

# Position Statement of the Asian Oceanian Society of Radiology on the Multidisciplinary Approach to Patient Care

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# **Executive Summary**

*"The right care delivered to the (right) patient at the right time in the right place"* The Asian Oceanian Society of Radiology (AOSR) strongly advocates for radiologists and its allied professionals be included as an integral member of any multidisciplinary team and actively contribute to enable optimal personalized patient care.

The Multidisciplinary Approach (MDA), through a properly set up Multidisciplinary Team (MDT), serves to provide continuing education, with opportunities for feedback and audit to MDT members. It can help improve communication and build trust and collaboration within the MDT. Achieving an accurate and definitive diagnosis expeditiously through optimised use of imaging resources will enable better patient outcome.

There will be challenges such as increased radiology workload, finding enough subspecialty radiologists, coordinating time for the pre-meeting review of images, attending the MDT meeting and timely access of clinical information, to name a few.

To take on these tasks, management/employer administrative support and resource provision are critical. MDA involvement by radiologists could be encouraged by indicating MDT work as part of job descriptions and being recognised as a Key Performance Indicator (coupled with appropriate incentives). Over time, the work culture will evolve so that radiologists will be committed and derive satisfaction from directly impacting patient care.

The AOSR spans many countries with varying resources. Where resource constraints preclude a regular in-person MDT, the MDA could be effected by participating in the formulation of Clinical Practice Guidelines and Consensus Statements. Radiologists could also contribute to selected multidisciplinary conferences such as Mortality and Morbidity Conferences and hospital-wide Quality & Safety activities.

# Introduction

The MDA to patient care is often seen in oncology (tumour boards). However, this approach should be adopted in a variety of clinical scenarios as many diseases are in fact multisystem or may present as diagnostic conundrums, where management is not straightforward. In the setting of a novel infectious disease such as COVID-19, the MDA has proven crucial<sup>1,2</sup>.

As more options to treatment and surveillance arise, an all or none approach should be abandoned, and true personalisation of patient care adopted where the patient's voice is not just heard but opinions and best interest included in decision making. The right care delivered to the patient at the right time in the right place summarises the AOSR goal of the MDA.

The AOSR strongly advocates for radiologists be included as an indispensable member of the clinical management team and multidisciplinary collaboration to ensure delivery of optimal personalized care to our patients and healthcare gaps are looked into. Radiologists and its allied professionals (nuclear medicine/molecular medicine/clinical oncologists/radiation therapists) having both



diagnostic and therapeutic non-invasive interventional roles including theranostics have become and will continue to serve as a critical member of the MDT.

# The Multidisciplinary Approach<sup>3,4,5</sup>

### MDA: Why?

1. Achieve an accurate and definitive diagnosis in a complex scenario allowing optimal management of the patient

2. Optimise utilisation of imaging resources. As the armamentarium of imaging and diagnostic tools have increased in complexity, input on the most cost-effective way to arrive at a correct diagnosis or choose the most appropriate imaging method for a particular clinical scenario including what is <u>NOT</u> needed is vital.

3. Expedite time to care or time to diagnostic investigation

As MDTs are where immediate discussion and exchange of information occurs including enhancing and gaining knowledge from each other - it serves as a continuing professional development forum, providing feedback and audit opportunities.

When the various specialists improve communication and understand each other's needs better, the importance of providing relevant information becomes apparent. Requests for investigations have clinical indications clearly spelled out whilst reports are refined and provide the information the team needs to make a management decision. There is no one size fits all in medical imaging as protocols will vary with the clinical question.

#### MDA: When and Where?

1. Tumour Boards

2. Any multidisciplinary conference – such as Morbidity and Mortality hospital conference

3. Development and application of clinical decision support systems, clinical practice guidelines and consensus statements.

#### MDA: How?

1. Form an MDT with clear goals and objectives

2. Have a committed and competent leader with the right team members

- 3. Ensure disciplined time keeping for the meeting
- 4. Ensure respect for the contribution of each member and build trust

5. Be willing to communicate effectively and coordinate the different steps for patient care or be willing to learn to work together effectively.

6. Establish procedures to evaluate and audit the effectiveness of the team

7. Get/Have Administrative Support

Team members should reflect the type of MDT. For example, the patient is usually part of the team in oncology/tumour boards which might include members from the fields of genetics, radiology, pathology, pain management, surgery (including plastic & reconstructive surgery), clinical oncology



or medical and radiation oncology, palliative care and nursing. Resource-constraint limitations must be taken into consideration in the setting up of an MDT. Members should be competent and may consist of senior and junior health professionals.

Many clinical conditions rest on medical imaging and image guided intervention and therefore, radiologists should always be included in the MDT. When the primary purpose is diagnostic, radiologists may even lead the MDT<sup>6</sup>.

#### **MDA: Challenges**

Whether in a formalised regular multidisciplinary meeting through the MDT or even "kerbside" consults, some or all of these challenges will apply. Being accessible, approachable, affable, and able will require intentionality.

1. Scheduling the meeting and eking out time in a workday in the face of increasing workload in diagnostic and imaging disciplines. Time constraints and increasing workload are realities. Even in mammography, digital tomosynthesis has increased the number of images per patient; let alone sectional imaging.

2. Ensuring the various disciplines are represented (subspecialty radiologists in particular)

3. Specifically for radiology, outside studies may not have the full complement of images and when studies are provided at the meeting it may lead to incomplete or cursory review.

4. Coordinating clinical information and studies for pre-meeting review

5. Finding resources – IT and administrative support

# **AOSR Recommendations**

1. Be actively involved in MDT meetings where discussion takes place in the context of clinical, pathological and other related information. Participation should include recommending the most appropriate diagnostic examination or intervention, to ensure good or better patient outcomes. Where available, subspecialty radiologists in a department should have clearly designated roles to ensure all the multidisciplinary boards in the institution/hospital/centre are covered.

2. Be actively involved in the development of Clinical Practice Guidelines, Consensus Statements and Clinical Decision Support – whether national or institutional by collaborating with other clinical specialties. Where relevant and appropriate, radiologists should proactively take the lead role.

3. Engage with referring clinicians in discussions on complex or difficult clinical situations, even in the absence of formal multidisciplinary teams.

4. Commit to life-long learning, such as by participating in local and international meetings.

5. Set up and/or participate in Quality & Safety activities such as audit of specific indicators (for e.g., diagnostic accuracy) and establish patient radiation dose monitoring in diagnostic examinations; participate in selected multidisciplinary conferences such as Mortality and Morbidity conferences.

6. Advocate for recognition of radiologists' roles in MDTs to be included in the job scope where possible, even if this does not directly generate revenue like routine clinical work. Incentivising MDT participation as a KPI would further encourage radiologists' involvement in the MDA.



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#### References

1. Lo Bianco G, Di Pietro S, Mazzuca E, et al. Multidisciplinary Approach to the Diagnosis and In-Hospital Management of COVID-19 Infection: A Narrative Review. Front Pharmacol, 9 Dec 2020. https://doi.org/10.3389/fphar.2020.572168 (Accessed online May 16, 2022)

2. Romei C, De Liperi A, Bartholmai BJ. COVID-19: The Importance of Multidisciplinary Approach. Acad Radiol 2020 Sep; 27(9):1327-1328. doi: 10.1016/j.acra.2020.05.023 (Accessed online May 16, 2022)

3. Kane B., Luz S., O'Briain DS, McDermott R. Multidisciplinary team meetings and their impact on workflow in radiology and pathology departments. BMC Medicine 2007, 5:15 doi:10.1186/1741-7015-5-15 https://bmcmedicine.biomedcentral.com/articles/10.1186/1741-7015-5-15 (Accessed May 17, 2022)

4. Nasir S, Anwar S, Ahmed M. Multidisciplinary team meeting and Radiologist workload: A prospective review in a tertiary care hospital. Pak J Med Sci 2017; 33(6):1501-1506. https://doi.org/10.12669/pjms.336.12905 (Accessed online May 17, 2022)

5.Rosell L, Alexandersson N, Hagberg O, Nilbert M. Benefits, Barriers and Opinions on Multidisciplinary Team Meetings: A Survey in Swedish Cancer Care. BMC Health Services Research 2018; 18:249 https://doi.org/10.1186/s12913-018-2990-4 (Accessed online May 17, 2022)

6. Ali H, Fletcher T, Ryall C, et al. The Benefits of an Infectious Disease/Radiology Multidisciplinary Team Meeting. Journal of Infection. 2012; 65(4):363-365 https://doi.org/10.1016/j.jinf.2012.05.007 (Accessed online May 16, 2022)