FACING THE CHALLENGES AHEAD IN DIAGNOSTIC IMAGING
A Survey of Decision-Making Stakeholders
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A SURVEY OF DECISION-MAKING STAKEHOLDERS

Against the backdrop of uncertainty in healthcare reform, reduced reimbursement rates and market consolidation, the practice of medical imaging is challenged with adding greater value to the care cycle and not becoming ancillary to it. In contrast to the last decade of growth in spending and utilization, radiology professionals today face a vastly different reality as they juggle an array of imperatives with diminishing resources.

Given this complex environment, M*Modal commissioned a survey of imaging stakeholders and decision makers with the objective of identifying their top concerns and needs. Our goal was to learn more about their business challenges, provide a guide to the most common priorities and offer insights into the concerns of different stakeholders. The data is revealing, seeing respondents align on some issues and part company on others. As one respondent remarks, “It’s going to be a very interesting ride but I am confident my facility is going to do well!”

“This is an uncertain time and we should be prepared for the uncertainty.” Administrative Director of Radiology

This survey seeks, in a small way, to contribute towards that preparedness by better understanding the priorities and pain points of decision-making radiology stakeholders.
METHODOLOGY

Responses were collected in June 2013 and analyzed in July 2013. All responses have come through voluntary interviews with no benefits attached. The questions asked are the same, with the same choice of answers, except for an optional opportunity for additional comment.

RESPONDENTS AT A GLANCE

The respondents come from organizations of different sizes, ranging from 250 beds to 800+ beds. The greatest number of responses have come from those with hospitals in the 250 to 350-beds range. The majority of the respondents work for larger hospital systems (68%)—either part of a health system or multi-hospital system – while a third (32%) come from smaller community hospitals. All regions of the U.S. are equally represented.

<table>
<thead>
<tr>
<th>TYPE OF ORGANIZATION</th>
<th>FACILITY SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>42% - Part of a health system</td>
<td>8%  - 250-350 Beds</td>
</tr>
<tr>
<td>30% - Community hospital</td>
<td>26% - 351-500 Beds</td>
</tr>
<tr>
<td>26% - Multi-hospital</td>
<td>28% - 501-800 Beds</td>
</tr>
<tr>
<td>1% - Part of an IDN</td>
<td>38% - 800+ Beds</td>
</tr>
</tbody>
</table>
Key findings and trends have emerged from the data.

The stakeholders in diagnostic imaging are aligned in naming workflow and productivity as their number one priority.

There is a difference of opinion between Radiology Chairs and Directors when it comes to prioritizing the commoditization of imaging and growing competition.

Only 22% of Directors are concerned with commoditization and competition as compared to 56% of Radiology Chairs.

Everyone agrees at all levels about importance of leveraging data by accessing information in unstructured data formats.

Nearly half of the respondents feel the income lost due to incomplete documentation is 5% to 10% of revenue.

There is room for improvement when it comes to final report turnaround times*. However, the most prevalent turnaround time seems to be 1 to 4 hours.

*Vary substantially from one organization to another
Q: Please prioritize the following issues in terms of importance and impact on your business, where 5 is most important/impactful and 1 is least important/impactful.

A: 1. Reimbursement
   2. Workflow and productivity
   3. Compliance
   4. Competition—improving services
   5. Commoditization of radiology—adding demonstrable value to the care cycle
   6. Other

We asked survey respondents to identify one of the following as their top priority:

44% A: #2
30% A: #1
12% A: #3
7% A: #4
7% A: #5

“I believe it will be more important for radiology to both receive and share information from various departments as well as the EMR.”
When asked to prioritize the above five business concerns, 44% of those polled claim that workflow and productivity is the single-most impactful issue for meeting their organizational goals.

Over and above resource challenges, reimbursement cuts have also forced imaging professionals to hone in on productivity. Nearly 30% say that reimbursement is their top priority. This indicates the extent to which radiology departments are concerned about new payment models that transition from volume-based care to a value-based approach and the reduction in overall reimbursement rates.

Clearly, imaging professionals are challenged with improving workflow and productivity to reduce some of the pressures of declining reimbursements and increasing compliance requirements. To enhance productivity, it is necessary to streamline the radiology workflow and improve patient throughput. This would suggest that giving radiologists productivity-enhancing tools to address more than just basic reporting needs from within their natural workflow would alleviate the number one concern of the majority of respondents of this survey. Whether expressed through the need for improving workflow and productivity or reimbursement, concerns about financial survival seem to be the top priority of nearly three out of four respondents.

“Workflow efficiencies and technology will drive the future success of imaging departments. The expectation of doing more with less is a challenge…the increase in quality measures and documentation to meet regulatory requirements and provide an improved medical record take away from direct patient care.”

Director of Imaging Services
WHAT IS MISSION CRITICAL?

The answer depends on who you ask. Taking a deeper dive into the data reveals an interesting divide between the top priority of Radiology Chairs/Chiefs and Directors of Radiology (or parallel positions). While the majority of Radiology Chairs and Directors (50% and 42% respectively) agree that workflow and productivity are the most pressing concern, they are not as aligned on the commoditization of radiology and the need to add value to the care cycle. More than twice as many Radiology Chairs vote this to the top concern spot than do Directors (13% versus 6% respectively).

<table>
<thead>
<tr>
<th>#1 Priority</th>
<th>Chiefs/Chairs</th>
<th>Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workflow &amp; Productivity</td>
<td>50%</td>
<td>42%</td>
</tr>
<tr>
<td>Commoditization</td>
<td>13%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Speaking at RSNA 2012, Dr. Paul Chang, Professor and Vice Chair of Radiology Informatics at the University of Chicago, said that in order to recapture their role as the “doctor’s doctor”, radiologists “have to be perceived as irreplaceable in this aligned model and have to provide evidence ... and demonstrate to that aligned enterprise that we truly add value. In other words, we need to be a differentiable value innovator.”

AGREE TO DISAGREE?

The difference of opinion between Radiology Chairs and Directors with regard to the commoditization continues to be seen in their choice of the number 2 priority. One in 4 Radiology Chairs polled feel that commoditization is the second-most important issue, but only 3% of Directors polled concur. While 31% of Radiology Chiefs feel that competition takes the second place, only 18% of Directors polled agree.

<table>
<thead>
<tr>
<th>#2 Priority</th>
<th>Chiefs/Chairs</th>
<th>Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Commoditization</td>
<td>25%</td>
<td>3%</td>
</tr>
<tr>
<td>Reimbursement</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>Compliance</td>
<td>19%</td>
<td>22%</td>
</tr>
</tbody>
</table>

The two stakeholders are more aligned when it comes to reimbursement: 26% of Directors and 19% of Radiology Chairs polled pick it as their number 2 priority. Also, they are more in sync on compliance taking the number 2 spot: 19% of Chairs and 22% of Directors.
THE KEY TO THE CITY: DATA IS THE SOLUTION

As one respondent, a Director of Radiology, succinctly sums up, it is “Data, data, data!” To alleviate some of the concerns like commoditization, the expanded focus of imaging informatics needs to include factors such as quality, consideration of prior studies and leveraging information to improve outcomes. Moreover, with growing concerns over Meaningful Use attestation that requires discrete data capture, healthcare organizations need the ability to extract specific information from medical records.

Considering that the bulk of clinical information is in the form of narrative text in an unstructured format, we asked our respondents how important it is to them to access this information. Small wonder then that 88% of respondents affirm the importance of accessing the information buried within their unstructured reports.

It is relevant to note that the ability to access and utilize this clinical information ties in with the top priorities identified earlier. It significantly improves workflow efficiencies and helps succeed in a reimbursement system that better reflects the value rather than volume of radiology interpretations.

**IMPORTANCE OF ACCESSING UNSTRUCTURED DATA**

- Very important (46%)
- Important (42%)
- Not very important (10%)
- Not important at all (2%)

Q: How important is to access clinical information that is in your systems in the form of narrative text or unstructured data?
REVENUE LOSS: GREATER THAN WE THOUGHT

Nearly half the respondents (49%) report the loss of income due to incomplete documentation to be 5 to 10% of revenue. This expands on and exceeds the findings of a Journal of the American College of Radiology (JACR) study which concluded: “Incomplete physician documentation in abdominal ultrasound reports is common (9.3%-20.2% of cases) and results in 2.5% to 5.5% in lost professional income. Structured reporting may improve documentation and mitigate lost revenue.”

Our findings suggest that the impression of the problem is more widespread and almost twice as impactful. It is interesting that despite reimbursement being a top priority, radiologists and administrators alike have the perception that they are leaving much-needed income on the table. Addressing the need for complete and encoded clinical documentation will not only deliver immediate improvements in revenue, but will also stave off commoditization by enhancing the value of the report and the radiologist.

Q: What percentage of your revenue do you think is lost due to incomplete documentation that leads to under-coding, under-billing, etc.

REVENUE LOSS DUE TO INCOMPLETE DOCUMENTATION

- 5% to 10% (49%)
- 10% to 20% (25%)
- 5% or less (24%)
- Other (2%)
TIMELY REPORTS: ROOM FOR IMPROVEMENT

When asked about the average turnaround time for final reports, nearly 40% of respondent pick 1 to 4 hours while nearly 30% say the number is 5 to 12 hours. Only 20% of respondents are turning around reports in less than one hour while, at the other end of the spectrum, 12% are taking 12+ hours. This indicates that turnaround times vary significantly by hospital, and that 1 to 4 hours is the most prevalent.

![Pie chart showing turnaround times](image)

When final reports take that long to turn around, diagnoses are delayed and patient outcomes suffer. According to a JACR study titled Improving the Quality of Radiology Reporting: A Physician Survey to Define the Target, “The single greatest problem area in reporting is lack of timeliness.” This suggests that the use of speech recognition and other technologies would help these facilities to deliver reports faster, reduce transcription costs, enhance speed of care and improve value. Such enabling technologies can help radiologists significantly improve the service level they provide to referring physicians in an increasingly competitive market. Case Western Reserve University conducted a survey of the members of the Society of Chairs of Academic Radiology Departments (SCARD) on the use of dashboards and found that, with regard to access indicators, “60% were interested in the time from preliminary findings to report finalization and sign-off.” This indicates that turnaround time is a popular and important metric. If the final reports are timely and encoded, it further improves efficiencies and mitigates revenue loss.

Q: What is the average turnaround time for final reports for your entire mix of patients on any given day (not subspecialty reading rooms)?
To summarize the salient findings of the M*Modal survey of imaging stakeholders:

- The **number 1 priority** for the majority of stakeholders is **workflow and productivity** with reimbursement as the runner up for the top spot.
- **88%** of respondents feel it is very important or **important to access** clinical information from unstructured, **narrative reports**.
- Nearly half the respondents (49%) believe the loss of income due to incomplete documentation is **5 to 10% of revenue**.
- Only **20%** of respondents are turning around **final reports in less than 1 hour**.
- There is a **difference of opinion** between Radiology **Chairs** and **Directors**: the former are more concerned about commoditization and competition than the latter.

“Continue to move toward patient-centered radiology and get radiologists more involved in the operational/business side….quality and workflow efficiencies revolution!”

**BIBLIOGRAPHY**