## 2021 - 2022 NRMP Annual Report



# ABOUT THE NATIONAL RESIDENT MATCHING PROGRAM

The National Resident Matching Program<sup>®</sup> ("The Match<sup>®</sup>") is an independent, non-profit organization incorporated in Illinois in 1953 with the express purpose of facilitating the systematic placement of U.S. MD medical school students into graduate medical education (GME) positions in United States teaching hospitals.

In 70 years, The Match has grown to include U.S. DO medical students and graduates and U.S. citizen and non-U.S. citizen international medical school students and graduates among its applicants in the Main Residency Match®. It also manages the Specialties Matching Service® to support more than sixty-five Fellowship Matches. The NRMP oversees National Resident Matching Program International® (NRMPI®), a wholly-owned, not-for-profit subsidiary that provides physician matching services for private and governmental agencies located outside the U.S. and Canada.

The Match is the largest health care matching service in the world, meeting the needs of more than 60,000 medical students and graduates annually who compete for more than 40,000 residency and fellowship positions. The Match also offers unparalleled data resources and is committed to research that benefits the GME community.

### **MISSION**

Match healthcare professionals to training programs through a process that is fair, equitable, efficient, and reliable, and provide meaningful Match data and analyses to stakeholders.

### **VISION**

Serve as a trusted global provider of matching services for healthcare professionals and the premier Match data resource.



# MESSAGE FROM THE PRESIDENT AND CEO



As I look back on this past year, and ahead at our future, I see the medical education community undergoing dramatic change. Some of that change will be transformational, and some will continue to challenge the framework and traditions of the transition to residency.

Since my tenure began in October 2019, the NRMP has been challenged to think differently, critically, and to expand our perspective. Along with you, the COVID-19 pandemic forced us all to approach our work in new and sometimes uncomfortable ways, to reflect on how our processes should change in order to mitigate some of the challenges faced by the medical education community, and to rethink our assumptions about the stressors and issues arising throughout the transition to residency. The NRMP has been called upon to make sweeping changes in policy and Matching processes, some of which we acted upon, and some we did not due to concerns about the potential for exacerbating inequity, stress, and harm to Match participants and specialties. Throughout this time, the NRMP has remained steadfast in its mission and obligation to the medical education community to ensure that changes are rational, evidence-based, and have input from the medical education community.

Challenges aside, the NRMP has also experienced great success this past year. Consistent execution of accurate and successful Matching Programs and enforcement of the commitments reinforce stability in the transition to residency. The NRMP's Matching Program remains in demand and has expanded to facilitate the subspecialty training of residents in specialties not

previously participating in the Match. Match policy and Codes of Conduct were modernized, underpinning the rights and responsibilities of all Match participants, and we implemented new policies and processes that allowed for decompression of some stressors associated with Match Week. The NRMP also partnered for research with multiple organizations to help clarify issues and understand concerns, and we implemented the collection of voluntary, primary source demographic data across all applicants to analyze and inform the community about trends during the transition and the equitable treatment of applicants across the transition to residency.

During fiscal year 2021, the NRMP realized a modest increase in revenue, a direct result of the increasing numbers of applicants, programs, and institutions participating in the Matching Program. The NRMP has not increased matching fees since 2018. At the same time, the NRMP also worked to reduce expenses across administrative, legal, and general spending, and again, achieved a clean audit resulting from well-grounded financial management and reliable internal controls. These savings have enabled the NRMP to maintain a financially stable organization, ensure the resources required to maintain a high level of technology and cybersecurity, and engage in new and innovative business efforts.

The NRMP executive leadership and Board of Directors engaged in a year-long process of strategic planning, which was completed in January 2022 and is described throughout this report. In addition to a focus on the NRMP's core business of matching services, the Board implemented an expansive research strategy and reinforced its commitment to advanced technology and robust cybersecurity principles, stringent process improvement, and exploration of innovative matching processes and services for a forward-leaning posture.

Finally, the NRMP staff formed a set of Core Values which dictate how we come to work each day, how we treat each other, and how we approach our relationship with the medical education community. While there is much more to Core Values than a few words, we are focused on demonstrating Dedication, Trustworthiness, and Collaboration to each other and to you. These Core Values guide our efforts to strengthen relationships that may be strained by distance and remote work, recognize excellence through a staff-led recognition program, and enhance the NRMP's program of professional development so that we give you our best selves every day.

The majority of the NRMP's team has worked remotely since March 2020 and the team now includes members all over the country. With the adjustment to this "new normal" the team continues to display fortitude, creativity, and a can-do spirit. We remain focused on our mission and committed to advancing continuous process improvement and policy improvements that clarify the rights and responsibilities of Match participants. We have, and will continue to implement technologies that harden, streamline, and secure Match data and processes. And, we look to expand the research agenda and lean into partnerships and initiatives that allow for a better understanding of the transition to residency with the intent of helping the community to form solutions.

With so many positive advancements in the organization, I am confident in the future of the NRMP and in its ability to build on its history of credible and reliable service to the community. I look forward to sharing more of our work with you, collaborating on Match process, supporting the success of our Match participants, and continuing to serve you as President and CEO of The Match.

Regards, Donna L. Lamb, DHSc, MBA, BSN

## MESSAGE FROM THE BOARD CHAIR



As I began my second year as chair of the NRMP Board of Directors I reflected on all that has been accomplished by the NRMP in the last year. The first round of demographic data was collected and we look forward to determining how best to share the data to inform issues of diversity, equity, and inclusion in the matching process. The research agenda was expanded and the results will contribute in a data-informed manner to the national conversation around the transition to residency. The NRMP has completed a number of initiatives to improve the overall match experience for learners and programs. And much more.

This October we will once again have an in-person Transition to Residency Conference in San Diego, CA. The plenary speakers are excellent and I'm sure they will provide inspiration for our work. The workshops and panels touch on a myriad of important and timely issues for the community and will promote meaningful discussion. Most of all we will be able to have the networking opportunities that are so important for all of us as we tackle the issues that we address in our daily work.

I remain extremely proud to be affiliated with the NRMP and look forward to all that will be accomplished in the upcoming year as the NRMP implements its strategic plan and charts progress as a critical organization in medical education.

Regards, Donna D. Elliott, MD, EdD

# STRATEGIC PRIORITIES

For 70 years, the NRMP's strategic priorities have been focused primarily on running the Matching Program and publishing data to the community. However, with a new CEO at the helm beginning in 2019, the onset of the pandemic, and call for change in the transition to residency, the NRMP has undertaken purposeful and thoughtful examination of the organization and its role in the transition to residency. In 2020, NRMP executive leadership and the NRMP Board of Directors initiated an extensive strategic planning process, thinking candidly about the future of the organization and its role in the changing landscape of undergraduate and graduate medical education, and that work culminated in 2022. As the path forward has crystallized, the NRMP has remained committed to relying on the following principles to preserve and protect the Match:

Ensure change processes are deliberative and data-driven

Consider the potential unintended consequences

Prevent, to the extent possible, any harm to constituents

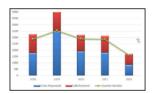
Prioritize equity for, transparency to, and accountability of all stakeholders

#### **SERVICES**

#### RESEARCH

#### **TECHNOLOGY**

#### INNOVATION



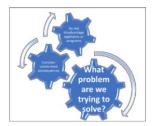
Engage in diligent quality assurance and continuous quality improvement to provide efficient and reliable matching services that deliver exceptional customer support and meet the needs of the medical education community.

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VIRTUAL EXPERIENCE AND HOLISTIC REVIEW IN THE TRANSITION TO RESIDENCY: AN EXAMINATION OF THE 2021 AND 2022 MAIN RESIDENCY MATCHES RESEARCH BIRDS
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Continuously evolve a meaningful research agenda that seeks to understand and provide thoughtful analysis of issues related to the transition to residency and foster meaningful partnerships that strengthen the UME-GME continuum.

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Maintain advanced technology platforms built on robust cybersecurity principles to ensure participant data is protected from threat and that the NRMP continues to deliver trusted and reliable results.



Continuously seek improvement and innovation in Match processes that reduce stressors, protect Match participants, and enhance equity of experience.

# **YEAR IN REVIEW**



NRMP Expands Outreach and Improves Information Dissemination

NRMP focused its efforts on understanding ways to enhance and build new pathways for communication, to strengthen its messaging to stakeholders, and to provide transparent information to the medical education community about the Match, Match processes and policies, and Match data. Collaboration on Three-Year Medical Education Curriculum. Since 2013, the NRMP has engaged with medical [...]

Read more



NRMP Grows, Adding Matches and Developing Infrastructure to Build For the Future

Demand for the Matching Program continues to thrive with more applicants, specialties, and positions participating each year. Internally, the NRMP also is growing, with new governance structures, new staff, and new initiatives to carry the NRMP into the future. Improvement of Board Processes. In 2020, the NRMP Board of Directors began engaging in conversations about [...]

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NRMP Modernizes Its Policies and Policy Resources to Elevate the Match Experience

NRMP's Match Participation Agreements have governed the Matching Program for decades but had, over time, become unduly burdensome. In 2021, NRMP executive leadership focused on reframing Match policies and and resources for the next generation of Match participants. Modernization of the Match Participation Agreements. Well in advance of the 2022 Main Residency Match, the Match [...]

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## NRMP Expands Outreach and Improves Information Dissemination

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Collaboration on Three-Year Medical Education Curriculum. Since 2013, the NRMP has engaged with medical schools who are implementing three-year curriculum/accelerated pathway programs. The NRMP provides guidance on how frameworks for those initiatives should be implemented with adherence to existing Match policy. The NRMP has leveraged those efforts by initiating work directly with the Consortium of Accelerated Medical Pathway Programs (CAMPP) schools. Over the course of the year, the NRMP partnered with 15 CAMPP schools to educate school leadership on the rights and responsibilities of both medical schools, residency training programs, and accelerated pathway students in the Match. Additionally, the NRMP worked with participating residency programs to create tracks within the R3 system, clearly identifying accelerated pathway positions to facilitate students' designation of their program preference(s).

As the NRMP's relationship evolved with the CAMPP schools, amendments to the Match Participation Agreements, specific to the three-year accelerated pathway programs, were implemented to reinforce each Match participant's rights and responsibilities. With new language, medical schools and programs must ensure that applicants can freely investigate programs of their choice without pressure. The proposed amendments were the result of requests for policy guidance by medical schools and training programs.

Creation of Biannual DIO Calls. In 2021, NRMP leadership created a new pathway for connecting and sharing information with designated institutional officials (DIOs) at institutions sponsoring residency and fellowship training programs. Biannual "Community Conversations" (April and November) have established a direct pipeline between the two parties for purposes of sharing information on topics including

- + Match Policy Updates
- + Governance Action and Nominations
- + Strategic Research Agenda and New Research Initiatives
- + Annual Stakeholder Conference

Although NRMP leadership stewards the creation of meeting agendas, attendees are invited to offer discussion topics to ensure the conversations are meaningful.

Launch of a Redesigned Website. In 2021, the NRMP began a comprehensive and systematic review of its current website to identity ways in which to better present and share Matching Program content with the community. Ideas on Purpose was contracted to help the NRMP reimaging its online presence, and a new website was launched December 2021 that offers

- + Customized
  Match Calendars
  for constituent
  groups with the
  ability to export
  important dates
  directly to personal
  Google calendars
- + Unique pathway "experiences" for users to walk through the Match



process in a way that is relevant to them

+ Improved site engagement with animations and movement for a less static experience

As users interact with the website, the NRMP has continued to evolve the site to ensure it meets the needs of Match Participants and will continue to seek ways in which the site may enhance and encourage interaction with the medical education community.

Publication of Position Statements Addressing Critical Issues. In 2021, the NRMP Executive Leadership developed and disseminated three position statements to share insight and maintain transparency with the community:

+ Collection of Applicant Demographic Data. In April 2021, the NRMP announced its intent to collect applicant demographic data beginning with the 2022 Main Residency Match. The statement provided information about NRMP's decision-making process (dating back to 2020), including the solicitation of community feedback, and the desire to improve the value of the Match for participants and advance the NRMP's mission to provide meaningful and transparent data on Match outcomes and workforce trends. The statement also included reassurance that applicant demographic data provision would be voluntary and that outcomes never would be shared in an identifiable way or incorporated in any way into the matching algorithm.

+ Feasibility of an Early Match. In July 2021, the NRMP responded to a proposal for an "Early Match." The position statement outlined concerns related to the structure of the proposal and how that structure would compromise the key components of an effective matching market and disadvantage applicants.



The NRMP also highlighted its own efforts to model/simulate the effects of the proposal to better understand how it could impact, potentially adversely impacting Match participants. The statement provided thoughtful and deliberate justification for declining to implement the proposal in the immediate future.

+ Interviewing. In November 2021, the NRMP addressed growing concerns in the community about interviewing behaviors and the need for a recruitment process that promoted equity, wellness, and respect. The NRMP developed recommendations that encouraged more time from programs for applicants to respond to interview offers and timely feedback from applicants to programs if offers were to be declined. The NRMP asked parties to do their part to demonstrate ethical and fair practices.

Development of a Marketing Strategy to Identify New Paths for Connectedness. In 2021, the NRMP engaged Mighty Citizen in a partnership to help develop short- and long-term goals for future marketing and communications efforts. Social listening, discovery sessions, focus groups, and surveys are the means by which the NRMP is identifying the current state of and satisfaction with marketing and communication efforts and how the NRMP can better leverage those efforts and build new ones to create new opportunities. Stay tuned for what's to come!

# NRMP Grows, Adding Matches and Developing Infrastructure to Build for the Future

Demand for the Matching Program continues to thrive with more applicants, specialties, and positions participating each year. Internally, the NRMP also is growing, with new governance structures, new staff, and new initiatives to carry the NRMP into the future.

Improvement of Board Processes. In 2020, the NRMP Board of Directors began engaging in conversations about ways to strengthen the governance infrastructure of the NRMP. Early efforts were directed toward ways to improve the recruitment of new members and identify key skills needed among Directors. Throughout 2021 and 2022, those conversations continued, resulting in the following Board-approved enhancements:

- + **Updated nominations process** that allows for election of new members in winter, a tiered orientation in the spring, and the ability for incoming Directors to shadow a Board meeting before their term commences
- + Reimagined role of Board liaisons, with greater emphasis on and accountability for exploring and improving issues related to the transition to residency
- + Establishment of a Governance Committee to streamline processes and reduce time commitments of Directors while providing a more seamless decision-making process and efficient movement on key initiatives
- + **Enhanced safety protocols** to protect against COVID-19 transmission as the Board gradually moves toward inperson meetings

Launch of a 70<sup>th</sup> Anniversary Campaign. The first Match utilizing an early version of the current matching algorithm was executed in 1952, making the 2022 Main Residency Match the 70<sup>th</sup> Match on record. The NRMP was incorporated in 1953, making the 2022-2023 season one to celebrate, and in 2021 and early 2022, the NRMP developed an anniversary campaign that will kick off with the Transition to Residency conference in October 2022. With the tagline "Building on the past, investing in the future", the NRMP plans to reflect not only on how the Matching Program has grown and evolved over time but also on the future and creating new initiatives such as

+ Modernizing report and data deliverables. The NRMP has decades of published data on its website, all available to the public. However, the organization is beginning to focus on understanding what data is most relevant and meaningful to the community and how deliverables like Results and

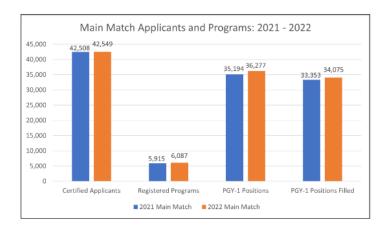


Data can better showcase applicant and program Match experiences and outcomes. The NRMP also is beginning to explore how best to display data to the community and make it more usable through technology.

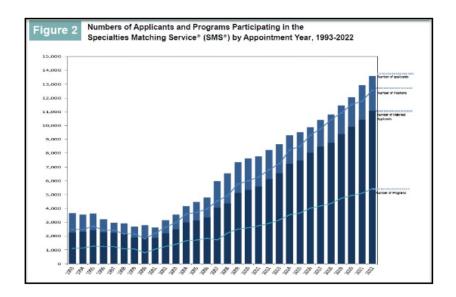
- + Building learner-focused videos. The NRMP plans to partner with videographers to capture the perspectives and experiences of applicants that reflect the growing diversity of the resident body and the unique pathways traveled toward residency. As the NRMP reflects on where it might be 70 years from now, the insight of today's applicants is valuable for the next generation of young physicians.
- + LEAP-ing toward the future. In 2023, the NRMP will launch a Learner Engagement Alliance Program (LEAP) as a means of creating a direct pipeline to those most impacted in the transition to residency. LEAP will seek out would-be leaders with a passion for understanding, improving, and supporting the UME-GME pipeline. Members will work together on self-identified issues, with the NRMP providing the necessary supports and resources to help them achieve their goals.

Looking beyond physician matching. In 2020, the NRMP initiated the development of a technology platform to facilitate matching for industries not requiring the complexity of physician matching. That new platform, iMatch<sup>SM</sup>, provides for registration, ranking, and results, and works seamlessly with the NRMP matching algorithm. Using iMatch, the NRMP engaged in 2021 in a pilot project with the Department of State, ranking and matching Foreign Service employees into posts around the world. The pilot will continue into 2022. Also in 2022, the NRMP formed a second subsidiary – National Matching Program<sup>SM</sup> - to provide matching services to government, higher education, and other not-for-profit organizations to improve their recruitment and selection processes. The NRMP Board of Directors appointed Laurie Curtin, PhD, the NRMP's Chief Policy and Research Officer, as the Executive Director and Dr. Donna Lamb, the NRMP's president and CEO will act as the inaugural Chair of the Board of Directors. With 70 years of growth and understanding under its belt, the NRMP is poised to help other industries and organizations offer simple, equitable, and effect solutions that prioritize the preferences of applicants.

Growth in Matching Program. The 2021 and 2022 Main Residency Matches saw increases in the number of applicants and programs registered, the number of PGY-1 positions offered, and the number of PGY-1 positions filled. PGY-1 match rates for U.S. MD seniors was stable at 92.8 percent in 2021 and 92.9 percent in 2022. For US MD seniors, PGY-1 match rates increased from 89.1 percent in 2021 to 91.3 percent in 2022. International medical graduates (IMGs) saw a mean 51.9 percent PGY-1 match rate in 2021 increase to a 57.5 percent match rate in 2022.



The Specialties Matching Service for the 2021 and 2022 appointment years also saw growth with the onboarding of Critical Care Medicine, Complex Family Planning, Emergency Radiology, and Global Emergency Medicine. Specialties voluntarily implementing the All In Policy remained strong at 12, with Addiction Psychiatry joining for the 2023 appointment year.



Expansion and Support of Staff. The NRMP staff has historically been small and tasked with executing the Matching Program, building and maintaining highly secure technology, generating comprehensive data reports, and implementing robust policies. As the NRMP Board and CEO have examined and defined the strategic direction of the organization, new staff positions have been developed, largely in the areas of IT and Research, to achieve the vision. The NRMP has grown by 68 percent since early 2021, and expansion will continue as needed to ensure the NRMP has the capabilities to provide outstanding support, services, and research to the community.

The NRMP also has examined ways to support staff through creation of a framework of common values and development of recognition protocols. A *Core Values Group* serves as the steward of those common values, sponsoring quarterly staff professional development pertaining to the Core Values of the organization, and managing employee recognition awards. The creation of the Core Values group helps ensure staff feel connected, appreciated, and ready to give their time and talents in support of the UME and GME communities.

# NRMP Modernizes Its Policies and Policy Resources to Elevate the Match **Experience**

NRMP's Match Participation Agreements have governed the Matching Program for decades but had, over time, become unduly burdensome. In 2021, NRMP executive leadership focused on reframing Match policies and and resources for the next generation of Match participants.

Modernization of the Match Participation Agreements. Well in advance of the 2022 Main Residency Match, the Match Participation Agreements for Applicants and Programs and Medical Schools were revised. The Agreement for Applicants and Programs was split into unique versions for each participant type that focused on specific roles and responsibilities. Emphasis also was placed on reordering the Agreements to mirror

**EMATCH** 

SOAP is a program-preferenced process occurring during Match Week wherein positions left unfilled in the Match (i.e., affect the matching algorithm has been processed) are offered to

the flow of the Match cycle and using plain language to

- + Improve and clarify Match policy and the policy pertaining to couples
- + Clarify limits on coercive communication during the recruitment process
- + Introduce a SOAP exception to provide an off-ramp so unmatched individuals could step out of Match Week in favor of a year for research or other academic endeavor
- + Reframe the violations policy to provide greater parity in how applicants and programs are treated when a violation has occurred, focusing on program education and remediation of alleged or actual violations

In fall 2021, the Specialties Matching Service Match Participation Agreements were revised, one for fellowship applicants and one for fellowship programs, and in 2022, Match Agreements for Institutions were updated. Content can be routinely curated to ensure it accurately and concisely reflects the unique experiences of participants in the Matching Program.

Launch of Online Content Management System. Also in 2021, NRMP implemented a cloud-based compliance management system to improve the efficiency of tracking and processing requests for waivers and to address reporting needs. Existing processes were cumbersome and required extensive manual input. Staff undertook extensive process mappings and workflow creation to understand current procedures and establish new ones, and a new web-based process was developed to give Match participants more direct involvement in case management. The system moved online in 2022.

Expansion of the Code of Conduct. In 2012, the NRMP partnered with the Organization of Program Director Associations (OPDA) to build the Match Communication Code of Conduct. The

Code provided recommendations for participant engagement in ethical behavior throughout the application, interview, and matching processes.

To align with the

modernization of Match Agreements, the NRMP revisited the Code and in 2021 created three unique versions, one for applicants, programs, and medical schools with the express purpose of providing clarity for each Match participant group. The Codes provide guidance about the current landscape of the transition (e.g., virtual recruitment) and highlight best practices for demonstrating ethical and professional behavior throughout the Match season.





### NRMP Reimagines the Match Cycle Timeline to Improve Flow and Encourage Deliberative Action

The COVID-19 pandemic set in motion extraordinary changes in the appointment and recruitment process. The NRMP used the opportunity to consider how it could best support applicants in their transition to residency and improve timelines for the 2021 Main Residency Match cycle, 2022 Main Residency Match cycle, and beyond. The 2021 Match Cycle. The NRMP [...]

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#### NRMP Launches Research Agenda, Commits to Advancing Understanding of the Transition

A primary strategic goal for the NRMP Board of Directors is to engage NRMP data independently and through partnership in research that tackles hard questions facing the transition to residency. Several initiatives already are underway, and findings will inform and support initiatives that improve the experience for all stakeholders. External Collaborations. Since 2021, the NRMP [...]

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### NRMP Champions Innovation, Exploring Possible Changes to Match Structure and the Impact on Equity

As part of its deep commitment to building and sustaining a healthy, equitable Matching Program, the NRMP has actively engaged in initiatives that touch directly on essence of the Match. Match Simulation. In 2019, proposals were presented to the GME community calling for changes to the transition to residency, including changes to the Match. [...]

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**The 2021 Match Cycle.** The NRMP executed fundamental changes to the registration and ranking processes, modifying pinch points to optimize the time needed for recruitment.

- + The standard Match registration period was extended from November 30 to Jan 31 to allow programs more time to to finalize their quotas and applicants more time to register for the Match before late fees were applied
- + The ranking period was pushed to February-March to allow more time for interview scheduling and completion
- + The SOAP verification process required of medical schools was eliminated to reduce confusion and stress associated with Match Week and streamline the time between the Rank Order List Deadline and Match Week

The 2022 Match Cycle. Building on the modifications introduced in the 2021 Main Residency Match, the NRMP dramatically changed Match Week to provide more time and flexibility for unmatched or partially matched applicants to engage in a more robust application and interview period before the SOAP rounds began.

- + Match status notification was provided earlier on Monday of Match Week to give unmatched and partially Matched applicants a jump on strategizing about SOAP
- + All four SOAP rounds were pushed from Wednesday and Thursday of Match Week to Thursday, providing more time for applicants to submit applications and engage in interviews



The 2023 Match cycle and Beyond. The NRMP is considering other ways to improve on the Match cycle and related processes, and this summer has issued a call for public comment regarding the feasibility of a Two-Phase Match. Adjustments would be made to the flow of the Match, but the September – March timeframe would be preserved. You can read more about the Two-Phase Match on the "NRMP Champions Innovation" page of this report.

# NRMP Launches Research Agenda, Commits to Advancing Understanding of the Transition

A primary strategic goal for the NRMP Board of Directors is to engage NRMP data independently and through partnership in research that tackles hard questions facing the transition to residency. Several initiatives already are underway, and findings will inform and support initiatives that improve the experience for all stakeholders.

**External Collaborations.** Since 2021, the NRMP has established partnerships with a variety of organizations to better understand and clarify the transition process.

+ Preference Signaling. As part of the 2021 Main Residency Match season, Otolaryngology launched a preference signaling pilot to understand how applicant preferences for training programs, as reflected in a "signal" to said programs, might impact interview opportunities. The NRMP worked with the Organization of Program Directors in Otolaryngology (OPDO) leadership in late 2020 to ensure appropriate structure of and communication about the pilot program so that Match policies were not violated. In fall 2021, the NRMP entered into a research partnership with OPDO leadership and staff from the AAMC to explore the impact, if any, preference signaling has on Match outcomes. Work is underway to finalize analyses and prepare a manuscript for publication that reveals the applicant characteristics, post interview, most prioritized by programs during ranking.

+ Inappropriate
Communication During
Recruitment. In late 2020, the
NRMP created a partnership with
the Alliance of Academic Internal
Medicine (AAIM) to examine the
prevalence of inappropriate and
illegal communication between
fellowship programs and
applicants during the recruitment

A decision was made to expand that partnership to include leadership of the Association of

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Pediatric Program Directors (APPD) so that the assessment could include both internal medicine and pediatric fellowship candidates, the two largest combined Fellowship Matches. The partnership continued throughout 2021 and into 2022, and a workgroup is developing a manuscript for publication that will inform program interviewing teams on best practices.

- + Same-state Locality and Match Outcomes. In 2021, NRMP partnered with Thalamus, GME, a cloud-based graduate medical education interview scheduling software platform, to provide Match outcome data for an examination of characteristics driving conversions of interviews to matches in Anesthesiology. Findings indicated that same-state interviewees could reduce their number of interviews while maintaining the same odds of matching. To add to that evidence base, NRMP and Thalamus extended the partnership in 2022 to examine the role of geography in ranking and matching to the three primary care specialties: Internal Medicine, Family Medicine, and Pediatrics. A manuscript has been submitted for publication.
- + IMGS Fulfilling Training Commitments. With the onset of COVID, the ability of international medical graduates, critical contributors to the physician workforce, to gain the clearances needed to enter and remain in the United Sate for training was in jeopardy. As a result, the NRMP built a partnership with the ECFMG to provide Match outcomes that could be shared with the Department of State and serves to advocate for IMG matriculation for training.

**Internal Studies.** The NRMP also is leveraging its own data in new ways to contribute to a better-informed community.

### + Publication about Sustained Partnerships.

In 2021, the NRMP published an article in Academic Medicine commemorating the inaugural Single Match in 2020 and reflecting back on the organization's history, it's long-standing partnerships with stakeholders, and its unwavering commitment to grow and evolve to meet the needs of the community. The article highlighted the NRMP's efforts in 2012 to create a Scramble Work



Group to devise the Supplemental Offer and Acceptance Program® (SOAP®), expand its reporting and modify its Board governance structure between for greater osteopathic involvement, and build modern resources (conference, smartphone app) to keep constituents connected.

+ Revamp of Applicant and Program Director Surveys. Although usually issued biennially, the NRMP elected as part of the 2021 Main Residency Match to simultaneously issue the Applicant and Program Director Survey to examine virtual experiences as a result of the COVID-19 pandemic. A Research Brief outlining findings was published in summer 2021. In 2022, both surveys were issued again, this time with a section added to the Program Director Survey targeting utilization of holistic review during recruitment. The two-year Research Brief was published in summer 2022.

+ Implementation of Applicant Demographic Data Collection. In 2022, the NRMP launched applicant demographic data collection from both residency and fellowship applicants. Collecting the data provides the NRMP with primary source data, consented for use in research and analysis, that allows for a more comprehensive understanding of who is transitioning to residency, what is happening during the recruitment period, and how outcomes might be affected by demographic factors. The NRMP achieved an 87% consent rate for use of research and is building the inaugural report to present demographic data and Match outcomes by preferred specialty. As the data mature, NRMP will begin to collaborate with others to incorporate information about applications, interviews, etc., to develop a more complete view of the whole transition.

**Looking Ahead.** The NRMP is excited about initiatives on the horizon and how those initiatives will bring forth new collaborations.

- + The Unmatched Applicant. In late 2022, the NRMP will initiate efforts to establish a comprehensive approach to evaluating and understanding the journey of the unmatched applicant. Study design will focus on applicant type, demographic profile, preferred specialty, and Match and/or SOAP outcomes.
- + Match Outcomes and Performance on ACGME Milestones. Also in late 2022, the NRMP intends to collaborate with the ACGME to better understand the readiness of applicants for training and their trajectory through residency/fellowship.

# NRMP Champions Innovation, Exploring Possible Changes to Match Structure and the Impact on Equity

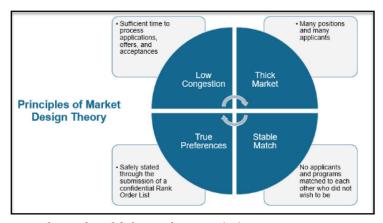
As part of its deep commitment to building and sustaining a healthy, equitable Matching Program, the NRMP has actively engaged in initiatives that touch directly on essence of the Match.

Match Simulation. In 2019, proposals were presented to the GME community calling for changes to the transition to residency, including changes to the Match. One such proposal called for an "Early Match". In response, the NRMP activated a comprehensive, data-based study to examine potential benefits and consequences for applicants and programs should the structure of the Match be changed. At the heart of the study was the simulation of the Early Match proposal that incorporated the following conditions into its design:

- + Launch the early Match in July
- + Restrict the number of applications per applicant to
- + Limit the number of positions available to up to 50 percent of a program's quota
- + Make participation optional for applicants
- + Launch the standard Match in September
- +Consider unmatched applicants from the early Match, and all other applicants, as part of the standard Match

Importantly, while the early Match proposal encumbered applicants with multiple restrictions, there were no such restrictions extended to programs, causing the NRMP to have concerns about fairness and equity for applicants.

The simulation of an early Match was compared to a simulation of the traditional single Match to understand changes in Match outcomes. The study relied on eight years of ranking and matching data and found that the early Match, as proposed, could harm applicants, namely osteopathic and international students and graduates, and programs while also generating dissatisfaction with outcomes. Perhaps more importantly, the study determined that an early Match would compromise several of the fundamental principles on which a stable and effective matching market is based:



- + Reduce the thick market needed to ensure participants have many options from which to freely choose
- + Restrict true preferencing because participants could be driven to create rank lists based that ensured a positive outcome
- + Compromise the stability of the Match because participants could match to less preferred options since all available potions would not be in the early Match

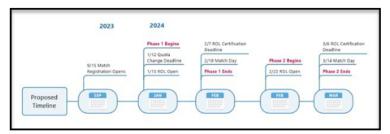
In summer and fall 2021, the NRMP communicated with the GME community about its concerns with an early Match as proposed and how the modeling study had identified adverse impacts on applicants and programs that could alter the Match in ways that would be disadvantageous and negatively impact the transition and training experiences.

Exploration of a Two-Phase Match. As part of its commitment to providing a Matching Program that is fair, equitable, efficient, transparent, and reliable, the NRMP began in 2021 to examine whether improvements could be made to the Match that would foster greater applicant wellness and agency, greater capacity for thoughtful decision-making, and a more wide-spread holistic approach to the application and interview processes. For 70 years, the NRMP has proudly served as the steward of a system that continuously evolves to meet the changing needs of applicants, programs, institutions, and medical schools through improved Match processes, offerings, and

In summer 2022, a proposal outlining a two-phase Match was presented to the GME community that outlined why the time was ripe for the consideration and how participants could benefit from the change in Match structure. Although the Supplemental Offer and Acceptance Program® (SOAP®) has objectively improved on the chaos and instability surrounding the post-Match "Scramble" since it was implemented in 2012, it lacks equity for applicants and encourages reactive rather than proactive training decisions that increase stress on all participants.

The transition to residency has had to shoulder increasing numbers of applicants, broad variation in recruitment methodologies by programs, and increasing stress among applicants and programs. A two-phase Match could, at minimum, address stress levels while fostering greater parity of experience for all by

- + Requiring submission of rank order lists by both applicants and programs at each phase
- + Utilizing the matching algorithm (applicantproposing) for each phase
- + Providing time for applicants to research and vet program choices
- + Providing time for programs to engage in a more holistic review
- + Increasing time for contact between programs and applicants
- + Including two Match Days that would provide the release of the full results to all participants



The NRMP built the concept of a two-phase Match using the existing Main Residency Match timeline to ensure stakeholders were not burdened with radical changes in preparation, selection, and onboarding. The NRMP has solicited public comment from the GME community and will invite organizations and other interested parties to participate in a period of public testimony. Findings from the public comment and engagement period will be analyzed and shared with the community.



## PHYSICIAN-LED GOVERNANCE

The NRMP is governed by a 19-member Board of Directors with deep experience in medicine, medical education, academia, and research. Directors include medical school deans and advisors, designated institutional officials, MD and DO program directors, MD, DO, and IMG resident physicians, MD and DO medical students, and public members. Directors represent a variety of medical specialties, reflect diverse ethnic, racial, and religious backgrounds, and nearly one-half are women. Dr. Lamb is an ex-officio, non-voting Director of the Board.

MEET THE BOARD

# NRMP BOARD OF DIRECTORS















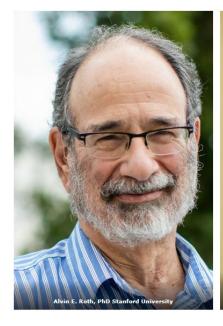






















NOT PICTURED: Tiffany Morton, MD/MPH Candidate, The Ohio State University College of Medicine and College of Public Health

The Board of Directors also maintains two advisory groups: Board Liaisons and the Research Advisory Committee.

- Board Liaisons represent partner organizations, societies, and military members who engage in an open dialogue with the Board annually to discuss issues pertaining to medical education and initiatives undertaken by their organization(s) or the military.
- $\circ$  The Research Advisory Committee (RAC) works with the organization to discuss and inform research initiatives.

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- · Sanjay Desai, MD American Medical Association
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- Jeanette Mladenovic, MD, MBA Foundation for Advancement of International Medical Education and Research (FAIMER)
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- Kimball Mohn, MD Association for Hospital Medical Education
- John Gallinger Canadian Resident Matching Service
- · Helen Burstin, MD, MPH Council of Medical Specialties Societies
- William Beckman, CAPT; Navy Graduate Medical Education

## Research Advisory Committee

#### Individual Members

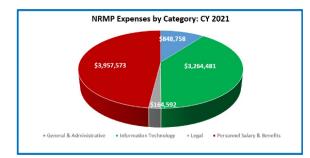
- Sarah Brotherton, PhD; American Medical Association
- Clese Erikson, MPAff; George Washington University School of Public Health
- Craig Hoesley, MD, University of Alabama Birmingham School of Medicine
- Alice Kuo, MD, PhD; University of California, Los Angeles
- · Colin West, MD, PhD; Mayo Clinic, Rochester

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- Liana Puscas, MD, American Medical Association
- Karen Nichols, DO; American Osteopathic Association
- Dana Dunleavy, PhD; Association of American Medical Colleges
- Jeanette Mladenovic, MD, MBA; Foundation for Advancement of International Medical Education and Research (FAIMER)
- · Aaron Young, PhD; Federation of State Medical Boards
- Amanda Clauser, EdD; National Board of Medical Examiners
- Jeanne Sandella, DO; National Board of Osteopathic Medical Examiners

# **FINANCIALS**

The NRMP has worked to uphold a high standard of integrity and honesty in all financial management practices. As such, the NRMP has maintained a stable financial status that underpins the core mission of the Match and has provided for organizational growth in technology, processes, and human capital.



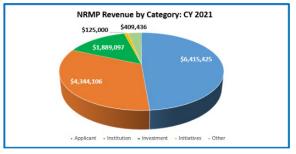
#### The Match includes free access to resources including

Data Reports and Research Articles

Newsletters and Webinars

PRISM Smartphone App and YouTube® Channel

R3® System Support Guides and Micro-Learning Videos



## Increases in revenue are directed toward

Software Development
Information Technology (IT) Upgrades
Subsidization of the Transition to Residency Conference
Interactive, Tableau-Based Tools and Resources

