

## QUDI Project CS06

### The role of the radiologist in multidisciplinary teams

#### Report summary

##### Introduction

The RANZCR, through the Quality Use of Diagnostic Imaging (QUDI) Program, commissioned this project to establish:

- The current level of radiologist involvement in Multi-Disciplinary Teams (MDT) and how widespread the use of MDT is in the treatment of breast cancer
- The barriers and enablers to radiologists participating in MDT
- What MDT models best facilitate radiologist involvement in MDT
- Recommendations for encouraging radiologist participation in MDT and informing other MDT members of the value of radiologist involvement in MDT.

##### Method

A literature review systematically assessed publications using the NHMRC 'Levels of Evidence' guidelines and identified 60 publications meeting the inclusion criteria. The majority of these were assessed as either Level III or Level IV studies (mostly observational or descriptive studies conducted without intervention, or reports of expert committees). There is almost no discussion in the literature about the roles any of the core disciplines contribute to team functioning, and little evidence of systematic evaluation of MDT outcomes at this time.

Stakeholder consultations were completed as a part of an initial environmental scan, and during targeted interactions with radiologists who participated in MDT for breast and other cancer. Observational visits to three examples of MDTs were also conducted.

##### Outcomes

The composite data from these activities showed that:

###### Use of MDT in breast cancer

MDT has been recommended as best practice for over a decade, and many services reportedly operate MDT following the Principles of MDT Care espoused by the National Breast and Ovarian Cancer Centre. The model of MDT implemented in Australia varies, as does the definition of what constitutes an MDT, and this is reported to appropriately reflect the complexities of the Australian service environment, workforce limitations and funding models. It is noteworthy that the recommendations from NBCC and the NHMRC guidelines both indicate the need for flexibility in implementation to respond to local service needs and workforce availability.

###### Current level of radiologist involvement

Radiologists are identified as core members of MDT teams, and participation rates in MDT are reported to be high, and reasonably consistent over time. The composition of teams is however, largely based on self-reported data provided by

disciplines other than radiology. Radiologists identified a number of benefits they attribute to MDT membership: contribution of specialist expertise to team decision-making and treatment planning; team and resource use efficiency; inter-professional collegial support; quality improvement activities; personal satisfaction; training and education; research outcomes. Other benefits noted in the literature range from changing initial diagnosis and initial therapy (>50% cases) to clarifying diagnostic strategy or refining therapeutic decision (>65% cases) of clinician members.

#### Barriers and enablers to radiologist participation

Factors identified as barriers to participation included: attributes of practice and setting; workforce scarcity and geographic dispersion of services and population; workload, other service demands and lack of protected time; lack of information on effectiveness of working in MDT; and lack of adequate infrastructure and administrative support.

Factors enabling radiologist participation included: evidence-based guidelines and adherence to these; governance structures that promoted collaboration; leadership possessing well-developed facilitation skills; supporting infrastructure including venue, facilities and equipment to support timely access to information and information exchange; presence of a 'champion' to drive change.

#### Models of MDT that help facilitate radiologist participation

The implementation of a 'post-intervention' model of MDT is reported to provide limited opportunities for radiologist participation, since the primary focus of this model is on treatment planning following intervention, and this is predominantly about adjuvant therapy. Radiologist presence at teams using this model is noted to be an inefficient use of their time given other service requirements. The 'pre-intervention' model – that is closest to the recommendations of NHMRC and NBCC - is reported to enable radiologists to contribute their specialist expertise and derive greater benefit in relation to educational and professional development.

#### Recommendations for encouraging participation

These are structured around areas for action at a national and jurisdictional policy and program level; at an institution and service level; and at the level of research evidence.

- RANZCR engagement with MDT policy and program research and development at the national and jurisdictional level is important to ensure an appropriate focus on the role of the radiologist in MDT, and guide research and evaluation activities being undertaken.
- The establishment of an 'MDT interest group' within RANZCR membership could support information and best practice exchange, and facilitate radiologist representation and input to other groups' research and policy development.
- Standards for radiologist participation in MDT should be promoted to institutions and services using MDT, including advice on the resources necessary to support their contribution.
- The benefits of their participation in MDT also need to be promoted to radiologists, and this could be addressed through the education and professional development programs of RANZCR.

RANZCR could promote research by radiologists into MDT solutions addressing geographic and workforce barriers; the contribution of radiologists' role to MDT functions, outcomes and quality assurance; and benefits to radiologists of involvement in different models of MDT.