

### Your Technical Skills Won't Get You There: Identifying Vital Skills to Thrive in Your Career

Izabella Barreto, PhD, DABR Clinical Assistant Professor Department of Radiology University of Florida





### Disclosures

110

#### • None



- Medical physicists offer technical expertise and contributions of physics principles in medicine
- However, technical skills are not enough



• Leadership skills are necessary to adapt to unpredictable challenges





# Are medical physicists perceived as *leaders*?



## Are all managers leaders?

Do they intimidate or inspire?





Kets de Viles

New Hire



# Collaboration and motivation rely on emotional competence

• Emotional Intelligence is the ability to understand and manage our own emotions and the emotions of others





• A leadership development program designed for medical physicists

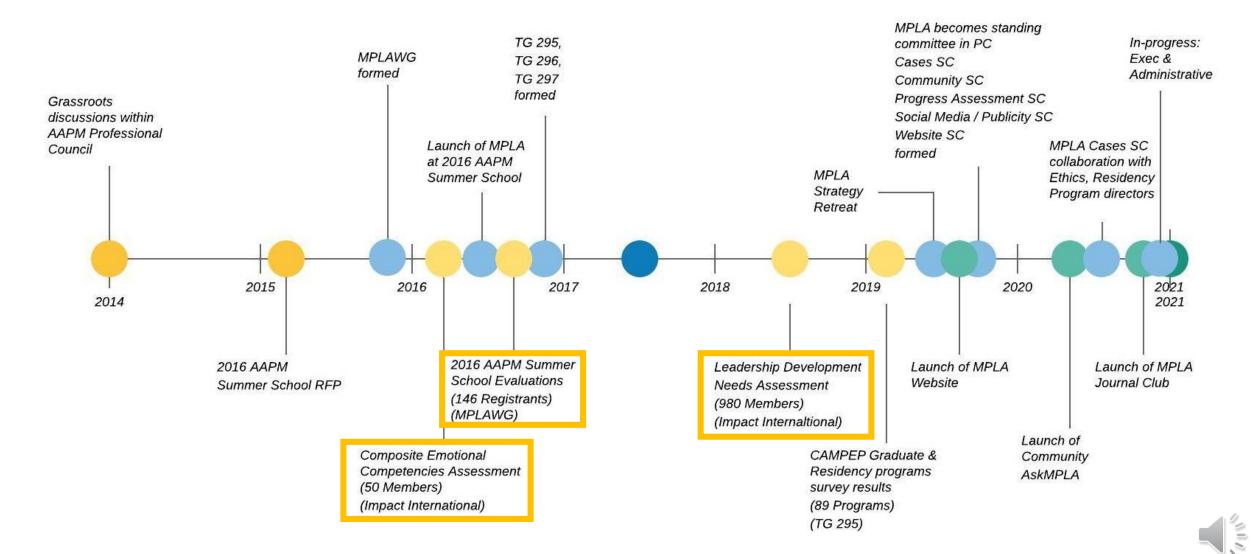


Organizes training, creates sessions, and provides educational resources





### **History of MPLA**





### 2016 AAPM Summer School

- Hands-on environment for leadership and management development for medical physicists
- Follow-up survey sent to all 146 Registrants:



"What are **your** top 3 priorities for MPLA to address moving forward?"





### **Top Priorities:**

- 1. MP value and advocacy
- 2. Emotional intelligence
- 3. Communication
- 4. Influence / working with others
- 5. Teamwork and collaboration
- 6. Conflict management
- 7. Operations
- 8. Finance
- 9. Project management
- 10. Human resources
- 11. Service / customer operations

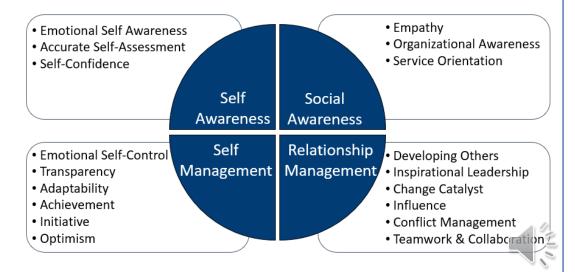
Professional & Developmental Personal & interpersonal Professional & developmental Personal & interpersonal Personal & interpersonal Personal & interpersonal Executive & administration Executive & administration Professional & developmental Executive & administration Professional & developmental



## Emotional Competence Inventory (ECI)

- Impact International conducted a **360-Review** of 50 AAPM members
- Assess emotional competencies of individuals and organizations
- The individual and the people they work with rate **emotional** and **social** behaviors the individual displays

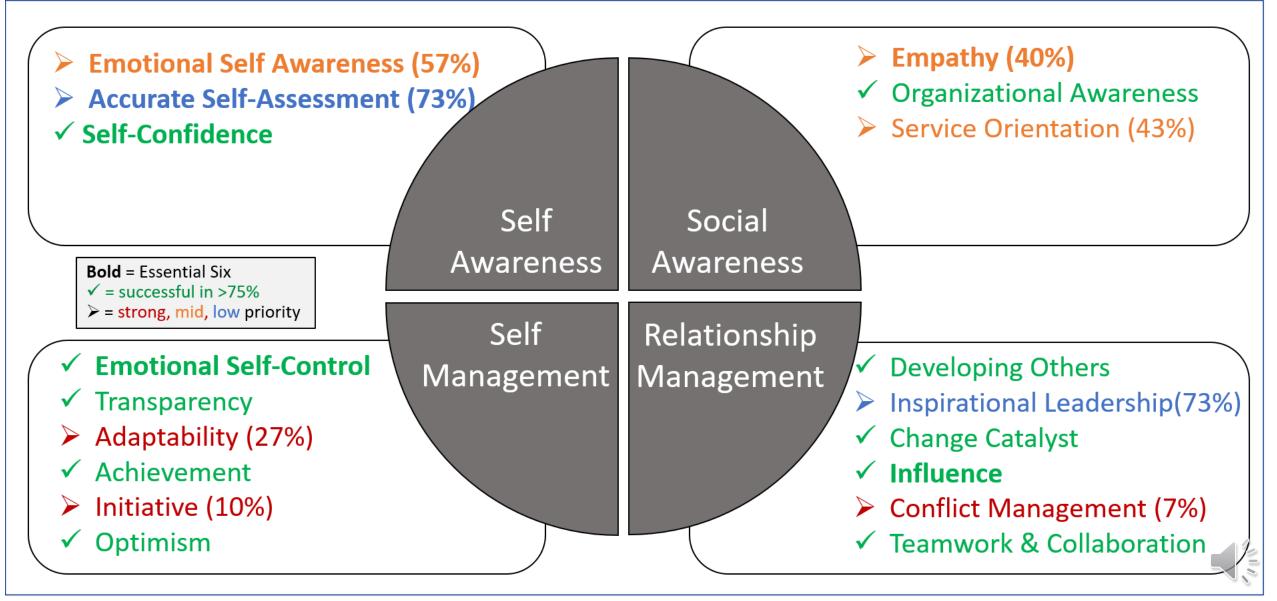
#### 18 competencies grouped into 4 areas:

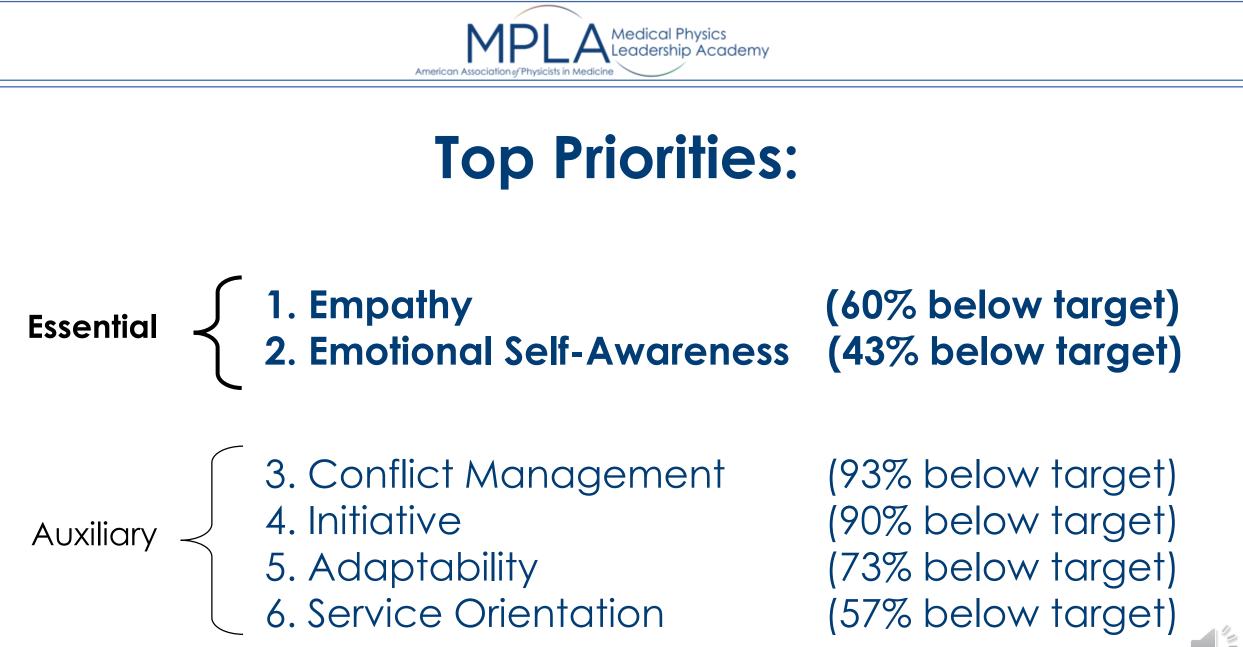




|                         | COMPETENCY                 | % ACHIEVED<br>BY AAPM MEMBERS |
|-------------------------|----------------------------|-------------------------------|
|                         | Emotional Self-Awareness   | 57%                           |
|                         | Accurate Self-Assessment   | 73%                           |
| "The Essential Six"     | Self-Confidence            | 80%                           |
| Competencies            | Emotional Self-Control     | 90%                           |
| impactinternational.com | Empathy                    | 40%                           |
| impactinternational.com | Influence                  | 87%                           |
|                         | Transparency               | 83%                           |
|                         | Adaptability               | 27%                           |
|                         | Achievement                | 93%                           |
|                         | Initiative                 | 10%                           |
| Auvilian                | Optimism                   | 93%                           |
| Auxiliary               | Organizational Awareness   | 83%                           |
| Competencies            | Service Orientation        | 43%                           |
|                         | Developing Others          | 87%                           |
|                         | Inspirational leadership   | 73%                           |
|                         | Change Catalyst            | 80%                           |
|                         | Conflict Management        | 7%                            |
|                         | – Teamwork & Collaboration | 90%                           |







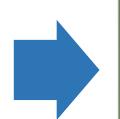


### **AAPM Leadership Needs Assessment**

>1k members responded to survey designed to define leadership development needs of AAPM members

Skills in 3 Areas:

Personal & Interpersonal
 Professional & Developmental
 Executive & Administrative

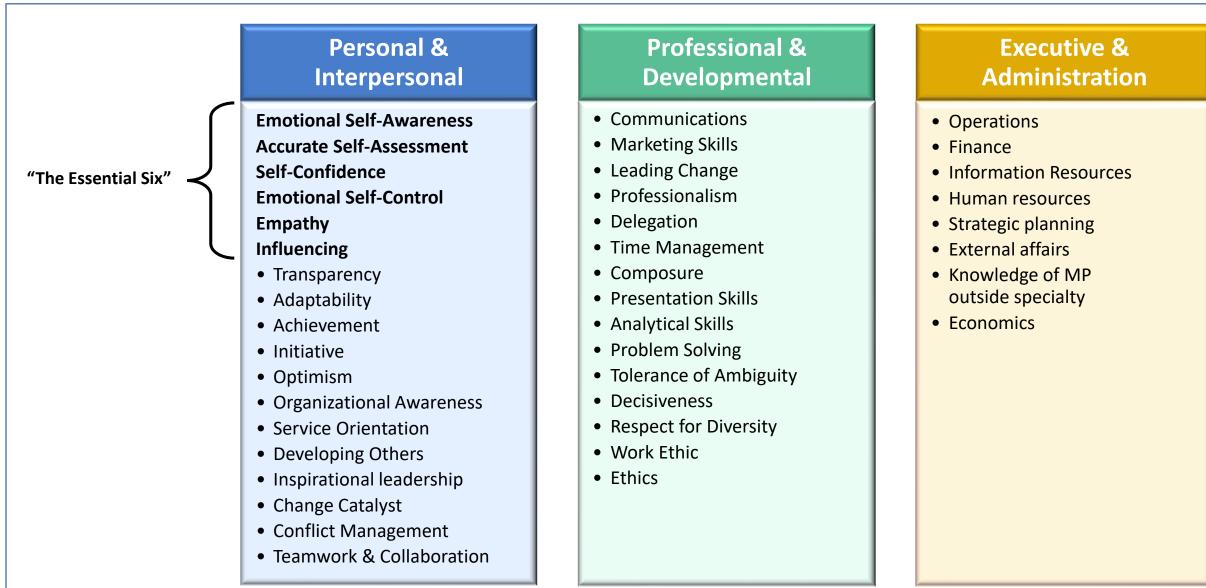


#### For each skill, assessed:

1. To what extent do you agree this skill is *important* for medical physicists to possess?

2. To what extent do you believe this skill is a *strength* of yours?







### Most Favorable

|                      | COMPETENCY                   | CATEGORY                     | FAVORABILITY | These are                    |
|----------------------|------------------------------|------------------------------|--------------|------------------------------|
|                      | Communications               | Professional & Developmental | 98.2%        |                              |
|                      | Problem Solving              | Professional & Developmental | 98.2%        |                              |
| Critical<br>Skill    | Work Ethic                   | Professional & Developmental | 95.8%        |                              |
| Экш                  | Analytical Thinking          | Professional & Developmental | 97.5%        |                              |
|                      | Professionalism              | Professional & Developmental | 97.4%        | I am "good"                  |
|                      | Problem Solving              | Professional & Developmental | 95.5%        | $\langle , at these \rangle$ |
| Description          | Work Ethic                   | Professional & Developmental | 93.8%        |                              |
| Personal<br>Strength | Analytical Thinking          | Professional & Developmental | 93.2%        |                              |
| Stiength             | Professionalism              | Professional & Developmental | 92.4%        |                              |
|                      | <b>Respect for Diversity</b> | Professional & Developmental | 88.4%        |                              |

10



Kets de Viles

New Hire



### Least Favorable

| These are <u>not</u><br>that important |                      | COMPETENCY                              | CATEGORY                     | FAVORABILITY |
|----------------------------------------|----------------------|-----------------------------------------|------------------------------|--------------|
|                                        |                      | Change Catalyst                         | Personal & Interpersonal     | 79.7%        |
|                                        | Cuities              | Management of Politics in Organizations | Personal & Interpersonal     | 76.3%        |
|                                        | Critical<br>Skill    | Human Resources                         | Executive & Administration   | 72.9%        |
| Lam not so                             | JKIII                | Tolerance of Ambiguity                  | Professional & Developmental | 66.5%        |
|                                        |                      | Marketing Skills                        | Professional & Developmental | 54.6%        |
| <b>good</b> at these                   |                      | Conflict Management                     | Personal & Interpersonal     | 53.6%        |
|                                        | Damand               | Human Resources                         | Executive & Administration   | 42.4%        |
|                                        | Personal<br>Strength | Management of Politics in Organizations | Personal & Interpersonal     | 41.2%        |
|                                        | Juengui              | Finance                                 | Executive & Administration   | 39.5%        |
|                                        |                      | Marketing Skills                        | Professional & Developmental | 35.0%        |
|                                        |                      | 5                                       |                              | 4            |

110



### Participants didn't know the "**Essential 6**" <u>are</u> Critical Skills

| PERSONAL &<br>INTERPERSONAL SKILLS | ACHIEVED<br>IN ECI (%) | AGREE CRITICAL<br>SKILL (%) | PERSONAL<br>STRENGTH (%) |
|------------------------------------|------------------------|-----------------------------|--------------------------|
| <b>Emotional Self-Awareness</b>    | 57%                    | 89.8                        | 82.4                     |
| Accurate Self-Assessment           | 73%                    | 94.4                        | 83.2                     |
| Self-Confidence                    | 80%                    | 93.7                        | 76.0                     |
| Emotional Self-Control             | 90%                    | 94.9                        | 79.8                     |
| Empathy                            | 40%                    | 86.7                        | 80.5                     |
| Influence                          | 87%                    | 83.5                        | 57.8                     |
| Transparency                       | 83%                    | 88.7                        | 83.9                     |
| Adaptability                       | 27%                    | 95.5                        | 86.0                     |
| Achievement                        | 93%                    | 90.4                        | 78.2                     |
| Initiative                         | 10%                    | 95.6                        | 81.4                     |
| Optimism                           | 93%                    | 82.9                        | 75.5                     |
| Organizational Awareness           | 83%                    | 76.3                        | 41.2                     |
| Service Orientation                | 43%                    | 86.9                        | 71.2                     |
| Developing Others                  | 87%                    | 89.9                        | 67.1                     |
| Inspirational leadership           | 73%                    | 85.2                        | 53.6                     |
| Change Catalyst                    | 80%                    | 79.7                        | 57.3                     |
| Conflict Management                | 7%                     | 85.9                        | 53.6                     |
| Teamwork & Collaboration           | 90%                    | 95.7                        | 88.1                     |



Participants self-scored <u>higher</u> skills ECI-360 identified as priorities

### Blind Spots



|   | PERSONAL &<br>INTERPERSONAL SKILLS | ACHIEVED<br>IN ECI (%) | AGREE CRITICAL<br>SKILL (%) | PERSONAL<br>STRENGTH (%) |
|---|------------------------------------|------------------------|-----------------------------|--------------------------|
|   | Emotional Self-Awareness           | 57%                    | 89.8                        | 82.4                     |
|   | Accurate Self-Assessment           | 73%                    | 94.4                        | 83.2                     |
|   | Self-Confidence                    | 80%                    | 93.7                        | 76.0                     |
|   | Emotional Self-Control             | 90%                    | 94.9                        | 79.8                     |
|   | Empathy                            | 40%                    | 86.7                        | 80.5                     |
|   | Influence                          | 87%                    | 83.5                        | 57.8                     |
|   | Transparency                       | 83%                    | 88.7                        | 83.9                     |
|   | Adaptability                       | 27%                    | 95.5                        | 86.0                     |
|   | Achievement                        | 93%                    | 90.4                        | 78.2                     |
|   | Initiative                         | 10%                    | 95.6                        | 81.4                     |
|   | Optimism                           | 93%                    | 82.9                        | 75.5                     |
|   | Organizational Awareness           | 83%                    | 76.3                        | 41.2                     |
|   | Service Orientation                | 43%                    | 86.9                        | 71.2                     |
|   | Developing Others                  | 87%                    | 89.9                        | 67.1                     |
|   | Inspirational leadership           | 73%                    | 85.2                        | 53.6                     |
|   | Change Catalyst                    | 80%                    | 79.7                        | 57.3                     |
| 4 | Conflict Management                | 7%                     | 85.9                        | 53.6                     |
|   | Teamwork & Collaboration           | 90%                    | 95.7                        | 88.1                     |



#### Participants self-scored <u>lower</u> as a Personal Strength items ECI-360 identified acceptable

| PERSONAL &<br>INTERPERSONAL SKILLS | ACHIEVED<br>IN ECI (%) | AGREE CRITICAL<br>SKILL (%) | PERSONAL<br>STRENGTH (%) |
|------------------------------------|------------------------|-----------------------------|--------------------------|
| <b>Emotional Self-Awareness</b>    | 57%                    | 89.8                        | 82.4                     |
| Accurate Self-Assessment           | 73%                    | 94.4                        | 83.2                     |
| Self-Confidence                    | 80%                    | 93.7                        | 76.0                     |
| <b>Emotional Self-Control</b>      | 90%                    | 94.9                        | 79.8                     |
| Empathy                            | 40%                    | 86.7                        | 80.5                     |
| Influence                          | 87%                    | 83.5                        | 57.8                     |
| Transparency                       | 83%                    | 88.7                        | 83.9                     |
| Adaptability                       | 27%                    | 95.5                        | 86.0                     |
| Achievement                        | 93%                    | 90.4                        | 78.2                     |
| Initiative                         | 10%                    | 95.6                        | 81.4                     |
| Optimism                           | 93%                    | 82.9                        | 75.5                     |
| Organizational Awareness           | 83%                    | 76.3                        | 41.2                     |
| Service Orientation                | 43%                    | 86.9                        | 71.2                     |
| Developing Others                  | 87%                    | 89.9                        | 67.1                     |
| Inspirational leadership           | 73%                    | 85.2                        | 53.6                     |
| Change Catalyst                    | 80%                    | 79.7                        | 57.3                     |
| Conflict Management                | 7%                     | 85.9                        | 53.6                     |
| Teamwork & Collaboration           | 90%                    | 95.7                        | 88.1                     |

### MPLA Curriculum

Delegation

#### Core

- Emotional Self-awareness
- Empathy
- Influence
- Adaptability
- Initiative
- **Organizational Awareness** Interpersonal
  - Service Orientation
  - Conflict Management
  - Teamwork & Collaboration

#### Complementary

- Accurate Self-assessment
- Self-confidence
- Emotional Self-control
- Transparency
- Achievement
- Optimism
- Developing Others
- Inspirational Leadership
- Change Catalyst

**Bold** = Essential Six Competencies

#### Professional & **Developmental**

#### Complementary

Core

- Responsible behavior
- Ethical behavior
- Respect for diversity
- Interpersonal
- Problem-solving skills
- New ventures leadership

#### Operations

- Finance
- Information resources

Core

- Human resources
- Strategic planning
- External Affairs

#### Complementary

 Knowledge of MP outside specialty





**Executive &** 

Administrative

#### Personal &



Professional vitality





# Applying the MPLA Curriculum to your Career Stage



### **Graduate Student & Trainee**

|                                         | Personal & Interpersonal                                                                                                                                                   | Professional & Developmental                                 | Executive & Administration                                                                                   |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Focus on                                | <ul> <li>Empathy</li> <li>Emotional-Self Awareness</li> <li>Conflict Management</li> <li>Teamwork &amp; Collaboration</li> <li>Initiative</li> <li>Adaptability</li> </ul> | • Communication                                              | <ul> <li>Operations</li> <li>Information Resources</li> <li>Knowledge of MP<br/>Outside Specialty</li> </ul> |
| Learn<br>about/<br>begin to<br>practice |                                                                                                                                                                            | <ul><li>MP Value &amp; advocacy</li><li>Delegation</li></ul> | • Finance                                                                                                    |



### Early Careerist without management responsibilities

|                                         | Personal & Interpersonal                                                                                                                                                                                                                                                   | Professional & Developmental                                                                                                     | Executive & Administration                                                     |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Focus on                                | <ul> <li>Empathy</li> <li>Emotional-Self Awareness</li> <li>Conflict Management/Negotiation</li> <li>Teamwork &amp; Collaboration</li> <li>Initiative</li> <li>Adaptability</li> <li>Service orientation</li> <li>Organizational awareness</li> <li>Influencing</li> </ul> | Communication                                                                                                                    | <ul> <li>Operations</li> <li>Information resources</li> </ul>                  |
| Learn<br>about/<br>begin to<br>practice |                                                                                                                                                                                                                                                                            | <ul> <li>MP Value &amp; advocacy</li> <li>Delegation</li> <li>Project management</li> <li>Service/customer operations</li> </ul> | <ul> <li>Finance</li> <li>Human Resources</li> <li>External Affairs</li> </ul> |



### Middle Manager

|                                         | Personal & Interpersonal                                                                                                                                                                                                                                                   | Professional & Developmental                                                                                                                            | Executive & Administration                                                                                            |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Focus on                                | <ul> <li>Empathy</li> <li>Emotional-Self Awareness</li> <li>Conflict Management/Negotiation</li> <li>Teamwork &amp; Collaboration</li> <li>Initiative</li> <li>Adaptability</li> <li>Service orientation</li> <li>Organizational awareness</li> <li>Influencing</li> </ul> | <ul> <li>Communication</li> <li>MP Value &amp; advocacy</li> <li>Delegation</li> <li>Project Management</li> <li>Service/Customer Operations</li> </ul> | <ul> <li>Operations</li> <li>Information Resources</li> <li><i>Finance</i></li> <li><i>Human Resources</i></li> </ul> |
| Learn<br>about/<br>begin to<br>practice |                                                                                                                                                                                                                                                                            |                                                                                                                                                         | <ul> <li>External Affairs</li> <li>Strategic Planning</li> <li>Knowledge of MP<br/>Outside Specialty</li> </ul>       |

000



### **Senior Manager**

|                              | Personal & Interpersonal                                                                                                                                                                                                                                                   | Professional & Developmental                                                                                                                            | Executive & Administration                                                                                                                                                                                                               |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Master/<br>greater<br>effort | <ul> <li>Empathy</li> <li>Emotional-Self Awareness</li> <li>Conflict Management/Negotiation</li> <li>Teamwork &amp; Collaboration</li> <li>Initiative</li> <li>Adaptability</li> <li>Service orientation</li> <li>Organizational awareness</li> <li>Influencing</li> </ul> | <ul> <li>Communication</li> <li>MP value &amp; advocacy</li> <li>Delegation</li> <li>Project management</li> <li>Service/customer operations</li> </ul> | <ul> <li>Operations</li> <li>Finance</li> <li>Information resources</li> <li>Human resources</li> <li><i>External affairs</i></li> <li><i>Strategic planning</i></li> <li><i>Knowledge of MP</i><br/><i>outside specialty</i></li> </ul> |



### Leadership Training

### Content (what)

- Sessions
- Cases
- Books & journals
- Podcasts



### Practice (how)

- Education programs
- Community
  - Ask MPLA
  - Cohorts
  - Journal Club







## How do I join?

- Visit the website
  - aapm.org/leadership
- Join the Community
- Follow us on social media





