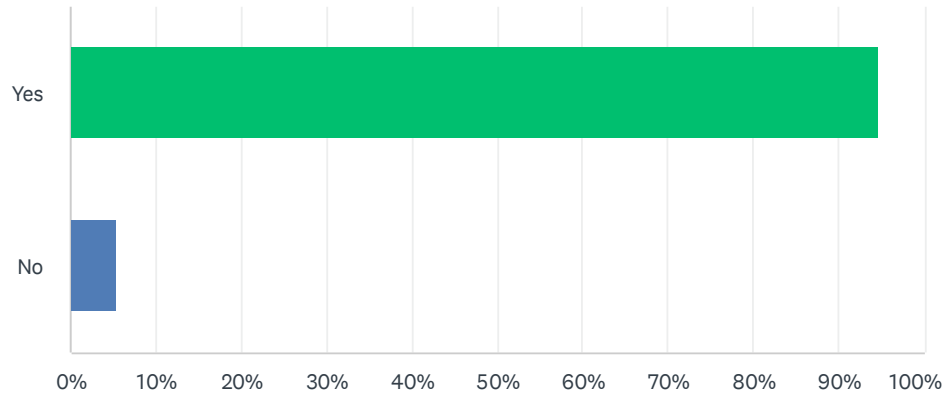


## Q1 Do you have any role in managing patients with implanted CIEDs (pacemakers/ICDs)?

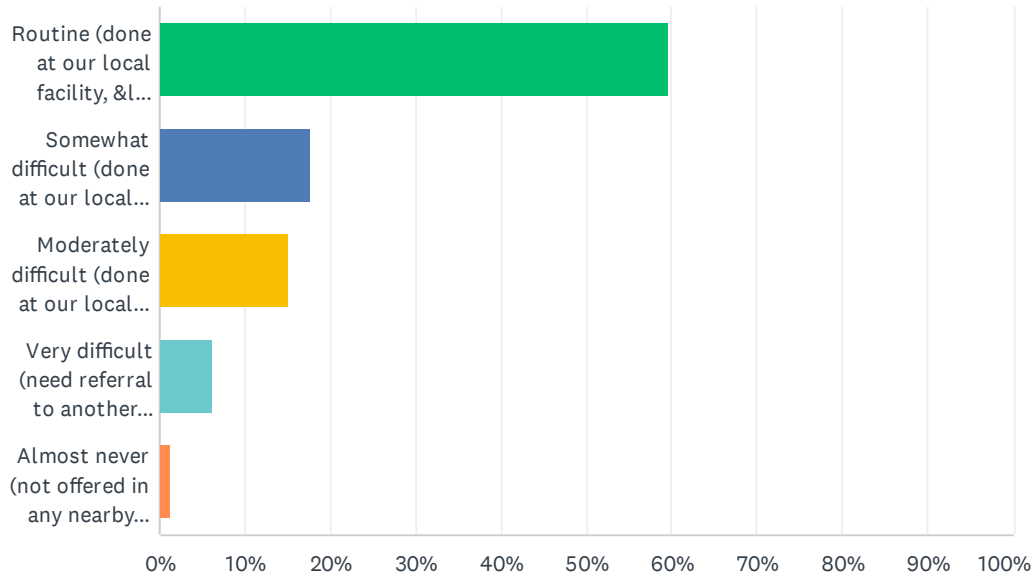
Answered: 168 Skipped: 0



| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| Yes            | 94.64%    | 159 |
| No             | 5.36%     | 9   |
| TOTAL          |           | 168 |

## Q2 How accessible is MRI scanning for your patients with MRI-conditional CIED systems?

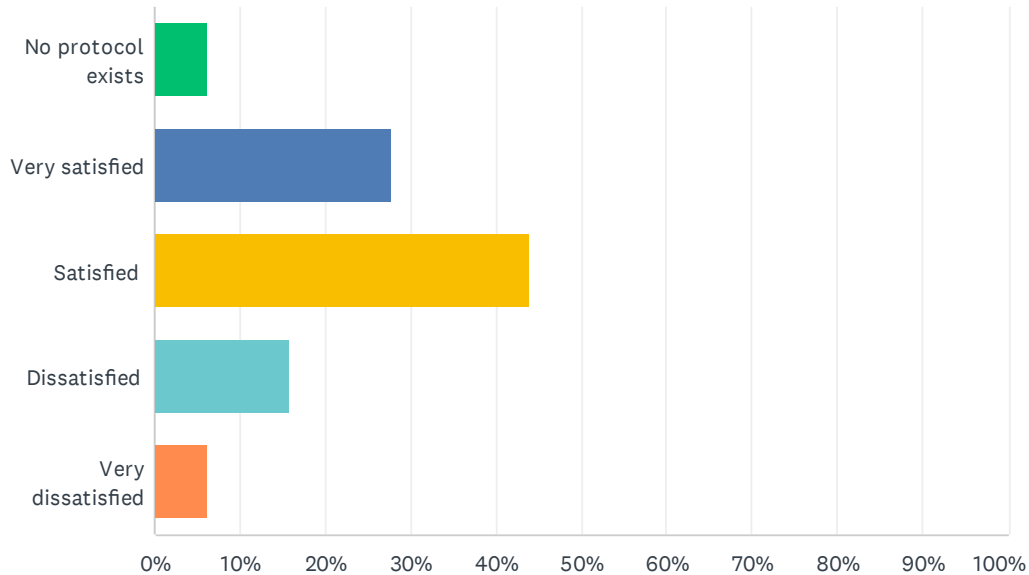
Answered: 159 Skipped: 9



| ANSWER CHOICES  | RESPONSES |     |
|---|-----------|-----|
| Routine (done at our local facility, <1 month wait time)                  | 59.75%    | 95  |
| Somewhat difficult (done at our local facility, but 1-3 month wait time)  | 17.61%    | 28  |
| Moderately difficult (done at our local facility, but >3 month wait time) | 15.09%    | 24  |
| Very difficult (need referral to another facility in our area)            | 6.29%     | 10  |
| Almost never (not offered in any nearby facilities)                       | 1.26%     | 2   |
| TOTAL   |           | 159 |

### Q3 How satisfied are you with your clinic's protocol for MRI coordination (for conditional and non-conditional systems)?

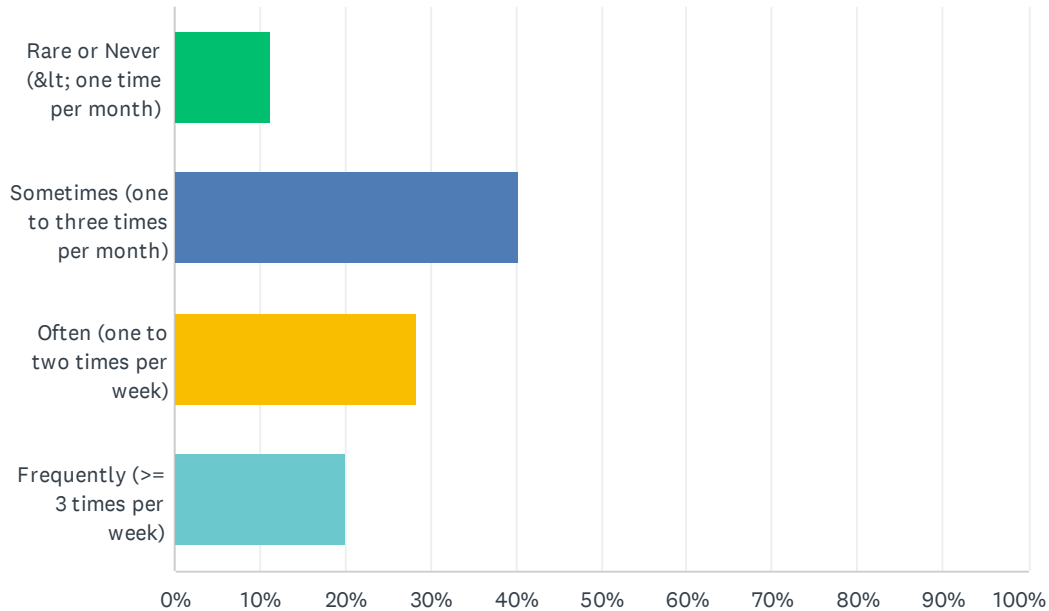
Answered: 159 Skipped: 9



| ANSWER CHOICES     | RESPONSES |     |
|--------------------|-----------|-----|
| No protocol exists | 6.29%     | 10  |
| Very satisfied     | 27.67%    | 44  |
| Satisfied          | 44.03%    | 70  |
| Dissatisfied       | 15.72%    | 25  |
| Very dissatisfied  | 6.29%     | 10  |
| TOTAL              |           | 159 |

## Q4 How frequently are you asked to determine whether an individual with CIEDs may undergo an MRI?

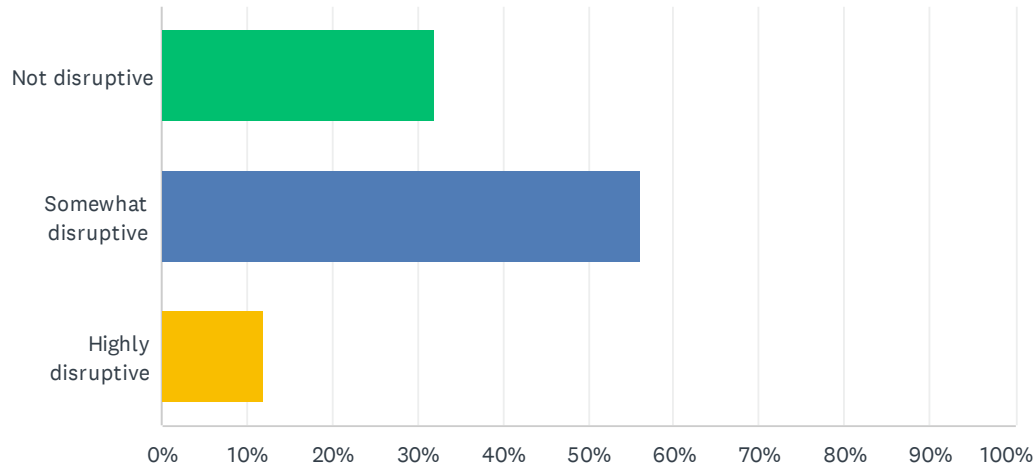
Answered: 159 Skipped: 9



| ANSWER CHOICES                           | RESPONSES |     |
|--|-----------|-----|
| Rare or Never (< one time per month)     | 11.32%    | 18  |
| Sometimes (one to three times per month) | 40.25%    | 64  |
| Often (one to two times per week)        | 28.30%    | 45  |
| Frequently (>= 3 times per week)         | 20.13%    | 32  |
| TOTAL                                    |           | 159 |

## Q5 How disruptive are the requests to adjudicate MRI approvals in your workflow?

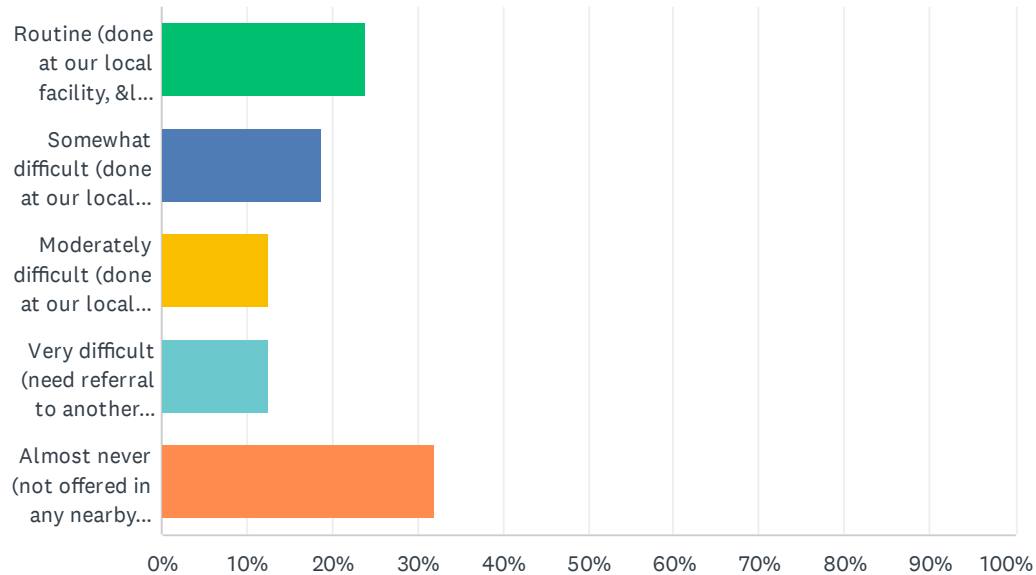
Answered: 159 Skipped: 9



| ANSWER CHOICES      | RESPONSES |     |
|---------------------|-----------|-----|
| Not disruptive      | 32.08%    | 51  |
| Somewhat disruptive | 55.97%    | 89  |
| Highly disruptive   | 11.95%    | 19  |
| TOTAL               |           | 159 |

## Q6 How accessible is MRI scanning for your patients with a non-MRI-conditional CIED system?

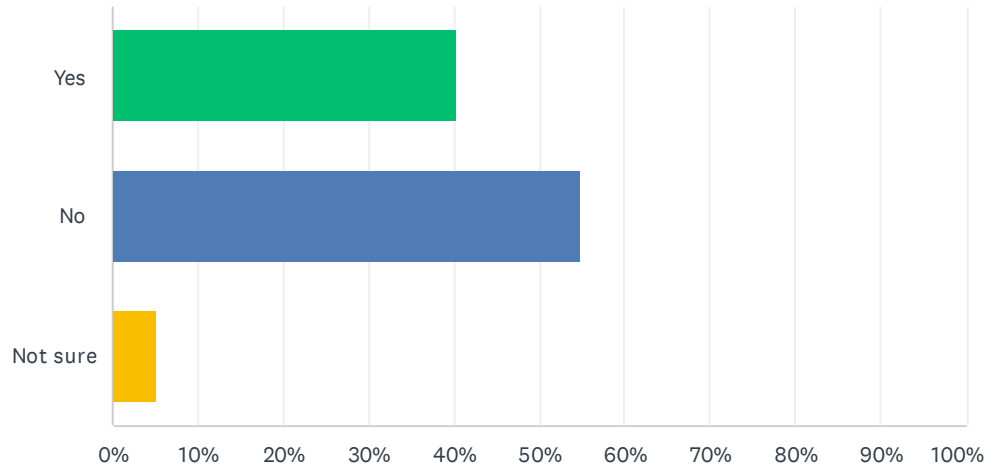
Answered: 159 Skipped: 9



| ANSWER CHOICES  | RESPONSES |     |
|---|-----------|-----|
| Routine (done at our local facility, <1 month wait time)                  | 23.90%    | 38  |
| Somewhat difficult (done at our local facility, but 1-3 month wait time)  | 18.87%    | 30  |
| Moderately difficult (done at our local facility, but >3 month wait time) | 12.58%    | 20  |
| Very difficult (need referral to another facility)                        | 12.58%    | 20  |
| Almost never (not offered in any nearby facilities)                       | 32.08%    | 51  |
| TOTAL   |           | 159 |

## Q7 Does your institution have a formal protocol for scanning off label/non-conditional devices?

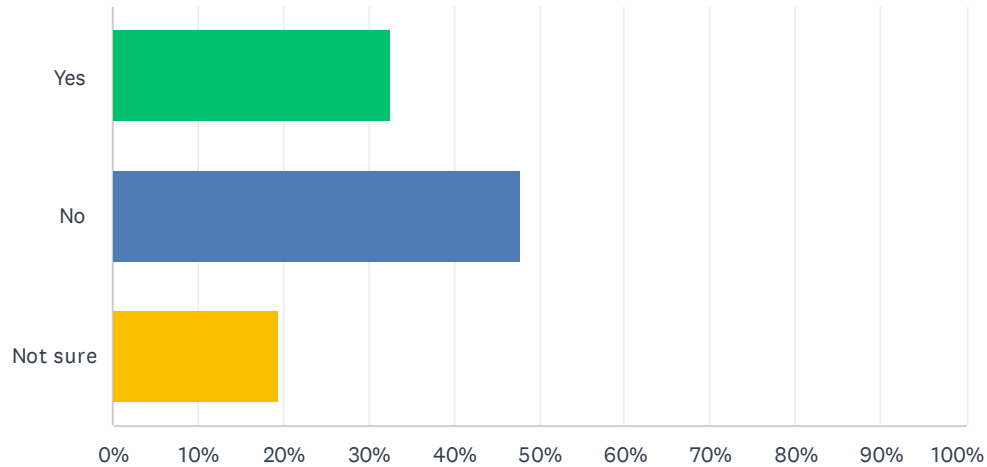
Answered: 159 Skipped: 9



| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| Yes            | 40.25%    | 64  |
| No             | 54.72%    | 87  |
| Not sure       | 5.03%     | 8   |
| TOTAL          |           | 159 |

## Q8 Have you ever encountered denial of pre-authorization for scanning an off- label/non-conditional device or denial of payment after a scan?

Answered: 159 Skipped: 9

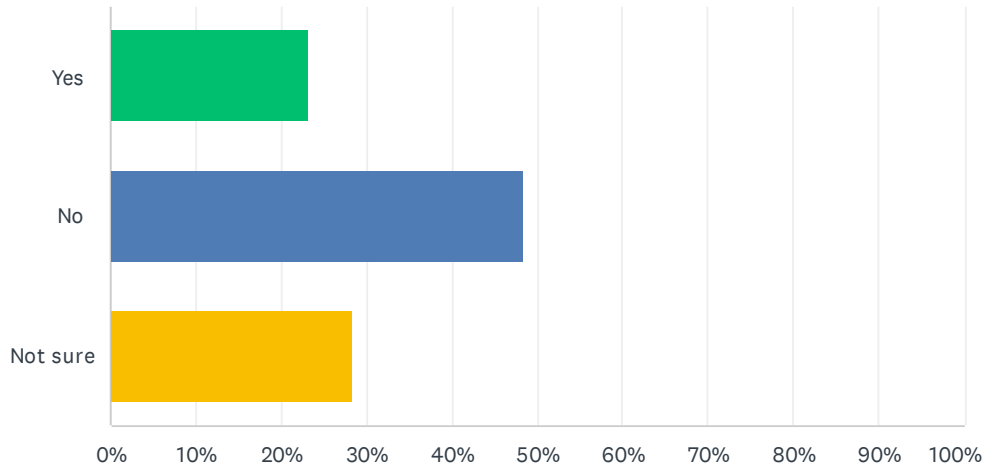


| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| Yes            | 32.70%    | 52  |
| No             | 47.80%    | 76  |
| Not sure       | 19.50%    | 31  |
| TOTAL          |           | 159 |



## Q9 Do you prefer to do off-label MRI for non-conditional systems while patients are in the hospital (under inpatient DRG)?

Answered: 159 Skipped: 9



| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| Yes            | 23.27%    | 37  |
| No             | 48.43%    | 77  |
| Not sure       | 28.30%    | 45  |
| TOTAL          |           | 159 |

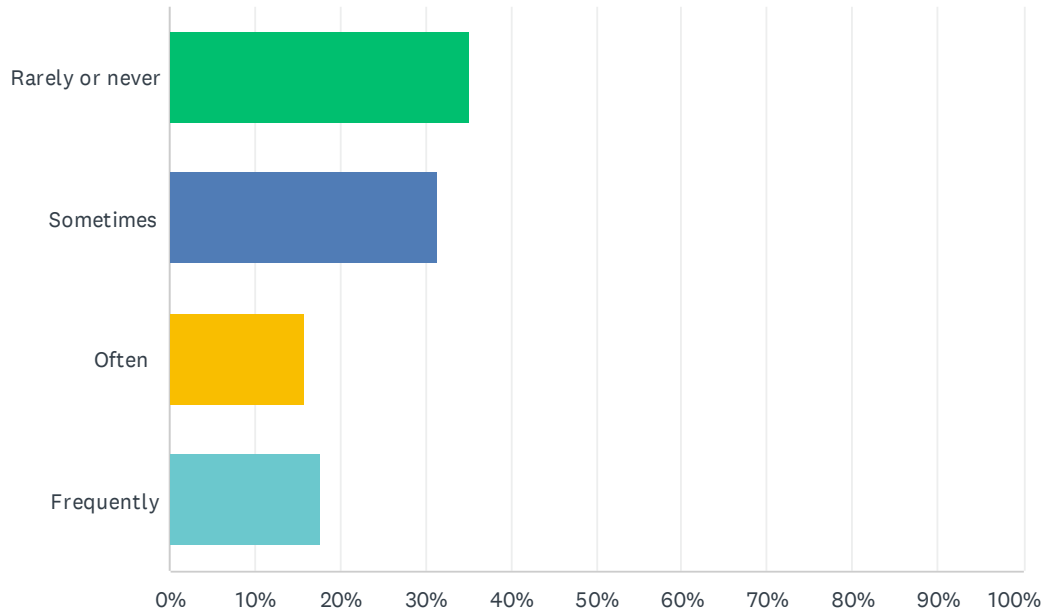
| #  | COMMENTS  | DATE              |
|----|---|-------------------|
| 1  | We are in Canada. Different program   | 5/27/2024 2:59 PM |
| 2  | never happens as no radiology practice will do off lable scans  | 5/26/2024 4:47 PM |
| 3  | Not available   | 5/26/2024 5:59 AM |
| 4  | Since our hospital authority has not allowed MRI scanning of non-conditional systems, if we were to start this program, would definitely want to monitor these patients to obtain data that CMRI does not affect these systems. | 5/26/2024 5:47 AM |
| 5  | I will not assume the risk. Any judicial problem herein will be on me   | 5/25/2024 5:42 PM |
| 6  | These patients undergo a through pre-MRI evaluation adn these patients receive the MRI only when really necessary and there is no other imaging alternative.  | 5/25/2024 5:37 AM |
| 7  | We have a regional centre conducting such lists and can refer - however the referral process is tedious   | 5/25/2024 5:07 AM |
| 8  | One cardiologist travels out to do them   | 5/24/2024 9:35 PM |
| 9  | -   | 5/24/2024 8:01 PM |
| 10 | I don't know what DRG is  | 5/24/2024 7:11 PM |
| 11 | Majority of CIED were changed to MRI compatible in the last decade  | 5/24/2024 4:57 PM |
| 12 | In Italy MRI for patients with non-conditional CIED is not allowed  | 5/24/2024 3:17 PM |

## Challenges with MRIs for Patients with CIEDs

|    |   |                    |
|----|---|--------------------|
| 13 | We are in Canada so the paying is different. Our barrier is that the radiologists won't let us do these tests.  | 5/24/2024 3:04 PM  |
| 14 | We rarely perform MRI scanning for patients with non conditional cardiac devices even if we as EP physicians approve that, Radiologists will not agree. We even don't try to refer these patients to MRI. | 5/24/2024 1:01 PM  |
| 15 | Radiology department doesn't take responsibility  | 5/24/2024 9:55 AM  |
| 16 | not performed at all currently at our institution   | 5/24/2024 1:55 AM  |
| 17 | We already do not allow these patients  | 5/24/2024 1:24 AM  |
| 18 | no MRI providers will do MRI "off label" for non MRI conditional CIEDs  | 5/23/2024 11:07 PM |
| 19 | I TRY TO ADMIT EVERY PATIENT WITH A RESONANCE DEVICE, THE PROBLEM IS THE RADIOLOGY AND THE FEAR OF THE PROCEDURE  | 5/23/2024 10:03 PM |
| 20 | some times an off label MRI are done in consistent no major protocol across board   | 5/23/2024 9:40 PM  |
| 21 | Our radiology department has an absolute refusal of off-label scans with no plan to review this position in the near future despite evidence from the magnasafe registry                                  | 5/23/2024 9:40 PM  |
| 22 | We do not do off-label MRI scans  | 5/23/2024 7:14 PM  |
| 23 | non   | 5/23/2024 6:32 PM  |
| 24 | We don't do any nonconditional scanning   | 5/23/2024 5:32 PM  |
| 25 | Usually the MRI people do not accept the physician's letters  | 5/23/2024 5:24 PM  |
| 26 | Is this an American issue?  | 5/23/2024 5:23 PM  |
| 27 | We dont procede MRI in non-conditional device and we have many difficulties to perform in conditional because radiologists refuse do it.  | 5/23/2024 4:59 PM  |
| 28 | What does DRG mean? The acronym should be expanded first before used in a document.   | 5/23/2024 4:37 PM  |

## Q10 How often have you not been able to obtain an MRI on a non-conditional device that you felt was low risk?

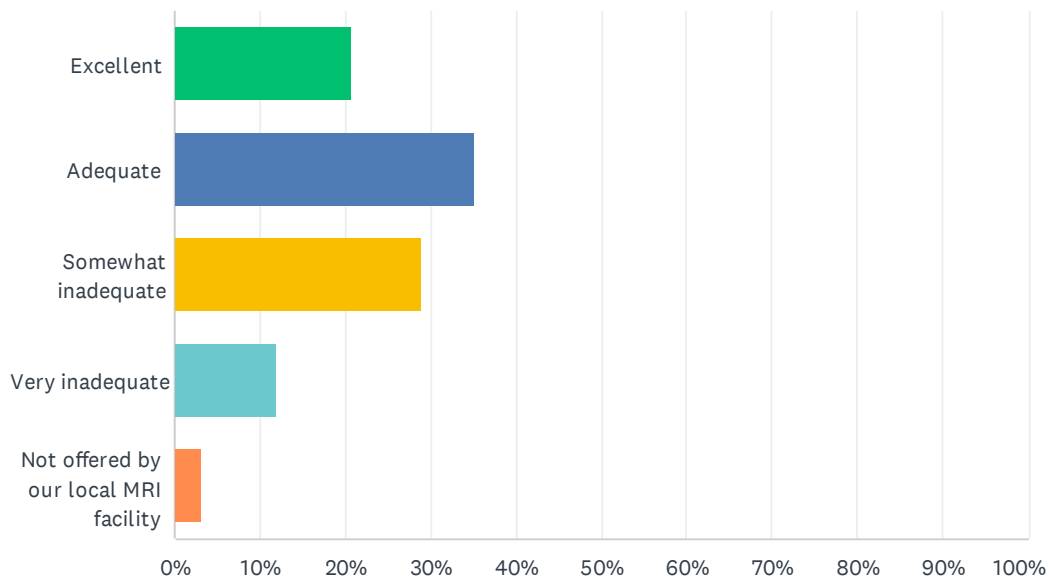
Answered: 159 Skipped: 9



| ANSWER CHOICES  | RESPONSES |     |
|-----------------|-----------|-----|
| Rarely or never | 35.22%    | 56  |
| Sometimes       | 31.45%    | 50  |
| Often           | 15.72%    | 25  |
| Frequently      | 17.61%    | 28  |
| TOTAL           |           | 159 |

## Q11 What is your perception of your local MRI facility's efforts to accommodate CIED patients for MRI?

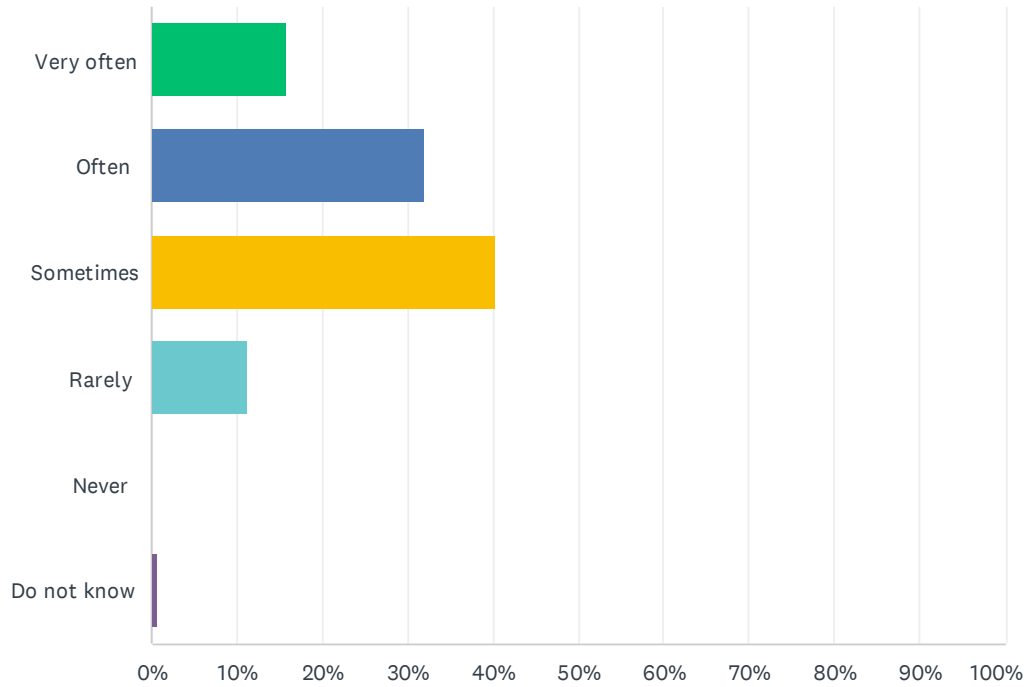
Answered: 159 Skipped: 9



| ANSWER CHOICES                        | RESPONSES |     |
|---------------------------------------|-----------|-----|
| Excellent                             | 20.75%    | 33  |
| Adequate                              | 35.22%    | 56  |
| Somewhat inadequate                   | 28.93%    | 46  |
| Very inadequate                       | 11.95%    | 19  |
| Not offered by our local MRI facility | 3.14%     | 5   |
| TOTAL                                 |           | 159 |

## Q12 Do you think patient care is adversely affected by inability to obtain indicated MRI scans in patients with non-conditonal devices?

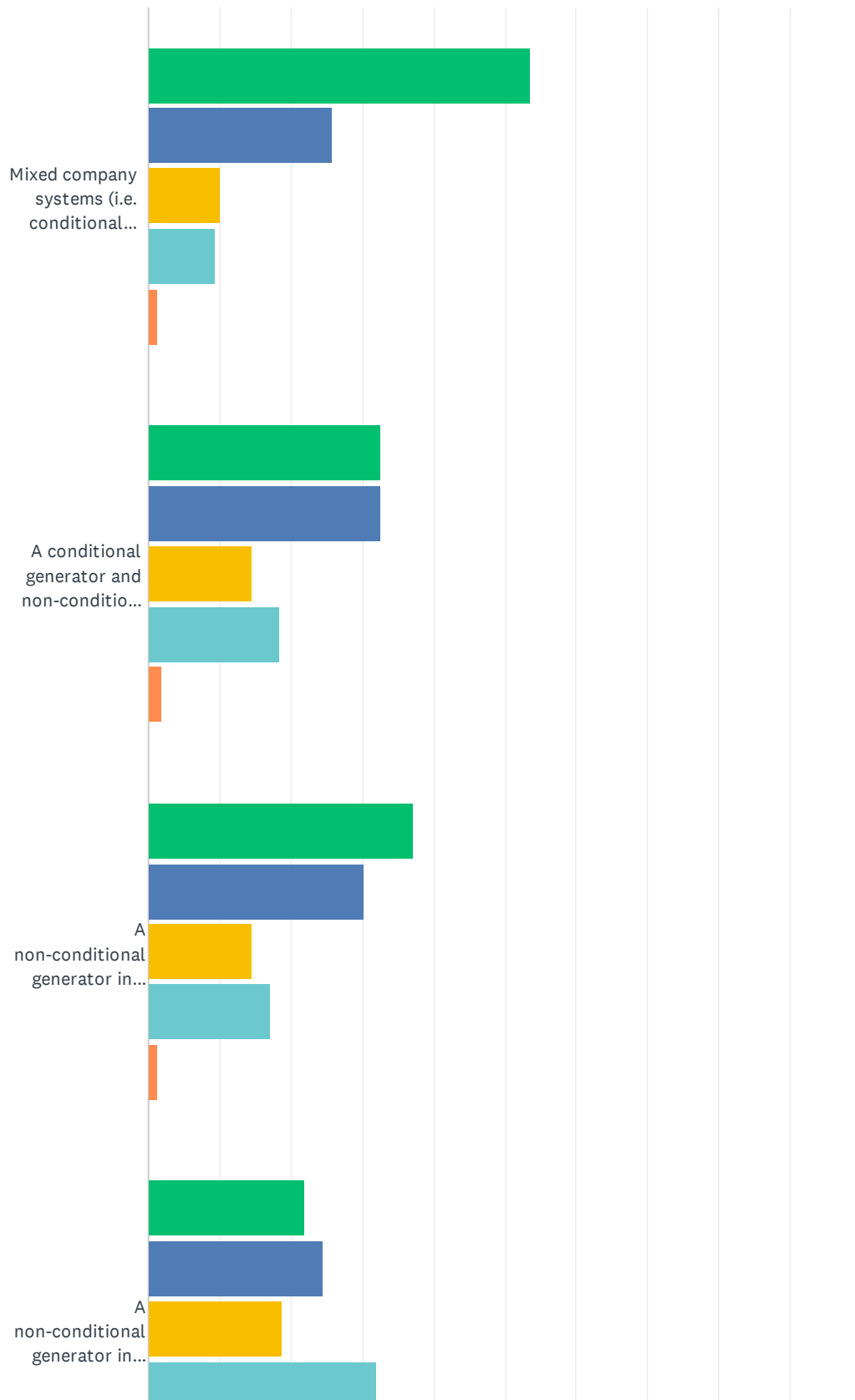
Answered: 159 Skipped: 9



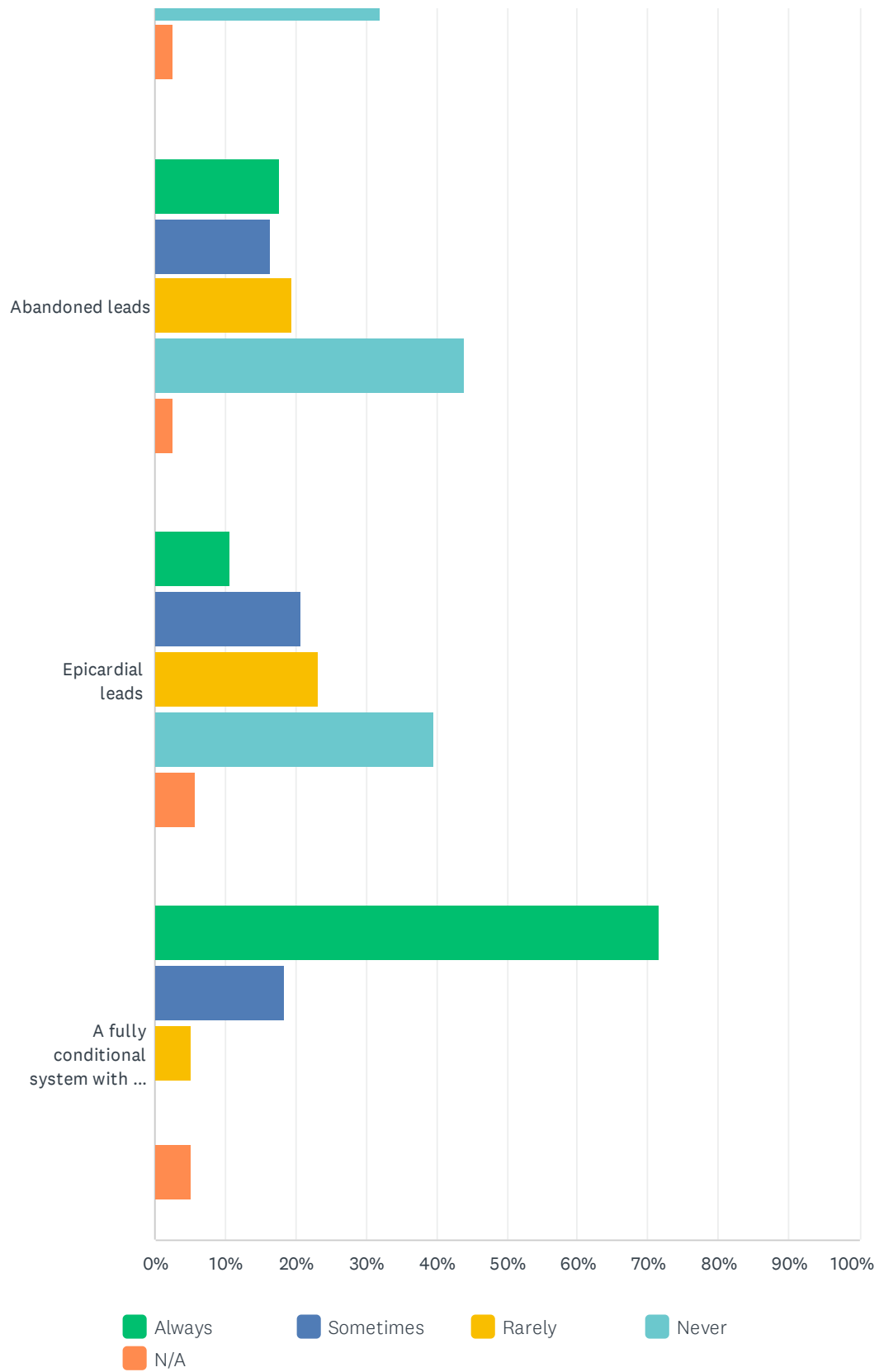
| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| Very often     | 15.72%    | 25  |
| Often          | 32.08%    | 51  |
| Sometimes      | 40.25%    | 64  |
| Rarely         | 11.32%    | 18  |
| Never          | 0.00%     | 0   |
| Do not know    | 0.63%     | 1   |
| TOTAL          |           | 159 |

## Q13 Would you approve an MRI scan in a CIED patient with:

Answered: 159 Skipped: 9



## Challenges with MRIs for Patients with CIEDs



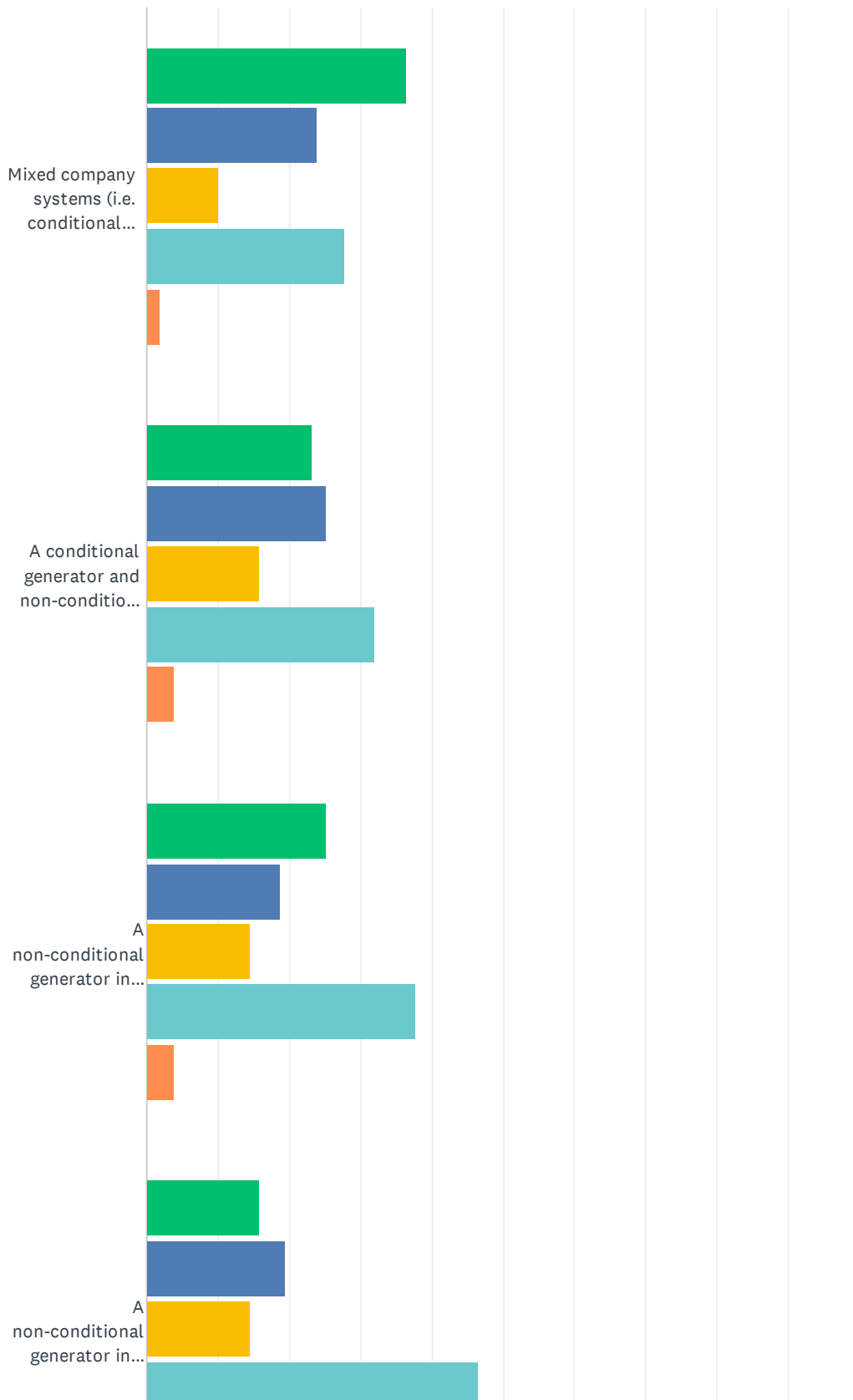
## Challenges with MRIs for Patients with CIEDs

|   | ALWAYS        | SOMETIMES    | RARELY       | NEVER        | N/A        | TOTAL | WEIGHTED AVERAGE |
|---|---------------|--------------|--------------|--------------|------------|-------|------------------|
| Mixed company systems (i.e. conditional generator and another company's conditional leads)?   | 53.46%<br>85  | 25.79%<br>41 | 10.06%<br>16 | 9.43%<br>15  | 1.26%<br>2 | 159   | 1.75             |
| A conditional generator and non-conditional leads   | 32.70%<br>52  | 32.70%<br>52 | 14.47%<br>23 | 18.24%<br>29 | 1.89%<br>3 | 159   | 2.19             |
| A non-conditional generator in non-pacing-dependent patient   | 37.11%<br>59  | 30.19%<br>48 | 14.47%<br>23 | 16.98%<br>27 | 1.26%<br>2 | 159   | 2.11             |
| A non-conditional generator in pacing-dependent patient   | 22.01%<br>35  | 24.53%<br>39 | 18.87%<br>30 | 32.08%<br>51 | 2.52%<br>4 | 159   | 2.63             |
| Abandoned leads   | 17.61%<br>28  | 16.35%<br>26 | 19.50%<br>31 | 44.03%<br>70 | 2.52%<br>4 | 159   | 2.92             |
| Epicardial leads  | 10.69%<br>17  | 20.75%<br>33 | 23.27%<br>37 | 39.62%<br>63 | 5.66%<br>9 | 159   | 2.97             |
| A fully conditional system with an additional MRI-conditional implanted device (such as an implanted loop recorder, coronary stent, CardioMEMS, ASD occlusion device, LAA occlusion device, Mitra clip, etc). | 71.70%<br>114 | 18.24%<br>29 | 5.03%<br>8   | 0.00%<br>0   | 5.03%<br>8 | 159   | 1.30             |

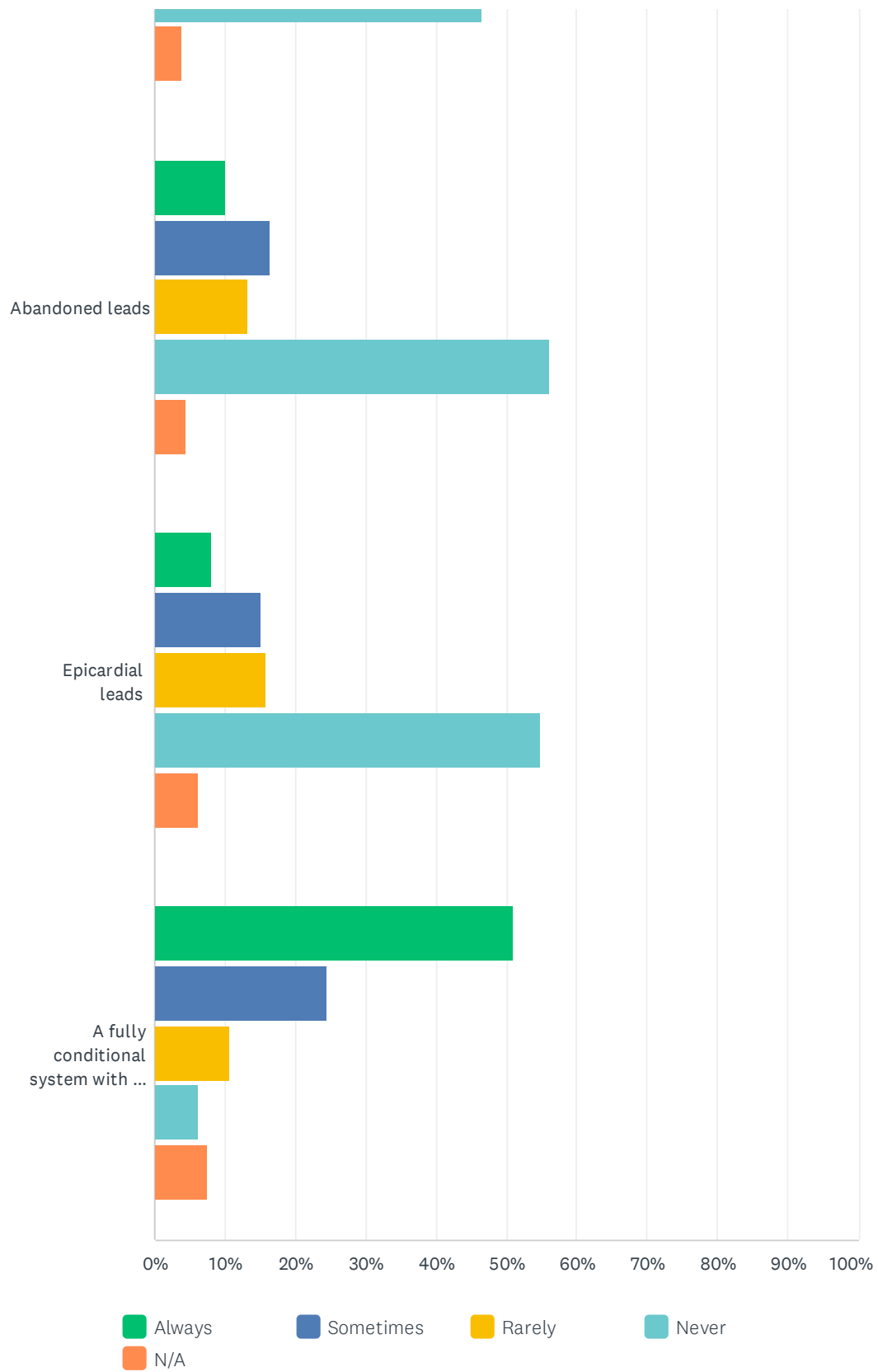


## Q14 Does your facility ever allow MRI scan in a CIED patient with:

Answered: 159 Skipped: 9



## Challenges with MRIs for Patients with CIEDs

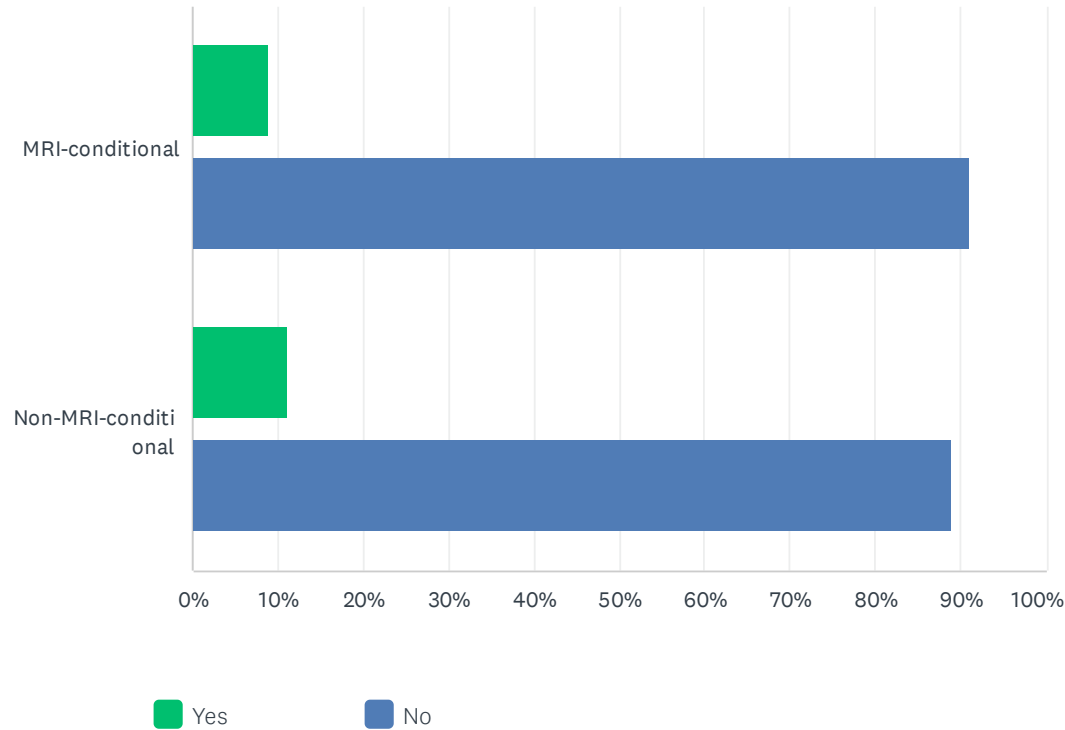


## Challenges with MRIs for Patients with CIEDs

|   | ALWAYS       | SOMETIMES    | RARELY       | NEVER        | N/A         | TOTAL | WEIGHTED AVERAGE |
|---|--------------|--------------|--------------|--------------|-------------|-------|------------------|
| Mixed company systems (i.e. conditional generator and another company's conditional leads)?   | 36.48%<br>58 | 23.90%<br>38 | 10.06%<br>16 | 27.67%<br>44 | 1.89%<br>3  | 159   | 2.29             |
| A conditional generator and non-conditional leads   | 23.27%<br>37 | 25.16%<br>40 | 15.72%<br>25 | 32.08%<br>51 | 3.77%<br>6  | 159   | 2.59             |
| A non-conditional generator in non-pacing-dependent patient   | 25.16%<br>40 | 18.87%<br>30 | 14.47%<br>23 | 37.74%<br>60 | 3.77%<br>6  | 159   | 2.67             |
| A non-conditional generator in pacing-dependent patient   | 15.72%<br>25 | 19.50%<br>31 | 14.47%<br>23 | 46.54%<br>74 | 3.77%<br>6  | 159   | 2.95             |
| Abandoned leads   | 10.06%<br>16 | 16.35%<br>26 | 13.21%<br>21 | 55.97%<br>89 | 4.40%<br>7  | 159   | 3.20             |
| Epicardial leads  | 8.18%<br>13  | 15.09%<br>24 | 15.72%<br>25 | 54.72%<br>87 | 6.29%<br>10 | 159   | 3.25             |
| A fully conditional system with an additional MRI-conditional implanted device (such as an implanted loop recorder, coronary stent, CardioMEMS, ASD occlusion device, LAA occlusion device, Mitra clip, etc). | 50.94%<br>81 | 24.53%<br>39 | 10.69%<br>17 | 6.29%<br>10  | 7.55%<br>12 | 159   | 1.70             |

## Q15 Have you ever encountered a clinically significant adverse event related to MRI scanning with a CIED system that is:

Answered: 159    Skipped: 9



|                     | YES          | NO            | TOTAL | WEIGHTED AVERAGE |
|---------------------|--------------|---------------|-------|------------------|
| MRI-conditional     | 8.86%<br>14  | 91.14%<br>144 | 158   | 1.91             |
| Non-MRI-conditional | 11.11%<br>17 | 88.89%<br>136 | 153   | 1.89             |

| #  | IF YES, PLEASE SPECIFY   | DATE               |
|----|--|--------------------|
| 1  | Parameters got effected  | 6/1/2024 11:04 PM  |
| 2  | Device got reset and was not programmable thereafter                                       | 5/29/2024 12:08 PM |
| 3  | Patient concealed the fact he had ICD -> reset of device                                   | 5/26/2024 3:52 PM  |
| 4  | Increase in pacing threshold   | 5/25/2024 8:38 PM  |
| 5  | EOL behavior that persisted in two Biotronik ICDs  | 5/25/2024 5:11 PM  |
| 6  | Increase in pacing threshold   | 5/25/2024 8:00 AM  |
| 7  | ERI, sensing issue   | 5/25/2024 6:16 AM  |
| 8  | 2 x induction of atrial arrhythmia due to D00 mode (both self-terminating within hours)    | 5/25/2024 6:07 AM  |
| 9  | Increase in LV threshold   | 5/25/2024 1:00 AM  |
| 10 | The ICD turned into safety mode.   | 5/24/2024 9:57 AM  |
| 11 | Patient has mixed conditional device with non MRI lead , during the scan patient developed | 5/24/2024 5:04 AM  |

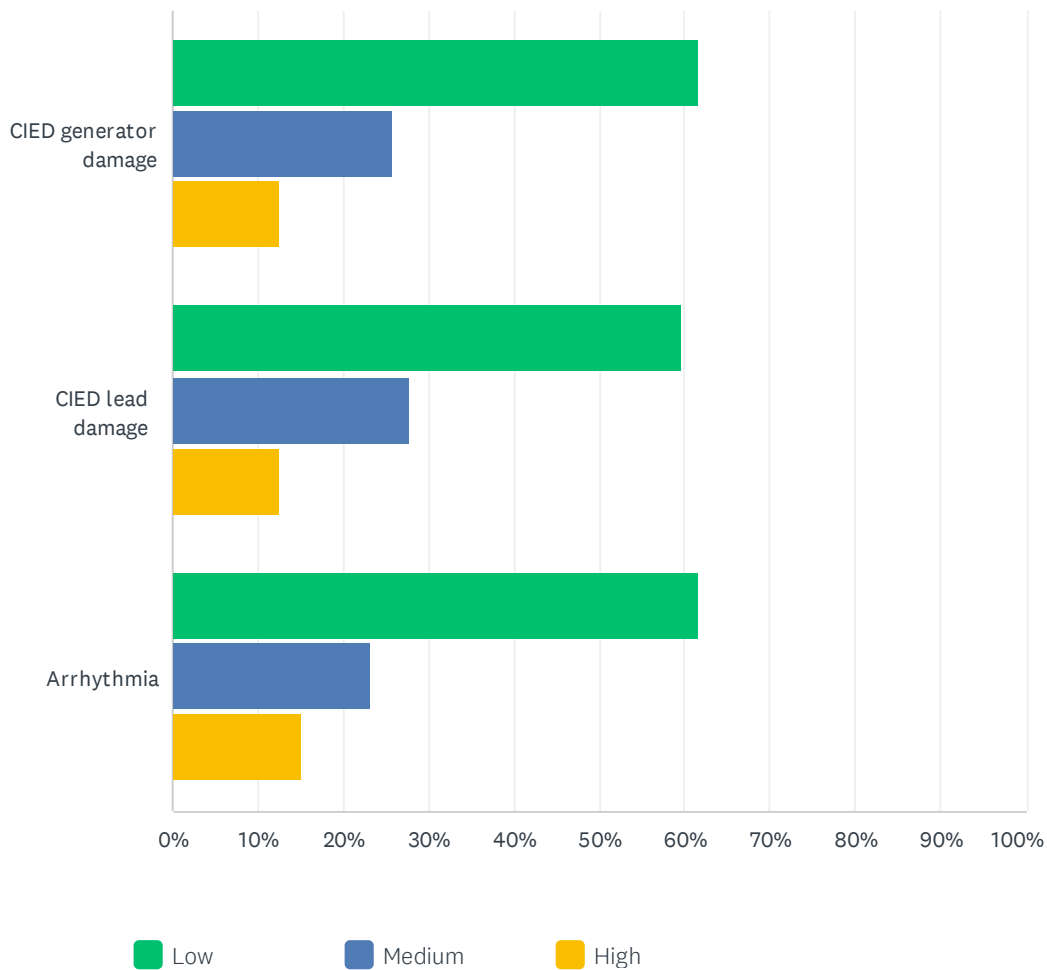
## Challenges with MRIs for Patients with CIEDs

chest pain with heat inside the chest .So the scan was canceled and device was rechecked.  
When I checked the device I found that The device was turned off the MRI mode spontaneously

|    |   |                    |
|----|---|--------------------|
| 12 | V00 with VF induction   | 5/24/2024 3:17 AM  |
| 13 | No because we already do not allow. If we did may be we would   | 5/24/2024 1:24 AM  |
| 14 | Generator damage  | 5/24/2024 1:03 AM  |
| 15 | Back up VVI mode. Vere rare. Solvable by updating the software.   | 5/24/2024 12:57 AM |
| 16 | Remember one battery nearly depleted and one "reprogramming" occurred during the process.<br>No really serious events             | 5/24/2024 12:07 AM |
| 17 | Generator extrusion   | 5/23/2024 10:28 PM |
| 18 | An atrial fibrillation due to asincronic stimulation  | 5/23/2024 6:53 PM  |
| 19 | Pacing threshold elevation, including exit block on an atrial lead. Accelerated ventricular rhythm (duration 4 h after MRI Scan). | 5/23/2024 6:39 PM  |
| 20 | I Have a Patient with DAI DD who was submitted to MRI and the device failed   | 5/23/2024 6:32 PM  |
| 21 | N/A. Our facility doesn't perform this  | 5/23/2024 5:07 PM  |
| 22 | Delay in diagnosis of a spinal cord compression resulting in permanent paralysis  | 5/23/2024 5:05 PM  |
| 23 | Asystole  | 5/23/2024 4:41 PM  |

## Q16 What is your level of concern for these possible adverse events when scanning a non-conditional CIED system:

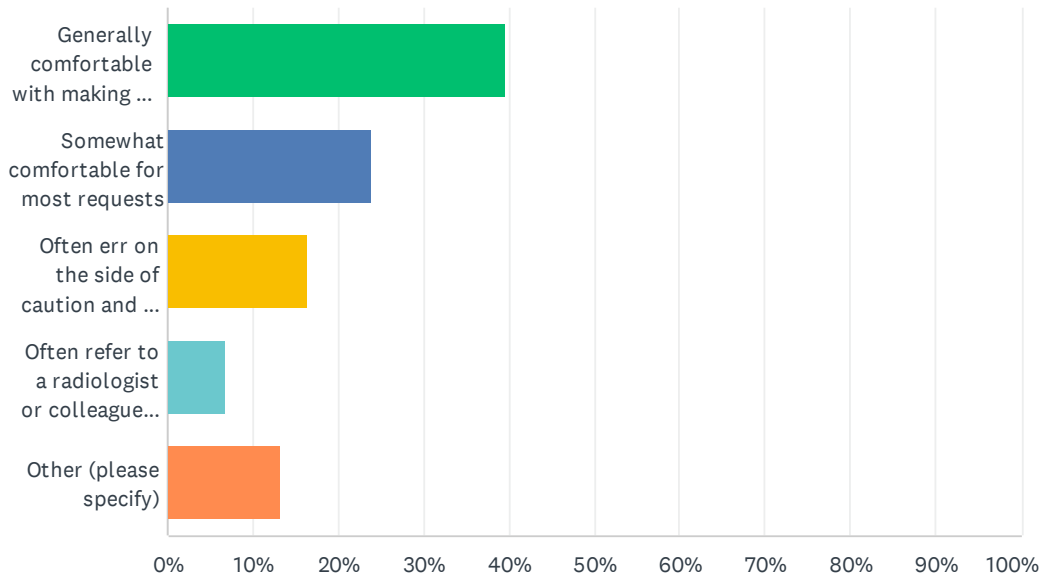
Answered: 159 Skipped: 9



|                       | LOW          | MEDIUM       | HIGH         | TOTAL | WEIGHTED AVERAGE |
|-----------------------|--------------|--------------|--------------|-------|------------------|
| CIED generator damage | 61.64%<br>98 | 25.79%<br>41 | 12.58%<br>20 | 159   | 1.51             |
| CIED lead damage      | 59.75%<br>95 | 27.67%<br>44 | 12.58%<br>20 | 159   | 1.53             |
| Arrhythmia            | 61.64%<br>98 | 23.27%<br>37 | 15.09%<br>24 | 159   | 1.53             |

## Q17 When you receive requests to approve MRI for patients with non-conditional CIEDs, how certain do you feel about your ability to manage the request to ensure the safety of the patient?

Answered: 159 Skipped: 9



| ANSWER CHOICES   | RESPONSES |            |
|--|-----------|------------|
| Generally comfortable with making the decision                 | 39.62%    | 63         |
| Somewhat comfortable for most requests                         | 23.90%    | 38         |
| Often err on the side of caution and do not approve            | 16.35%    | 26         |
| Often refer to a radiologist or colleague to make the decision | 6.92%     | 11         |
| Other (please specify)   | 13.21%    | 21         |
| <b>TOTAL</b>   |           | <b>159</b> |

| # | OTHER (PLEASE SPECIFY)  | DATE              |
|---|---|-------------------|
| 1 | xx  | 6/5/2024 9:20 AM  |
| 2 | Some sedation to make patients calm   | 6/1/2024 11:04 PM |
| 3 | We do not approve   | 5/30/2024 4:10 AM |
| 4 | If the system is non-conditional the radiology practice will not scan   | 5/26/2024 4:47 PM |
| 5 | never referred  | 5/26/2024 5:59 AM |
| 6 | This is currently not allowed in Hong Kong  | 5/26/2024 5:47 AM |
| 7 | since our radiologist deny MRI scans on patient with non-conditional CIEDs I do not have to address this question | 5/25/2024 6:07 AM |
| 8 | Cardiologist will be within facility  | 5/24/2024 9:35 PM |

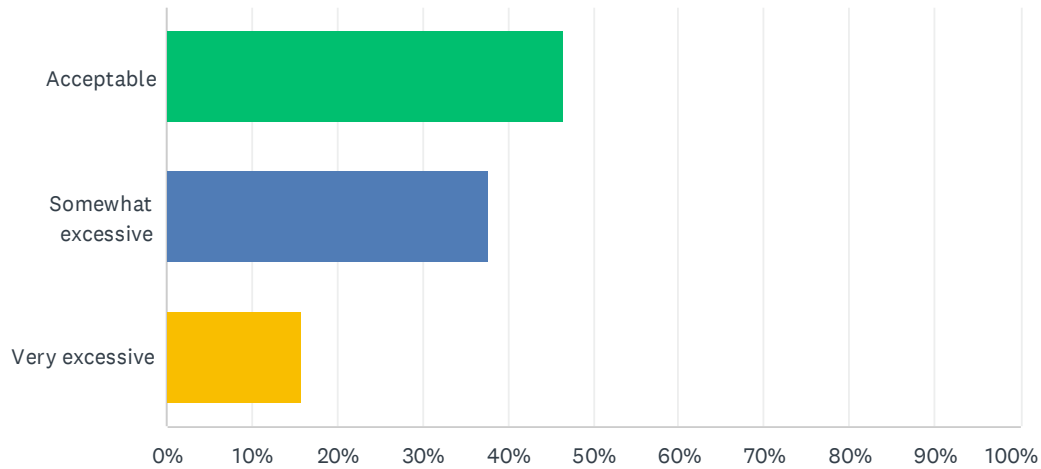
## Challenges with MRIs for Patients with CIEDs

|    |   |                    |
|----|---|--------------------|
| 9  | We do not offer this at my centre   | 5/24/2024 7:11 PM  |
| 10 | Confirm model and contact company representatives   | 5/24/2024 4:57 PM  |
| 11 | Depends whether patient is pacemaker dependent or not.  | 5/24/2024 1:01 PM  |
| 12 | Depends on the CIED features and the clinical and electrophysiological conditions of the patient.   | 5/24/2024 9:57 AM  |
| 13 | In Japan, recently published statement does not allow the MRI as class 1 or 2. Therefore, we usually have to ask this issue for the IRB.  | 5/24/2024 3:40 AM  |
| 14 | currently not doing non conditional systems   | 5/24/2024 1:55 AM  |
| 15 | I do not allow  | 5/24/2024 1:24 AM  |
| 16 | never asked   | 5/23/2024 11:07 PM |
| 17 | Not allowed at our hospital currently but if that changed I would be comfortable with making the decision   | 5/23/2024 9:40 PM  |
| 18 | We do not approve off-label MRI   | 5/23/2024 7:14 PM  |
| 19 | We have to analyze each case, some time we have to take the risk if the data obtained by MRI it is more important than the device. Some time we have to be prepared to upgrade the device | 5/23/2024 6:32 PM  |
| 20 | We do not get requests for this as radiology decline  | 5/23/2024 5:32 PM  |
| 21 | In Italy is the radiologist that decides  | 5/23/2024 5:09 PM  |



## Q18 How would you characterize the amount of your device team's work involved for the average patient with non-conditional CIED to undergo MRI?

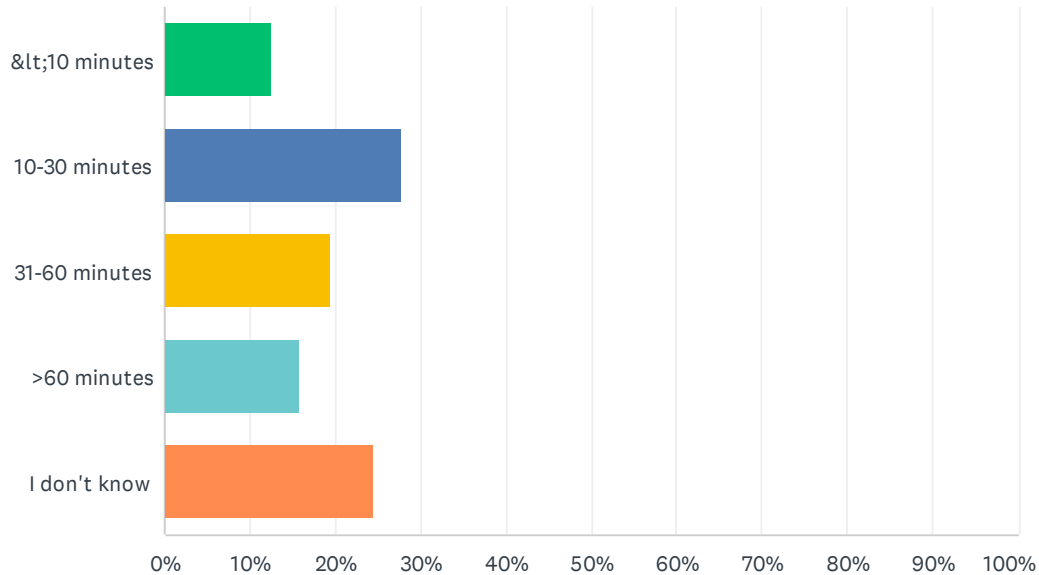
Answered: 159 Skipped: 9



| ANSWER CHOICES     | RESPONSES |     |
|--------------------|-----------|-----|
| Acceptable         | 46.54%    | 74  |
| Somewhat excessive | 37.74%    | 60  |
| Very excessive     | 15.72%    | 25  |
| TOTAL              |           | 159 |

## Q19 What is the estimated total time dedicated by you and your device team to the care of a typical non-conditional CIED patient's MRI scan?

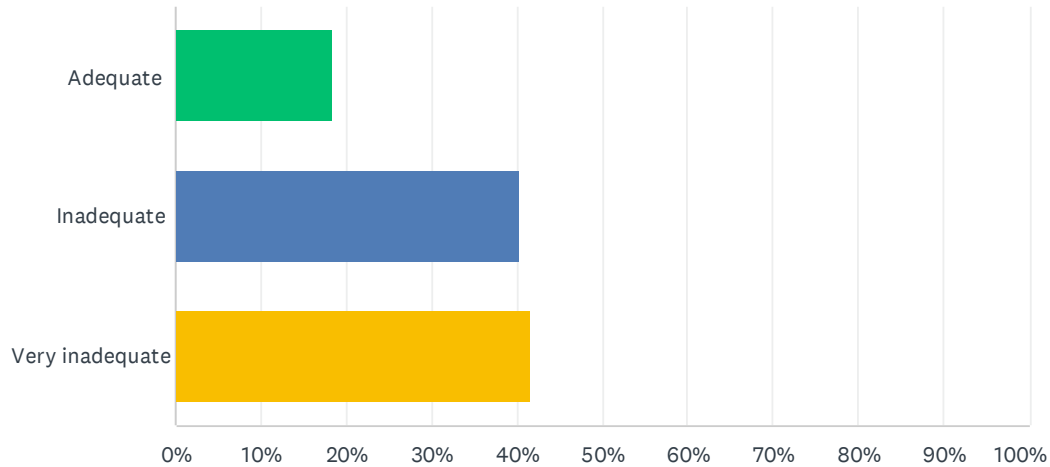
Answered: 159 Skipped: 9



| ANSWER CHOICES | RESPONSES |     |
|----------------|-----------|-----|
| <10 minutes    | 12.58%    | 20  |
| 10-30 minutes  | 27.67%    | 44  |
| 31-60 minutes  | 19.50%    | 31  |
| >60 minutes    | 15.72%    | 25  |
| I don't know   | 24.53%    | 39  |
| TOTAL          |           | 159 |

## Q20 Payment for EP services provided to support MRI scans in CIED patients is:

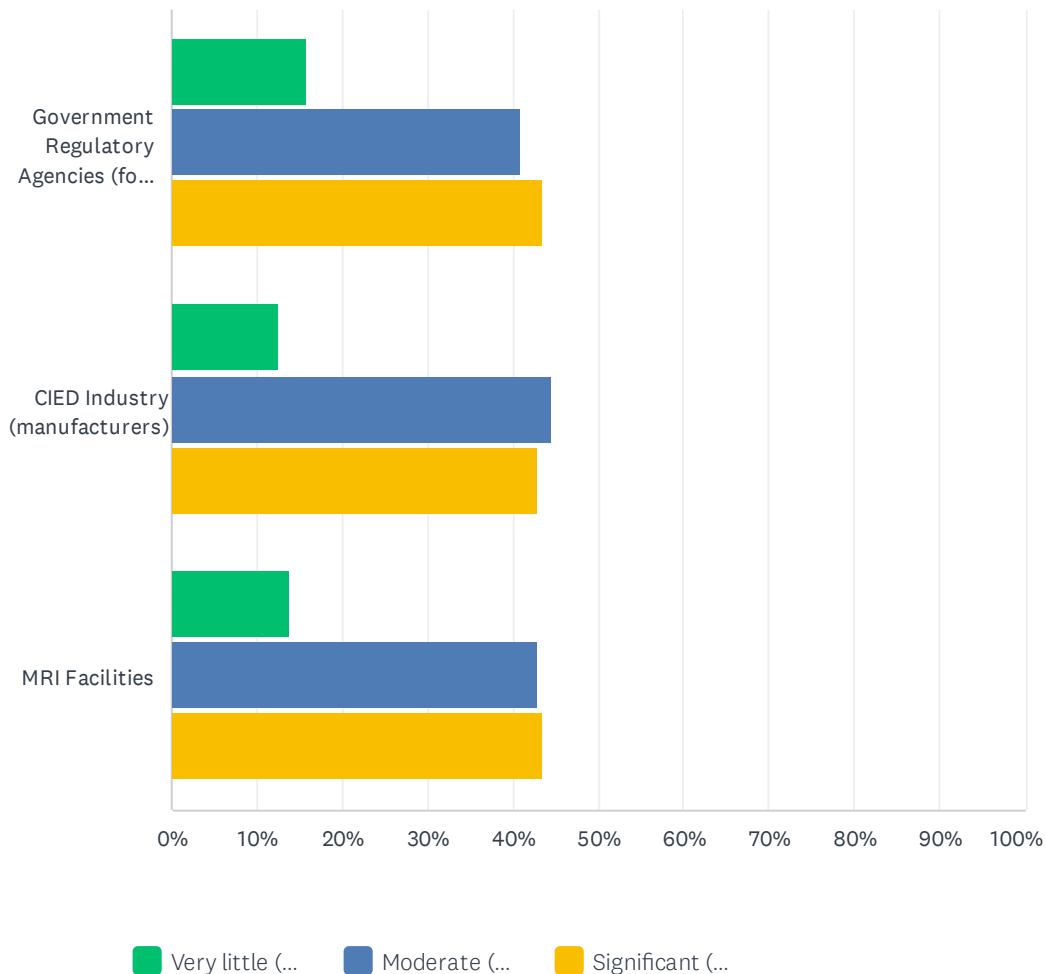
Answered: 159 Skipped: 9



| ANSWER CHOICES  |  | RESPONSES |     |
|-----------------|--|-----------|-----|
| Adequate        |  | 18.24%    | 29  |
| Inadequate      |  | 40.25%    | 64  |
| Very inadequate |  | 41.51%    | 66  |
| TOTAL           |  |           | 159 |

## Q21 How much increased effort do you believe each of the following entities need to dedicate to improve MRI scanning for patients with CIEDs (including systems currently considered non-conditional)?

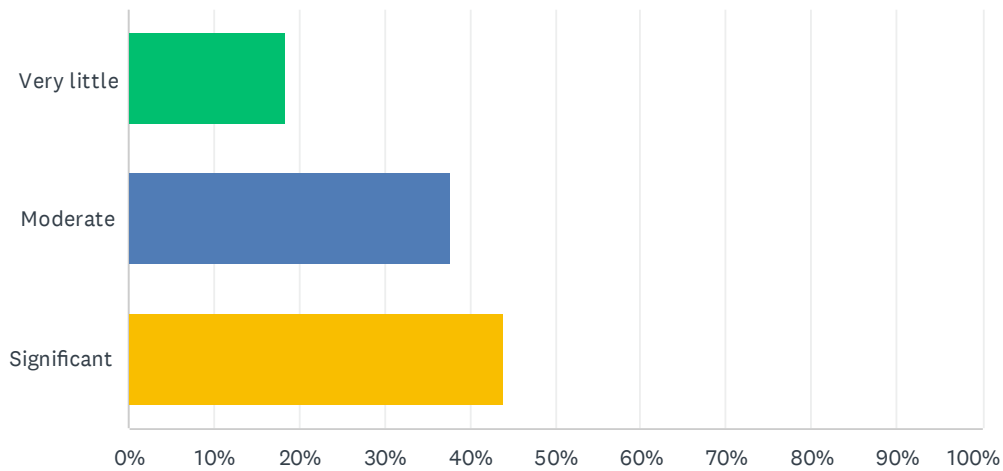
Answered: 159 Skipped: 9



|   | VERY LITTLE<br>(CURRENT EFFORTS<br>ARE GENERALLY<br>ADEQUATE) | MODERATE (CURRENT<br>EFFORTS ARE<br>SOMEWHAT<br>INADEQUATE) | SIGNIFICANT<br>(CURRENT EFFORTS<br>ARE VERY<br>INADEQUATE) | TOTAL | WEIGHTED<br>AVERAGE |
|---|---|---|--|-------|---------------------|
| Government<br>Regulatory Agencies<br>(for U.S.: FDA and<br>CMS) | 15.72%<br>25  | 40.88%<br>65  | 43.40%<br>69   | 159   | 2.28                |
| CIED Industry<br>(manufacturers)                                | 12.58%<br>20  | 44.65%<br>71  | 42.77%<br>68   | 159   | 2.30                |
| MRI Facilities  | 13.84%<br>22  | 42.77%<br>68  | 43.40%<br>69   | 159   | 2.30                |

Q22 If a CIED manufacturer was able to obtain MRI-conditional labeling for its generator to be used with a mix of other manufacturers' leads, how much competitive advantage would you give this brand in your practice?

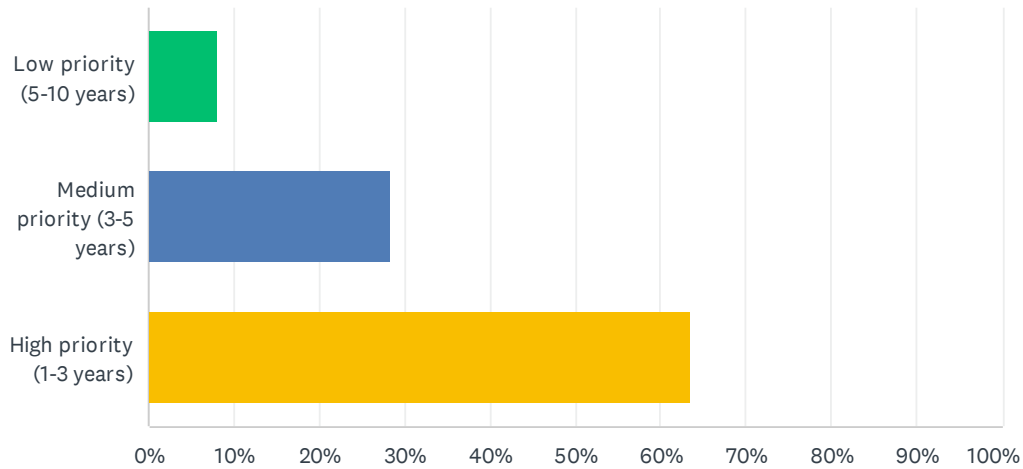
Answered: 159 Skipped: 9



| ANSWER CHOICES |  | RESPONSES |     |
|----------------|--|-----------|-----|
| Very little    |  | 18.24%    | 29  |
| Moderate       |  | 37.74%    | 60  |
| Significant    |  | 44.03%    | 70  |
| TOTAL          |  |           | 159 |

## Q23 What priority do you believe industry and regulatory agencies (FDA and others) should place to update MRI-conditional labeling to include mixed-brand systems?

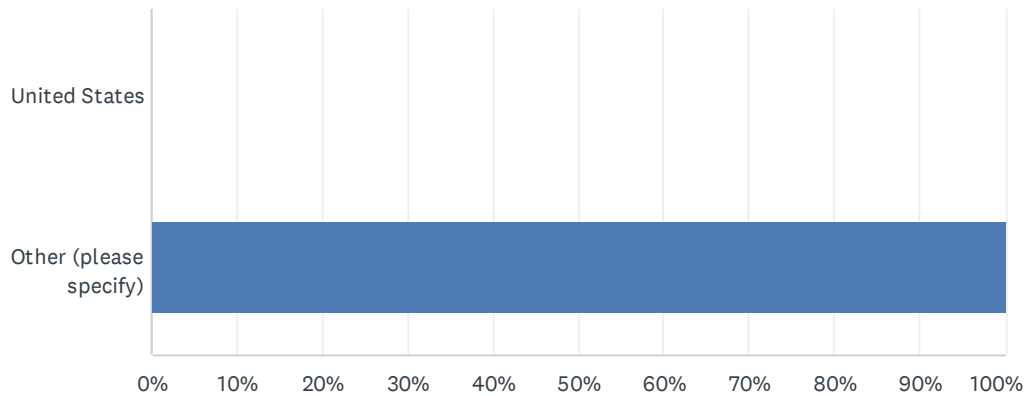
Answered: 159 Skipped: 9



| ANSWER CHOICES              | RESPONSES |     |
|-----------------------------|-----------|-----|
| Low priority (5-10 years)   | 8.18%     | 13  |
| Medium priority (3-5 years) | 28.30%    | 45  |
| High priority (1-3 years)   | 63.52%    | 101 |
| TOTAL                       |           | 159 |

## Q24 In what country do you currently practice?

Answered: 168 Skipped: 0



| ANSWER CHOICES         | RESPONSES   |
|------------------------|-------------|
| United States          | 0.00% 0     |
| Other (please specify) | 100.00% 168 |
| TOTAL                  | 168         |

| #  | OTHER (PLEASE SPECIFY) | DATE               |
|----|------------------------|--------------------|
| 1  | UK                     | 6/7/2024 1:55 AM   |
| 2  | canada                 | 6/5/2024 9:20 AM   |
| 3  | The Netherlands        | 6/3/2024 12:50 AM  |
| 4  | India                  | 6/1/2024 11:04 PM  |
| 5  | Canada                 | 5/31/2024 7:59 PM  |
| 6  | sweden                 | 5/30/2024 5:30 PM  |
| 7  | Czech republic         | 5/30/2024 4:10 AM  |
| 8  | India                  | 5/29/2024 12:08 PM |
| 9  | Europe                 | 5/29/2024 8:56 AM  |
| 10 | Malaysia               | 5/28/2024 6:08 PM  |
| 11 | Portugal               | 5/28/2024 1:33 PM  |
| 12 | na                     | 5/28/2024 11:02 AM |
| 13 | Denmark                | 5/28/2024 7:59 AM  |
| 14 | hong kong              | 5/28/2024 5:22 AM  |
| 15 | Canada                 | 5/27/2024 2:59 PM  |
| 16 | TURKEY                 | 5/27/2024 2:59 PM  |
| 17 | Canada                 | 5/27/2024 12:13 PM |
| 18 | ITALY                  | 5/27/2024 5:12 AM  |

## Challenges with MRIs for Patients with CIEDs

|    |                     |                    |
|----|---------------------|--------------------|
| 19 | Portugal            | 5/27/2024 5:08 AM  |
| 20 | Germany             | 5/27/2024 3:52 AM  |
| 21 | Netherlands         | 5/27/2024 3:46 AM  |
| 22 | Republic of Moldova | 5/27/2024 3:22 AM  |
| 23 | Australia           | 5/26/2024 10:53 PM |
| 24 | Australia           | 5/26/2024 4:47 PM  |
| 25 | Morocco             | 5/26/2024 4:00 PM  |
| 26 | Poland              | 5/26/2024 3:52 PM  |
| 27 | Brazil              | 5/26/2024 3:43 PM  |
| 28 | Canada              | 5/26/2024 3:01 PM  |
| 29 | Australia           | 5/26/2024 6:00 AM  |
| 30 | Hong Kong           | 5/26/2024 5:47 AM  |
| 31 | India               | 5/26/2024 12:50 AM |
| 32 | Portugal            | 5/25/2024 8:38 PM  |
| 33 | Brazil              | 5/25/2024 5:42 PM  |
| 34 | New Zealand         | 5/25/2024 5:33 PM  |
| 35 | Israel              | 5/25/2024 5:11 PM  |
| 36 | Poland              | 5/25/2024 3:43 PM  |
| 37 | Poland              | 5/25/2024 12:30 PM |
| 38 | South Africa        | 5/25/2024 9:47 AM  |
| 39 | ISRAEL              | 5/25/2024 8:00 AM  |
| 40 | Australia           | 5/25/2024 7:28 AM  |
| 41 | spain               | 5/25/2024 6:36 AM  |
| 42 | CHINA               | 5/25/2024 6:16 AM  |
| 43 | Germany             | 5/25/2024 6:07 AM  |
| 44 | Slovenia            | 5/25/2024 5:41 AM  |
| 45 | Switzerland         | 5/25/2024 5:37 AM  |
| 46 | UK                  | 5/25/2024 5:07 AM  |
| 47 | Romania             | 5/25/2024 4:02 AM  |
| 48 | lebanon             | 5/25/2024 2:42 AM  |
| 49 | Australia           | 5/25/2024 2:10 AM  |
| 50 | Italy               | 5/25/2024 1:58 AM  |
| 51 | UK                  | 5/25/2024 1:37 AM  |
| 52 | UAE                 | 5/25/2024 1:01 AM  |
| 53 | Australia           | 5/24/2024 9:35 PM  |
| 54 | Canada              | 5/24/2024 9:14 PM  |
| 55 | Argentina           | 5/24/2024 8:02 PM  |
| 56 | England             | 5/24/2024 7:11 PM  |



## Challenges with MRIs for Patients with CIEDs

|    |                    |                    |
|----|--------------------|--------------------|
| 57 | UK                 | 5/24/2024 6:13 PM  |
| 58 | Hong kong          | 5/24/2024 4:57 PM  |
| 59 | Netherlands        | 5/24/2024 4:32 PM  |
| 60 | KSA                | 5/24/2024 4:10 PM  |
| 61 | ITALY              | 5/24/2024 3:17 PM  |
| 62 | Canada             | 5/24/2024 3:04 PM  |
| 63 | Sweden             | 5/24/2024 2:20 PM  |
| 64 | Israel             | 5/24/2024 1:02 PM  |
| 65 | United Kingdom     | 5/24/2024 12:34 PM |
| 66 | Lebanon            | 5/24/2024 12:28 PM |
| 67 | INDIA              | 5/24/2024 12:04 PM |
| 68 | Canada             | 5/24/2024 10:52 AM |
| 69 | Canada             | 5/24/2024 10:51 AM |
| 70 | Italy              | 5/24/2024 10:13 AM |
| 71 | BRAZIL             | 5/24/2024 10:04 AM |
| 72 | India              | 5/24/2024 9:56 AM  |
| 73 | Yemen              | 5/24/2024 9:23 AM  |
| 74 | Dominican Republic | 5/24/2024 8:58 AM  |
| 75 | United Kingdom     | 5/24/2024 8:30 AM  |
| 76 | Austria            | 5/24/2024 8:29 AM  |
| 77 | India              | 5/24/2024 6:29 AM  |
| 78 | Japan              | 5/24/2024 5:57 AM  |
| 79 | argentina          | 5/24/2024 5:39 AM  |
| 80 | Jordan             | 5/24/2024 5:04 AM  |
| 81 | Brazil             | 5/24/2024 5:04 AM  |
| 82 | Australia          | 5/24/2024 4:57 AM  |
| 83 | Japan              | 5/24/2024 3:41 AM  |
| 84 | North Macedonia    | 5/24/2024 3:33 AM  |
| 85 | Malta              | 5/24/2024 3:33 AM  |
| 86 | France             | 5/24/2024 3:24 AM  |
| 87 | Germany            | 5/24/2024 3:17 AM  |
| 88 | Argentina          | 5/24/2024 3:05 AM  |
| 89 | Tunisia            | 5/24/2024 2:52 AM  |
| 90 | israel             | 5/24/2024 2:24 AM  |
| 91 | Malaysia           | 5/24/2024 2:14 AM  |
| 92 | Australia          | 5/24/2024 1:55 AM  |
| 93 | Turkey             | 5/24/2024 1:24 AM  |
| 94 | India              | 5/24/2024 1:17 AM  |

## Challenges with MRIs for Patients with CIEDs

|     |             |                    |
|-----|-------------|--------------------|
| 95  | Turkey      | 5/24/2024 1:05 AM  |
| 96  | Italy       | 5/24/2024 1:03 AM  |
| 97  | Brazil      | 5/24/2024 1:01 AM  |
| 98  | Estonia     | 5/24/2024 12:57 AM |
| 99  | Ireland     | 5/24/2024 12:55 AM |
| 100 | South KOREA | 5/24/2024 12:45 AM |
| 101 | pakistan    | 5/24/2024 12:19 AM |
| 102 | Norway      | 5/24/2024 12:07 AM |
| 103 | France      | 5/24/2024 12:05 AM |
| 104 | Netherlands | 5/23/2024 11:57 PM |
| 105 | Israel      | 5/23/2024 11:56 PM |
| 106 | Romania     | 5/23/2024 11:54 PM |
| 107 | Greece      | 5/23/2024 11:31 PM |
| 108 | China       | 5/23/2024 11:09 PM |
| 109 | AUSTRALIA   | 5/23/2024 11:08 PM |
| 110 | Ecuador     | 5/23/2024 11:03 PM |
| 111 | Brazil      | 5/23/2024 10:28 PM |
| 112 | Canada      | 5/23/2024 10:26 PM |
| 113 | Canada      | 5/23/2024 10:07 PM |
| 114 | COLOMBIA    | 5/23/2024 10:03 PM |
| 115 | Israel      | 5/23/2024 10:02 PM |
| 116 | France      | 5/23/2024 9:48 PM  |
| 117 | india       | 5/23/2024 9:41 PM  |
| 118 | Australia   | 5/23/2024 9:41 PM  |
| 119 | Canada      | 5/23/2024 9:31 PM  |
| 120 | India       | 5/23/2024 8:45 PM  |
| 121 | Canada      | 5/23/2024 8:38 PM  |
| 122 | India       | 5/23/2024 8:22 PM  |
| 123 | Australia   | 5/23/2024 8:13 PM  |
| 124 | Uruguay     | 5/23/2024 8:12 PM  |
| 125 | Australia   | 5/23/2024 7:59 PM  |
| 126 | China       | 5/23/2024 7:46 PM  |
| 127 | Canada      | 5/23/2024 7:36 PM  |
| 128 | Sweden      | 5/23/2024 7:35 PM  |
| 129 | Australia   | 5/23/2024 7:14 PM  |
| 130 | Japan       | 5/23/2024 7:04 PM  |
| 131 | Argentina   | 5/23/2024 6:59 PM  |
| 132 | Argentina   | 5/23/2024 6:53 PM  |

## Challenges with MRIs for Patients with CIEDs

|     |                 |                   |
|-----|-----------------|-------------------|
| 133 | Canada          | 5/23/2024 6:44 PM |
| 134 | VietNam         | 5/23/2024 6:44 PM |
| 135 | Sweden          | 5/23/2024 6:39 PM |
| 136 | MEXICO          | 5/23/2024 6:33 PM |
| 137 | Spain           | 5/23/2024 6:05 PM |
| 138 | China           | 5/23/2024 6:00 PM |
| 139 | India           | 5/23/2024 5:59 PM |
| 140 | the netherlands | 5/23/2024 5:57 PM |
| 141 | Canada          | 5/23/2024 5:57 PM |
| 142 | Canada          | 5/23/2024 5:45 PM |
| 143 | Japan           | 5/23/2024 5:44 PM |
| 144 | Colombia        | 5/23/2024 5:42 PM |
| 145 | Canada          | 5/23/2024 5:32 PM |
| 146 | Portugal        | 5/23/2024 5:26 PM |
| 147 | Uk              | 5/23/2024 5:25 PM |
| 148 | Brasil          | 5/23/2024 5:24 PM |
| 149 | Netherlands     | 5/23/2024 5:24 PM |
| 150 | Canada          | 5/23/2024 5:21 PM |
| 151 | Italy           | 5/23/2024 5:10 PM |
| 152 | Israel          | 5/23/2024 5:09 PM |
| 153 | Canada          | 5/23/2024 5:07 PM |
| 154 | Jamaica         | 5/23/2024 5:07 PM |
| 155 | Sweden          | 5/23/2024 5:07 PM |
| 156 | Canada          | 5/23/2024 5:05 PM |
| 157 | germany         | 5/23/2024 5:05 PM |
| 158 | Brazil          | 5/23/2024 4:59 PM |
| 159 | Canada          | 5/23/2024 4:58 PM |
| 160 | Japan           | 5/23/2024 4:55 PM |
| 161 | Brazil          | 5/23/2024 4:52 PM |
| 162 | syria           | 5/23/2024 4:52 PM |
| 163 | Tanzania        | 5/23/2024 4:43 PM |
| 164 | Australia       | 5/23/2024 4:41 PM |
| 165 | Netherlands     | 5/23/2024 4:40 PM |
| 166 | Canada          | 5/23/2024 4:37 PM |
| 167 | Austria         | 5/23/2024 4:36 PM |
| 168 | Germany         | 5/23/2024 4:35 PM |

## Q25 In what region or territory of the U.S. do you primarily practice?

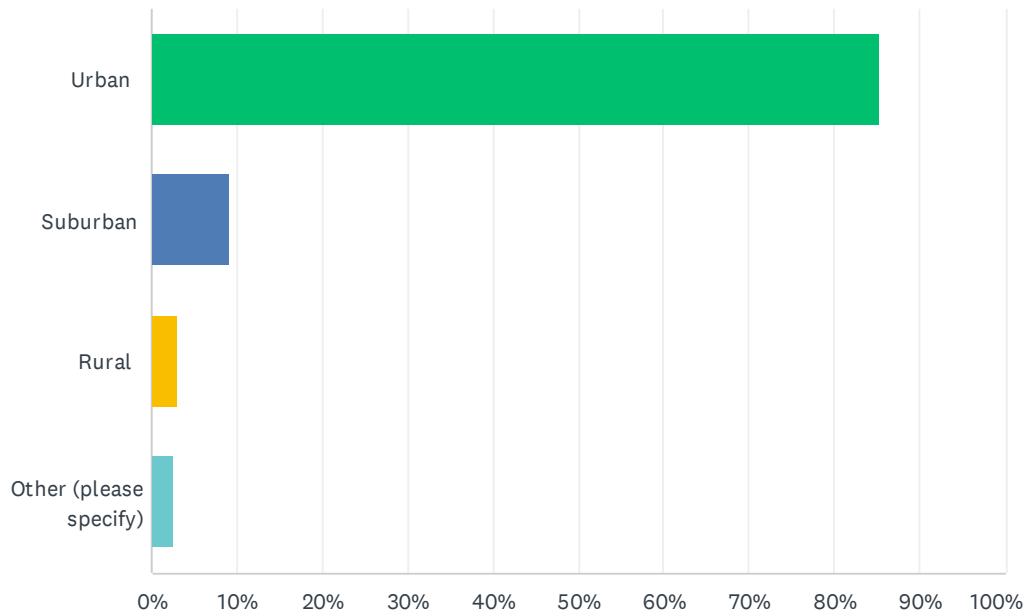
Answered: 0   Skipped: 168

 No matching responses.

| ANSWER CHOICES   | RESPONSES |   |
|--|-----------|---|
| Northeast: Includes CT, MA, ME, NH, NJ, NY, PA, RI, VT   | 0.00%     | 0 |
| Midwest: Includes IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI                               | 0.00%     | 0 |
| South: Includes AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV             | 0.00%     | 0 |
| West: Includes AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY                              | 0.00%     | 0 |
| US Territory: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands | 0.00%     | 0 |
| TOTAL  |           | 0 |

## Q26 What is the setting of your primary hospital?

Answered: 163 Skipped: 5

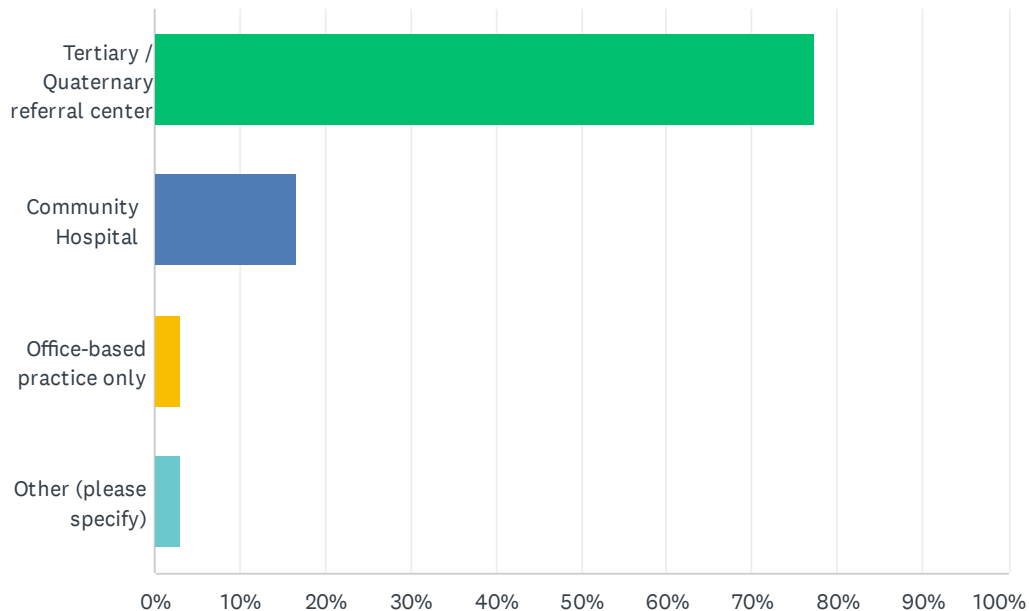


| ANSWER CHOICES         | RESPONSES |     |
|------------------------|-----------|-----|
| Urban                  | 85.28%    | 139 |
| Suburban               | 9.20%     | 15  |
| Rural                  | 3.07%     | 5   |
| Other (please specify) | 2.45%     | 4   |
| TOTAL                  |           | 163 |

| # | OTHER (PLEASE SPECIFY)     | DATE              |
|---|----------------------------|-------------------|
| 1 | PRIVATE HOSPITAL           | 5/27/2024 3:04 PM |
| 2 | mixed rural/suburban/urban | 5/27/2024 3:47 AM |
| 3 | Oncology Center            | 5/26/2024 3:55 PM |
| 4 | University Hospital        | 5/25/2024 2:44 AM |

## Q27 Which of the following best describes your primary practice setting?

Answered: 163 Skipped: 5

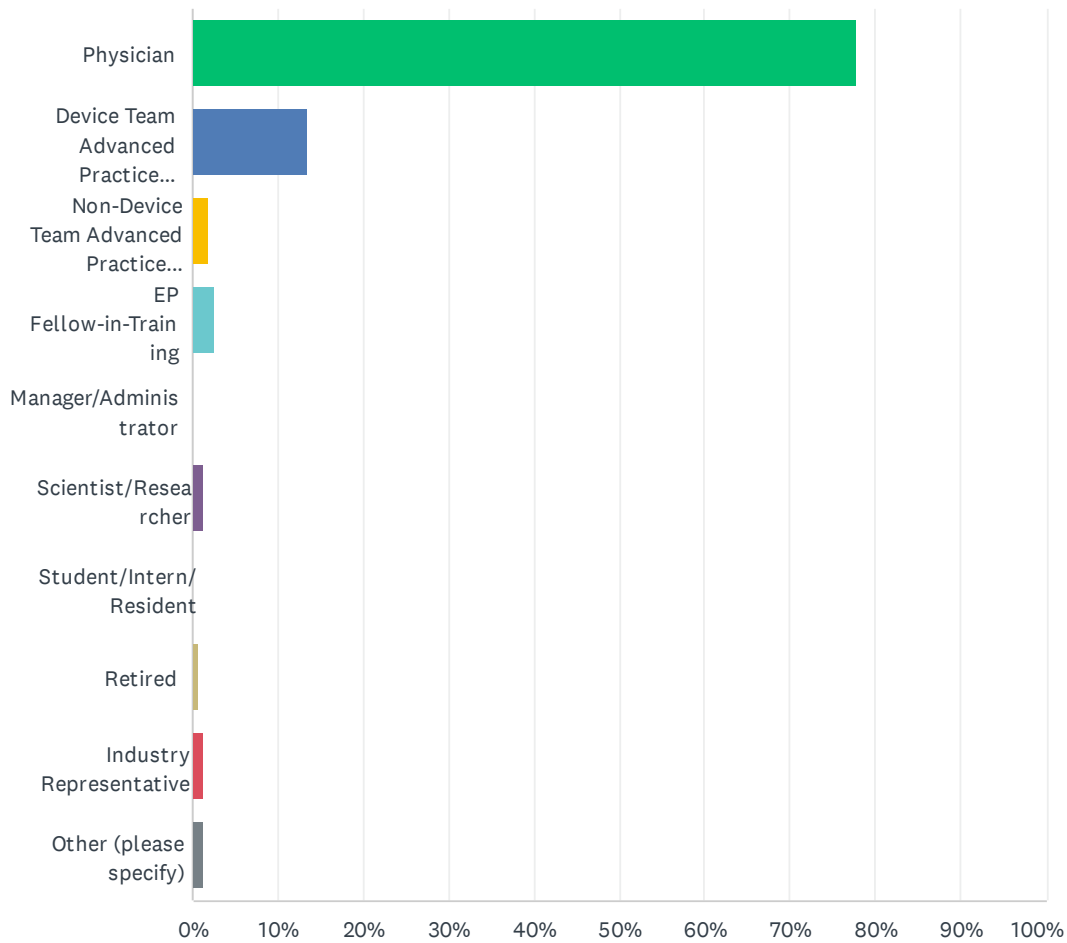


| ANSWER CHOICES                        | RESPONSES |     |
|---------------------------------------|-----------|-----|
| Tertiary / Quaternary referral center | 77.30%    | 126 |
| Community Hospital                    | 16.56%    | 27  |
| Office-based practice only            | 3.07%     | 5   |
| Other (please specify)                | 3.07%     | 5   |
| TOTAL                                 |           | 163 |

| # | OTHER (PLEASE SPECIFY)  | DATE               |
|---|---|--------------------|
| 1 | St. Michael's Hospital is a fully affiliated teaching and research hospital serving Toronto's urban comWe are an Urban level 1 trauma centre and provincial hub for neurosurgery, complex cardiac and cardiovascular care and more, and home to one of the largest MS Clinics in North America. | 6/5/2024 9:23 AM   |
| 2 | PRIVATE HOSPITAL  | 5/27/2024 3:04 PM  |
| 3 | University Hospital   | 5/24/2024 12:29 PM |
| 4 | Office, Hospital, University  | 5/24/2024 10:04 AM |
| 5 | Académic hospital   | 5/23/2024 5:11 PM  |

## Q28 Which of the following best describes your role? (Select only one):

Answered: 163 Skipped: 5



## Challenges with MRIs for Patients with CIEDs

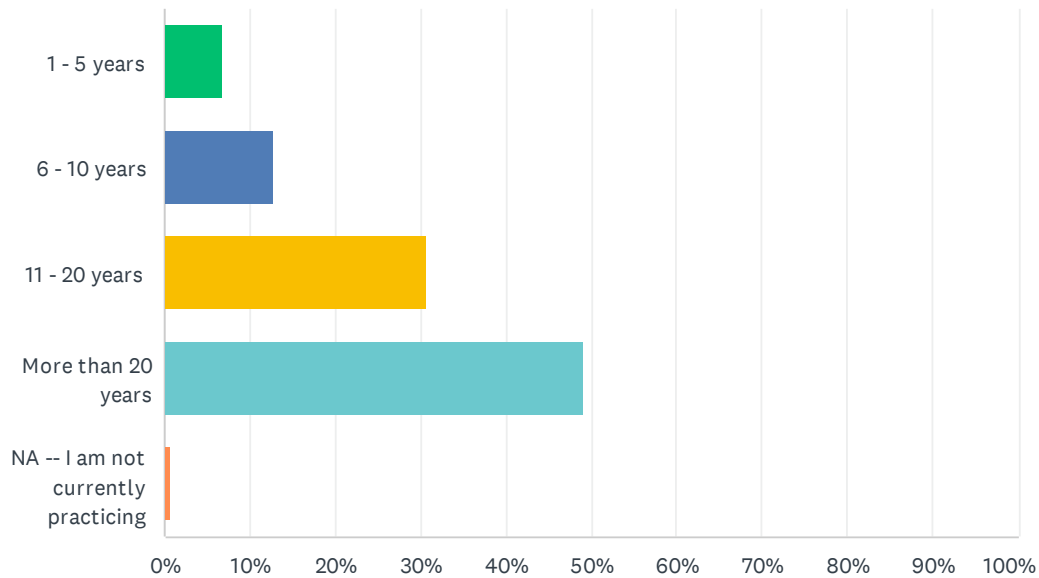
| ANSWER CHOICES  | RESPONSES |     |
|---|-----------|-----|
| Physician   | 77.91%    | 127 |
| Device Team Advanced Practice Provider (NP, PA), Nurse, or Technician     | 13.50%    | 22  |
| Non-Device Team Advanced Practice Provider (NP, PA), Nurse, or Technician | 1.84%     | 3   |
| EP Fellow-in-Training   | 2.45%     | 4   |
| Manager/Administrator   | 0.00%     | 0   |
| Scientist/Researcher  | 1.23%     | 2   |
| Student/Intern/Resident   | 0.00%     | 0   |
| Retired   | 0.61%     | 1   |
| Industry Representative   | 1.23%     | 2   |
| Other (please specify)  | 1.23%     | 2   |
| TOTAL   |           | 163 |

| # | OTHER (PLEASE SPECIFY)                 | DATE              |
|---|--|-------------------|
| 1 | Chief Arrhythmia Unit                  | 5/23/2024 6:58 PM |
| 2 | Clinical Nurse Educator in CIED clinic | 5/23/2024 5:08 PM |



## Q29 How many years have you been in practice?

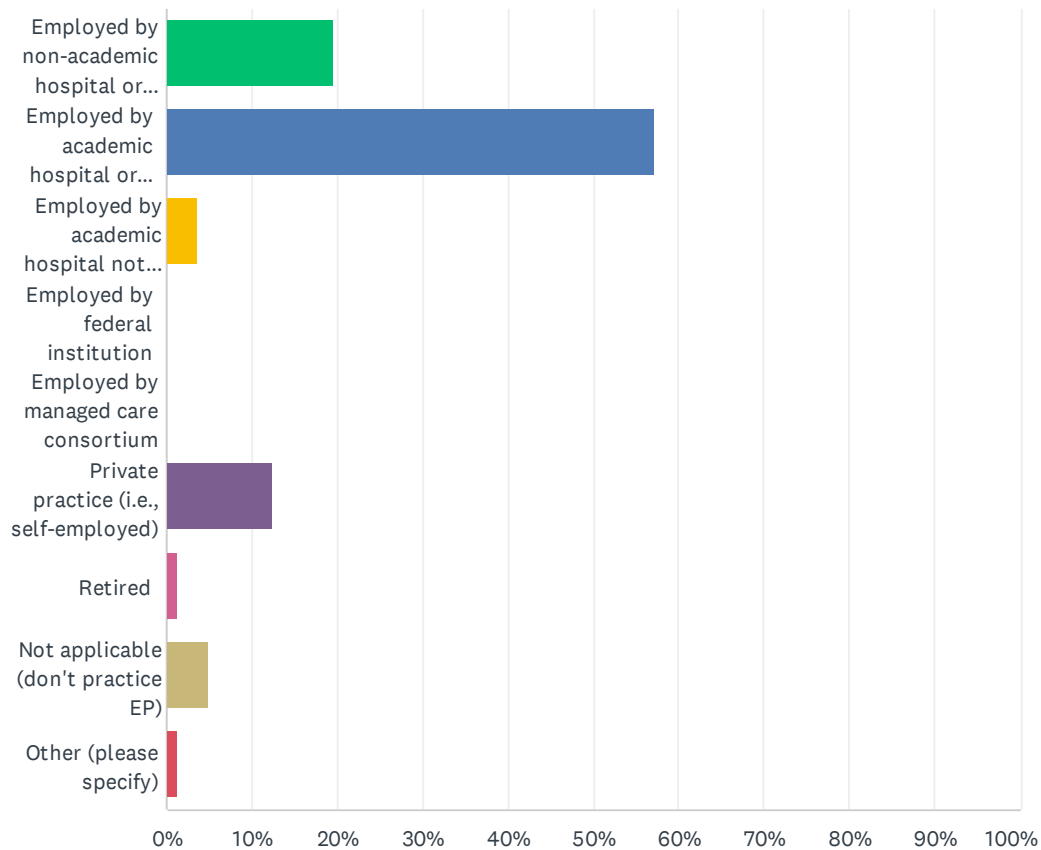
Answered: 163 Skipped: 5



| ANSWER CHOICES                      | RESPONSES |     |
|-------------------------------------|-----------|-----|
| 1 - 5 years                         | 6.75%     | 11  |
| 6 - 10 years                        | 12.88%    | 21  |
| 11 - 20 years                       | 30.67%    | 50  |
| More than 20 years                  | 49.08%    | 80  |
| NA -- I am not currently practicing | 0.61%     | 1   |
| TOTAL                               |           | 163 |

## Q30 What is the primary setting in which you practice electrophysiology?

Answered: 163 Skipped: 5



| ANSWER CHOICES   |  | RESPONSES |     |
|--|--|-----------|-----|
| Employed by non-academic hospital or health system             |  | 19.63%    | 32  |
| Employed by academic hospital or health system                 |  | 57.06%    | 93  |
| Employed by academic hospital not affiliated with a university |  | 3.68%     | 6   |
| Employed by federal institution                                |  | 0.00%     | 0   |
| Employed by managed care consortium                            |  | 0.00%     | 0   |
| Private practice (i.e., self-employed)                         |  | 12.27%    | 20  |
| Retired  |  | 1.23%     | 2   |
| Not applicable (don't practice EP)                             |  | 4.91%     | 8   |
| Other (please specify)   |  | 1.23%     | 2   |
| TOTAL  |  |           | 163 |

| # | OTHER (PLEASE SPECIFY)  | DATE              |
|---|---|-------------------|
| 1 | Employed by state owned hospital part of UK national health service | 5/25/2024 1:43 AM |



## Q31 Please share your comments and suggestions for HRS on the need for additional evidence or workflow improvement for CIEDs and MRI scanning.

Answered: 51 Skipped: 117

| #  | RESPONSES   | DATE               |
|----|---|--------------------|
| 1  | Questions were good and thanks for the opportunity  | 6/1/2024 11:08 PM  |
| 2  | The images got are suboptimal. We need our radiology team to be taught on how to get good images  | 5/29/2024 12:10 PM |
| 3  | Take so much time-from Cardio signing forms, MRI contacting reps, local rep unavailability, counter-productive time utilized on follow ups(between floor staff & doctor/floor staff & MRI, MRI & local rep)   | 5/28/2024 11:08 AM |
| 4  | Perform studies that show there is no need for any protocols surrounding MRI scanning of CIEDs - just scan them without the requirement for any other monitoring or "pre / post MRI programming or monitoring"  | 5/26/2024 4:50 PM  |
| 5  | While we have been able to develop a program to MRI scan patients with both conditional and non conditional devices except for abandoned leads, most centers in Canada would not perform a cardiac MRI on any of these patients. Better guidance with respect to specifically cardiac MRI and these patients would be helpful   | 5/26/2024 3:03 PM  |
| 6  | This is an increasing problems for our adults with congenital heart disease patient population, therefore epicardial leads and/or non-MRI conditional device create significant dilemma.  | 5/26/2024 5:48 AM  |
| 7  | For us the major barrier for MRI access is the staffing resources, our local MRI radiologists and MRT technicians lack of willingness to accept data of safety with on- and off- label devices without cardiac techs and EPs on-site but not physically present at a scan. Currently MRIs at our institution are heavily staff resourced and thus very hard for patients to access. | 5/25/2024 5:38 PM  |
| 8  | cooperation between cardiologist and radiologist needs to be specified; reimbursement needs to be adequate  | 5/25/2024 6:14 AM  |
| 9  | Workflow for abandoned leads  | 5/25/2024 5:44 AM  |
| 10 | Many MRI workflows do not permit free flow - pre-planning of elective lists is needed.  | 5/25/2024 5:09 AM  |
| 11 | We have had well established and working model for almost 10 years. We scan 10 -12 patients per week and everything is protocolized and well documented. I realise that the set up is slightly different but we have patients with exactly the same needs and types of devices and the service is ran by similarly qualified people.  | 5/25/2024 1:43 AM  |
| 12 | Important issue to develop new guidelines   | 5/24/2024 8:06 PM  |
| 13 | Just adapt 2017 guidelines to current knowledge as soon as possible e.g. see 2021 esc guidelines  | 5/24/2024 4:35 PM  |
| 14 | .   | 5/24/2024 4:12 PM  |
| 15 | Write something jointly with radiologists   | 5/24/2024 3:05 PM  |
| 16 | We need more clarity in the guidelines for MRI in CIED patients as well as management protocols and troubleshooting if required   | 5/24/2024 12:06 PM |
| 17 | 1. Disclose a risk index to do MRI in non-conditioned CIED in order to show the patient and hospital 2. Disclose a risk index to do MRI in CIED and lead of different brands in order to show the patient and hospital 3. Recommend a fair medical payment rate   | 5/24/2024 10:04 AM |
| 18 | Formation of guidelines Formation of registry Education to physician and radiologist Expected complications during MRI and action plan Certificate course for physicians in such pt   | 5/24/2024 9:59 AM  |

## Challenges with MRIs for Patients with CIEDs

|    |  |                    |
|----|--|--------------------|
| 19 | Proper protocol for unconditional devices.   | 5/24/2024 6:31 AM  |
| 20 | es importante que tanto el paciente , como el servicio o las personas que ttrabajan en el servicio de RMI sepan que la mayoría de los dispositivos actuales son compatibles con resonancia y que ante la necesidad de realizar una resonancia de cualquier parte del cuerpo, se podría hacer sin inconvenientes previo paso del dispositivo a un modo de seguridad ya se el resonador de 1,5 tesla o 3 tesla. y tambien saber que hay dispositivos actuales que al entrar en un capo magnetico solo se pasan un modo de seguridad. | 5/24/2024 5:51 AM  |
| 21 | In Australia patients are going to be charged at least A\$200 for each MRI- which they will have to pay not covered by the payer. It is also difficult to find radiology practices who will accomodated CIED patients. This makes it very frustrating and costly.  | 5/24/2024 5:00 AM  |
| 22 | Probably, current HRS statement was published in 2017. Therefore, it should be updated according to the recent clinical practice and the situation of device provider (they only provide the MRI conditional device).  | 5/24/2024 3:47 AM  |
| 23 | Provide a listing of all leads and devices according to ability to undergo MRI scans   | 5/24/2024 3:36 AM  |
| 24 | Further liaison with industry to loosen labelling restrictions regarding MRIs in non-conditional CIEDs   | 5/24/2024 3:36 AM  |
| 25 | provide examples of workflow/ procedures to improve outcomes for off label scanning  | 5/24/2024 1:57 AM  |
| 26 | A guideline or a flowchart to primary care physicians  | 5/24/2024 1:05 AM  |
| 27 | Many institutions are simply declining to scan patients with CIEDs even if conditional systems due to the resources involved. This is a significant disadvantage to EP patients and is actually a consideration when implanting a device. Institutions should have an ethical and legal obligation to scan patients with MRI conditional systems and not simply decline due to inconvenience.  | 5/24/2024 12:59 AM |
| 28 | need definitive guide lines  | 5/24/2024 12:20 AM |
| 29 | Automatic entry into and exit from MRI-modes greatly enhances workflow. Only Biotronik has this.   | 5/24/2024 12:09 AM |
| 30 | Accept for epicardial leads, we accept every situation for MRI without any adverse events. Of course we re-program the CIED to avoid EMI   | 5/24/2024 12:05 AM |
| 31 | Very important; Australian MRI providers are excessively risk averse   | 5/23/2024 11:10 PM |
| 32 | WE NEED TO CHANGE THE PARADIGM OF CONTRA INDICATION IN CARDIAC STIMULATION DEVICES AND THE EVIDENCE IS AVAILABLE   | 5/23/2024 10:07 PM |
| 33 | non conditional mri devices and abandoned leads need to be addressed dependency on devices is still an open question hence these need to be addressed  | 5/23/2024 9:43 PM  |
| 34 | measure the problem to show loss of access by qualified patients   | 5/23/2024 9:32 PM  |
| 35 | Mandating the manufacturer for mix use data and common MRI standard  | 5/23/2024 8:47 PM  |
| 36 | Informative  | 5/23/2024 8:24 PM  |
| 37 | Organize trials and trainings.   | 5/23/2024 7:51 PM  |
| 38 | Main barrier is device technologist time to do the MRIs. We are struggling with remote monitoring and have less tech time to do MRIs.  | 5/23/2024 7:37 PM  |
| 39 | HRS sponsored clinical trials on safety of MRI on current non-Conditional CIEDs, including mixed systems and abandoned hardware  | 5/23/2024 7:16 PM  |
| 40 | I started with MRI and CIEDs in my country and I'm the head of Arrhythmia Service in the hospital. This center is the biggest in Argentina in MRI with 11 MRI 1,5 T and 3 T. With referral of all the country, about 3 per day.  | 5/23/2024 6:58 PM  |
| 41 | Good   | 5/23/2024 6:47 PM  |
| 42 | HRS IS DOING WELL  | 5/23/2024 6:35 PM  |
| 43 | It'd be necessary to have MRI compatible devices, especially for SCD patients.   | 5/23/2024 6:03 PM  |

## Challenges with MRIs for Patients with CIEDs

|    |  |                   |
|----|--|-------------------|
| 44 | Evidence on non conditional MRI  | 5/23/2024 6:02 PM |
| 45 | A list of all brands of devices and leads, specifying if they are conditional or not conditional, the Tesla recommendation, and the issues reported in each devices to be aware of   | 5/23/2024 5:47 PM |
| 46 | More effort engaging radiology would be helpful  | 5/23/2024 5:33 PM |
| 47 | The evidence is all there . We jjust need regulatory bodies to endorse it  | 5/23/2024 5:27 PM |
| 48 | Interaction of HRS with other societies to provide adequate regulation valid for everyone.   | 5/23/2024 5:26 PM |
| 49 | There should be a shift towards gradient of risk for non-conditional MRI patients and not absolute versus relative risk, such as the British Cardiovascular Society format). Also from reviewing the literature overall it seems older non-conditional devices are the highest risk for potential malfunction where newer non-conditional devices have a much lower risk of malfunction. This risk stratification has not been integrated into our guidelines. Below is conflicting information of various regulatory bodies which makes it challenging to create robust guidelines. Our CIED staff workload for monitoring patients during non-conditional MRIs has increased substantially which pulls away clinic staff resources. I think low risk non-conditional CIED patients should be considered to have less extensive clinical support than currently recommended. Also I have no idea how CIED MRI patients are financially coded but I could not put N/A as an answer so I chose "adequate" In regards to abandon leads: HRS 2017 publication on MRI and Cardiac Devices does not place abandoned leads as an absolute contraindication but also does not give specific recommendations. They imply that consideration of scanning must be done with collaborative risk/benefit discussion as there is insufficient RCT large trials to comment definitively on the safety. Language around devices and MRIs are moving away from "relative" and "absolute" to assessing the gradient of risk. I reviewed British (2024), Netherland (2020), European (2013) guidelines and the International Society for Magnetic Resonance in Medicine (ISMRM) Safety Committee journal (2020). British and Netherland guidelines state abandon leads may be considered for scanning with comprehensive assessment (deemed as intermediate risk) and still support that fractured and epicardial leads are higher risk than abandoned leads. European guidelines do not support scanning of abandoned, epicardial or fractured leads, their literature is from 2013 or earlier and HRS, British, Netherland and ISMRM guidelines have been published more recently which include a handful of studies potentially supporting scanning abandoned leads in extenuating circumstances with risk/benefits understood. If anything there is a higher degree of uncertainty with epicardial leads which was accepted with our physician consensus here to be potentially considered for scanning in the future. | 5/23/2024 5:08 PM |
| 50 | we need a document to explain to radiologists about safety in MRI and CEIDs, because they dont know and dont have interest to obtain this information. Need to be clear and easy.  | 5/23/2024 5:03 PM |
| 51 | NA   | 5/23/2024 4:43 PM |

## Q32 Please provide your contact information if you are willing to share your CIED MRI protocol and/or participate in future CIED-MRI registry studies.

Answered: 98    Skipped: 70

| ANSWER CHOICES  | RESPONSES |    |
|-----------------|-----------|----|
| Name            | 98.98%    | 97 |
| Institution     | 91.84%    | 90 |
| Address         | 0.00%     | 0  |
| Address 2       | 0.00%     | 0  |
| City/Town       | 0.00%     | 0  |
| State/Province  | 74.49%    | 73 |
| ZIP/Postal Code | 0.00%     | 0  |
| Country         | 96.94%    | 95 |
| Email Address   | 95.92%    | 94 |
| Phone Number    | 80.61%    | 79 |

| #  | NAME                      | DATE               |
|----|---------------------------|--------------------|
| 1  | Alexander Maass           | 6/3/2024 12:52 AM  |
| 2  | Satya Dhanumjaya          | 6/1/2024 11:08 PM  |
| 3  | John Roshan Jacob         | 5/29/2024 12:10 PM |
| 4  | LUIS ELVAS                | 5/28/2024 1:36 PM  |
| 5  | TC Yung                   | 5/28/2024 5:23 AM  |
| 6  | KAMAL ISGANDAROV          | 5/27/2024 3:04 PM  |
| 7  | Darciuc Radu              | 5/27/2024 3:28 AM  |
| 8  | Julie Abduloska           | 5/26/2024 10:56 PM |
| 9  | Kheyi                     | 5/26/2024 4:02 PM  |
| 10 | Katarzyna Piotrowska      | 5/26/2024 3:55 PM  |
| 11 | Vitor Dornela de Oliveira | 5/26/2024 3:46 PM  |
| 12 | Yaariv Khaykin            | 5/26/2024 3:03 PM  |
| 13 | Sabrina Tsao              | 5/26/2024 5:48 AM  |
| 14 | Joao Sousa                | 5/25/2024 8:40 PM  |
| 15 | Bridget McIlraith         | 5/25/2024 5:38 PM  |
| 16 | Michael Glikson           | 5/25/2024 5:13 PM  |
| 17 | Artur Filipecki           | 5/25/2024 12:32 PM |
| 18 | Sachin Nayyar             | 5/25/2024 7:30 AM  |

## Challenges with MRIs for Patients with CIEDs

|    |  |                    |
|----|--|--------------------|
| 19 | IGNACIO GIL ORTEGA                                     | 5/25/2024 6:40 AM  |
| 20 | Oliver Przibille                                       | 5/25/2024 6:14 AM  |
| 21 | David zizek  | 5/25/2024 5:44 AM  |
| 22 | François D. Regoli                                     | 5/25/2024 5:40 AM  |
| 23 | Randa N Tabbah   | 5/25/2024 2:44 AM  |
| 24 | Jason Wildschut  | 5/25/2024 2:11 AM  |
| 25 | Pangallo Antonio                                       | 5/25/2024 2:04 AM  |
| 26 | Tsveta Rahneva   | 5/25/2024 1:43 AM  |
| 27 | N/A. We do not have a protocol as we do not offer this | 5/24/2024 7:12 PM  |
| 28 | Klaus Witte  | 5/24/2024 6:14 PM  |
| 29 | Ken choy   | 5/24/2024 4:59 PM  |
| 30 | Frank Bracke   | 5/24/2024 4:35 PM  |
| 31 | STEFANO VIANI  | 5/24/2024 3:18 PM  |
| 32 | Nemer Samniah  | 5/24/2024 1:05 PM  |
| 33 | Dr Vivek S narayan Pillai                              | 5/24/2024 12:06 PM |
| 34 | Frederic Paulin  | 5/24/2024 10:54 AM |
| 35 | Leila Laroussi   | 5/24/2024 10:51 AM |
| 36 | Sergio Conti   | 5/24/2024 10:15 AM |
| 37 | JC Pachon-M  | 5/24/2024 10:04 AM |
| 38 | Abhijeet B Shelke                                      | 5/24/2024 9:59 AM  |
| 39 | Mustafa Dabwan   | 5/24/2024 9:23 AM  |
| 40 | Laiden Suarez  | 5/24/2024 9:00 AM  |
| 41 | Thomas Aschacher                                       | 5/24/2024 8:32 AM  |
| 42 | Anoop Gupta  | 5/24/2024 6:31 AM  |
| 43 | Pedro Leonardo gil                                     | 5/24/2024 5:51 AM  |
| 44 | jose mario baggio junior                               | 5/24/2024 5:19 AM  |
| 45 | Ritsushi Kato  | 5/24/2024 3:47 AM  |
| 46 | Nikola Gjorgov, MD, PhD, FESC                          | 5/24/2024 3:36 AM  |
| 47 | Mark Sammut  | 5/24/2024 3:36 AM  |
| 48 | Jonas Wörmann  | 5/24/2024 3:18 AM  |
| 49 | Mahjoub Marouane                                       | 5/24/2024 2:55 AM  |
| 50 | yuval konstantino                                      | 5/24/2024 2:25 AM  |
| 51 | Kean Huat Neoh   | 5/24/2024 2:15 AM  |
| 52 | Kay sutton   | 5/24/2024 1:57 AM  |
| 53 | Senem Özgür  | 5/24/2024 1:27 AM  |
| 54 | Vora Amit  | 5/24/2024 1:18 AM  |
| 55 | Mustafa Adem Tatlısu                                   | 5/24/2024 1:07 AM  |
| 56 | Andressa Piaia   | 5/24/2024 1:05 AM  |



## Challenges with MRIs for Patients with CIEDs

|    |                               |                    |
|----|-------------------------------|--------------------|
| 57 | Gisella Amoroso               | 5/24/2024 1:04 AM  |
| 58 | Jüri Voitk                    | 5/24/2024 1:00 AM  |
| 59 | daud shaukat                  | 5/24/2024 12:20 AM |
| 60 | Jan Elders                    | 5/24/2024 12:05 AM |
| 61 | Stefan Bogdan                 | 5/23/2024 11:56 PM |
| 62 | Michael Spartalis             | 5/23/2024 11:33 PM |
| 63 | yankai guo                    | 5/23/2024 11:11 PM |
| 64 | william heddle                | 5/23/2024 11:10 PM |
| 65 | PABLO JOSE CASANOVA ZAMBRANO  | 5/23/2024 11:04 PM |
| 66 | Diego Chemello                | 5/23/2024 10:29 PM |
| 67 | JORGE ENRIQUE VELASQUEZ       | 5/23/2024 10:07 PM |
| 68 | Alain Lebon                   | 5/23/2024 9:50 PM  |
| 69 | sridevi chennapragada         | 5/23/2024 9:43 PM  |
| 70 | Colin Woodfield               | 5/23/2024 9:43 PM  |
| 71 | Andrew Krahn                  | 5/23/2024 9:32 PM  |
| 72 | Chander Mohan Thakur          | 5/23/2024 8:47 PM  |
| 73 | Dr. Sharan Badiger            | 5/23/2024 8:24 PM  |
| 74 | Sachin Sondhi                 | 5/23/2024 8:15 PM  |
| 75 | Gabriel Vanerio               | 5/23/2024 8:13 PM  |
| 76 | Daniel Ninio                  | 5/23/2024 7:59 PM  |
| 77 | Hailei Liu                    | 5/23/2024 7:51 PM  |
| 78 | Nicoleta Sora                 | 5/23/2024 7:36 PM  |
| 79 | Edward Toal                   | 5/23/2024 7:16 PM  |
| 80 | Taro Temma                    | 5/23/2024 7:06 PM  |
| 81 | Sergio Dubner                 | 5/23/2024 7:01 PM  |
| 82 | Luis A. Arabia                | 5/23/2024 6:58 PM  |
| 83 | Xuan Duong                    | 5/23/2024 6:47 PM  |
| 84 | José Carlos Medina Buenfil    | 5/23/2024 6:35 PM  |
| 85 | naga narasimhareddy           | 5/23/2024 6:02 PM  |
| 86 | Christian Adams               | 5/23/2024 5:47 PM  |
| 87 | C.P. Allaart                  | 5/23/2024 5:26 PM  |
| 88 | Erik Frick                    | 5/23/2024 5:12 PM  |
| 89 | Suzette Turner                | 5/23/2024 5:08 PM  |
| 90 | Allana Fantin                 | 5/23/2024 5:08 PM  |
| 91 | Thomas Gaspar                 | 5/23/2024 5:07 PM  |
| 92 | Erika Olivier Vilela Bragança | 5/23/2024 5:03 PM  |
| 93 | Michelle Madonis              | 5/23/2024 5:00 PM  |
| 94 | bankin yousef                 | 5/23/2024 4:56 PM  |

## Challenges with MRIs for Patients with CIEDs

| 95 | Smita bhalia  | 5/23/2024 4:45 PM  |
|----|---|--------------------|
| 96 | Ivaylo Tonchev  | 5/23/2024 4:43 PM  |
| 97 | Marco Götte   | 5/23/2024 4:42 PM  |
| #  | INSTITUTION   | DATE               |
| 1  | UMCG  | 6/3/2024 12:52 AM  |
| 2  | Manipal hospitals   | 6/1/2024 11:08 PM  |
| 3  | Christian Medical College Vellore                             | 5/29/2024 12:10 PM |
| 4  | university coimbra hospital                                   | 5/28/2024 1:36 PM  |
| 5  | Hong Kong children's hospital                                 | 5/28/2024 5:23 AM  |
| 6  | OZEL ESKISEHIR ANADOLU HOSPITAL                               | 5/27/2024 3:04 PM  |
| 7  | Medpark International Hospital                                | 5/27/2024 3:28 AM  |
| 8  | Northern Hospital   | 5/26/2024 10:56 PM |
| 9  | Mohammed V military teaching hospital                         | 5/26/2024 4:02 PM  |
| 10 | DCOPiH in Wrocalw   | 5/26/2024 3:55 PM  |
| 11 | HUCAM-UFES / Vitória Apart Hospital                           | 5/26/2024 3:46 PM  |
| 12 | Southlake Regional Health Centre                              | 5/26/2024 3:03 PM  |
| 13 | The University of Hong Kong                                   | 5/26/2024 5:48 AM  |
| 14 | Hospital Santa Maria  | 5/25/2024 8:40 PM  |
| 15 | Christchurch Hospital   | 5/25/2024 5:38 PM  |
| 16 | Shaare Zedek MC   | 5/25/2024 5:13 PM  |
| 17 | Uppersilesian Medical Center                                  | 5/25/2024 12:32 PM |
| 18 | Gold Coast University Hospital                                | 5/25/2024 7:30 AM  |
| 19 | ARRHYTHMYA UNIT. HOSPITAL UNIVERSITARIO SANTA LUCIA CARTAGENA | 5/25/2024 6:40 AM  |
| 20 | CCB   | 5/25/2024 6:14 AM  |
| 21 | University Medical Centre Ljubljana                           | 5/25/2024 5:44 AM  |
| 22 | Centro Cardiologico Ticino                                    | 5/25/2024 5:40 AM  |
| 23 | CHUNDS  | 5/25/2024 2:44 AM  |
| 24 | QLD Children's Hospital                                       | 5/25/2024 2:11 AM  |
| 25 | Large Metropolitan Hospital of Reggio Calabria                | 5/25/2024 2:04 AM  |
| 26 | Royal Brompton Hospital                                       | 5/25/2024 1:43 AM  |
| 27 | TCC   | 5/24/2024 4:59 PM  |
| 28 | Catharina hospital Eindhoven                                  | 5/24/2024 4:35 PM  |
| 29 | AZIENDA OSPEDALIERO UNIVERSITARIA PISANA                      | 5/24/2024 3:18 PM  |
| 30 | Bnai- Zion medical center                                     | 5/24/2024 1:05 PM  |
| 31 | GMC,Kannur,Pariyaram  | 5/24/2024 12:06 PM |
| 32 | Health Science Centre   | 5/24/2024 10:54 AM |
| 33 | Hôpital Sacré Cœur  | 5/24/2024 10:51 AM |
| 34 | ARNAS Civico  | 5/24/2024 10:15 AM |

## Challenges with MRIs for Patients with CIEDs

|    |   |                    |
|----|---|--------------------|
| 35 | Sao Paulo University  | 5/24/2024 10:04 AM |
| 36 | Krishna vishwa vidyapeeth                                   | 5/24/2024 9:59 AM  |
| 37 | YSH   | 5/24/2024 9:23 AM  |
| 38 | AIDC  | 5/24/2024 9:00 AM  |
| 39 | Clinic Floridsdorf  | 5/24/2024 8:32 AM  |
| 40 | Epic hospital   | 5/24/2024 6:31 AM  |
| 41 | Sanatorio Aregentino de La Plata                            | 5/24/2024 5:51 AM  |
| 42 | Cardiology institute of Brasilia                            | 5/24/2024 5:19 AM  |
| 43 | Saitama Medical University, International Medical Center    | 5/24/2024 3:47 AM  |
| 44 | Zan Mitrev Clinic   | 5/24/2024 3:36 AM  |
| 45 | Mater Dei Hospital Malta                                    | 5/24/2024 3:36 AM  |
| 46 | University Hospital Cologne                                 | 5/24/2024 3:18 AM  |
| 47 | University Hospital Fattouma Bourguiba                      | 5/24/2024 2:55 AM  |
| 48 | soroka medical center                                       | 5/24/2024 2:25 AM  |
| 49 | Flinders Medical Centre                                     | 5/24/2024 1:57 AM  |
| 50 | Etlik City Hospital   | 5/24/2024 1:27 AM  |
| 51 | Istanbul Ataşehir International Hospital                    | 5/24/2024 1:07 AM  |
| 52 | Unimed Chapecó  | 5/24/2024 1:05 AM  |
| 53 | Asl Cn1   | 5/24/2024 1:04 AM  |
| 54 | North Estonia Medical Center Foundation                     | 5/24/2024 1:00 AM  |
| 55 | Naz Hospital  | 5/24/2024 12:20 AM |
| 56 | Canadius Wilhelminahospital                                 | 5/24/2024 12:05 AM |
| 57 | Elias Emergency University Hospital                         | 5/23/2024 11:56 PM |
| 58 | National and Kapodistrian University of Athens              | 5/23/2024 11:33 PM |
| 59 | flinders university/ flinders medical centre                | 5/23/2024 11:10 PM |
| 60 | RED ENDOCOR   | 5/23/2024 11:04 PM |
| 61 | Hospital de Caridade Astrogildo de Azevedo                  | 5/23/2024 10:29 PM |
| 62 | SOMER INCARE  | 5/23/2024 10:07 PM |
| 63 | Saint Martin private hospital center                        | 5/23/2024 9:50 PM  |
| 64 | AIG hospital  | 5/23/2024 9:43 PM  |
| 65 | Launceston General Hospital                                 | 5/23/2024 9:43 PM  |
| 66 | St. Paul's Hospital   | 5/23/2024 9:32 PM  |
| 67 | Abbott  | 5/23/2024 8:47 PM  |
| 68 | BLDE Deemed to be University                                | 5/23/2024 8:24 PM  |
| 69 | Mildura Base Hospital                                       | 5/23/2024 8:15 PM  |
| 70 | CASMU   | 5/23/2024 8:13 PM  |
| 71 | The First Affiliated Hospital of Nanjing Medical University | 5/23/2024 7:51 PM  |
| 72 | Blekingesjukhuset Thoraxcentrum                             | 5/23/2024 7:36 PM  |

## Challenges with MRIs for Patients with CIEDs

|    |   |                   |
|----|---|-------------------|
| 73 | Royal Prince Alfred Hospital                    | 5/23/2024 7:16 PM |
| 74 | Hokkaido University                             | 5/23/2024 7:06 PM |
| 75 | Clinica y maternidad Suizo Argentina            | 5/23/2024 7:01 PM |
| 76 | Instituto Oulton                                | 5/23/2024 6:58 PM |
| 77 | Thu duc dist                                    | 5/23/2024 6:47 PM |
| 78 | navy hospital                                   | 5/23/2024 6:35 PM |
| 79 | Indus hospital                                  | 5/23/2024 6:02 PM |
| 80 | Fundación Valle de Lili                         | 5/23/2024 5:47 PM |
| 81 | Amsterdam university medical center             | 5/23/2024 5:26 PM |
| 82 | Dept of Cardiology Skövde                       | 5/23/2024 5:12 PM |
| 83 | Sunnybrook                                      | 5/23/2024 5:08 PM |
| 84 | Foothills Medical Center Calgary Alberta Canada | 5/23/2024 5:08 PM |
| 85 | Heart Center Dresden                            | 5/23/2024 5:07 PM |
| 86 | RitmoCheck                                      | 5/23/2024 5:03 PM |
| 87 | Scarborough Health Network                      | 5/23/2024 5:00 PM |
| 88 | Jakaya KIKWETE cardiac institute                | 5/23/2024 4:45 PM |
| 89 | Flinders Medical Center                         | 5/23/2024 4:43 PM |
| 90 | AmsterdamUMC                                    | 5/23/2024 4:42 PM |

| # | ADDRESS | DATE |
|---|---------|------|
|---|---------|------|

There are no responses.

| # | ADDRESS 2 | DATE |
|---|-----------|------|
|---|-----------|------|

There are no responses.

| # | CITY/TOWN | DATE |
|---|-----------|------|
|---|-----------|------|

There are no responses.

| # | STATE/PROVINCE | DATE |
|---|----------------|------|
|---|----------------|------|

|    |           |                    |
|----|-----------|--------------------|
| 1  | Goa       | 6/1/2024 11:08 PM  |
| 2  | Tamilnadu | 5/29/2024 12:10 PM |
| 3  | Portugal  | 5/28/2024 1:36 PM  |
| 4  | ESKISEHIR | 5/27/2024 3:04 PM  |
| 5  | Vic       | 5/26/2024 10:56 PM |
| 6  | Rabat     | 5/26/2024 4:02 PM  |
| 7  | Wroclaw   | 5/26/2024 3:55 PM  |
| 8  | ES        | 5/26/2024 3:46 PM  |
| 9  | ON        | 5/26/2024 3:03 PM  |
| 10 | N/A       | 5/26/2024 5:48 AM  |
| 11 | Israe     | 5/25/2024 5:13 PM  |
| 12 | Silesia   | 5/25/2024 12:32 PM |
| 13 | Qld       | 5/25/2024 7:30 AM  |
| 14 | MURCIA    | 5/25/2024 6:40 AM  |

## Challenges with MRIs for Patients with CIEDs

|    |                     |                    |
|----|---------------------|--------------------|
| 15 | Hessen              | 5/25/2024 6:14 AM  |
| 16 | Ljubljana           | 5/25/2024 5:44 AM  |
| 17 | Other               | 5/25/2024 2:44 AM  |
| 18 | QLD                 | 5/25/2024 2:11 AM  |
| 19 | RC                  | 5/25/2024 2:04 AM  |
| 20 | London              | 5/25/2024 1:43 AM  |
| 21 | kerala              | 5/24/2024 12:06 PM |
| 22 | NL                  | 5/24/2024 10:54 AM |
| 23 | Qc                  | 5/24/2024 10:51 AM |
| 24 | PA                  | 5/24/2024 10:15 AM |
| 25 | SP                  | 5/24/2024 10:04 AM |
| 26 | Karad , Maharashtra | 5/24/2024 9:59 AM  |
| 27 | Santo Domingo       | 5/24/2024 9:00 AM  |
| 28 | Vienna              | 5/24/2024 8:32 AM  |
| 29 | Gujarat             | 5/24/2024 6:31 AM  |
| 30 | Buenos Aires        | 5/24/2024 5:51 AM  |
| 31 | Brasilia            | 5/24/2024 5:19 AM  |
| 32 | Saitama             | 5/24/2024 3:47 AM  |
| 33 | Birkirkara          | 5/24/2024 3:36 AM  |
| 34 | Monastir            | 5/24/2024 2:55 AM  |
| 35 | Penang              | 5/24/2024 2:15 AM  |
| 36 | State               | 5/24/2024 1:57 AM  |
| 37 | Ankara              | 5/24/2024 1:27 AM  |
| 38 | N/A                 | 5/24/2024 1:07 AM  |
| 39 | SC                  | 5/24/2024 1:05 AM  |
| 40 | CN                  | 5/24/2024 1:04 AM  |
| 41 | Punjab              | 5/24/2024 12:20 AM |
| 42 | Gelderland          | 5/24/2024 12:05 AM |
| 43 | Bucharest           | 5/23/2024 11:56 PM |
| 44 | Attiki              | 5/23/2024 11:33 PM |
| 45 | xinjiang            | 5/23/2024 11:11 PM |
| 46 | Souith Australia    | 5/23/2024 11:10 PM |
| 47 | Machala             | 5/23/2024 11:04 PM |
| 48 | RS                  | 5/23/2024 10:29 PM |
| 49 | ANTIOQUIA           | 5/23/2024 10:07 PM |
| 50 | Caen                | 5/23/2024 9:50 PM  |
| 51 | Telangana           | 5/23/2024 9:43 PM  |
| 52 | TAS                 | 5/23/2024 9:43 PM  |

## Challenges with MRIs for Patients with CIEDs

| 53 | BC               | 5/23/2024 9:32 PM |
|----|------------------|-------------------|
| 54 | Karnataka        | 5/23/2024 8:24 PM |
| 55 | Victoria         | 5/23/2024 8:15 PM |
| 56 | Montevideo       | 5/23/2024 8:13 PM |
| 57 | SA               | 5/23/2024 7:59 PM |
| 58 | Jiangsu          | 5/23/2024 7:51 PM |
| 59 | Blekinge         | 5/23/2024 7:36 PM |
| 60 | NSW              | 5/23/2024 7:16 PM |
| 61 | Hokkaido         | 5/23/2024 7:06 PM |
| 62 | Buenos Aires     | 5/23/2024 7:01 PM |
| 63 | Córdoba          | 5/23/2024 6:58 PM |
| 64 | Hcm city         | 5/23/2024 6:47 PM |
| 65 | Distrito Federal | 5/23/2024 6:35 PM |
| 66 | Andhra Pradesh   | 5/23/2024 6:02 PM |
| 67 | Valle            | 5/23/2024 5:47 PM |
| 68 | ON               | 5/23/2024 5:08 PM |
| 69 | Alberta          | 5/23/2024 5:08 PM |
| 70 | SP               | 5/23/2024 5:03 PM |
| 71 | ON               | 5/23/2024 5:00 PM |
| 72 | Dar es salaam    | 5/23/2024 4:45 PM |
| 73 | South Australia  | 5/23/2024 4:43 PM |
| #  | ZIP/POSTAL CODE  | DATE              |

There are no responses.

| #  | COUNTRY             | DATE               |
|----|---------------------|--------------------|
| 1  | The Netherlands     | 6/3/2024 12:52 AM  |
| 2  | India               | 6/1/2024 11:08 PM  |
| 3  | India               | 5/29/2024 12:10 PM |
| 4  | Portugal            | 5/28/2024 1:36 PM  |
| 5  | TURKIYE             | 5/27/2024 3:04 PM  |
| 6  | Republic of Moldova | 5/27/2024 3:28 AM  |
| 7  | Australia           | 5/26/2024 10:56 PM |
| 8  | Morocco             | 5/26/2024 4:02 PM  |
| 9  | Poland              | 5/26/2024 3:55 PM  |
| 10 | Brazil              | 5/26/2024 3:46 PM  |
| 11 | Canada              | 5/26/2024 3:03 PM  |
| 12 | Hong Kong           | 5/26/2024 5:48 AM  |
| 13 | Portugal            | 5/25/2024 8:40 PM  |
| 14 | New Zealand         | 5/25/2024 5:38 PM  |

## Challenges with MRIs for Patients with CIEDs

|    |                        |                    |
|----|------------------------|--------------------|
| 15 | Israel                 | 5/25/2024 5:13 PM  |
| 16 | Poland                 | 5/25/2024 12:32 PM |
| 17 | Australia              | 5/25/2024 7:30 AM  |
| 18 | SPAIN                  | 5/25/2024 6:40 AM  |
| 19 | Germany                | 5/25/2024 6:14 AM  |
| 20 | Slovenia               | 5/25/2024 5:44 AM  |
| 21 | Switzerland            | 5/25/2024 5:40 AM  |
| 22 | United Kingdom         | 5/25/2024 5:09 AM  |
| 23 | Lebanon                | 5/25/2024 2:44 AM  |
| 24 | Australia              | 5/25/2024 2:11 AM  |
| 25 | Italia                 | 5/25/2024 2:04 AM  |
| 26 | London                 | 5/25/2024 1:43 AM  |
| 27 | Vereinigtes Königreich | 5/24/2024 6:14 PM  |
| 28 | Hong kong              | 5/24/2024 4:59 PM  |
| 29 | Nederland              | 5/24/2024 4:35 PM  |
| 30 | ITALY                  | 5/24/2024 3:18 PM  |
| 31 | Israel                 | 5/24/2024 1:05 PM  |
| 32 | India                  | 5/24/2024 12:06 PM |
| 33 | Canada                 | 5/24/2024 10:54 AM |
| 34 | Canada                 | 5/24/2024 10:51 AM |
| 35 | Italy                  | 5/24/2024 10:15 AM |
| 36 | Brasil                 | 5/24/2024 10:04 AM |
| 37 | India                  | 5/24/2024 9:59 AM  |
| 38 | اليمن                  | 5/24/2024 9:23 AM  |
| 39 | Dominican Republic     | 5/24/2024 9:00 AM  |
| 40 | Austria                | 5/24/2024 8:32 AM  |
| 41 | India                  | 5/24/2024 6:31 AM  |
| 42 | La Plata               | 5/24/2024 5:51 AM  |
| 43 | BRazil                 | 5/24/2024 5:19 AM  |
| 44 | Japan                  | 5/24/2024 3:47 AM  |
| 45 | North Macedonia        | 5/24/2024 3:36 AM  |
| 46 | Malta                  | 5/24/2024 3:36 AM  |
| 47 | Germany                | 5/24/2024 3:18 AM  |
| 48 | Tunisie                | 5/24/2024 2:55 AM  |
| 49 | israel                 | 5/24/2024 2:25 AM  |
| 50 | Malaysia               | 5/24/2024 2:15 AM  |
| 51 | Australia              | 5/24/2024 1:57 AM  |
| 52 | Turkey                 | 5/24/2024 1:27 AM  |

## Challenges with MRIs for Patients with CIEDs

|    |             |                    |
|----|-------------|--------------------|
| 53 | India       | 5/24/2024 1:18 AM  |
| 54 | Turkey      | 5/24/2024 1:07 AM  |
| 55 | Brasil      | 5/24/2024 1:05 AM  |
| 56 | Italia      | 5/24/2024 1:04 AM  |
| 57 | Estonia     | 5/24/2024 1:00 AM  |
| 58 | Pakistan    | 5/24/2024 12:20 AM |
| 59 | Netherlands | 5/24/2024 12:05 AM |
| 60 | Romania     | 5/23/2024 11:56 PM |
| 61 | Greece      | 5/23/2024 11:33 PM |
| 62 | 中国          | 5/23/2024 11:11 PM |
| 63 | Australia   | 5/23/2024 11:10 PM |
| 64 | Ecuador     | 5/23/2024 11:04 PM |
| 65 | Brasil      | 5/23/2024 10:29 PM |
| 66 | COLOMBIA    | 5/23/2024 10:07 PM |
| 67 | France      | 5/23/2024 9:50 PM  |
| 68 | India       | 5/23/2024 9:43 PM  |
| 69 | Australia   | 5/23/2024 9:43 PM  |
| 70 | Canada      | 5/23/2024 9:32 PM  |
| 71 | India       | 5/23/2024 8:47 PM  |
| 72 | India       | 5/23/2024 8:24 PM  |
| 73 | Australia   | 5/23/2024 8:15 PM  |
| 74 | Uruguay     | 5/23/2024 8:13 PM  |
| 75 | Australia   | 5/23/2024 7:59 PM  |
| 76 | China       | 5/23/2024 7:51 PM  |
| 77 | Sweden      | 5/23/2024 7:36 PM  |
| 78 | Australia   | 5/23/2024 7:16 PM  |
| 79 | Japan       | 5/23/2024 7:06 PM  |
| 80 | Argentina   | 5/23/2024 7:01 PM  |
| 81 | Argentina   | 5/23/2024 6:58 PM  |
| 82 | Vietnam     | 5/23/2024 6:47 PM  |
| 83 | Mexico      | 5/23/2024 6:35 PM  |
| 84 | India       | 5/23/2024 6:02 PM  |
| 85 | Colombia    | 5/23/2024 5:47 PM  |
| 86 | Netherlands | 5/23/2024 5:26 PM  |
| 87 | Sweden      | 5/23/2024 5:12 PM  |
| 88 | Canada      | 5/23/2024 5:08 PM  |
| 89 | Canada      | 5/23/2024 5:08 PM  |
| 90 | Germany     | 5/23/2024 5:07 PM  |



## Challenges with MRIs for Patients with CIEDs

| 91 | Brasil                            | 5/23/2024 5:03 PM  |
|----|-----------------------------------|--------------------|
| 92 | Canada                            | 5/23/2024 5:00 PM  |
| 93 | Tanzania                          | 5/23/2024 4:45 PM  |
| 94 | Australia                         | 5/23/2024 4:43 PM  |
| 95 | Netherlands                       | 5/23/2024 4:42 PM  |
| #  | EMAIL ADDRESS                     | DATE               |
| 1  | a.h.maass@umcg.nl                 | 6/3/2024 12:52 AM  |
| 2  | dhanu.yadla@gmail.com             | 6/1/2024 11:08 PM  |
| 3  | johnroshanjacob@gmail.com         | 5/29/2024 12:10 PM |
| 4  | luisdvelvas@gmail.com             | 5/28/2024 1:36 PM  |
| 5  | kemalazeri@hotmail.com            | 5/27/2024 3:04 PM  |
| 6  | rdarciuc@yahoo.com                | 5/27/2024 3:28 AM  |
| 7  | julie.abdulloska@nh.org.au        | 5/26/2024 10:56 PM |
| 8  | kheyi.jamal@gmail.com             | 5/26/2024 4:02 PM  |
| 9  | khpiotrowska@wp.pl                | 5/26/2024 3:55 PM  |
| 10 | vitordorneladeoliveira@gmail.com  | 5/26/2024 3:46 PM  |
| 11 | ykhaykin@southlake.ca             | 5/26/2024 3:03 PM  |
| 12 | stsao@hku.hk                      | 5/26/2024 5:48 AM  |
| 13 | jmfrsousa@gmail.com               | 5/25/2024 8:40 PM  |
| 14 | bridget.mcilraith@cdhb.health.nz  | 5/25/2024 5:38 PM  |
| 15 | mglikson@szmc.org.il              | 5/25/2024 5:13 PM  |
| 16 | arturfilipecki@wp.pl              | 5/25/2024 12:32 PM |
| 17 | sachinststephens@gmail.com        | 5/25/2024 7:30 AM  |
| 18 | ignaciogilortega@gmail.com        | 5/25/2024 6:40 AM  |
| 19 | o.przibille@ccb.de                | 5/25/2024 6:14 AM  |
| 20 | david.zizek@kclj.si               | 5/25/2024 5:44 AM  |
| 21 | francois.regoli@hin.ch            | 5/25/2024 5:40 AM  |
| 22 | drandatabbah22@hotmail.com        | 5/25/2024 2:44 AM  |
| 23 | Jason.Wildschut@health.qld.gov.au | 5/25/2024 2:11 AM  |
| 24 | panganto@gmail.com                | 5/25/2024 2:04 AM  |
| 25 | cveta.rahneva@gmail.com           | 5/25/2024 1:43 AM  |
| 26 | k.k.witte@leeds.ac.uk             | 5/24/2024 6:14 PM  |
| 27 | kenchoymk@gmail.com               | 5/24/2024 4:59 PM  |
| 28 | f.bracke@me.com                   | 5/24/2024 4:35 PM  |
| 29 | s.viani@ao-pisa.toscana.it        | 5/24/2024 3:18 PM  |
| 30 | samnn0001@gmail.com               | 5/24/2024 1:05 PM  |
| 31 | docvivpillai@yahoo.com            | 5/24/2024 12:06 PM |
| 32 | frederic.paulin@easternhealth.ca  | 5/24/2024 10:54 AM |

## Challenges with MRIs for Patients with CIEDs

|    |                                 |                    |
|----|---------------------------------|--------------------|
| 33 | liloularoussi@gmail.com         | 5/24/2024 10:51 AM |
| 34 | sergioconti.md@gmail.com        | 5/24/2024 10:15 AM |
| 35 | pachon@usp.br                   | 5/24/2024 10:04 AM |
| 36 | panacea2005.abhijeet@gmail.com  | 5/24/2024 9:59 AM  |
| 37 | alsheheri005@gmail.com          | 5/24/2024 9:23 AM  |
| 38 | laidenf@gmail.com               | 5/24/2024 9:00 AM  |
| 39 | thomasaschacher@msn.com         | 5/24/2024 8:32 AM  |
| 40 | anoopgupta@msn.com              | 5/24/2024 6:31 AM  |
| 41 | pedrotiziano220736@gmail.com    | 5/24/2024 5:51 AM  |
| 42 | jmbaggio@cardiol.br             | 5/24/2024 5:19 AM  |
| 43 | ritsn@saitama-med.ac.jp         | 5/24/2024 3:47 AM  |
| 44 | nikola.gjorgov@zmc.mk           | 5/24/2024 3:36 AM  |
| 45 | markadrian.sammur@gmail.com     | 5/24/2024 3:36 AM  |
| 46 | woerjon@googlemail.com          | 5/24/2024 3:18 AM  |
| 47 | marouchmc@gmail.com             | 5/24/2024 2:55 AM  |
| 48 | yuvalkon@clalit.org.il          | 5/24/2024 2:25 AM  |
| 49 | nkh777@yahoo.com                | 5/24/2024 2:15 AM  |
| 50 | kaye.sutton@sa.gov.au           | 5/24/2024 1:57 AM  |
| 51 | drsenemozgur@hotmail.com        | 5/24/2024 1:27 AM  |
| 52 | amvora@hotmail.com              | 5/24/2024 1:18 AM  |
| 53 | ademtatlisu@gmail.com           | 5/24/2024 1:07 AM  |
| 54 | acpiaia@yahoo.com               | 5/24/2024 1:05 AM  |
| 55 | amorosogisella@yahoo.it         | 5/24/2024 1:04 AM  |
| 56 | jyri.voitk@regionalhaigla.ee    | 5/24/2024 1:00 AM  |
| 57 | daudshaukat@yahoo.com           | 5/24/2024 12:20 AM |
| 58 | j.elders@cwz.nl                 | 5/24/2024 12:05 AM |
| 59 | bogdan.stefan@spitalul-elias.ro | 5/23/2024 11:56 PM |
| 60 | mshpartalis@alumni.harvard.edu  | 5/23/2024 11:33 PM |
| 61 | guoyk0511@163.com               | 5/23/2024 11:11 PM |
| 62 | bill.heddle@flinders.edu.au     | 5/23/2024 11:10 PM |
| 63 | pablocasanova87@gmail.com       | 5/23/2024 11:04 PM |
| 64 | chemello.diego@gmail.com        | 5/23/2024 10:29 PM |
| 65 | jevelasquez79@gmail.com         | 5/23/2024 10:07 PM |
| 66 | lebon.al1@gmail.com             | 5/23/2024 9:50 PM  |
| 67 | dr_csridevi@yahoo.com           | 5/23/2024 9:43 PM  |
| 68 | colin.woodfield@ths.tas.gov.au  | 5/23/2024 9:43 PM  |
| 69 | akrahn@mail.ubc.ca              | 5/23/2024 9:32 PM  |
| 70 | sharanrb@rediffmail.com         | 5/23/2024 8:24 PM  |

## Challenges with MRIs for Patients with CIEDs

| 71 | ssachin119@gmail.com                   | 5/23/2024 8:15 PM  |
|----|--|--------------------|
| 72 | ca40399@casmu.com                      | 5/23/2024 8:13 PM  |
| 73 | daniel.ninio@sa.gov.au                 | 5/23/2024 7:59 PM  |
| 74 | liuhailei@njmu.edu.cn                  | 5/23/2024 7:51 PM  |
| 75 | orsaminor@gmail.com                    | 5/23/2024 7:36 PM  |
| 76 | edward.toal@health.nsw.gov.au          | 5/23/2024 7:16 PM  |
| 77 | ttemma@med.hokudai.ac.jp               | 5/23/2024 7:06 PM  |
| 78 | dubnermd@gmail.com                     | 5/23/2024 7:01 PM  |
| 79 | luisarabi@hotmail.com                  | 5/23/2024 6:58 PM  |
| 80 | duongbme04@gmail.com                   | 5/23/2024 6:47 PM  |
| 81 | carbuenfil@prodigy.net.mx              | 5/23/2024 6:35 PM  |
| 82 | naganarasimhareddy@gmail.com           | 5/23/2024 6:02 PM  |
| 83 | adams.cardiologia@gmail.com            | 5/23/2024 5:47 PM  |
| 84 | cp.allaart@amsterdamumc.nl             | 5/23/2024 5:26 PM  |
| 85 | erik.frick@vgregion.se                 | 5/23/2024 5:12 PM  |
| 86 | suzette.turner@sunnybrook.ca           | 5/23/2024 5:08 PM  |
| 87 | allana.fantin@albertahealthservices.ca | 5/23/2024 5:08 PM  |
| 88 | gasparthomas@hotmail.com               | 5/23/2024 5:07 PM  |
| 89 | oliviererika@hotmail.com               | 5/23/2024 5:03 PM  |
| 90 | Mmadonis@shn.ca                        | 5/23/2024 5:00 PM  |
| 91 | bankinyousef@gmail.com                 | 5/23/2024 4:56 PM  |
| 92 | sbhaliaa@gmail.com                     | 5/23/2024 4:45 PM  |
| 93 | ivailortonchev@gmail.com               | 5/23/2024 4:43 PM  |
| 94 | mjlw.gotte@amsterdamumc.nl             | 5/23/2024 4:42 PM  |
| #  | PHONE NUMBER                           | DATE               |
| 1  | +31-503612355                          | 6/3/2024 12:52 AM  |
| 2  | 9850661237                             | 6/1/2024 11:08 PM  |
| 3  | +919443312680                          | 5/29/2024 12:10 PM |
| 4  | +351 239400400                         | 5/28/2024 1:36 PM  |
| 5  | 00905305155393                         | 5/27/2024 3:04 PM  |
| 6  | +373 69459077                          | 5/27/2024 3:28 AM  |
| 7  | 0431646575                             | 5/26/2024 10:56 PM |
| 8  | 00212661291739                         | 5/26/2024 4:02 PM  |
| 9  | +5527993214343                         | 5/26/2024 3:46 PM  |
| 10 | 4165604699                             | 5/26/2024 3:03 PM  |
| 11 | +852 9185 2699                         | 5/26/2024 5:48 AM  |
| 12 | 00351966020103                         | 5/25/2024 8:40 PM  |
| 13 | 972526667128                           | 5/25/2024 5:13 PM  |

## Challenges with MRIs for Patients with CIEDs

|    |                   |                    |
|----|-------------------|--------------------|
| 14 | +48 501525633     | 5/25/2024 12:32 PM |
| 15 | 0449608541        | 5/25/2024 7:30 AM  |
| 16 | 0034696166572     | 5/25/2024 6:40 AM  |
| 17 | 0049 69 945028338 | 5/25/2024 6:14 AM  |
| 18 | +41 79 269 4908   | 5/25/2024 5:40 AM  |
| 19 | 70238849          | 5/25/2024 2:44 AM  |
| 20 | 3389450947        | 5/25/2024 2:04 AM  |
| 21 | +447773223158     | 5/25/2024 1:43 AM  |
| 22 | 07768254073       | 5/24/2024 6:14 PM  |
| 23 | +852 55444661     | 5/24/2024 4:59 PM  |
| 24 | 0032494775481     | 5/24/2024 4:35 PM  |
| 25 | 972547542818      | 5/24/2024 1:05 PM  |
| 26 | +91 8129093071    | 5/24/2024 12:06 PM |
| 27 | 4035613346        | 5/24/2024 10:54 AM |
| 28 | 5149926948        | 5/24/2024 10:51 AM |
| 29 | +393396408321     | 5/24/2024 10:15 AM |
| 30 | 11963970703       | 5/24/2024 10:04 AM |
| 31 | 8978623010        | 5/24/2024 9:59 AM  |
| 32 | 0777159005        | 5/24/2024 9:23 AM  |
| 33 | 8299861698        | 5/24/2024 9:00 AM  |
| 34 | +919825611033     | 5/24/2024 6:31 AM  |
| 35 | +5492215406802    | 5/24/2024 5:51 AM  |
| 36 | 5561981123107     | 5/24/2024 5:19 AM  |
| 37 | +81-492-984-4111  | 5/24/2024 3:47 AM  |
| 38 | +35699238013      | 5/24/2024 3:36 AM  |
| 39 | +4917699992357    | 5/24/2024 3:18 AM  |
| 40 | 98405482          | 5/24/2024 2:55 AM  |
| 41 | 972506912613      | 5/24/2024 2:25 AM  |
| 42 | 0164407009        | 5/24/2024 2:15 AM  |
| 43 | +61433248693      | 5/24/2024 1:57 AM  |
| 44 | 5056893981        | 5/24/2024 1:27 AM  |
| 45 | 9821084160        | 5/24/2024 1:18 AM  |
| 46 | 5300319906        | 5/24/2024 1:07 AM  |
| 47 | 49998125477       | 5/24/2024 1:05 AM  |
| 48 | 3294428889        | 5/24/2024 1:04 AM  |
| 49 | +3725076364       | 5/24/2024 1:00 AM  |
| 50 | 03349884997       | 5/24/2024 12:20 AM |
| 51 | +31652296586      | 5/24/2024 12:05 AM |

## Challenges with MRIs for Patients with CIEDs

|    |                  |                    |
|----|------------------|--------------------|
| 52 | +40723195179     | 5/23/2024 11:56 PM |
| 53 | 6937291476       | 5/23/2024 11:33 PM |
| 54 | 0407604452       | 5/23/2024 11:10 PM |
| 55 | +593991040172    | 5/23/2024 11:04 PM |
| 56 | 559919313        | 5/23/2024 10:29 PM |
| 57 | +573136727084    | 5/23/2024 10:07 PM |
| 58 | +33676700175     | 5/23/2024 9:50 PM  |
| 59 | 09618922644      | 5/23/2024 9:43 PM  |
| 60 | 0418988571       | 5/23/2024 9:43 PM  |
| 61 | 6047540191       | 5/23/2024 9:32 PM  |
| 62 | +59899689420     | 5/23/2024 8:13 PM  |
| 63 | 0421042150       | 5/23/2024 7:59 PM  |
| 64 | 0086-18094226858 | 5/23/2024 7:51 PM  |
| 65 | 0046709457782    | 5/23/2024 7:36 PM  |
| 66 | 0415439517       | 5/23/2024 7:16 PM  |
| 67 | +541148273654    | 5/23/2024 7:01 PM  |
| 68 | +543515179015    | 5/23/2024 6:58 PM  |
| 69 | 0902469541       | 5/23/2024 6:47 PM  |
| 70 | 5551353186       | 5/23/2024 6:35 PM  |
| 71 | 09542016043      | 5/23/2024 6:02 PM  |
| 72 | +573108493635    | 5/23/2024 5:47 PM  |
| 73 | +46730444554     | 5/23/2024 5:12 PM  |
| 74 | 4039210229       | 5/23/2024 5:08 PM  |
| 75 | 12991566693      | 5/23/2024 5:03 PM  |
| 76 | 6472084991       | 5/23/2024 5:00 PM  |
| 77 | +2557845426      | 5/23/2024 4:45 PM  |
| 78 | 0423707898       | 5/23/2024 4:43 PM  |
| 79 | +31204440123     | 5/23/2024 4:42 PM  |