





The Team for Scientific Research Partnership

By

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Video

We all observed, experienced or maybe represent our mistaken style of partnership













Advantages of research & projects' partnership

- Resolve real-world or complex problems,
- Provide different perspectives on problems,
- Create comprehensive research questions,
- Develop consensus clinical definitions and guidelines,
- Provide comprehensive health care evidence-based services.

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Partnership Teams

- Multi disciplinarity, draws on knowledge from different disciplines but stays within their boundaries.
- Interdisciplinarity, analyses, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole.
- Trans disciplinarity, integrates the natural, social and health sciences in a humanities context, and transcends their traditional boundaries.





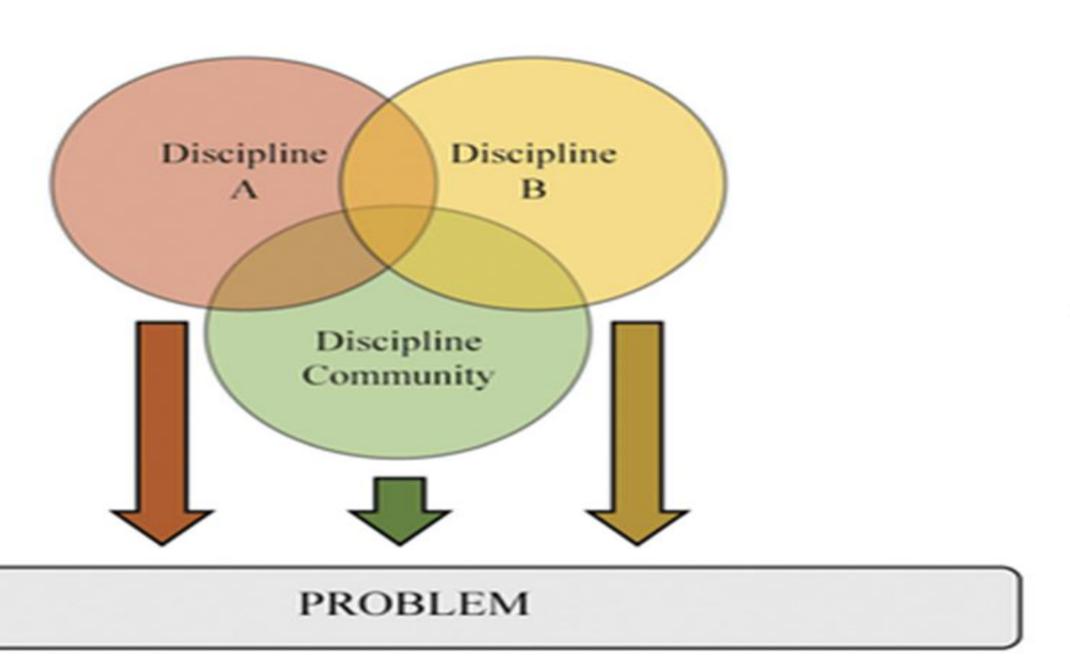




MONODISCIPLINARY Discipline A Discipline B Discipline Community

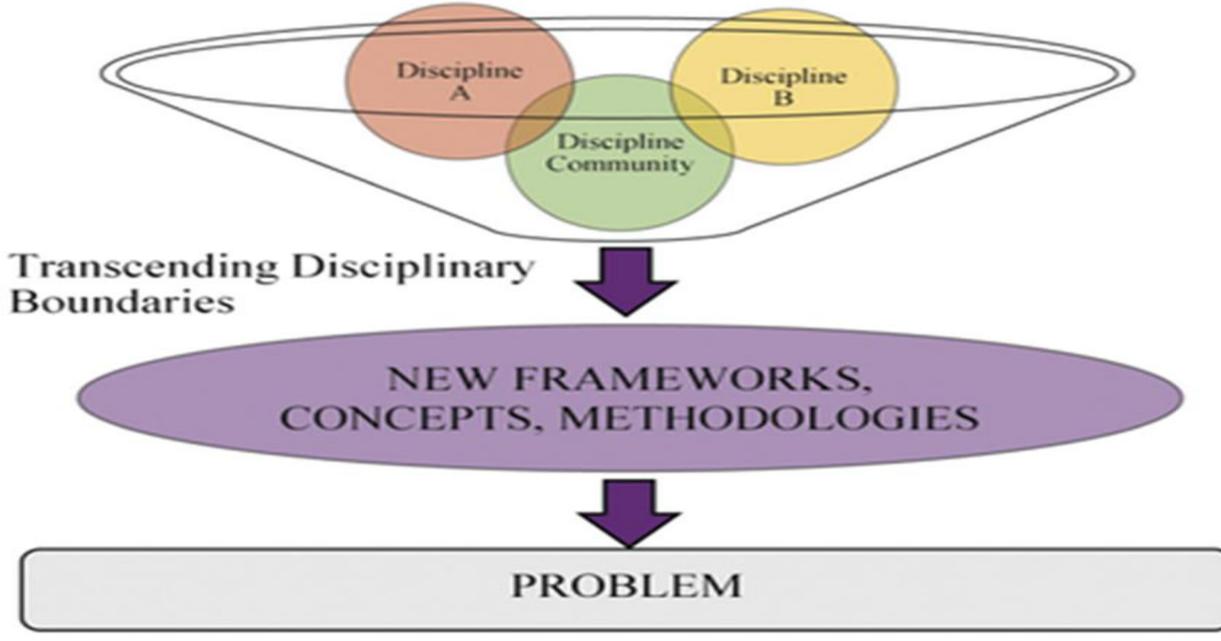
INTERDISCIPLINARY

PROBLEM



TRANSDISCIPLINARY

PROBLEM







Models of MDT should not be used interchangeably <u>Multidisciplinary</u>

- Researchers work independently as own discipline.
- Share research goals and work on the same problem but look at it from their own discipline's perspective.
- Findings from each discipline are supplementary to each other.
- The advantage each aspect can be analyzed by a particular specialty, often necessary to answer complex research problems.













Interdisciplinary

Teams or individuals from two or more disciplines that **integrate** their information, data, techniques, tools, perspectives, concepts, and/or theories from or bodies of knowledge collaboratively to:

- Advance fundamental understanding.
- Solve problems whose solutions are beyond the scope of a single discipline or area of research practice." In other words, rather than working independently.













For example,
biochemistry, nanoscience, and
neuroscience all emerged as
interdisciplinary fields that eventually
grew to become their own disciplines.













Transdisciplinary & Convergence

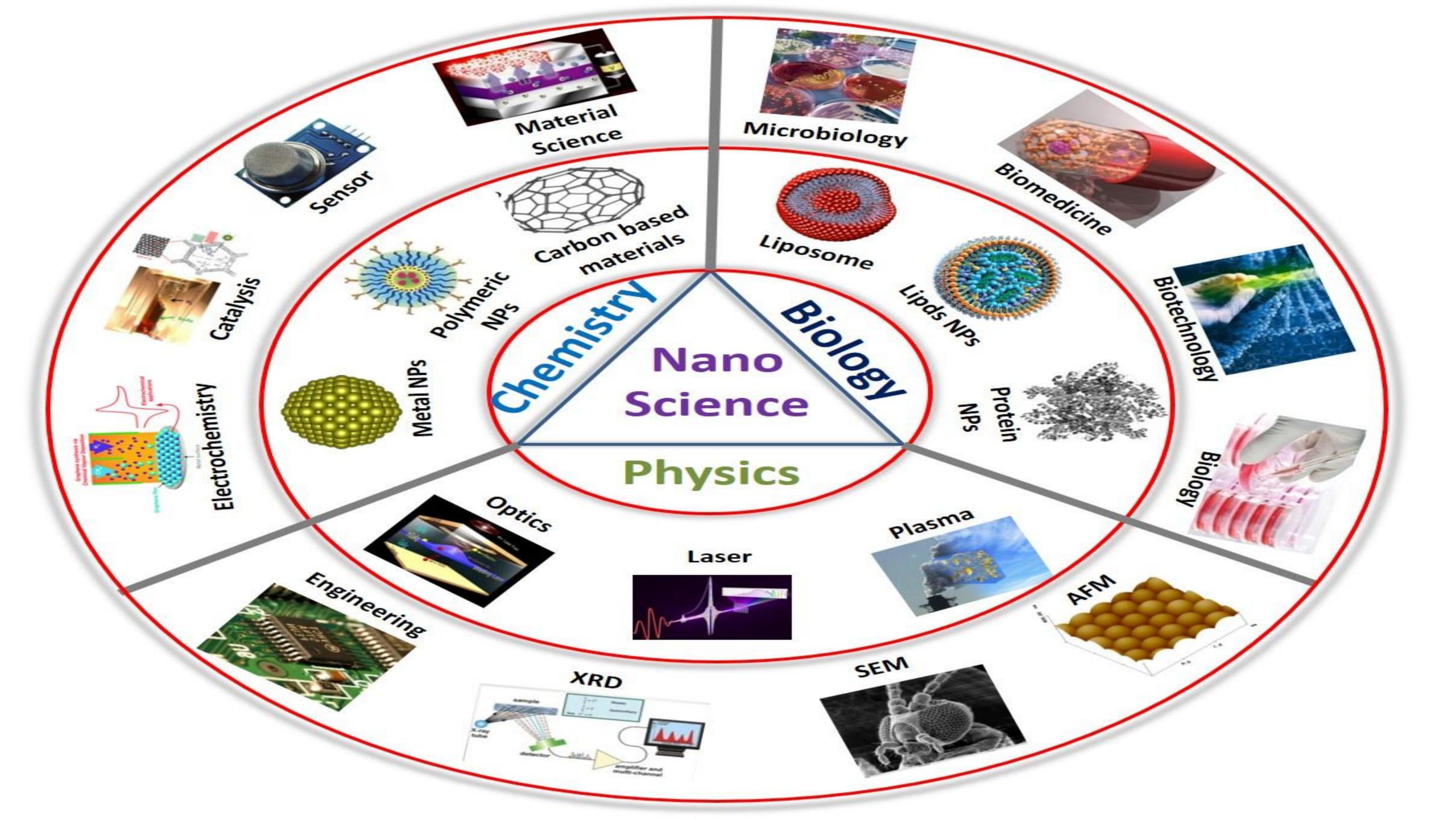
- Facilitating Integration of different Life Sciences, Physical Sciences, Engineering and Beyond is explained as:
- "a comprehensive synthetic framework for tackling scientific and societal challenges at the interfaces of multiple fields.
- By merging these diverse areas of expertise in a network of partnerships, convergence stimulates innovation from basic science discovery to translational application."

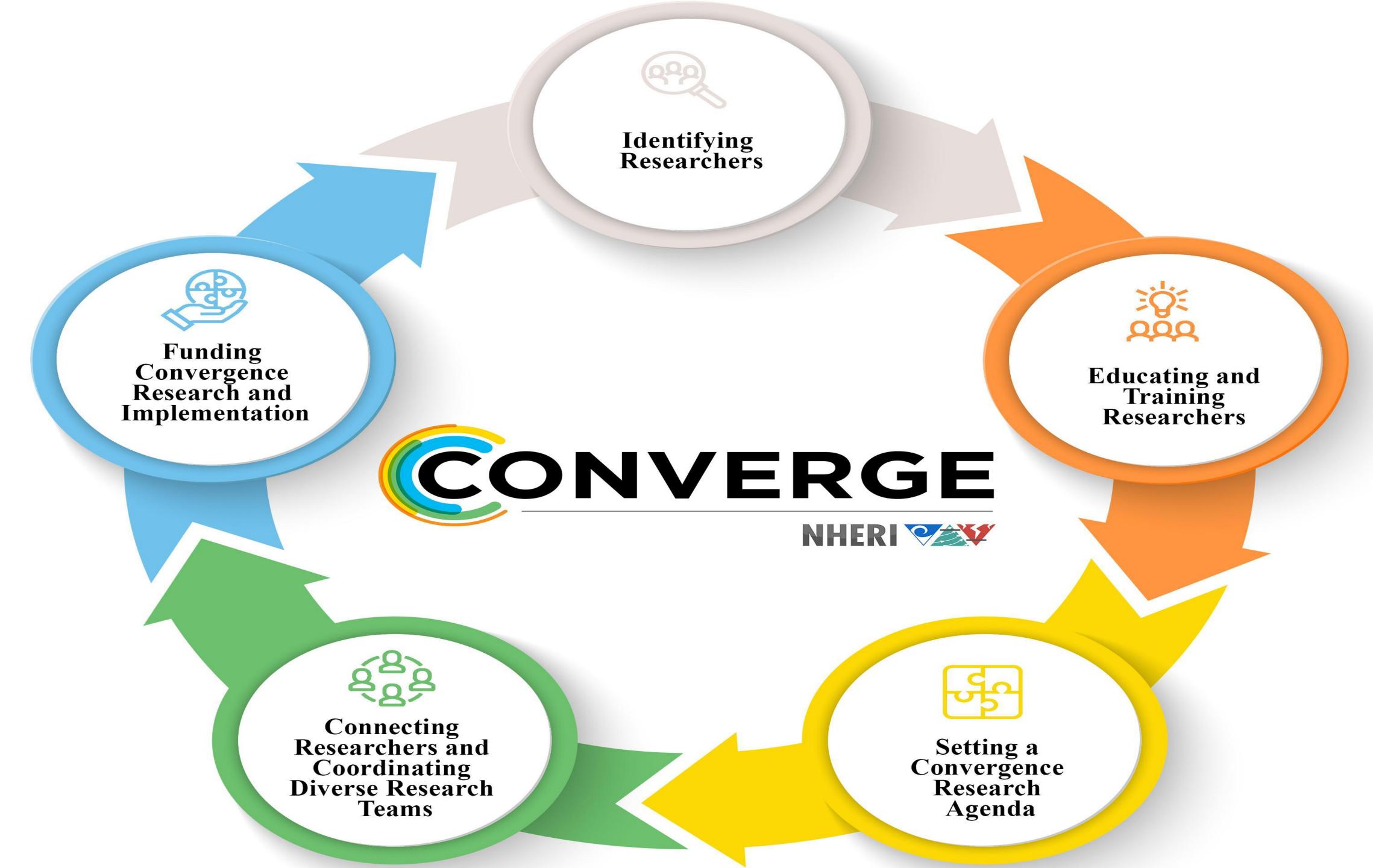
















Objectives & Benefits

- Resolve real-world or complex problems,
- Provide different perspectives on problems,
- Create comprehensive research questions,
- Develop consensus clinical definitions and guidelines,







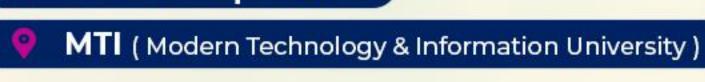






- Provide comprehensive evidence-based health services,
- Improved patient outcomes and satisfaction,
- Efficient use of staff time,
- Improved staff & Researchers satisfaction, and
- Decreased expenditure.













The multidisciplinary team approach offers a wide range of benefits for health research 1. Comprehensive Understanding of Health Issues

- . Brings together experts from various fields (e.g., medicine, nursing, public health, sociology, psychology, data science).
 - . Allows for a more holistic view of complex health problems by integrating diverse perspectives.

2. Innovation and Creativity

Diverse viewpoints often lead to novel ideas and innovative solutions that may not arise within a single-discipline team.

MTI (Modern Technology & Information University) ourages thinking outside traditional boundaries.







3. Improved Research Design

- Experts from different disciplines can contribute to more robust study designs, methodologies, and analytical approaches.
 - . Enhances the validity and reliability of research findings.

4. Better Translation of Research into Practice

- . Collaboration with clinicians, policy makers, and community health experts helps ensure that research is relevant and translatable to real-world settings.
 - . Promotes evidence-based practices across different areas of healthcare.

5. Enhanced Problem Solving

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different layers of the issue simultaneously (e.g., biological, behavioral, social).





6. Resource Sharing and Efficiency

- . Shared expertise, infrastructure, and tools can lead to more efficient use of resources.
- . Avoids duplication of effort and facilitates synergy between departments or institutions.

7. Capacity Building and Learning

- . Team members learn from each other, gaining insights into other disciplines and improving their own skills and knowledge.
 - . Supports training of junior researchers in a collaborative environment.

8. Greater Impact and Funding Opportunities

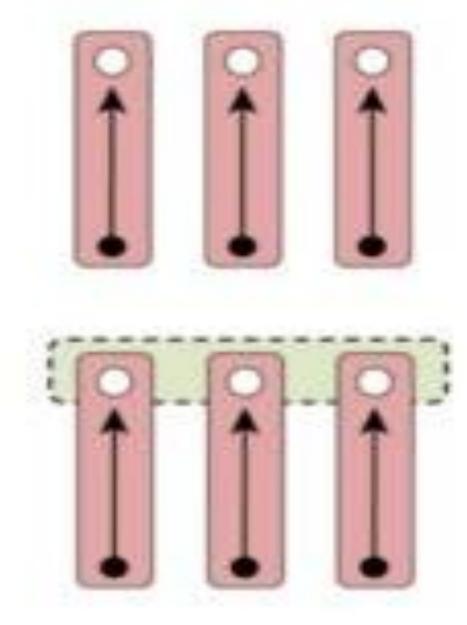
- . Many funding bodies prioritize or require multidisciplinary collaboration.
- . Research outcomes are often more impactful and applicable to a broader audience.
 - Would you like these benefits tailored into a slide or presentation format?

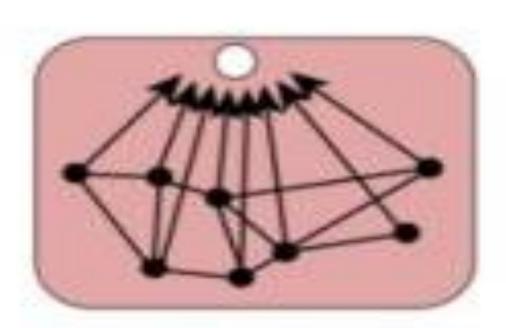


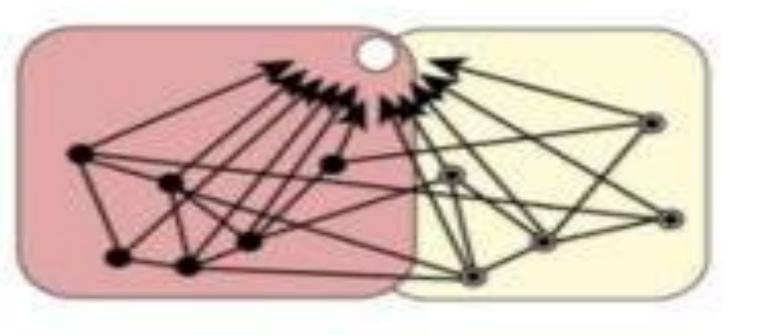
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Disciplinary

- Within one academic discipline
- Disciplinary gal setting
- Development of new disciplinary knowledge

Multidisciplinary

- Multiple disciplines
- Multiple disciplinary goal setting under one thematic umbrella

Interdisciplinary

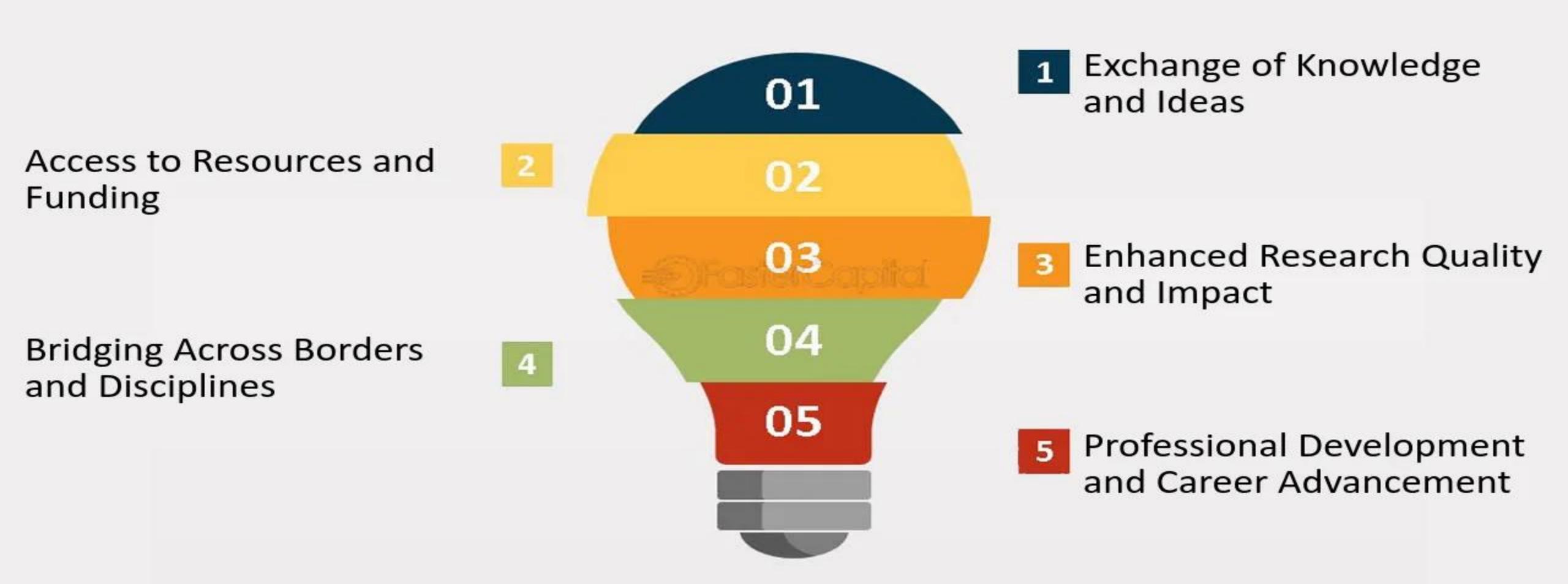
- Crosses disciplinary boundaries
- Development of integrated knowledge

Convergence

- Crosses disciplinary and sectorial boundaries
- Common goal setting
- Develops integrated knowledge for science and society
- Creates new paradigms

Collaboration & Partnership

How Collaboration Boosts Research Productivity

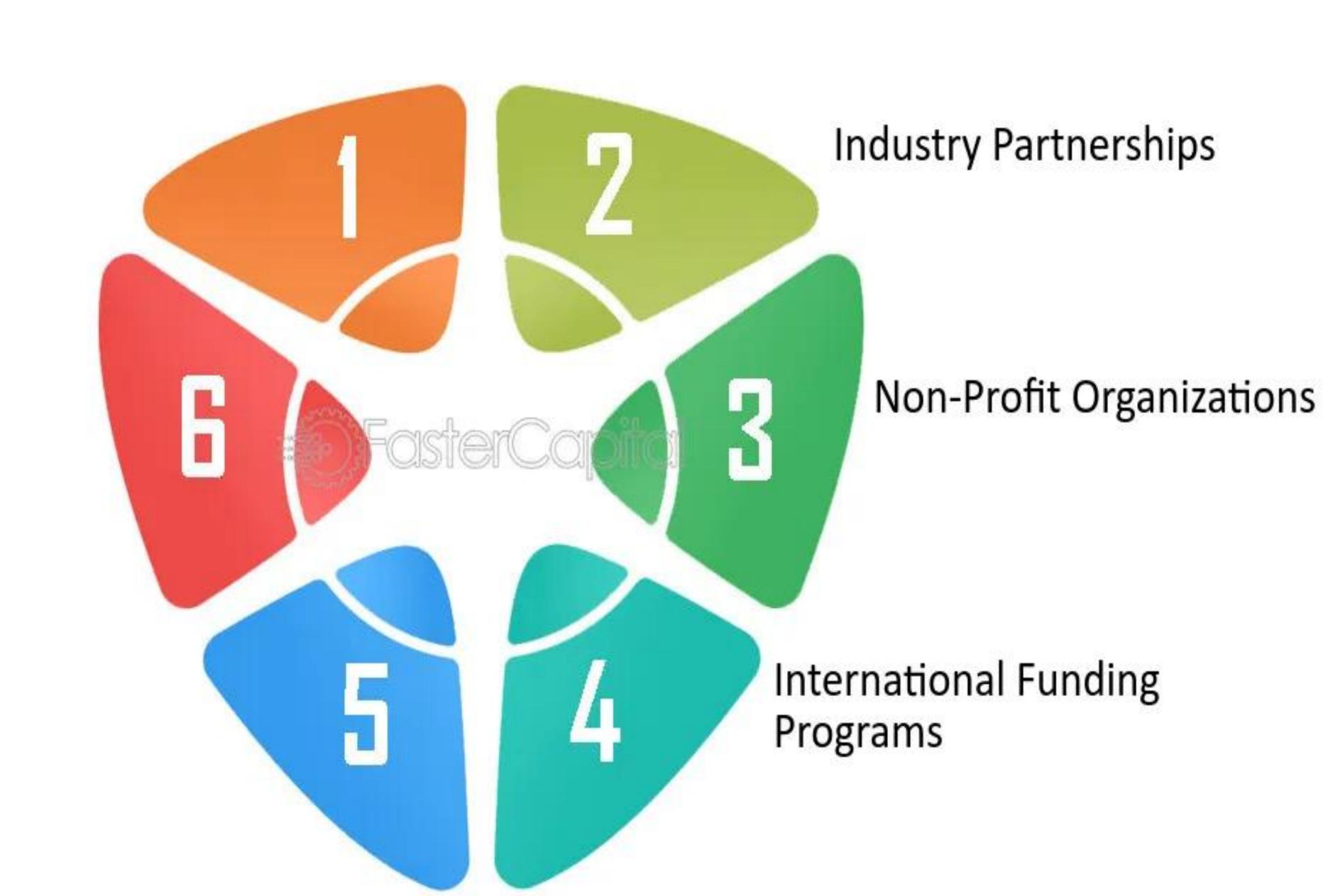


Leveraging Research Collaboration for Financial Support

Government Grants

Philanthropic Grants

Crowdfunding



Strategies for Successful Research Partnerships

Establish clear goals and expectations

Foster open and effective communication



Leverage diverse expertise and resources





Characteristics of an Effective Multidisciplinary Team for Health Care Practice & Research

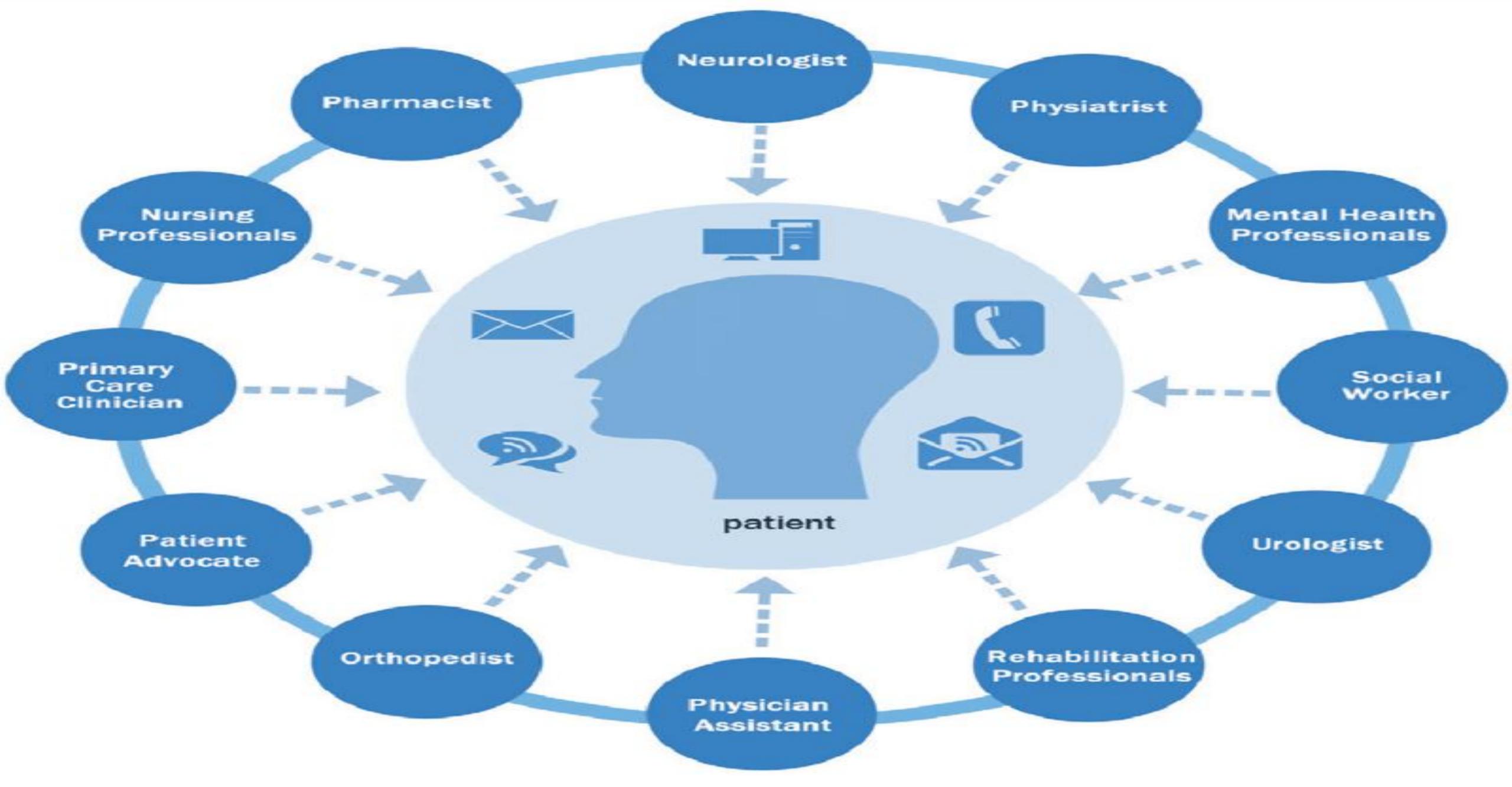












Multidisciplinary patient-centered team approach promotes communication and optimal care

I. The Team

- Level of expertise and specialization
- Attendance of MDMs
- Leadership (e.g., chair or leader of the MDMs)
- Team working and culture (e.g., mutual respect and trust, equality, resolution of conflict, ability to request, and provide clarification)
- Personal development and training

II. Infrastructure for MDM

- Appropriate meeting room
- Availability of technology and equipment

III. MDM organization

Regular meetings

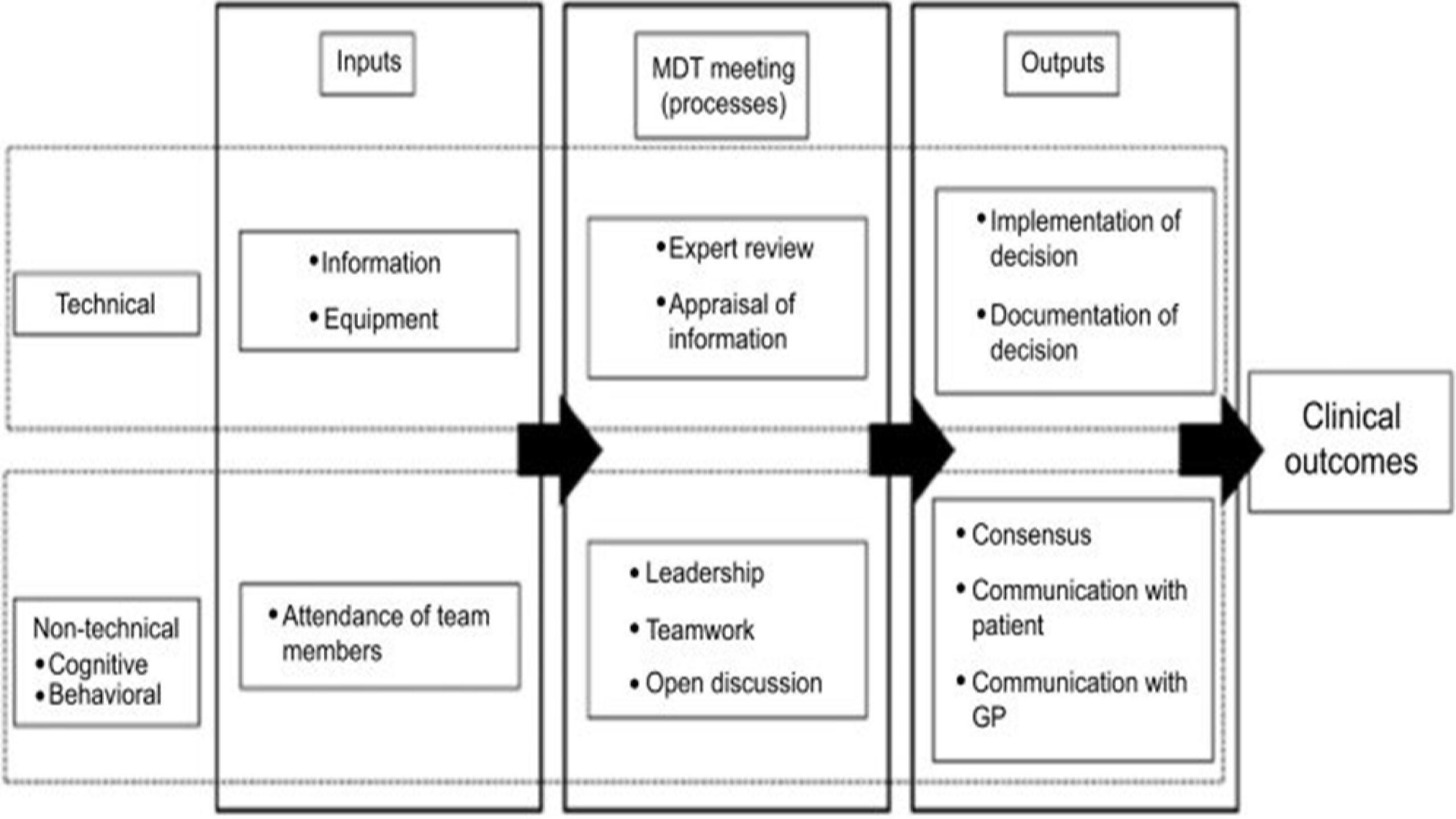
IV. Logistics

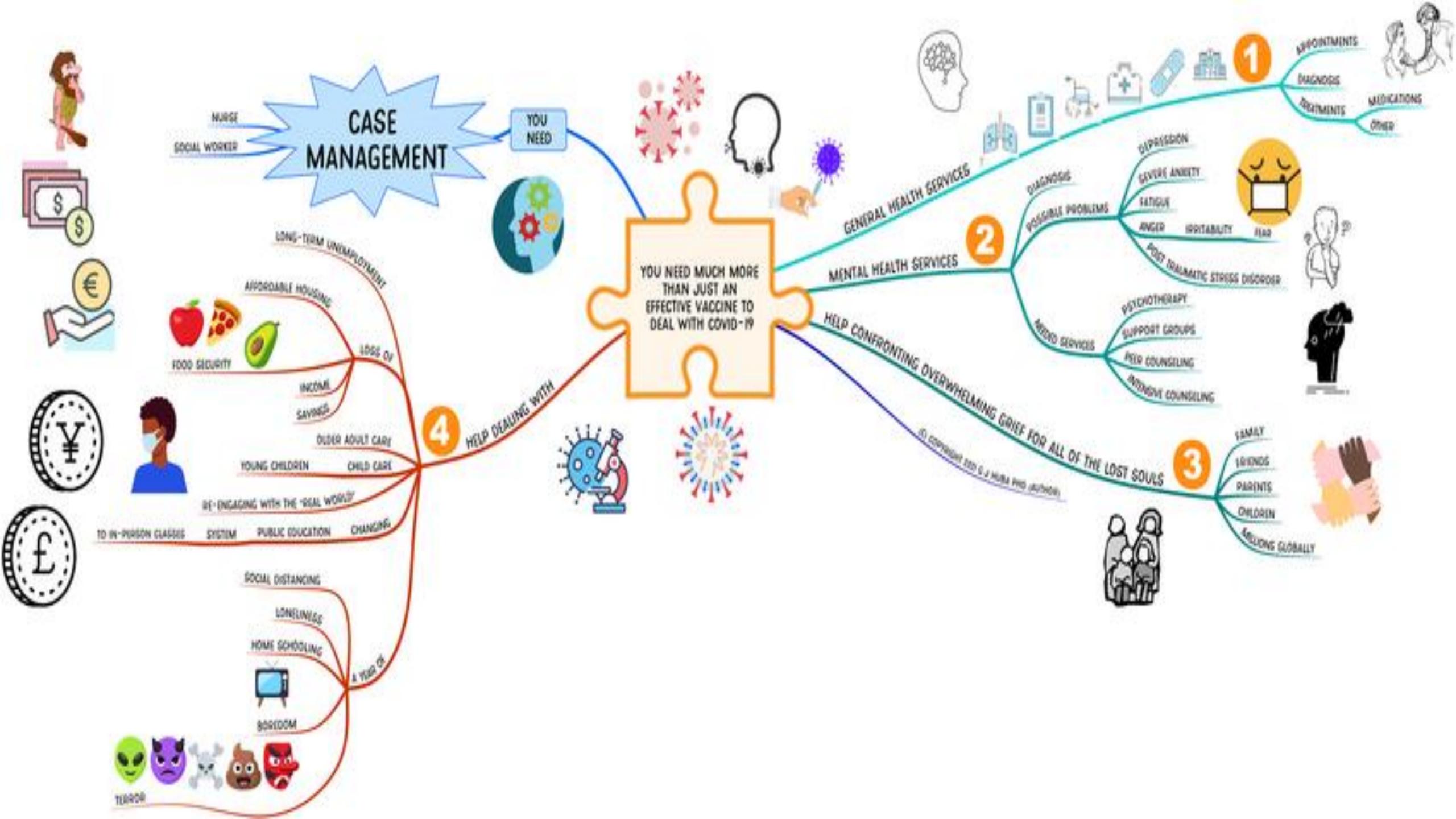
- Preparation for meetings
- Organization during meetings
- Post-meeting coordination of services for the patient

V. Patient-centered clinical decision-making

• TEAM WORKING & CULTURE

MUTUAL RESPECT & TRUST STATUS EQUALITY & RESOLUTION OF CONFLICT CONSTRUCTIVE DISCUSSION ABSCENCE OF PERSONAL AGENDA ABILITY TO REQUEST and PROVIDE CLARIFICATION MIS COMMUNICATION & UNDERSTANDING PROTOCOL FOR SHARING INFORMATION TO AVOID CONFUSION & ENSURE THAT EVERYONE on THE SAME PAGE









ANY QUESTIONS



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