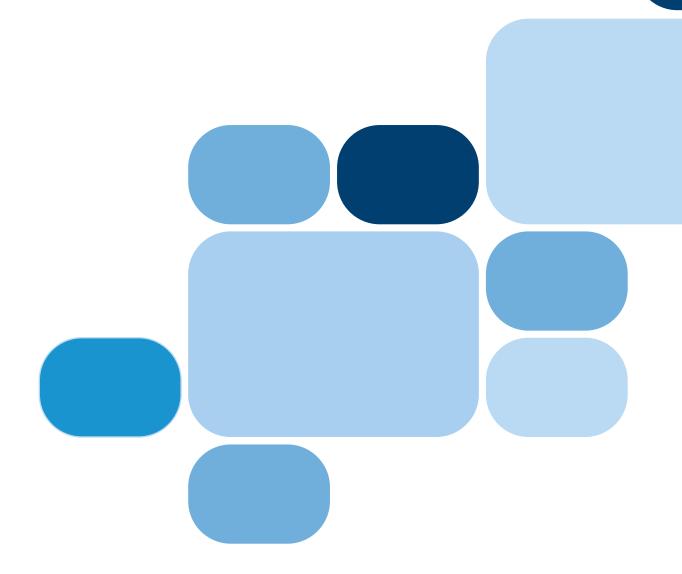
#### **REPORT**

# How radiology can improve communication with referring physicians

In June 2013, Sectra asked 78 US referring physicians and 78 US radiologists to give their views on the process of ordering studies and communicating results.

This report summarizes their answers.





# Executive Summary

#### MOW RADIOLOGY CAN IMPROVE COMMUNICATION WITH REFERRING PHYSICIANS

Radiology lies at the very center of the healthcare chain. Most patients pass through an imaging department at one point or another in their treatment. That said, an organization's overall effectiveness is highly dependent upon the ability of radiology to provide excellent service to referring physicians. But how is that best done?

In June 2013, Sectra asked 78 US referring physicians and 78 US radiologists to give their views on the process of ordering studies and communicating results. The goal was to understand how communication between radiologists and referring physicians can be improved and, as a result, increase the overall efficiency of the healthcare chain.

The survey shows that increased communication is clearly seen as important by both radiologists and referring physicians. It also indicates that there are several ways of increasing efficiency by improving both how studies are ordered and how results are communicated. The views of referring physicians and radiologists differ somewhat. Referring physicians often see both ordering of studies and communication of reports as a bigger challenge than radiologists. The responses from radiologists and referring physicians in the 2013 report can be summarized in the following needs:

- » Implement decision support to increase the quality of the requests
- » Increase transparency with regard to waiting times
- » Make reports clearer by including images
- » Improve the communication of critical results
- » Implement a portal for easier scheduling
- » Make radiation dose information visible in both the requests and the report

#### INTRODUCTION

Radiology lies at the very center of the healthcare chain. Most patients pass through an imaging department at one point or another in their treatment. That said, an organization's overall effectiveness is highly dependent upon the ability of radiology to provide excellent service to referring physicians. But how is that best done?

In 2012, Sectra polled 150 US neurologists, neurosurgeons, urologists, orthopaedists, internists and general surgeons to discover what they needed from radiology. The survey showed that referring physicians would like to see an easier procedure for ordering studies, shorter report turnaround times and a more efficient and secure method for notification of critical results.

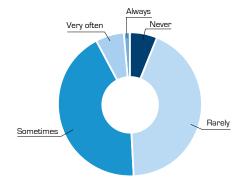
This year, we have analyzed the subject further and also broadened the scope of the study by surveying both radiologists and referring physicians. While the previous survey highlights the areas of the process in which referring physicians see problems, this year's survey describes in greater detail why these problems arise and shows how referring physicians and radiologists believe the problems can best be solved. We have asked 78 US radiologists and 78 US referring physicians to give their views on the processes of ordering

studies and communicating results. The report gives radiologists a good idea of what referring physicians think is important and what type of initiatives would make a difference to the current situation.

Both surveys show that increased communication is clearly seen as important from radiologists and referring physicians alike, and both recognize its value. We asked radiologists why, in spite of this, they think communication has decreased. A majority, six out of ten, say it requires too much time or that their workload has increased and that there are no longer enough hours in the day.

In general, it's interesting to note that referring physicians often see both ordering of studies and communication of reports as a bigger challenge than radiologists. This result is perhaps to be expected given that the radiologists are the service providers and referring physicians are service consumers, but it may also indicate that some radiologists currently lack the service mindedness needed to truly provide top-notch service.

Figure 1. How often, radiologists feel they need to contact the referring physician about a request



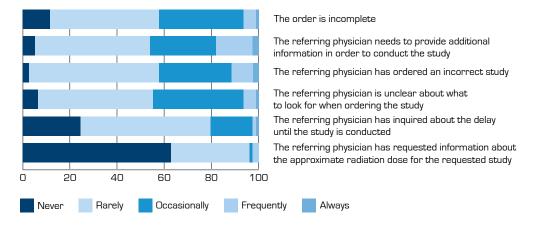
#### **ODERING STUDIES POSES A CHALLENGE**

Both radiologists and referring physicians see a need for more and improved communication in order to improve the ordering of studies. The referring physicians describe challenges in the areas of ordering the right study, ordering studies correctly with all relevant information and the inefficiencies caused by a lack of system integration. However, referring physicians do not seem to encounter any problems when the need to contact a radiologist arises.

- » 23% of the referring physicians state that correctly ordering the appropriate study is very often or always a problem (35% sometimes, 42% rarely or never see this as a problem).
- » 13% of the referring physicians state that communicating what you are looking for when ordering the study is very often or always a problem (52% sometimes, 35% rarely or never see this as a problem).

However, these challenges do not seem to raise a need for radiology to contact the referring physicians after receiving the request to gather more information. A majority of radiologists say they need to contact the referring physician about a request less often than every fifth request. When they do need to contact a referring physician regarding a request, the main reasons are that the order is incomplete or that the referring physician needs to provide additional information in order to conduct the study. (See figure 1 & 2)

Figure 2. Why radiologists feel they need to contact referring physicians



# THE NEED FOR COMMUNICATION INCREASES WITH RESULT DISTRIBUTION

The survey shows that the need to communicate with each other is greater when it comes to result distribution. However, referring physicians and radiologists don't agree on how often the need to get in touch arises.

- » 32% of referring physicians say they need to get in touch with the radiologist after receiving one in five reports. 67% less often. (1% every second report)
- » 17% of radiologists state that they are contacted by the referring physician after they have received one in five reports (82% less often, 1% every second report)

According to radiologists, the primary reason for being contacted by a referring physician is to discuss the diagnosis to be able to adjust the treatment or to get a recommendation on which step to take next. Referring physicians, on the other hand, don't single out these reasons to the same degree. They state that they just as often need to contact the radiologist because the report contains too much information, which makes it unclear, or that the report contains incomplete information about the findings. (One in ten referring physicians say they often need to contact the radiologist because of too much information in the report, whereas only about 1% of radiologists agree.)

On the same note, about 6% of referring physicians say they often or always contact a radiologist because it is difficult to understand the individual radiologist's expressions and abbreviations, whereas nine out of ten radiologists say this rarely or never happens.

# HOW TO IMPROVE THE ORDERING OF STUDIES AND RESULT COMMUNICATION

Although more communication between radiologists and referring physicians may be beneficial, the survey also indicates that there are several ways to increase efficiency by improving both how studies are ordered and how results are communicated. The responses from radiologists and referring physicians in the 2013 report can be summarized in the following needs:

- Implement decision support to increase the quality of the requests
- Increase transparency with regard to waiting times
- Make reports clearer by including images
- · Improve the communication of critical results
- Implement a portal for easier scheduling
- Make radiation dose information visible in both the request and the report

# Implement decision support to increase the quality of the requests

If referring physicians could do only one thing to improve the ordering of studies, radiologists believe they should include more clinical information about the patient and more information about what they are looking for in the request. Specific suggestions include:

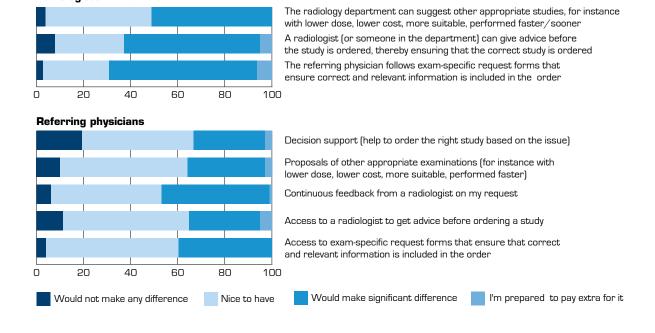
- » Clearly indicate why they are ordering a particular study
- » Be specific and complete when stating the reasons for the study
- » Provide more thorough clinical histories and specific diagnostic questions to be answered
- » Clarify exactly what answers/results they are looking for in a given study
- » Choose the most appropriate study
- » Provide a quick and easy way of contacting the referring physician directly to clarify issues that do arise (although infrequently)
- » Order less expensive exams first

Radiologists

So, how can referring physicians be supported in ordering the right study and including the right information? In general, radiologists believe it would be beneficial to give referring physicians different types of support to help them order the right study, such as better forms, access to a radiologist or having the radiologist propose more suitable exams based on the facts provided in the request.

Seven out of ten radiologists and four out of ten referring physicians believe exam-specific request forms would make a significant difference. Six out of ten radiologists and four out of ten referring physicians believe having access to a radiologist to receive advice before ordering the study would make a significant difference. Only one in ten says it would make no difference. Five out of ten referring physicians welcome continuous feedback from a radiologist regarding their requests and say it would make a significant difference. Four out of ten referring physicians and five out of ten radiologists think giving referring physicians proposals for other appropriate exams with, for example, lower doses, costs or waiting times would make a significant difference. (See figure 3)

Figure 3. How to improve the process of ordering studies



# Increase transparency with regard to waiting times

Today, many radiology departments are implementing tools for business intelligence to be able to better follow up on performance and the result of implemented changes. With such a system at hand, it would be possible to share information about the current waiting times for different procedures with referring physicians. Although referring physicians don't see the lack of this information as a huge problem today, according to the survey they do see the benefits of being able to see this data. One in three referring physicians states that access to business intelligence data to show waiting times for different studies would make a significant difference.

- » 17% state that not knowing the waiting time for a particular study before ordering it is very often or always a problem (54% sometimes, 29% rarely or never see this as a problem)
- » 30% of referring physicians state that access to business intelligence data from radiology to show waiting times for different studies at the various radiology clinics they're connected to would make a significant difference or that they would be willing to pay extra for it (58% say it would be nice to have and 11% feel it would not make any difference)
- » Radiologists are not as positive. Only 15% believe that access to this type of business intelligence data would make a significant difference, and as many as 36% believe it would make no difference (49% say it would be nice to have)

#### Make reports clearer by including images

Turning the focus towards the radiologists and how they communicate results, the survey again finds room for improvement. The main benefit, according to both radiologists and referring physicians, would be realized by including images together with the report, at least if there are positive findings. Some, although not as many, say 3D images would make a significant difference to understanding the report. Four out of ten referring physicians say that gaining access to both radiological and non-radiological images would make a significant difference and improve the treatment of their patients.

As for structured reporting, the answers are not as clear. However, according to the survey, four out of ten radiologists have a positive view towards implementing standardized report templates so that all wording and abbreviations remain the same in different reports.

Neither radiologists nor referring physicians believe that making the reports longer or shorter would make any difference in general. Although the survey does not give a coherent picture as to why there's a need to communicate, the survey shows that both increasing communication between radiologists and referring physicians and making it easier to get in touch with each other would add value and increase efficiency in the communication of results. Five out of ten referring physicians and seven out of ten radiologists say that making it easier to get in touch with the other party would make a significant difference. When the radiologists were asked to choose only one thing referring physicians should do to improve the communication of results, a majority said that referring physicians should make it easier to get in touch with them. Their suggestions include:

- » Have direct communication with the doctor, instead of having to go through staff
- » Have the ordering physician's cell phone number included on the order
- » Have a cell phone link to the referring clinician in PACS
- » Make sure there is a reliable chain of contact so that the first number dialed is the correct one and that the number works 100% of the time (including after hours)

# Improve the communication of critical results

Communication of critical results is one of the most outspoken frustrations among both radiologists and referring physicians. Six out of ten radiologists and referring physicians say improving the protocols around communication of critical results would make a significant difference or be a service they are willing to pay extra for. The improvements they are looking for can be summarized in three categories (For details, see figure 4):

#### 1. Make it easier to get in contact with each other

Both radiologists and referring physicians state that the notification itself should be improved. Both would prefer to be notified/make the notification with a phone call. The second best option, according to the respondents, would be an extended alert in text messages and, as a third option, an e-mail. In addition, radiologists would like faster access to direct contact details for the referring physician (they currently lack correct contact information or have information to a nurse or administrator rather than the doctor in question).

### 2. Make it clearer in the report that these are critical results

Both radiologists and referring physicians would like to see visible alert notifications in the report. Five out of ten radiologists and four out of ten referring physicians say that this would make a significant difference or be a service they are willing to pay extra for.

# 3. Give easy access to the report, including images – preferably in 3D

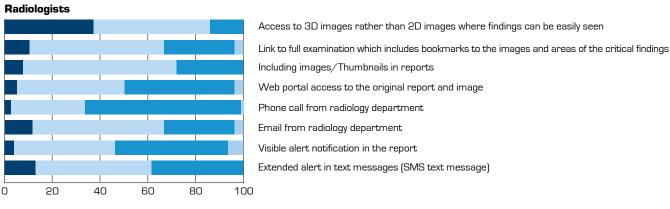
When it comes to improving communication concerning critical results, radiologists and referring physicians agree that web portal access to the original report is a key element. The report should include images/thumbnails or a link to the full examination – with bookmarks to the images and areas of the critical findings.

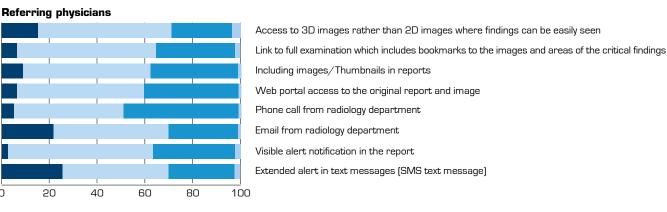
Some, although not as many, see a significant value in receiving access to 3D images rather than 2D images. Referring physicians are in general more positive than radiologists. Eight out of ten referring physicians say that it would be nice to have or make a significant difference. (An additional 4% of the respondents say that this is a service they would be willing to pay extra for.)

Figure 4. How to improve the communication of critical results

Nice to have

Would not make any difference

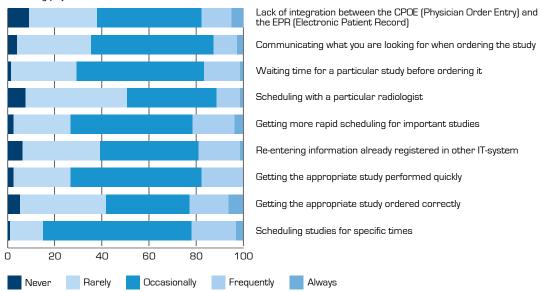




Would make significant difference I'm prepared to pay extra for it

Figure 5. Problems concerning ordering studies





#### Implement a portal for easier scheduling

One of the main issues referring physicians face concerns scheduling and, more specifically, their inability to schedule studies quickly enough and at specific times, as well as scheduling important studies more rapidly. Radiologists agree that being able to schedule important studies faster would make a significant difference. (See Figure 5)

These problems are likely explained by the fact that so many referring physicians lack access to a web scheduling system. When asked, only three out of ten radiologists stated that they give referring physicians access to web scheduling – the primary reason for this being that their current system does not support web scheduling. Both radiologists and referring physicians agree that access to web scheduling would have a positive impact on the cooperation between radiology and referring physicians.

The respondents were also asked whether they considered the inability to schedule with a particular radiologist or contact a qualified person to receive advice before ordering a study to be a problem. Referring physicians see this as less of a problem than the other steps of the process. Five out of ten say this is never or rarely a problem.

Related to the issue of not having an efficient web scheduling system is the lack of integration between different IT systems. 18% of the referring physicians state that the lack of integration between the CPOE and the EPR is very often or always a problem, and 19% say that re-entering information already registered in other IT systems is very often or always a problem.

# Make radiation dose information visible in both the request and report

The importance of visualizing dose levels from radiology examinations to enhance patient safety and meet new regulatory demands has become a hot topic in many countries. The survey shows that both radiologists and referring physicians see the clinical benefits of including this data both in the ordering process and in the report. The survey also indicated that patients have started requesting this information. One in five referring physicians find informing their patients about the approximate radiation dose for a requested study as a problem very often or always. However, according to radiologists referring physicians very rarely contacts them to receive dose information. Six out of ten radiologists are never asked for this information and another three out of ten are rarely asked. This indicates that both radiologists and referring physicians are aware of the importance of visualizing dose information, but that it is still not a requirement from patients or regulatory bodies and therefore not a reason to contact each other.

- » 25% of referring physicians think that an indication of how much radiation the patient will receive based on the requested procedure would make a significant difference to the process of ordering studies. 53% think it would be nice to have, and 22% feel it would not make any difference
- » 17% of radiologists believe that giving referring physicians an indication of how much radiation the patient will receive based on the requested study would make a significant difference in improving the process of ordering studies
- » 13% of radiologists believe that including radiation dose information in the report would make a significant difference
- » 18% of referring physicians believe that including radiation dose information in the report would make a significant difference in improving the communication concerning reports

#### ABOUT SECTRA

With more than 20 years of innovation and 1,400 installations worldwide, Sectra is a world-leading provider of IT systems and services for radiology, women's health, orthopaedics and rheumatology. Based on close cooperation with our customers and research centers, Sectra delivers solutions that provide tangible gains in productivity — today and well into the future.

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