typically involves multiple specialists.

Increasing efficiency in reading cancer cases, delivering timely and actionable reports, and professional participation at multi-disciplinary team meetings are all factors that are crucial to improving cancer care. But what is most important according to oncologists?

We have asked 50 oncologists\* how they perceive the service from radiology and how they would rate different changes.

In this report, we present a comprehensive view of what oncologists value in radiology service and how they think it can be further improved. The report also includes hands-on advice from Sectra's product management on what to consider when implementing the changes suggested by oncologists.

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#### RESPONDENTS

Medical Oncologists	40
Surgical Oncologists	4
Radiation Therapists	-

Avg Years 17

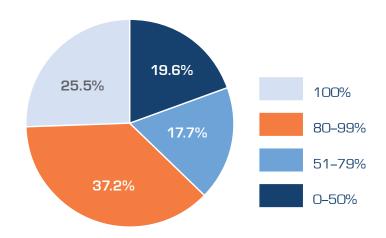
Min Years 4
Practising 4

# Just want the summary?

Take a look at the summary version and infographic of this report for a quicker overview.

www.sectra.com/oncology report

# Usage of in-house and external radiology services

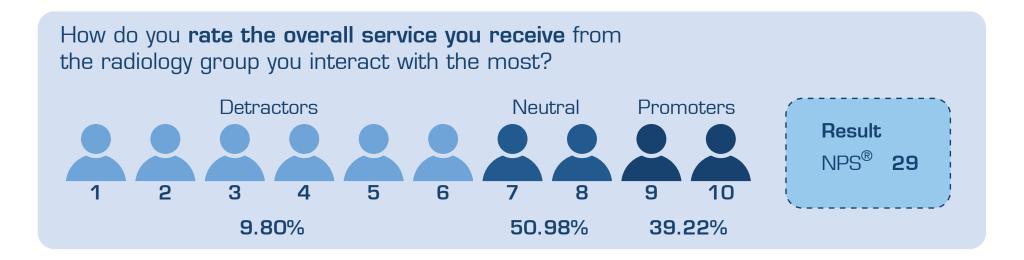


The majority of respondents primarily utilizes in-house radiology services.

Percentage of time respondents interact with in-house radiology

he majority of respondents primarily utilizes in-house radiology services. About 20% of the respondents utilize in-house radiology services less than 50%, and 13.7% of the respondents say they use in-house and external services 50% each. In other words, the rating presented on the next page is very much a rating of in-house radiology services.

### Overall perception of radiology services



ncologists are in general satisfied with the service they receive from radiology. Respondents were asked to rate on a scale of 1–10 the overall service received from the radiology group they interact with the most. Categorizing the responses in three categories in line with the Net Promoter Score® methodology (Detractors, Neutral and Promoters)\* shows that there is a 30% excess of promoters in the group of respondents.

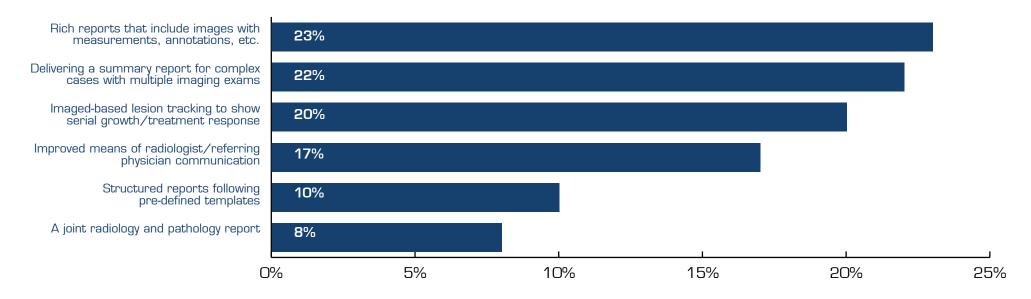
Among those not so satisfied two reasons stand out; vague reports and recommendations, and long response times.

The free text responses provided to clarify why they are satisfied can be summarized into the following categories:

- » Fast response, short lead times, radiology perceived as efficient
- » Good communication
- » High service level
- » High competence in radiology

Among those not so satisfied two reasons stand out: vague reports and recommendations, and long response times. Clearly, response time is an important issue, and depending on the radiology service used—either a source for satisfaction or complaint.

### How to improve the service to oncologists?



The oncologists were asked to identify which of a number of suggested changes would most improve the value of the service provided by radiology. On top of oncologists' wish list are:

- » Rich reports that include images with measurements, annotations, etc.
- $\,\,$  Delivering a summary report for complex cases with multiple imaging exams
- $\ \ \, \text{$\stackrel{>}{$}$ Imaged-based lesion tracking to show serial growth/treatment response}\\$

These responses are in line with the free text comments provided by the respondents to the same question. The responses can be summarized into three groups:

- » Clearer reports with more comments from radiologists
- » More measurements and details in the report
- » Include comparisons with previous reports



Article: Structured reports save time and add value for doctors and patients www.sectra.com/structured reports

# Sectra comments

# Image-close reporting important for both radiology efficiency and referring physician satisfaction.

Hans Lugnegård, Product manager Sectra Radiology IT solutions

I'm not at all surprised that one of the top requests from oncologists is rich reports that contain not only text, but also images, bookmarks, etc. This type of 'image-close reporting' makes it much easier for referring physicians to understand and act on the report, as well as to communicate with patients. In addition, it makes the radiologists work more efficiently. They don't have to explain what is obvious in the images, and it enables easy navigation of previous reports with the ability to quickly look at linked images and saved measurements directly from the report.

I also note that some of the respondents claim radiology reports can be vague and lack clear recommendations. I believe structured reports following pre-defined templates improve readability. Many of our customers are transforming towards standardized cancer care pathways, and I think we will see an increase of national templates and service level agreements built in as a native part of the PACS workflow support.

One of the most common reasons for being satisfied with the radiology service was quality. I want to mention two areas that I think can play an important role in ensuring that the quality of radiology services remains high. I believe we will see an increase of peer review and feedback solutions, and I also think modern technology like machine learning will help auto detect areas that need improvements.

#### My top advice:

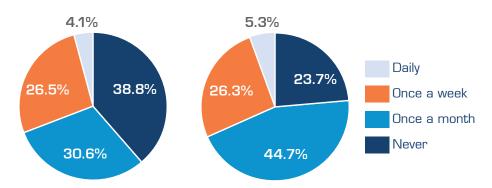
- Make your radiology reporting image-close. Radiologists have better and better diagnostic tools, including advanced visualization and measurement tools. Referring physicians will want to see what you see in the actual report. Make sure you can deliver that.
- Peer review and feedback initiatives will increase in the future. In order to maintain radiology efficiency when implementing these workflows, ensure your solution is directly integrated into the regular reading workflow.
- Keep your eyes on clinical assistants based on machine learning research. Machine learning could greatly benefit radiology through better decision support.
- Invest in a solution that puts the patient first, which means that all images regardless of discipline are easily accessible during the multi-disciplinary team meetings without any hassle.

Hans is the Product manager of Sectra's Radiology IT solutions. Connect with him on LinkedIn: https://se.linkedin.com/in/ lugnegard



### How to improve the communication between radiology and oncologists?

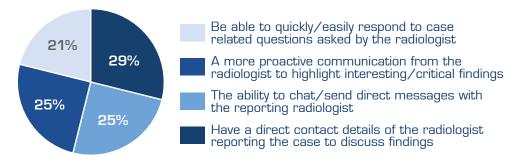
#### In-house radiology External radiology services



How often do respondents experience communication problems with in-house and external radiology services?

verall, oncologists don't experience problems communicating with radiology that often, but when they do, they seem to have fewer problems with in-house radiology services than with external resources. Almost 40% of the respondents state they never experience problems with in-house radiology services, compared with 24% when the respondents deal with external radiology services. However, more than 30% do experience communication problems as often as weekly or even daily—both with in-house as well as with external radiology services.

Respondents were asked which improvements they felt would have the biggest positive impact on communication. It's interesting to note that nearly 30% of the respondents stated that simply providing direct contact details to the reporting radiologists to enable easy discussions of findings would have a big impact on improving communication with radiology.



Which area do respondents feel would have the greatest impact on improving communication with radiology?

30% of the respondents stated that simply providing direct contact details to the reporting radiologists to enable easy discussions of findings would have a big impact on improving communication with radiology.

### Reading tip

Article: How radiology can improve communication with referring physicians www.sectra.com/improving communication

# Sectra comments

# Truly integrating visualization tools for cancer care diagnostics helps radiologists exceed the expectations of oncologists and patients.

Lisa Lindfors, Product manager Sectra Advanced Visualization

Two things caught my eye: 1) Oncologists are requesting more measurements in the reports, as well as image-based lesion tracking. 2) Oncologists find radiologists' inability to easily perform measurements and analyze images during the actual meeting as one of the biggest challenges during the multi-disciplinary team meetings.

These kinds of expectations, in combination with the increasing number of cancer cases with complex images, put tough demands on visualization tools. These tools have to be intuitive to use, accessible from anywhere in the enterprise, directly from within the radiologists' work spot, and be closely linked to the radiology report. I believe that's the only way radiology can maintain reading efficiency while meeting the needs of patients and referring physicians.

Looking at cancer care, I think tools to improve reading efficiency and reporting of fusion images, such as PET/CT and SPECT/CT, are extremely important. If available directly in the PACS, the tools can also be used during multi-disciplinary team meetings.

#### My top advice:

- Utilizing advanced visualization tools will become increasingly common. That makes it even more important to ensure that the use of these tools doesn't interfere with the efficiency of the radiology reading. Ensure that all the tools you need are available from a single application.
- 2 Another advantage of incorporating the visualization tools into the regular diagnostic application is that they can quickly be launched during the multi-disciplinary team meeting, enabling even more efficient meetings.

## Reading tip

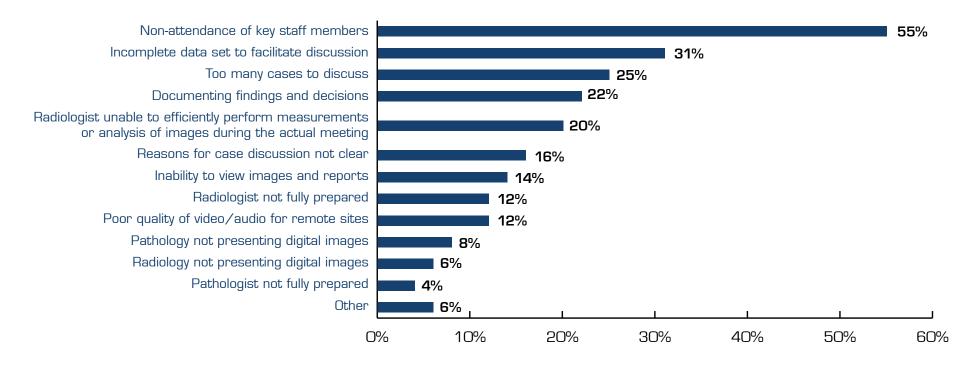
Customer case: NM Fusion improves workflow efficiency in cancer diagnostics and enhances communication with referring physicians www.sectra.com/fusion\_linkoping

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# What do oncologists feel are the biggest challenges during multi-disciplinary team meetings?



part from the radiology report, the participation at multi-disciplinary team meetings is a key component of the service radiology provides to oncologists and the rest of the care team. In the survey, respondents were asked what they felt were the three main challenges with these meetings. Slightly more than half of the respondents stated "non-attendance of key staff members" as a challenge to the meeting. One in three stated "incomplete data set to facilitate discussion" was a main challenge. One in four felt that one of the top three challenges is that they have too many cases to discuss.

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# Sectra comments

# Digitizing pathology not only changes pathologists' work, but will facilitate more integrated diagnostics and efficient multi-disciplinary team meetings.

Elin Kindberg, Product manager Sectra Digital Pathology

Many pathology departments are currently evaluating or implementing digital pathology solutions. However, it is clear that oncologists have not yet seen the benefits of digital pathology, and are not yet putting pressure on them to present digital images during the multi-disciplinary team meetings, or to utilize the possibilities in digital pathology to work closer to radiology.

However, I am confident that the situation will change dramatically in the coming years. Several care providers that have started to present digital pathology images during the tumor boards report that both oncologists and surgeons experience the change very positively. Correctly implemented, digital pathology can enable integrated diagnostic workflows, which can improve quality of care, and may even reduce the number of cases that are presented at multi-disciplinary team meetings. For example, an automatic concordance report between the radiology and pathology report could alert each department about discordant findings even before the meeting, thereby making the actual meetings more efficient.

#### My top advice:

- When evaluating a radiology IT solution, make sure that the solution can be smoothly expanded to the pathology department when they're ready to digitize. This is not only efficient from an IT standpoint, but also enables integrated diagnostics workflows, which provides clinical efficiency gains both before and during the multi-disciplinary team meeting.
- Cancer patients typically build up an extensive patient record, including different types of images and documents. Not storing these in silos, but rather in an enterprise archive with enterprise-wide access through PACS or universal viewers, is one way to ensure easy access to all data needed. Another important component is an efficient healthcare information solution that ensures that even data from outside the enterprise is included in the patient record.

Elin is the Product manager of Sectra's Digital Pathology solution. Connect with her on LinkedIn:

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### Join the discussion

Do you agree that these are the most important changes for improving service to oncologists and thereby improving cancer care? Let's continue the discussion and share your thoughts online:



sectra.com/medical



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# Further reading

Article: 4 areas where radiology can improve cancer care www.sectra.com/improving\_cancer\_care



