Objectives Of The Guidance

The Diagnostic Imaging Pathways website is an evidence-based and consensus-based education and decision support tool for clinicians. It guides the choice of the most appropriate diagnostic examinations in the correct sequence in a wide range of clinical scenarios.

The broad objectives of the guidance are to

- Reduce the incidence of unnecessary examinations which may expose patients to risk without benefit, including the risk of false-positive results
- Increase the incidence of appropriate examinations which will result in cost-effective diagnosis

Issues Covered By The Guidance

Inappropriate diagnostic practice is recognised as a significant problem in the health service sector. A major problem in achieving appropriate diagnostic practice is lack of knowledge. The task of keeping up-to-date with developments in clinical practice and policy is increasingly difficult due to expanding research, clinical specialisation and subspecialisation, and the development of new applications in technology. It is difficult to acquire and maintain the necessary breadth and depth of knowledge for confident and correct decision-making.

Broadly, as much material as possible is provided to educate clinicians in the appropriate use of diagnostic imaging services for specified clinical conditions. Guidance is summarised in flow charts (diagnostic algorithms) and these are supported by appropriate documentation and links to other sources of information and evidence where possible.

Jurisdiction Of The Guidance

Each pathway has been produced within Australia and has been developed with an understanding of the Australian healthcare system. Caution is therefore required when using a pathway outside of Australia, especially in areas with limited availability of imaging modalities. Experimental procedures that have not been approved by Australia's Therapeutic Goods Administration (TGA) have not been considered for inclusion.

Status Of Recommendations

Each pathway is designed to assist clinicians in situations when faced with a large array of possible diagnostic tests and examinations. However, it is recognised that diagnostic practice may differ from a particular pathway depending on local availability of equipment and expertise, as well as the experience of individual clinicians. Therefore each pathway is neither a rigid set of rules, nor a substitute for clinical assessment, and individual patient circumstances should always be considered.

Information in each pathway does not and cannot cover every possible circumstance, including a patient's specific medical condition (e.g. all co-morbidities). Each pathway provides a recommended course of action. Deviation from a pathway may be appropriate in particular circumstances. Each pathway is designed to support, not replace, the professional relationship between a patient and a medical practitioner.
Users should not act or fail to act solely on the basis of the information provided in any pathway. The information is not a substitute for the use of due care and skill by a medical practitioner or any other person involved in the medical assessment and diagnosis of conditions to which the information applies.

Target Audiences

The target audiences of the guidance provided in each pathway are

- Current and future referrers to diagnostic imaging services, including medical and surgical specialists, general practitioners, junior medical officers and medical students
- Current and future providers of diagnostic imaging services, including imaging specialists and students, imaging technologists and students
- Clinical educators and health service administrators

Guidance provided for consumers is relevant to any person (and/or their carer) who has been, or may be referred for a diagnostic imaging examination. The target audience is primarily the person and/or their carer. The audience also includes referrers and providers of diagnostic imaging services who need to provide information to their patients about diagnostic imaging examinations.

Substitution Of Modalities

All pathways have been drafted and finalised on the assumption that all medical imaging modalities are available to the referrer, even though there are circumstances in which modalities are not available. The non-availability of an imaging modality to a referrer may serve as an indication for specialist referral.

Consideration is however given to the varying availability of resources. Alternative recommendations are incorporated into each pathway wherever possible; where there are adequate substitutions for imaging modalities, these are indicated in the pathway.

Date reviewed: July 2019

Date of next review: July 2020