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 semiannual 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.
160 imaging directors/managers of hospitals completed the 2-minute Web survey regarding their perception of medical imaging trends for the first semester (6 months) 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%
**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 semester and will ensure that subsequent MICI results are valid.
### First semester 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>112</td>
<td>High confidence</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</td>
<td>63</td>
<td>Very low confidence</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>123</td>
<td>High confidence</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>99</td>
<td>Neutral</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>128</td>
<td>High confidence</td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td>104</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
Hospital bed size differences:
While none of the differences are statistically significant, hospitals under 100 beds have high confidence that internal operating and staff costs will remain constant. Larger hospitals have very high confidence in growth as a profit center.

<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>106</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</td>
<td>63</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td><strong>133</strong></td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>97</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td><strong>121</strong></td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td><strong>103</strong></td>
</tr>
</tbody>
</table>
Regional differences:

While none of the differences are statistically significant, imaging directors in South Atlantic, East North Central, West North Central, and East South Central regions have very high confidence about growing as a profit center. South Atlantic and East South Central regions have very high confidence that internal operating and staff costs will remain constant.

Mid-Atlantic region have extremely low confidence about receiving adequate reimbursement.

<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>118</td>
</tr>
<tr>
<td>Receive adequate reimbursement from Medicare for diagnostic and interventional imaging</td>
<td>47</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>108</td>
</tr>
<tr>
<td>Will have access to capital for imaging equipment and IT needs</td>
<td>94</td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>120</td>
</tr>
<tr>
<td>Composite score across all areas</td>
<td>97</td>
</tr>
</tbody>
</table>

Medical Imaging Confidence Index (MICI)
January to June 2012 results
Summary

- Hospitals under 100 beds have very high confidence that internal operating and staff costs will remain constant.
- Hospitals with 100 or more beds have very high confidence in growing as a profit center.
- Imaging directors in South Atlantic, East North Central, West North Central, and East South Central regions have very high confidence about growing as a profit center.
- South Atlantic and East South Central regions have very high confidence that internal operating and staff costs will remain constant.
- Receiving adequate reimbursement: While none of these apparent differences are significant, Mid-Atlantic region have extremely low confidence; while the West South Central and Mountain regions have low confidence. All other regions have very low confidence.
**Results** are now shown for Q4 2010 through Semester 1 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.
In the 1st semester 2012 respondents are more confident they will have access to capital for imaging equipment than the 4th quarter 2011.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Score Mean</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Q4 2011</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 interventional imaging</td>
<td>62</td>
</tr>
<tr>
<td>Internal operating and staff costs will remain constant</td>
<td>129</td>
</tr>
<tr>
<td><strong>Will have access to capital for imaging equipment and IT needs</strong></td>
<td><strong>86</strong></td>
</tr>
<tr>
<td>Will maintain/grow as a profit center</td>
<td>123</td>
</tr>
<tr>
<td><strong>Composite score across all areas</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Trending

Growth in diagnostic and interventional radiology have higher confidence the 1st semester 2012 compared to the 4th quarter 2010. Receiving adequate reimbursement and internal operating/staff costs will remain constant have lower confidence the 1st semester 2012 compared to the 4th quarter 2010.

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

For more information, click here.
Summary

- Respondents in the first semester of 2012 are more confident they will have access to capital for imaging equipment compared to those in the fourth quarter of 2011.

- Growth in diagnostic and interventional radiology have higher confidence the 1st semester 2012 compared to the 4th quarter 2010.

- Receiving adequate reimbursement and internal operating/staff costs will remain constant have lower confidence on the 1st semester 2012 compared to the 4th quarter 2010.
Medical Imaging Confidence Index (MICI)
January to June 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 six 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 six 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 six 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 six 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 six 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: January to June 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: There is higher confidence in having access to capital for imaging equipment on the first semester 2012 compared to the fourth quarter 2011.
Appendix: January to June 2012 results

100 to 299 beds: No changes in MICI between the 1st semester 2012 and the 4th quarter 2011.
Appendix: January to June 2012 results

300 or more beds: No changes in MICI between the 1st semester 2012 and the 4th quarter 2011.

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: January to June 2012 results

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

Average MICI Scores

Quarter/Semester

Under 100 beds 100 to 299 beds 300 or more beds

Back to Hospital bed size summary
Appendix: January to June 2012 results

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

- Under 100 beds
- 100 to 299 beds
- 300 or more beds
Internal operating and staff costs will remain constant: Hospital bed size

Quarter/Semester

<table>
<thead>
<tr>
<th></th>
<th>Under 100 beds</th>
<th>100 to 299 beds</th>
<th>300 or more beds</th>
</tr>
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<tbody>
<tr>
<td>1st quarter</td>
<td></td>
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<td>2nd quarter</td>
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<td>4th quarter</td>
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<tr>
<td>1st semester</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Appendix:
January to June 2012 results

Average MICI Scores

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

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

Back to Hospital bed size summary
Appendix: January to June 2012 results

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

Back to Hospital bed size summary