Non-Physician Radiology Providers (NPRPs) Landscape Survey

Topline Results
Member Town Hall - November 4, 2021

Environmental Intelligence
Office of Strategic Planning & Business Excellence
Objectives & Questionnaire Development

- **Inception:** HR Commission (early 2021)
  - Understand the landscape of NPRPs in Radiology
  - Development Team → including members and Environmental Intel (OSPBE)
  - Questionnaire to assess incidence and perceptions of NPRPs
  - MARCA familiarity and perceptions

- **Final Draft**
  - Included Survey/Questionnaire and invitation to participate
  - Finalized/Approved by September 12
  - Survey length ~ 6 minutes
Methodology

- **Survey recipients:**
  - Qualified respondents were screened to be full member physicians, inclusive of residents/fellows.
  - Survey was sent to a census roster (all who could qualify); balancing the ending sample to membership population, if required, to be done following data collection.

- **Data collection (Sep 14 - 30):**
  - Members who did not receive the survey could email survey@acr.org.
  - Of the 125 emails received (< 0.50% of total surveys sent), 70% were eligible and were resent the survey.
    - The remainder: had opted-out of ACR, were not members, invitation hit their spam folder, outdated emails in their ACR profile.

- **Responses:**
  - 4207 completed interviews; completion-based response rate = 16%
  - ACR’s typical completion-based response rate = 8-9%
Methodology - Sample Balancing

- Completed sample observations: some cohorts and demographics not proportional with the population statistics of our members (examples below)
  - Net: our ending ‘sample’ was not representative of membership: did not reflect the proportions of members and membership. Therefore, balancing of cohorts was necessary to achieve accurate representation of the Total

- Sample Balancing - completed Oct 12

### Tenure - Practice

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Unweighted Population Distribution</th>
<th>Member Population Distribution</th>
<th>Index Unwgt::Wgt</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 years. I am still in training</td>
<td>19% 792</td>
<td>26% 1107</td>
<td>71</td>
</tr>
<tr>
<td>1 to 4 years</td>
<td>15% 656</td>
<td>4% 183</td>
<td>350</td>
</tr>
<tr>
<td>5 to 9 years</td>
<td>15% 624</td>
<td>7% 305</td>
<td>203</td>
</tr>
<tr>
<td>10 to 15 years</td>
<td>15% 652</td>
<td>12% 519</td>
<td>124</td>
</tr>
<tr>
<td>16 to 19 years</td>
<td>8% 334</td>
<td>10% 398</td>
<td>82</td>
</tr>
<tr>
<td>20 to 25 years</td>
<td>11% 462</td>
<td>13% 556</td>
<td>82</td>
</tr>
<tr>
<td>26 to 29 years</td>
<td>7% 304</td>
<td>9% 376</td>
<td>80</td>
</tr>
<tr>
<td>30 or more years</td>
<td>10% 439</td>
<td>18% 763</td>
<td>57</td>
</tr>
</tbody>
</table>

### Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Unweighted Population Distribution</th>
<th>Member Population Distribution</th>
<th>Index Unwgt::Wgt</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>21.2% 903</td>
<td>22.0% 925</td>
<td>96</td>
</tr>
<tr>
<td>35-44</td>
<td>30.4% 1294</td>
<td>18.9% 796</td>
<td>161</td>
</tr>
<tr>
<td>45-54</td>
<td>22.4% 953</td>
<td>22.1% 928</td>
<td>101</td>
</tr>
<tr>
<td>55-64</td>
<td>17.3% 736</td>
<td>22.9% 963</td>
<td>75</td>
</tr>
<tr>
<td>65 or older</td>
<td>7.1% 301</td>
<td>12.1% 509</td>
<td>58</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1.8% 76</td>
<td>1.1% 86</td>
<td>162</td>
</tr>
</tbody>
</table>

### Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Unweighted Population Distribution</th>
<th>Member Population Distribution</th>
<th>Index Unwgt::Wgt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic Radiologist</td>
<td>68.5% 2919</td>
<td>63.9% 2690</td>
<td>107</td>
</tr>
<tr>
<td>Interventional Radiologist</td>
<td>10.9% 466</td>
<td>10.3% 433</td>
<td>106</td>
</tr>
<tr>
<td>Radiation Oncologist</td>
<td>1.2% 51</td>
<td>3.8% 161</td>
<td>32</td>
</tr>
<tr>
<td>Nuclear Medicine Physician or Nuclear Radiologist</td>
<td>0.9% 38</td>
<td>0.9% 40</td>
<td>99</td>
</tr>
<tr>
<td>Resident/Fellow</td>
<td>17.0% 726</td>
<td>19.3% 813</td>
<td>88</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1.5% 63</td>
<td>2% 71</td>
<td>87</td>
</tr>
</tbody>
</table>

Examples of observed skews in data
Non-Physician Radiology Provider (NPRP) Landscape

Familiarity, Experience with, Utilization

Attitudes
Familiarity: About six in ten (59%), overall, say they are extremely or very familiar with NPRPs

- Those with the highest levels of familiarity include:
  - IRs (81% extremely/very familiar)
  - Those in early or mid-career
  - Those in a national practice

- Relative lack of familiarity is noteworthy among:
  - Those in late-career
  - Those in a hospital or hospital system
  - Residents/Fellows

Question: How familiar are you with Non-Physician Radiology Providers (NPRPs)?
Base: Total n = 4207, DR = 2690, IR = 433, resident/fellow = 813, early career = 700, mid career = 919, late career = 1695, Academic practice = 1544, Private practice = 1363, national practice = 250, hosp/hosp sys = 681

1 = Significantly higher than Total Sample at the 95% confidence level
2 = Mid Career is defined in this study as those with 10-19 years in practice; Late Career is defined as those with 20 or more years in practice
Experience with both Physician Assistants (PAs) & Nurse Practitioners (NPs) is significantly higher than with Radiology Assistants (RAs)

- Current or past work with both PAs and NPs is significantly higher than with RAs
  - Two-thirds work currently with PAs or have worked with them in the past (41% and 25%, respectively)
  - Over half work or have worked with NPs (33% and 22%, respectively)
  - Only two in ten indicate that they have worked with RAs currently or in the past

- Six in ten indicate that they have not worked with RAs; half understand what they do, half are not very familiar with what RAs do

**Experience with NPRPs**

- **PAs**
  - 41% work currently with PAs
  - 25% have worked with PAs in the past

- **NPs**
  - 33% work currently with NPs
  - 22% have worked with NPs in the past

- **RAs**
  - 19% work currently with RAs
  - 19% have worked with RAs in the past

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*Question: From the choices below please indicate which statement best describes your knowledge and experience with NPRPs.*

*Base: Those familiar with NPRPs  n = 4076*

*Measures in RED are Significantly higher at the 95% confidence level*
Profile of those who have greater experience with RAs

There are several cohorts that indicate a significantly higher experience with RAs than the total sample overall. These include:

- Those in early career (22% work with RAs currently; 25% worked in past)
- Those in an academic practice (24% work with RAs currently)
- Those in a national practice (25% worked in past)
- Those in uniform services (31% worked with RAs in past)
- Residents/fellows (23% work with RAs currently*)
- Those in the Northeast (25% work with RAs currently)
- Those in the South or Mountain region (22% and 24% respectively have worked with RAs in the past)
- Those extremely/very familiar with MARCA (26% work with RAs currently)
- Those who support MARCA (42% work with RAs currently)

Question: From the choices below please indicate which statement best describes your knowledge and experience with NPRPs.
Base: Those familiar with NPRPs  n = 4076

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I work with these NPRPs Regularly</td>
<td>19%</td>
</tr>
<tr>
<td>I do not work with these NPRPs currently but have worked with these NPRPs in the past</td>
<td>19%</td>
</tr>
</tbody>
</table>

* Residents/Fellows demonstrate a certain amount of contradiction in their data. They tend to be relatively less familiar with NPRPs (see slide 6) and yet they indicate that they are more likely than the total sample to work with them currently

Measures in RED are Significantly higher than Total Sample at the 95% confidence level
Profile of those who have less relative experience with RAs

- Those who are significantly more likely than the total sample to say they have never worked with RAs but they do have a good understanding of what they do include:
  - Practice leaders (33%)
  - Those who do not utilize NPRPS (38%)
  - Those who do not utilize RAs (37%)
  - Concerned with the future scope of RAs (33%)
  - Extremely/Very familiar with MARCA (42%)
  - Those Negative on MARCA (44%)

- Those who indicate a significantly more likely than the total sample to say they have never worked with RAs and they are not that familiar with them include:
  - Those who are not practice leaders (33%)
  - Those who do not utilize NPRPS (38%)
  - Those who do not utilize RAs (38%)
  - Those not very familiar or not at all familiar with MARCA (40% and 56%, respectively)
  - Those in the Midwest region (34%) or in the West (35%)
Over half (57%) utilize NPRPs in their practice

- Those who are significantly¹ more likely than the total sample to utilize NPRPs include:
  - IRs (73%)
  - Academic practice (68%)
  - National practice (64%)
  - Northeast region (63%)
  - Those who are not very concerned about the future scope of RAs (71%)
  - Those extremely/very familiar with MARCA (65%)
  - Those who support or are neutral about MARCA (84% and 69%, respectively)

- Those who are less likely than the total to utilize NPRPs include:
  - DRs (55%), Those who are Late career (54%), those in a hospital setting (51%), those in Uniform (18%), and women (54%)

Question:. Does your current place of employment utilize NPRPs in its radiology practice?
Base: Those familiar with NPRPs  n = 4076

¹ = Significantly higher than Total Sample at the 95% confidence level
PAs prevalent; NPs are commonplace; Four in ten of Respondents’ Practices utilize RAs

Questions: You have indicated that your current place of employment utilizes NPRPs in its radiology practice. From the list below please indicate which NPRPs your practice employs. Please select all that apply. AND Please indicate how many of each type of NPRP your radiology practice employs. If you are unsure please provide your best estimate.

Base: Those who utilize NPRPs n = 2329

Overall Incidence among Total\(^4\) | Average # per group
--- | ---
PAs (Physician Assistants or Physician Associates) | 75% | 43%\(^4\) | 5.23
NPs (Nurse Practitioners) | 53% | 30% | 4.52
RAs (Radiologist Assistants, including Registered Radiologist Assistants and Radiology Practitioner Assistants) | 40% | 23% | 4.12

\(^4\) = Total incidence calculated by multiplying overall incidence (57%) by the incidence among those who have NPRPS (e.g., 0.57*0.75)
**RA utilization highest among:** DRs, those in Northeast, in Academic practice, not concerned with future scope of RAs, and those who support MARCA

- **PAs and/or NPs** more likely to be utilized by those in training or YPS, those who do not currently use RAs but who have concern about the future scope of RAs

**Table:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>75%</td>
</tr>
<tr>
<td><strong>do not utilize RAs</strong></td>
<td>84%</td>
</tr>
<tr>
<td><strong>IR</strong></td>
<td>80%</td>
</tr>
<tr>
<td><strong>Time in Practice: 1-9 years</strong></td>
<td>78%</td>
</tr>
<tr>
<td><strong>Concerned with Future Scope of RAs</strong></td>
<td>77%</td>
</tr>
</tbody>
</table>

**Profile: Those significantly¹ more likely than the Total to utilize PAs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>53%</td>
</tr>
<tr>
<td><strong>IR</strong></td>
<td>68%</td>
</tr>
<tr>
<td><strong>do not utilize RAs</strong></td>
<td>62%</td>
</tr>
<tr>
<td>** Regions - Midwest**</td>
<td>59%</td>
</tr>
<tr>
<td><strong>Exterminately/Familiar w/ MARCA</strong></td>
<td>58%</td>
</tr>
<tr>
<td><strong>Concerned with Future Scope of RAs</strong></td>
<td>55%</td>
</tr>
</tbody>
</table>

**Profile: Those significantly¹ more likely than the Total to utilize NPs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>40%</td>
</tr>
<tr>
<td><strong>Support MARCA</strong></td>
<td>55%</td>
</tr>
<tr>
<td><strong>Not very Concerned - Future Scope of RAs</strong></td>
<td>52%</td>
</tr>
<tr>
<td><strong>Regions - Northeast</strong></td>
<td>46%</td>
</tr>
<tr>
<td><strong>Exterminately/Familiar w/ MARCA</strong></td>
<td>44%</td>
</tr>
<tr>
<td><strong>Practice Type: Academic</strong></td>
<td>42%</td>
</tr>
<tr>
<td><strong>DR</strong></td>
<td>42%</td>
</tr>
</tbody>
</table>

**Profile: Those significantly¹ more likely than the Total to utilize RAs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>0%</td>
</tr>
</tbody>
</table>

**Question:** You have indicated that your current place of employment utilizes NPRPs in its radiology practice. From the list below please indicate which NPRPs your practice employs.

- **Base:** Those who utilize NPRPs  n = 2329, DR = 1448, IRs = 314, Res/fellow = 467, YPS = 406, Academic = 1011 Northeast = 627, Midwest = 459, do not utilize RA-925, concern with future scope of RA-1700, no concern with future scope of RA = 630, Those positive to MARCA = 360

¹ = Significantly higher than Total Sample at the 95% confidence level
Members agree most strongly that the use of NPRPs is a practice-level decision, and NPRPs are a threat to the quality of patient care

- About 4 in 10 (43%) members agreed that they are **opposed to having any NPRPs in the practice of radiology**
- Members are polarized about **NPRPs playing an important role**, as relatively equal proportions agree, disagree, or are on the fence

**Attitudes about NPRPS**

<table>
<thead>
<tr>
<th>Agree/Disagree Statements</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPRPs are a threat to the quality of patient care in radiology</td>
<td>13%</td>
<td>14%</td>
<td>17%</td>
<td>22%</td>
<td>33%</td>
</tr>
<tr>
<td>The use of NPRPs is a practice-level decision</td>
<td>13%</td>
<td>13%</td>
<td>12%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>I am opposed to having any NPRPs in the practice of radiology</td>
<td>21%</td>
<td>21%</td>
<td>14%</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>NPRPs play an important role in the practice of radiology</td>
<td>21%</td>
<td>18%</td>
<td>21%</td>
<td>23%</td>
<td>17%</td>
</tr>
</tbody>
</table>

**Question:** Below you will see a series of statements regarding Non-Physician Radiology Providers (NPRP) in radiology practice, please indicate the degree to which you agree or disagree with each. **Base:** n = 4005
Profile of those who are more likely than the Total sample to agree that the Use of NPRPs is a practice level decision

- Those who are significantly\(^1\) more likely to think the use of NPRPs is a practice-level decision include:
  - Those neutral or positive toward MARCA (and also those who are not familiar with the legislation)
  - Those who currently utilize NPRPs and/or RAs
  - Interventional Radiologists
  - Mid- or late career members
  - Those in a private or national practice
  - Practice Leaders
  - Men
  - Those residing in the South or Northeast

Question: Below you will see a series of statements regarding Non-Physician Radiology Practitioners (NPRP) in radiology practice, please indicate the degree to which you agree or disagree with each

Base: total n = 4005, IR = 417, mid career = 886, late career = 1612, natl practice = 243, private practice = 1307, Practice leader = 1851, male = 2827, Utilize NPRPs = 2329, Utilize RAs = 926, not very/not at all familiar = 989/721, neutral/support MARCA = 493/427, South = 1322, NE = 974

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
Profile of those who are more likely than the Total sample to agree that **NPRPs play an important role in the practice of radiology**

Those who are significantly¹ more likely to think that NPRPs play an important role in the practice of radiology include:

- Those support MARCA
- Interventional Radiologists
- Mid- or late career members
- Those in a private or national practice
- Practice Leaders
- Men
- Those who currently utilize NPRPs and/or RAs
- Those who are not concerned with the future scope of RAs

Question: Below you will see a series of statements regarding Non-Physician Radiology Providers (NPRP) in radiology practice, please indicate the degree to which you agree or disagree with each.

Base: total n = 4005, IR = 417, mid career =886, late career =1612, natl practice=243, private practice =1307, Practice leader =1851, male=2827, Utilize NPRPs =2329, Utilize RAs =926, support MARCA = 493, neutral on MARCA =427, those not concerned with RA future scope = 882

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¹ = Significantly higher than Total Sample at the 95% confidence level
Profile of those who are more likely than the Total sample to agree that the **NPRPs are a threat to the quality of patient care in radiology**

- Those who are significantly\(^1\) more likely to think the NPRPs are a threat to the quality of patient care in Radiology include:
  - Those negative toward MARCA (and also those who are very familiar with the legislation)
  - Residents/Fellows, and those who are Early Career
  - Those in academic practice or with uniform services
  - Not Practice Leaders
  - Women
  - Those who do not utilize NPRPs and/or RAs
  - Those who are concerned with the future scope

\(^1\) = Significantly higher than Total Sample at the 95% confidence level

Question: Below you will see a series of statements regarding Non-Physician Radiology Providers (NPRP) in radiology practice, please indicate the degree to which you agree or disagree with each.

Base: total \(n = 4005\), Residents/Fellow =762, early career =674, academic practice=1463, uniform svc=129 , not a Practice leader =1891 , female=971, do not Utilize NPRPs =1676, do not utilize RAs =3077, extremely/familiar = 1298, negative MARCA = 1377

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Profile: Those significantly\(^1\) more likely to Agree (Strongly & Somewhat) than the Total that **NPRPs are a threat to the quality of patient care in radiology**

- **Total**: 55%
- Negative on MARCA: 82%
- Resident / Fellow: 81%
- Do not utilize NPRPs: 69%
- Time in Practice: 1-9 years: 67%
- Concerned with Future Scope of RAs: 67%
- Female: 63%
- Practice Type: Academic: 61%
- Not a practice leader: 61%
- Extremely/Familiar w/ MARCA: 61%
- do not utilize RAs: 59%
- Uniform/VA: 58%

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
Profile of those who are more likely than the Total sample to agree that the
I am opposed to having any NPRPs in the practice of radiology

Those who are significantly\(^1\) more likely to be opposed to having any NPRPs in the practice of radiology include:

- Those negative toward MARCA (and also those who are very familiar with the legislation)
- Residents/Fellows, and those who are Early Career
- Those in academic practice or with uniform services/VA
- Not Practice Leaders
- Women
- Those who do not utilize NPRPs and/or RAs
- Those who are concerned with the future scope of RAs

Question: Below you will see a series of statements regarding Non-Physician Radiology Providers (NPRP) in radiology practice, please indicate the degree to which you agree or disagree with each.

Base: total n = 4005, Residents/Fellow = 762, early career = 674, academic practice = 1463, uniform svc = 129, not a Practice leader = 1891, female = 971, do not Utilize NPRPs = 1676, do not utilize RAs = 3077, extremely/familiar = 1298, negative MARCA = 1377

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
Attitudes toward NPRPs differ notably among the different age cohorts

- Mid-Career and Late-Career members are significantly more likely to agree than younger cohorts that NPRPs play an important role in the practice of radiology and The decision to use NPRPs is at the practice level.
Attitudes toward NPRPs differ notably among the different age cohorts (cont.)

- RFS and YPS members are significantly more likely to agree than older cohorts that NPRPs being a threat to the quality of patient care, and I am opposed to having any NPRPs in radiology.
Concern with current scope of practice (11-point scale)

- **Most are ‘neutral’ or not very concerned** about NPRP current scope of practice
  - NPs cause the least amount of concern among respondents (46% chose a ‘0’, ‘1’, or ‘2’)
  - Concern for RA current scope of practice was highest, with one in five giving RAs a ‘10’, ‘9’, or ‘8’

**Concern with NPRP Current Scope of Practice**

11-point scale: 0= not concerned; 11= very concerned
(Bottom-3 box, Middle-5 box, Top-3 box)

<table>
<thead>
<tr>
<th>Current scope of practice for RAs</th>
<th>Current scope of practice for PAs</th>
<th>Current scope of practice for NPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom-3 box (not concerned)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle-5 box - (neutral)</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Top-3 box (very concerned)</td>
<td>36%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Mean**
- 4.18
- 3.90
- 3.45

**Question**: Please indicate your level of concern regarding the current scope of practice for... (RA, NP, PA); Base = (4005)

**Measures in RED are Significantly higher at the 95% confidence level**
Six in ten are very concerned with the future scope of NPRPs; about two in ten are not that concerned

- **more concerned**: Those who are more concerned with NPRPs than the total group are younger, in training, are not a practice leader, in academic practice, female, do not utilize NPRPS or RAs, are familiar with and oppose MARCA.

- **less concerned**: Those who are less concerned with NPRPs than the total group are later career, interventional radiologists, male, utilize NPRPs and/or RAs, less familiar with MARCA but support the legislation.

**Concern Level for Future Scope of NPRPs**

- Future scope of practice expansion for NPs (Nurse Practitioners) in radiology:
  - Not at all concerned: 12%
  - Not very concerned: 23%
  - Somewhat concerned: 63%

- Future scope of practice expansion for PAs (Physician Assistants or Physician Associates) in radiology:
  - Not at all concerned: 14%
  - Not very concerned: 26%
  - Somewhat concerned: 57%

- Future scope of practice expansion for RAs (Radiologist Assistants, Registered Radiologist Assistants and Radiology Practitioner Assistants) in radiology:
  - Not at all concerned: 6%
  - Not very concerned: 16%
  - Somewhat concerned: 52%

**Question**: For each of the following, please indicate what level of concern you have, if at all. – Future scope of practice expansion of..., RA, NP, PA; **Base**: 4005
Two-thirds believe that the use of NPRPs in their practice will remain consistent over the next three years

- Those who are more likely^1 to think that RAs will increase in the next 3 years include:
  - RFS, academic setting, national practice, those who currently utilize NPRPs/RAs, those who are not concerned with future scope of RAs, those who are supportive of MARCA, and those in the NE

- Those who are more likely^1 to think that RAs will decrease in the next 3 years include:
  - YPS members, interventional radiologists, those who are concerned about the future scope of RAs, those familiar with and negative toward MARCA, and residing in the South

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Beliefs about NPRPs growth/contraction in next 3 Years
% who say Increase, remain the same, decrease

- RA (Radiologist Assistant, including Registered Radiologist Assistant and Radiology Practitioner Assistant)
  - Decrease: 6%
  - Remain the same: 66%
  - Increase: 26%

- PA (Physician Assistant or Physician Associate)
  - Decrease: 4%
  - Remain the same: 63%
  - Increase: 33%

- NP (Nurse Practitioner)
  - Decrease: 5%
  - Remain the same: 69%
  - Increase: 26%

---

Question: Please indicate whether you believe that the use of the following NPRPs in your radiology practice will Increase, Decrease or Remain the Same over the next Three Years

Base: total n = 4005, Residents/Fellow =762, early career =674, national practice=243, extremely/familiar = 1298, negative MARCA = 1377, support MARCA = 427, those concerned with future scope = 3123, those not concerned = 882, Northeast = 974, South = 1322

^1 = Significantly higher than Total Sample at the 95% confidence level
MARCA Reaction

Familiarity

Support of / Opposition to
One-third (33%) of respondents are Extremely Familiar or Familiar with MARCA

- A majority (58%) indicated they were at least somewhat familiar with the legislation
- About four in ten (43%) said they not so or not at all familiar with MARCA
  - These respondents who have said they are not so familiar or not at all familiar with MARCA skipped the follow-up question

Question: Before today, how familiar were you with the Medicare Access to Radiology Care Act (MARCA)?
Base: (n=4,207)
Profile of members who Extremely Familiar/Familiar with MARCA

- Those who are significantly more familiar with MARCA than total include:
  - Those early or Mid-career members
  - Practice Leaders
  - Those in private practice
  - Those who currently utilize NPRPs and/or RAs
  - Those who support MARCA
  - Those residing in the South

Base (Total n=4005, early career = 674, mid career = 886, practice leader = 1851, Private practice = 1307, Utilize NPRPs = 2329, utilize RAs = 926, Support MARCA = 427, South = 1322)

1 = Significantly higher than Total Sample at the 95% confidence level
Profile of Members who *not very/not at all* Familiar with MARCA

- Those who are significantly^1^ *less familiar* with MARCA than total include:
  - Residents/Fellows
  - Those who are not Practice Leaders
  - Those in an Academic setting
  - Those who do not utilize RAs or NPRPs

---

^1^ = Significantly higher than Total Sample at the 95% confidence level
**Familiarity with MARCA is significantly higher among the older cohorts than the RFS, in particular**

- Approximately four in ten older members indicated they were either ‘extremely familiar’ or ‘familiar’
- Half of RFS indicated they were ‘not so familiar’ or ‘not at all familiar’ with MARCA

**Familiarity with MARCA- by Age Cohort**

- Measures in RED are significantly higher at the 95% confidence level.
- RFS = this statistic is significantly higher than related % for RFS; YPS = this statistic is significantly higher than related % for YPS; MID = this percentage is significantly higher than Mid career statistic; LATE = this percentage is significantly higher than Late career statistic.

**Question:** Before today, how familiar were you with the Medicare Access to Radiology Care Act (MARCA)? Base: cohorts unweighted RFS - 680, YPS - 1206, Mid career - 946, late career - 1140
The group who does not support passage of MARCA is three times larger than those who support the legislation

- Only those respondents who were familiar with MARCA were asked for their level of support of the legislation
- One in ten (19%) are supportive; another two (21%) in ten are neutral toward MARCA
- 60% are against passage

**Support for MARCA**

<table>
<thead>
<tr>
<th>Support Level</th>
<th>Percentage</th>
</tr>
</thead>
</table>
| I strongly support the passage of MARCA | 19%  
(Top-2 Box) |
| I support the passage of MARCA | 13%  
| I am neutral on MARCA legislation | 21%  
| I do not support the passage of MARCA | 25% |
| I am strongly against the passage of MARCA | 35%  

**Question:** You have indicated that you have some familiarity with MARCA. Please indicate your level of support for the legislation  
**Base:** Those who are at least somewhat familiar with MARCA  
(n=2,295)
Profile of members who are more supportive of MARCA than the total sample

- Those who are significantly\(^1\) more positive toward MARCA than total include:
  - Those in private practice
  - Mid- or late career members
  - Interventional Radiologists
  - Practice Leaders
  - Those who currently utilize NPRPs and/or RAs
  - Those who are not very concerned about the future scope of RAs
  - Men
  - Those residing in the South

Profile: Those significantly more positive toward MARCA than Total

<table>
<thead>
<tr>
<th></th>
<th>% Strongly Support / Support Passage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample</strong></td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Utilize NPRPs</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Utilize RAs</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Not very Concerned - Future Scope of RAs</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Extremely/Familiar w/ MARCA</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Regions - South</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>IR</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Time in Practice: Mid career (10-19)</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Time in Practice: Late career (20+)</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Practice leader</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Private</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Male</td>
<td><img src="chart.png" alt="Bar Chart" /></td>
</tr>
</tbody>
</table>

**Base:** Those who are at least somewhat familiar with MARCA (Total n=2,295, IR=378, mid career =543, late-career=928, practice leader = 1213, Private practice = 798, Male=1583, South region= 784, extremely familiar with MARCA = 1298, not concerned about future scope of RAs = 466, utilize RAs = 601, Utilize NPRPs = 1455)

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
Those who are **Neutral** to MARCA legislation tend to share more characteristics with those who are Positive than those who are negative

- Those who are significantly\(^1\) more likely to be neutral toward MARCA than total include:
  - Diagnostic Radiologists
  - Practice Leaders
  - Those who are **not** very concerned about the future scope of RAs
  - Men
  - Those residing in the Mountain Region

---

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
Profile of Members who are more **Negative** of MARCA than the Total sample

- Those who are significantly\(^1\) more likely to be **Opposed** to MARCA than total include:
  - YPS Members
  - Residents/Fellows
  - Those who are not Practice Leaders
  - Those in an Academic setting
  - Those who do not utilize NPRPs or RAs
  - Those who are concerned about the future scope of RAs
  - Women
  - Those residing in the West region

Base: Those who are at least familiar with MARCA (Total n=2,295, Resident/Fellow =378, YPS (1-9 years) = 412, NOT a practice leader = 946, Academic setting practice = 802, Female=575, West region= 227, Concerned about future scope of RAs = 1829, Do NT utilize RAs = 1691, do NOT utilize NPRPs = 839)

\(^1\) = Significantly higher than Total Sample at the 95% confidence level
While all cohorts exhibit more opposition than support for MARCA legislation, the younger cohorts, and most notably RFS, are significantly more negative toward the legislation.

**Support of MARCA - by Age Cohort**

<table>
<thead>
<tr>
<th>Age Cohort</th>
<th>I am strongly against</th>
<th>I do not support</th>
<th>I support</th>
<th>I strongly support</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFS</td>
<td>13%</td>
<td>3%</td>
<td>6%</td>
<td>1%</td>
<td>62%</td>
</tr>
<tr>
<td>YPS</td>
<td>31%</td>
<td>19%</td>
<td>1%</td>
<td>31%</td>
<td>24%</td>
</tr>
<tr>
<td>Mid-Career (10-19 years)</td>
<td>48%</td>
<td>25%</td>
<td>21%</td>
<td>33%</td>
<td>19%</td>
</tr>
<tr>
<td>Late-Career (20+ years)</td>
<td>53%</td>
<td>24%</td>
<td>23%</td>
<td>24%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**Measures in RED are Significantly higher at the 95% confidence level**

- RFS = this statistic is significantly higher than related % for RFS;
- YPS = this statistic is significantly higher than related % for YPS;
- MID = this percentage is significantly higher than Mid career statistic;
- LATE = this percentage is significantly higher than Late career statistic.

**Question:** You have indicated that you have some familiarity with MARCA. Please indicate your level of support for the legislation.

**Base:** cohorts who are at least somewhat familiar with MARCA; unweighted RFS - 341, YPS - 731, Mid career - 576, late career - 682.
Demographics
A majority of respondents are Diagnostic Radiologists, followed by Interventional Radiologists. Members have spent an average of 14.9 years in practice.

- Diagnostic Radiologists have been in practice an average of 18.3 years.
- Interventional Radiologists’ time in practice is less than DRs by 1.5 years (average = 16.7 years).

**Job Focus**

- Diagnostic Radiologist: 64%
- Interventional Radiologist: 10%
- Radiation Oncologist: 4%
- Nuclear Med. Physician/Nuclear Rad.: 19%
- Resident/Fellow: 2%
- Other: 1%

**Time in Practice**

- 0 years - still in training: 3% (DR), 9% (IR), 9% (RO), 1% (NM), 9% (Resident/Fellow), 21% (Total)
- 1 - 4 years: 9% (DR), 9% (IR), 6% (RO), 8% (NM), 12% (Resident/Fellow), 16% (Total)
- 5 - 9 years: 10% (DR), 9% (IR), 8% (RO), 10% (NM), 9% (Resident/Fellow), 13% (Total)
- 10 - 15 years: 12% (DR), 16% (IR), 13% (RO), 13% (NM), 12% (Resident/Fellow), 16% (Total)
- 16 - 19 years: 9% (DR), 13% (IR), 10% (RO), 9% (NM), 13% (Resident/Fellow), 16% (Total)
- 20 - 25 years: 13% (DR), 21% (IR), 21% (RO), 13% (NM), 13% (Resident/Fellow), 21% (Total)
- 26 - 29 years: 11% (DR), 8% (IR), 9% (RO), 11% (NM), 11% (Resident/Fellow), 18% (Total)
- 30+ years: 18% (DR), 22% (IR), 18% (RO), 18% (NM), 18% (Resident/Fellow), 22% (Total)

**Base:** Total respondents n=4,207, DR = 2877, IR=460, RO = 161, NM = 40, Resident/Fellow = 813

Measures in RED are Significantly higher than Total Sample at the 95% confidence level.
Majority of respondents are male, with an average age of 47.3 years

- Diagnostic Radiology respondents cited the highest average age of 51.2 years; average age for an interventional radiologist is 49.7 years
- Residents and Fellows are 31 years old, on average, and their age is the driver for the lower average age overall

Base: Total respondents n=4,207, DR = 2877, IR=460, Resident/Fellow = 813

Measures in RED are Significantly higher than Total Sample at the 95% confidence level
Key Takeaways and Considerations
Key Takeaways (1)

- Familiarity with and utilization of NPRPs is relatively high
  - About six in ten are (extremely/very) familiar with NPRPs and utilize them (57%)
  - However, familiarity and current or past experience with RAs significantly lags both PAs and NPs

- Attitudes highlight two opposing views: one that is generally positive toward NPRPS/RAs and the other that is negative toward them. These two opposing cohorts exhibit generally consistent themes/profiles throughout the dataset:
  - Those who are more positive toward NPRPS are typically older (mid-to-late career), practice leaders, in private practice or a national practice, male, from the South, not concerned with the future scope of RAs, already utilizing NPRPS and RAs, neutral or supportive of MARCA
  - Those who are more negative toward NPRPs are typically YPS, residents & fellows, not practice leaders, in an academic practice or uniform/VA, female, do not utilize NPRPs and/or RAs, have familiarity with and oppose MARCA, from the West
Key Takeaways (2)

- Reaction to MARCA is overwhelmingly negative, outpacing positive reaction by three to one
  
  • The two in ten who are neutral toward MARCA tend to bear more similarities, demographically, with those who are positive (male, not concerned about the future scope of RAs, practice leaders), skew to the South
  
  • Those who oppose MARCA are younger constituents, do not currently utilize NPRPs or RAs, female, in an academic setting, not a practice leader, skew slightly to the West
Considerations

- Consider additional, follow-up research among the different groups to probe and understand concerns and issues
  - Focus groups to explore perspectives and attitudes
- This research enabled a significant amount of commentary, which we have not yet had the opportunity to review in detail but could provide insights and ‘food for thought’ for any additional research
- Quest for transparency
  - Opportunities to re-engage members with topically interesting surveys and research