Medical Specialty Preference Inventory, Revised Edition (MSPI-R) FAQs

Q. What are interests?
A. Interests are things you enjoy doing. Working with your hands, conducting experiments, and counseling patients are examples of interests found in the field of medicine.

Q. What is the MSPI-R?
A. The Medical Specialty Preference Inventory, Revised Edition (MSPI-R), is an assessment instrument that measures your interest in various activities, tasks, and experiences found in the field of medicine. Your MSPI-R results provide a comprehensive overview of your medical and specialty interests by comparing your responses to those of medical students who have now entered residency in their chosen specialty.

Q. Why should I assess my interests?
A. A thorough understanding of your interests is an important first step in choosing your specialty. Our research identified interests found in the field of medicine. Measuring your interests and comparing them to each specialty will help identify specialties that may be more satisfying and enjoyable to you.

Q. What is the process for taking the MSPI-R?
A. You’ll rate 150 items indicating your degree of desirability on a scale of one (low) to seven (high). When you choose your response to an item, the next statement will appear. You must answer all 150 items to receive your results. However, you’ll have the option to stop the assessment, save your progress, and resume the assessment another time. Once you complete the assessment, your results will appear on a new page.

Q. How long does it take to complete the MSPI-R?
A. It should take about 20 to 30 minutes to complete the assessment.
Q. When should I take the MSPI-R?

A. Most medical students complete the MSPI-R during their first or second year of medical school. But you may have difficulty rating some items because of limited knowledge or clinical experience. This is normal, and we suggest you retake the assessment after completing clinical rotations or other electives. In fact, your interests may change as you acquire more knowledge and experience in the field of medicine (and in life). By completing the MSPI-R multiple times throughout medical school, you can monitor and better understand changes in your preferences and specialty selection. Each time you take the assessment, your results are stored in your Personal Profile for comparison over time.

Q. How does the MSPI-R help me assess my interests?

A. Your MSPI-R results provide a comprehensive overview of your medical and specialty interests by comparing your responses to those of medical students who have now entered residency in their chosen specialty. Results are organized into two sets of scores: Specialty Choice Probabilities and Medical Interest Scales—and each set of scores helps you evaluate specialties.

Q. What are “Specialty Choice Probabilities?” What results constitute a high probability? A low probability?

A. Specialty Choice Probabilities indicate the likelihood (in percentage format) that you will enter into each of 16 major specialties. Specialty Choice Probabilities are calculated using your responses to items that our research has shown differentiates among specialties. Your responses are compared to those of medical students who have now entered residency in their chosen specialty. And while there is no formula that clearly defines high and low results, higher probabilities indicate specialties that you have a higher likelihood of entering. Explore the two to three specialties with the highest probabilities for you.

Q. How successful is the MSPI-R in predicting specialties?

A. The MSPI-R has high predictive ability, especially regarding the top three Specialty Choice Probabilities for a student. The MSPI-R’s accuracy for predicting a student’s eventual specialty choice:

- 52% accuracy for predicting students’ first choice
- 67% accuracy for predicting the first or second choice
- 76% accuracy for predicting the first, second, or third choice
To put this in perspective, if you left your specialty choice to chance, the accuracy of your prediction would be about 12 percent.

While the MSPI-R’s predictive ability is high, it doesn’t address other factors important in choosing a specialty. You may also be curious about other specialties and subspecialties not addressed by this assessment tool, so don’t use these predictions as certainties that you’ll enter a specialty.

**Q. What are the 16 specialties the MSPI-R includes?**

A. Many of the specialties that you can enter during the first two years of residency training are included:

- Anesthesiology
- Dermatology
- Emergency Medicine
- Family Medicine
- Internal Medicine
- Neurology
- Obstetrics and Gynecology
- Orthopaedic Surgery
- Otolaryngology
- Pathology — Anatomic and Clinical
- Pediatrics
- Physical Medicine and Rehabilitation
- Psychiatry
- Radiology — Diagnostic
- Surgery — General
- Urology

**Q. What are “Medical Interest Scales?”**

A. The Medical Interest Scales are 18 areas of medical practice— involving knowledge and information, services and procedures, and types of problems—that you experience to varying degrees in each specialty. Determining your interests in the context of these 18 areas in the field of medicine is another way to assess your fit with each specialty.

In your results, the Medical Interest Scale scores are presented alphabetically with a graph of each score. Grid lines indicate low, moderate, and high scores. The higher your score, the more interested you are in that area of medical practice. Your Medical Interest Scale scores generate an interest profile that you can compare to each of 16 major specialties.
Q. What are the 18 areas of medical practice addressed in the Medical Interest Scales?

A.

<table>
<thead>
<tr>
<th>Scale Name</th>
<th>Scale Description</th>
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</thead>
<tbody>
<tr>
<td>Complex Problems</td>
<td>Diagnosing and managing patients with multifaceted or difficult concerns</td>
</tr>
<tr>
<td>Comprehensive Care</td>
<td>Managing a wide variety of patient problems and providing a broad range of medical services</td>
</tr>
<tr>
<td>Diagnostic Precision</td>
<td>Utilizing an analytic approach to clinical care, following a precise sequence of steps in the diagnosis and treatment of diseases and problems</td>
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<tr>
<td>Emergency–Critical Care</td>
<td>Providing emergency services, dealing with life-threatening medical problems, or treating patients in an intensive care unit</td>
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<tr>
<td>History Taking</td>
<td>Compiling personal and family information in understanding and treating medical problems</td>
</tr>
<tr>
<td>Home Health Care</td>
<td>Using the services of nursing homes and home health care staff</td>
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<tr>
<td>Immediate Results</td>
<td>Providing treatment and seeing results that are immediately and readily apparent</td>
</tr>
<tr>
<td>Knowledge of Anatomical Structures</td>
<td>Using knowledge of structural systems (anatomy, skeletal, and muscular systems)</td>
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<tr>
<td>Knowledge of Organ Systems</td>
<td>Using knowledge of functional and organ systems</td>
</tr>
<tr>
<td>Laboratory Results</td>
<td>Using results of routine laboratory tests in diagnosis and treatment of patient problems</td>
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<tr>
<td>Palliative Care</td>
<td>Providing care and treatment to patients with terminal, progressively disabling, or incurable diseases</td>
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<tr>
<td>Patient Counseling</td>
<td>Discussing emotional reactions of patients and their families to illness and treatment plans</td>
</tr>
<tr>
<td>Prevention and Education</td>
<td>Counseling and educating patients on preventive health and providing other services that impact successful disease management</td>
</tr>
<tr>
<td>Procedural Care</td>
<td>Using hands and performing operative procedures in treating patient problems</td>
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Psychological Care  Using information and services oriented to diagnosis and treatment of psychological and psychosomatic disorders

Reproductive Care  Providing reproductive care and counseling and using information pertaining to reproductive health

Social Context  Using information and services from a variety of community and social networks (including social workers, socioeconomic status, and community conditions) to treat patients

Technology in Medicine  Understanding and using complex and rapidly changing equipment and procedures

Q. Why are the Medical Interest Scales important to me?

A. You can use the Medical Interest Scales to help clarify and describe your medical interests in more detail, compare your interest profile with profiles of various specialties, and explore other specialties not included in the MSPI-R.

When comparing your interest profile with various specialties, you'll find similarities and discrepancies between your interests and those associated with each specialty. Discrepancies occur when an interest in your profile is higher or lower than what's found in a specialty and may make your work in that specialty less satisfying.

As you explore other specialties not included in the MSPI-R, identify the interests found in those specialties and compare them with your interest profile. If you share interests, perhaps the specialty may be another option for you. Further analysis of your Medical Interest Scale scores will help ensure a more comprehensive, in-depth investigation into choosing your specialty.

Please note: The 18 Medical Interest Scales provide a limited description of a specialty. There are other important areas, such as types of patients, not included in the MSPI-R that may impact your choice of specialty. Use your knowledge of each specialty to supplement the information provided by your Medical Interest Scale scores.

Q. I've taken the MSPI-R, now how do I interpret my results?

A. First consider your scores for the Specialty Choice Probabilities. They should total 100 percent (or near 100 percent due to rounding error) and are ordered highest to lowest. Select the two or three specialties with the highest probabilities to explore further.
Next examine your Medical Interest Scale scores and identify your highest- and lowest-scoring interests. While your item responses may have generated a high Specialty Choice Probability score for a specialty, it's also likely you won't enjoy every task associated with that specialty. Determining your interests within the context of the 18 areas of medical practice is another way to assess your fit with each specialty.

Then compare your Medical Interest Scale scores with the specialties with the highest Specialty Choice Probabilities for you. You'll find similarities and discrepancies between your interests and those associated with each specialty. Discrepancies occur when an interest in your profile is higher or lower than what’s found in a specialty and may make your work in that specialty less satisfying.

If one of your interests is higher than that of a specialty you’re considering, it's still possible to feel satisfied working in that specialty, but you may want to find ways to incorporate that interest into your work. On the other hand, if one of your interests is lower than that of a specialty you’re considering, you’ll need to decide if you’re willing to perform that type of work.

Consider the MSPI-R like a weather forecast: Your Medical Interest Scales are like the current conditions—your interests in various aspects of medicine as they currently stand. Your Specialty Choice Probabilities are like the seven-day forecast—they predict which specialties you might likely enter based on your item responses.

And while people occasionally curse meteorologists for predicting wrong, forecasts do provide useful information to help us plan our day. So while your results aren’t certain, they do provide a solid place to start exploring specialties.

**Q. I've taken the MSPI-R, and I have high Specialty Choice Probabilities for several specialties. What does this mean?**

**A.** This is normal. While the MSPI-R does not highlight the perfect specialty for you, your results do point you toward multiple possibilities. Identify the two to three specialties with the highest probabilities, and use them as a starting point for further specialty research and exploration.
Q. The specialty/ies I’ve been considering rank low in my results. What does this mean?

A. It may mean your interests differ from those in the specialty you’re considering. Perhaps there are other aspects of the specialty not addressed by the MSPI-R that you find meaningful, or maybe your interests have changed since you first considered the specialty.

Don’t rule out the specialty/ies you’re considering because you received low scores. Explore them more closely by comparing your Medical Interest Scale scores to those of the specialty, and further consider the discrepancies. This may help you understand the low scores.

Q. Why do my results have so many zeros?

A. Most students’ results have at least one Specialty Choice Probability that equals zero, and the average number of zeros students receive is seven. Zeros are generated when your item responses largely differ from the interests found in the specialty. And while you may still like the specialty, the likelihood that you will enter it based on your interests is low.

Q. How was the MSPI-R developed?

A. The MSPI-R was originally developed by George Zimny, Ph.D. in the 1970s, updated in 2000, and revised by George V. Richard, Ph.D. and Mark L. Savickas, Ph.D. in 2009. It utilizes results from medical students who have now entered residency in their chosen specialty. The updated MSPI has been part of Careers in Medicine since 2005. The MSPI-R is the result of extensive research that has improved and expanded the capabilities of the instrument.

Research on the MSPI-R was conducted in two major areas. The first area of research involved examining the original factor structure using advanced statistical methods and technology originally unavailable. This research identified fewer factors, or medical interests. The second area of research produced a specialty choice algorithm capable of matching results to more specialties, expanding the specialties included in the MSPI-R from 6 to 16.

The research yielded two separate but related products: the Specialty Choice Probabilities and the Medical Interest Scales. Both products effectively measure interest in medical careers.