Medical Imaging Confidence Index (MICI)

4th Quarter 2012 outlook (October – December)
2012 Year analysis

Created for AHRA- October 2012

Courtesy Of:

The Nation’s Leading Panel of Imaging Directors
Through dialog and collaboration, today’s top imaging administrators share their knowledge to shape the future of medical imaging technology and solutions.
MICI Index Overview

Why was MICI created?

✓ The MarkeTech Group and AHRA collaborated on the creation of MICI based on the belief that measuring the confidence of US medical imaging administrators on a regular basis would provide a valuable index for those having an interest in this industry.

✓ The MICI panel consists of a select group of imagePRO panel members from around the US representing different hospital sizes and geographic locations to capture a true “industry outlook”: how imaging administrators see the future of medical imaging in regard to revenues, costs, purchasing, and growth.

✓ This exciting initiative captures the “mood” of imaging administrators on a quarterly basis regarding the state of medical imaging in the US. It also provides a unique statistical index that is likely to attract a lot of attention from those following this industry.

What is imagePRO and why is it important?

✓ imagePRO was created by The MarkeTech Group to provide a professional community for imaging administrators to participate in studies aimed at advancing the development of medical imaging technology.

✓ The imagePRO panel is a true community of industry professionals and is the leading opt-in panel of this industry. Members are subjected to strict enrollment requirements to represent the voice of their peers and to be part of a group of professionals whose knowledge and input is important.
143 imaging directors/managers of hospitals completed the 2-minute Web survey regarding their perception of medical imaging trends for the fourth quarter of 2012.

Scores measure the level of confidence, and range between 0 to 200. The score interpretation follows:
- Below 50 is extremely low confidence
- 50 to 69 is very low confidence
- 70 to 89 is low confidence
- 90 to 110 reflect an ambivalent score (Neutral)
- 111 to 130 is high confidence
- 131 to 150 is very high confidence
- Anything above 150 is extremely high confidence

Hospital bed size
- Under 100 beds: 46%
- 100 - 299 beds: 35%
- 300 or more beds: 19%
**Index Methodology**

**Results** are reflective of national trends because of the manner in which participants were invited to participate.

- Participants were recruited by region and number of beds to reflect known AHA incidence.

- Once the final counts were confirmed there was some statistical adjustment—weighting—to ensure the index reflects the US hospital imaging market. This type of adjustment is common when estimating overall market share, trends, and attitudes.

**Recruitment** accounts for about 90% of correct hospitals and regions to reflect the US hospital market.

- While relatively minor in magnitude, the weighting accounts for the final 10% to refine the estimates and ensure they represent the US hospital market.

- This refinement is necessary to create an index that truly represents how radiology departments view the economic outlook for the current quarter and will ensure that subsequent MICI results are valid.
### Medical Imaging Confidence Index (MICI) October to December 2012 results

#### Fourth quarter 2012 results:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Score Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will grow monthly in diagnostic and interventional radiology</td>
<td>107</td>
<td>Neutral</td>
</tr>
<tr>
<td><strong>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</strong></td>
<td>73</td>
<td>Low confidence</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>125</td>
<td>High confidence</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>89</td>
<td>Neutral</td>
</tr>
<tr>
<td><strong>Will maintain/grow as a profit center</strong></td>
<td>123</td>
<td>High confidence</td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td>102</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
Hospital bed size differences:
Hospitals with 300 or more beds are more confident in growth as a profit center and growth of diagnostic and interventional radiology than hospitals with fewer than 100 beds. Hospitals other than those with 100 to 299 beds have higher confidence that internal operating and staff costs will remain constant.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Score Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 100 beds</td>
</tr>
<tr>
<td>Will grow monthly in diagnostic and interventional radiology</td>
<td>96</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</td>
<td>78</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>134</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>84</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>111</td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td>99</td>
</tr>
</tbody>
</table>
Regional differences:
Imaging directors in East North Central region have higher confidence about growing as a profit center than those in the Mountain region.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Score Mean</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Mid-Atlantic</td>
</tr>
<tr>
<td>Will grow monthly in diagnostic and interventional radiology</td>
<td>115</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</td>
<td>85</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>132</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>96</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>133</td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td><strong>111</strong></td>
</tr>
</tbody>
</table>
Summary

- Hospitals with 300 or more beds are more confident in growth of diagnostic and interventional radiology than hospitals with under 100 beds.

- Hospitals under 100 beds and those with 300 or more beds have higher confidence than hospitals with 100 to 299 beds that internal operating and staff costs will remain constant.

- Hospitals with 300 or more beds have higher confidence in growth as a profit center than hospitals under 100 beds.

- Imaging directors in East North Central region have higher confidence about growing as a profit center than those on the Mountain region.
Results are now shown for Q4 2011 through Q4 2012

- Comparisons are presented to show any trending of the data over a year period.

Analyses are based on between group analysis of variance (ANOVA) where participant’s scores are compared over time to determine if changes occur.
No statistically significant differences in confidence for any of the MICI scores between the 3rd quarter 2012 and 4th quarter 2012.

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<thead>
<tr>
<th>Topic</th>
<th>Score Mean</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Q3 2012</td>
</tr>
<tr>
<td>Will grow monthly in diagnostic and interventional radiology</td>
<td>107</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and</td>
<td>67</td>
</tr>
<tr>
<td>interventional imaging</td>
<td></td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>128</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>89</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>120</td>
</tr>
<tr>
<td><strong>Composite score across all areas</strong></td>
<td><strong>101</strong></td>
</tr>
</tbody>
</table>

One year analysis review
Q4-2011 through Q4-2012
### Trending

Internal operating/staff costs will remain constant have lower confidence the 4th quarter 2012 compared to the 4th quarter 2010.

- Will grow monthly in diagnostic and interventional radiology
- Receive adequate reimbursement from Medicare for diagnostic and interventional imaging
- Internal operating and staff costs will remain constant
- Will have access to capital for imaging equipment and IT needs
- Will maintain/grow as a profit center
- Composite score across all areas

Margin of error: ±8 percentage points
For details on MICI scores by bed size – please click on underlined links, or go to Appendix B.
**Summary**

- MICI scores between 3rd quarter 2012 and 4th quarter 2012 have not changed and are not statistically significant.

- Internal operating/staff costs will remain constant has lower confidence on the 4th quarter 2012 compared to the 4th quarter 2010.

- Confidence that costs will remain constant is higher in Q4 2012 than Q3 2012 for hospitals with 300 or more beds.
Medical Imaging Confidence Index (MICI)
October to December 2012
Study and report have been conducted and brought to you courtesy of:

THE MARKETECH GROUP

ahra
the association for medical imaging management
APPENDIX A - Questionnaire

Grow monthly in diagnostic and interventional imaging
Over the next three months, I am very optimistic that our department:

S1Q1. will grow monthly study volumes in Diagnostic imaging modalities (X-ray, Ultrasound, MRI, CT and NM).

S1Q2. will grow monthly study volumes in Interventional imaging modalities (biopsy, angio cath lab, etc.).

Receive adequate reimbursement from Medicare for diagnostic and interventional imaging
Over the next three months, I am very optimistic that our department:

S1Q3. will receive adequate reimbursement from Medicare for Diagnostic imaging studies.

S1Q4. will receive adequate reimbursement from Medicare for Interventional imaging procedures.

Internal operating and staff costs will remain constant
Over the next three months, I am very optimistic that the imaging department:

S2Q1. internal operating expenses (not including staff costs) will remain constant.

S2Q2. internal staff costs will remain constant.
APPENDIX A - Questionnaire

**Will have access to capital for imaging equipment and IT needs**
Over the next three months, I am very optimistic that our department:

**S3Q1.** will have access to capital/credit to fund investments in new imaging equipment and the costs associated with Imaging capital projects (e.g. siting & construction costs).

**S3Q2.** will have access to capital/credit to fund investments in areas outside of imaging equipment, such as PACS, RIS, or other imaging-related IT needs.

**S3Q3.** will have access to capital/credit to fund investment in imaging facility expansion, if desired.

**Will grow as a profit center**
Over the next three months, I am very optimistic that our department:

**S4Q1.** will continue to maintain/grow Diagnostic imaging services as a profit center.

**S4Q2.** will continue to maintain/grow Interventional imaging services as a profit center.
Appendix:
October to December 2012 results

APPENDIX B

Graphs are presented by number of beds to show MICI for all quarters and semesters.

Interpretation is by number of beds—any changes across quarters are identified as being significant.

If no changes are identified then differences that might appear are due to random fluctuation in responses over time and should not be considered real.
Under 100 beds: No changes in MICI between the 4th quarter 2012 and the 3rd quarter 2012.
100 to 299 beds: No changes in MICI between the 4th quarter 2012 and the 3rd quarter 2012.
Appendix:
October to December 2012 results

300 or more beds: Internal operating/staff costs will remain constant has higher confidence on the 4th quarter 2012 compared to the 3rd quarter 2012.

Hospital bed size: 300 or more beds

- Will grow monthly in diagnostic and interventional radiology
- Receive adequate reimbursement from Medicare for diagnostic and interventional imaging
- Internal operating and staff costs will remain constant
- Will have access to capital for imaging equipment and IT needs
- Will maintain/grow as a profit center
- Composite score across all areas
Appendix: October to December 2012 results

Will grow monthly in diagnostic and interventional radiology: Hospital bed size

- Under 100 beds
- 100 to 299 beds
- 300 or more beds

Back to Hospital bed size summary
Appendix: October to December 2012 results

Receive adequate reimbursement from Medicare for diagnostic and interventional imaging: Hospital bed size

Quarter/Semester

- Under 100 beds
- 100 to 299 beds
- 300 or more beds

Back to Hospital bed size summary
Appendix: October to December 2012 results

Internal operating and staff costs will remain constant: Hospital bed size

Quarter/Semester

Under 100 beds 100 to 299 beds 300 or more beds

1st quarter 2nd quarter 3rd quarter 4th quarter 1st semester 3rd quarter 4th quarter

October 2012 results

Back to Hospital bed size summary
Appendix: October to December 2012 results

Will have access to capital for imaging equipment and IT needs: Hospital bed size

Back to Hospital bed size summary
Appendix: October to December 2012 results

Will maintain/grow as a profit center: Hospital bed size

Quarter/Semester
Under 100 beds 100 to 299 beds 300 or more beds

October to December 2012 results

Back to Hospital bed size summary