

Emergency Medicine Programme

Implementation Guide 9:

Rapid Assessment and Treatment (RAT)

January 2013

Introduction



This presentation outlines the key elements of Rapid Assessment and Treatment (RAT) as advocated by the National Emergency Medicine Programme. The slides:

- explain the RAT concept and the evidence-base behind it;
- provide options for RAT that ED teams can adapt for use in their department;
- explain how RAT can be integrated in the ED patient pathway, the advantages and potential pitfalls associated with RAT;
- include 'top tips' and 'pitfalls to avoid' for RAT.

EMP Terminology

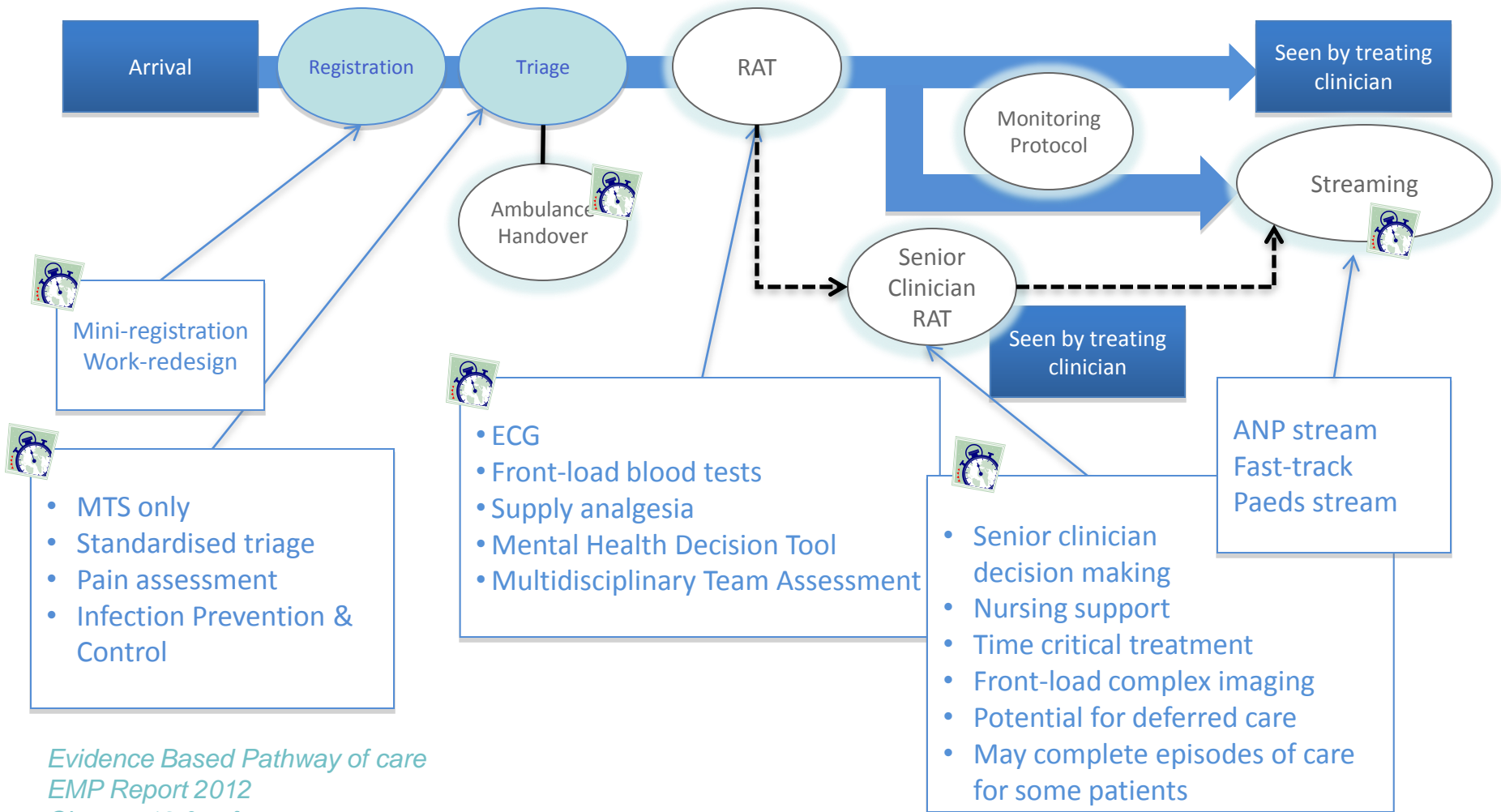


- The term Rapid Assessment and Treatment (RAT) is used by the National Emergency Medicine Programme to describe a set of actions that occurs immediately after patient triage.
 - RAT is provided by ED nurses at all times to supplement basic Manchester Triage (MT).
 - RAT may be expanded to include doctor or ANP-provided initial assessment at times of peak demand in some EDs (Senior Clinician RAT).

Other terms for RAT in the EM literature include Advanced Triage, IMPACT, Team Triage, Senior Intervention Following Triage (SIFT).

Note - Fast-track is not the same as RAT. The patient's episode of care is not routinely completed in RAT, but it is in the process termed Fast-track by the EMP. Fast-track is a streaming process for selected ambulatory patients with low complexity/low acuity care. It is used when service demand patterns will justify this care stream. Fast-track has also been called Super-track,¹ Rapid Assessment Zones (RZ),² 'See and Treat' or Ambulatory Care Streaming.

RAT in the ED Patient Pathway of Care



Benefits of RAT



- RAT is an evidence-based initiative shown to reduce Total ED time. ³⁻⁵ Delays are also reduced for:
 - initial ECG for patients with suspected STEMI;
 - analgesia;
 - the results of clinical investigations.
- It reduces patient waiting times for initial MT by deferring non-essential triage activity, thereby reducing the duration of basic triage;
- Protocol-based frontloading of clinical investigation by ED nurses using protocols for blood tests, x-rays and other clinical investigation contributes cost-efficiencies.
- RAT reduces the number of patients leaving before completion of treatment.
- Senior clinician RAT may enable occult high-acuity presentations to be identified early.

Components of RAT



RAT usually includes:

- Pain management following MT pain assessment;
- ECG, if indicated by the patient's clinical presentation;
- Application of the Mental Health Decision Tool;
- Assessment of vital signs;
- Clinical investigation including urine testing, peak flow measurement, as indicated;
- Cannulation and/or phlebotomy with blood testing according to standardised protocols;
- Organising Occupational Therapy, Physiotherapy or Medical Social Work review;
- Cleaning and dressing of wounds.

It may also include the commencement of therapy (e.g. intravenous fluids) and nurse requesting x-rays according to protocol.

Patients' hospital clinical notes should be requested at RAT (unless it is routine practice to obtain hospital notes for all ED patients).

EMP Recommendations for RAT



- Basic nurse-provided RAT should be developed in all EDs to support rapid MT.
- Pain management is an essential component of RAT.
- The skills and competencies necessary for nurses to undertake RAT are outlined in the Emergency Nursing Competencies section of the EMP Report 2012.
- Clinical protocols, including standard order sets, should be developed for RAT.
- Nurse staffing allocation should be organised to support rapid MT and RAT.
- RAT may occur in any ED patient cubicle or in a designated area adjacent to Triage – it is a patient care process, not a place.

Senior Clinician RAT



Senior clinicians including Consultants in Emergency Medicine, Staff Grade Doctors, Specialist Registrars, Middle Grade EM doctors and Advanced Nurse Practitioners (ANPs) may provide expanded RAT service in an ED.

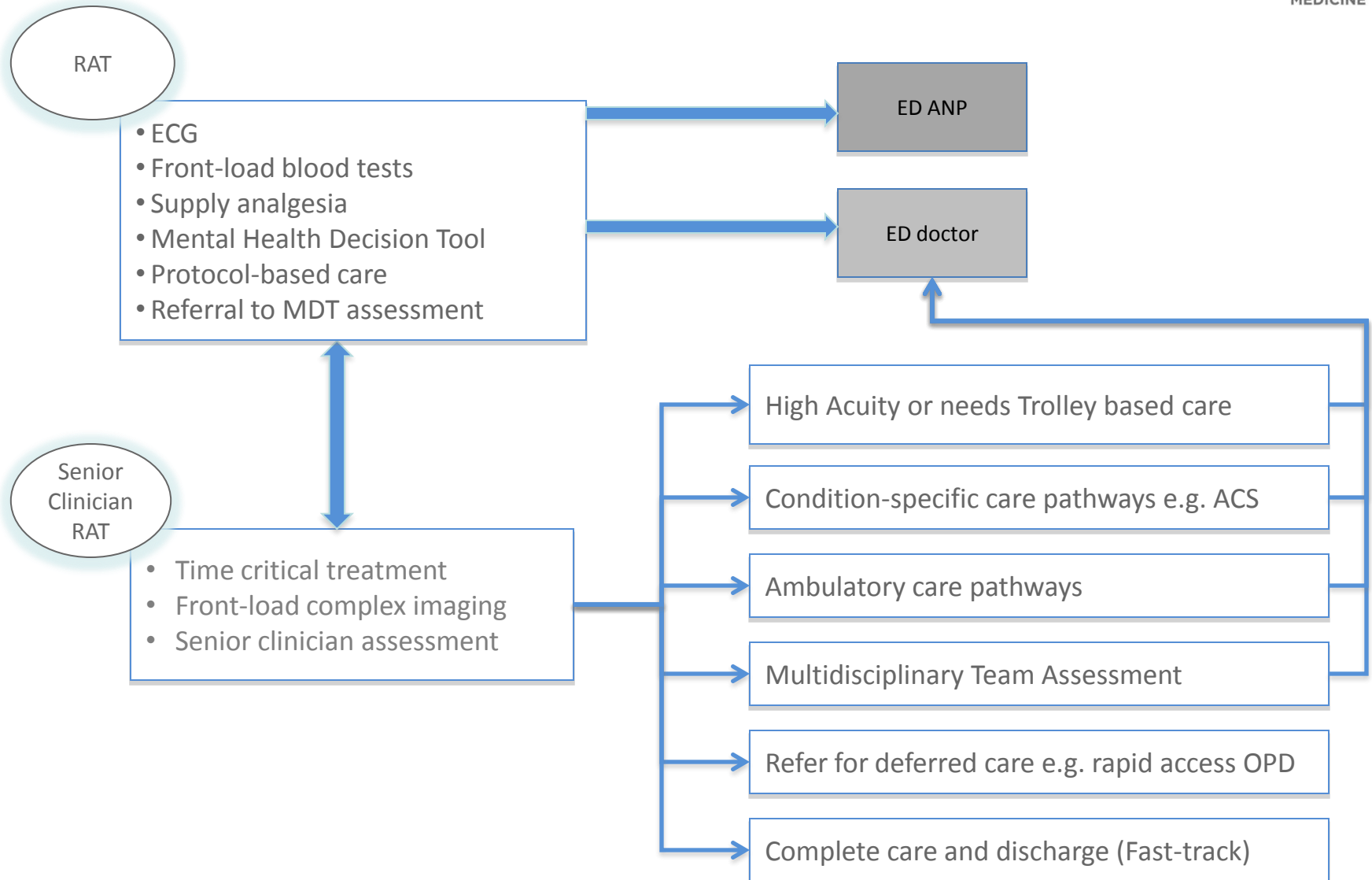
Senior clinician RAT is indicated when demand justifies deployment of this resource. Senior clinician RAT is more effective if started before queues develop rather than trying to catch-up with a surge in demand. It is not necessary when there is no delay for patients to be seen by a treating clinician and senior clinicians can be redeployed if/when demand does not indicate a need for senior clinician RAT.

It may include:

- Undertaking brief medical assessments and initiation of treatment;
- Front-loading complex imaging and investigations;
- Recommending further assessment, investigation and treatment by less experienced doctors completing the patient's episode of care;
- Selecting low-acuity patients for deferred care through attending an alternative service or re-attending the ED in a scheduled manner;

Senior clinicians in RAT may complete the episode of care for some patients with low-acuity, low-complexity care needs, effectively delivering Fast-track care.

ED Patient Pathways Following RAT



Role of the Senior Clinician in RAT



- The deployment of senior clinicians in RAT must be balanced with the demands of other patient care streams.
- RAT clinicians should not have conflicting demands when undertaking this role but may need to work flexibly, moving for a time to other care streams if RAT demand declines relative to other areas of the ED.
- RAT calls for high-intensity clinical decision-making and RAT clinicians should undertake this role for limited periods (e.g. 3 hours).
- The senior clinician must ensure effective handover of patient care when streaming patients to other clinicians.
- The RAT role requires clinicians to prioritise the assessment of new patients who may have occult clinical risks with the drive to complete patient episodes of care.
- Senior clinician input is required for deferred patient care at RAT because of the potential patient safety risks involved. This may be provided through real-time consultation and/or the development of and ongoing support of departmental protocols for this element of RAT.

Requirements for RAT



- The skills and competencies necessary to undertake RAT are outlined in the Emergency Nursing Competencies section of the EMP Report 2012.
- Nurse training will be needed to support the implementation of clinical protocols for RAT.
- Nurse staffing allocation may need to be reorganised to support RAT. The service may be provided by all nurses or by a dedicated resource at peak times.
- Support from Health Care Assistants and ECG technicians at peak demand times may also increase RAT efficiency.
- Essential equipment e.g. ECG machines and supplies must be readily available to optimise RAT efficiency.
- Clinical protocols to support RAT-based clinical care need to be developed or adapted from other EDs and audited.
- RAT processes should be continuously improved to maximise patient safety, the quality of care, efficiency and value.

Additional Requirements for Senior Clinician RAT



Clinicians:

- Senior clinician RAT is only possible when sufficient numbers of experienced EM clinicians are available in the ED team.
- ED demand and acuity patterns should be analysed to determine the times when senior clinician RAT is justified.
- Nursing support is required for senior clinician RAT and extended nursing roles will be advantageous in RAT.
- Senior clinicians work most effectively as members of a multidisciplinary RAT team e.g. nurses, Health Care Assistants, direct access to Physiotherapists, Occupational Therapists, Social Workers etc.

Additional Requirements for Senior Clinician RAT



Infrastructure, equipment and supplies:

- Senior clinician RAT may be more efficient if a designated clinical area is made available adjacent to triage and ambulance reception areas.
- Sub-wait areas in the ED should be used to accommodate patients after RAT, rather than the waiting room. Patient experience is adversely affected by moving back to the waiting room.
- Private rooms should be available for communication with ambulatory patients regarding the results of clinical investigations.
- All supplies need to treat patients in RAT should be held in a supply cart at point of use.
- Senior clinicians must have appropriate personal protective equipment if undertaking RAT for patients who require isolation.

Starting RAT



Initiating a system of RAT whether provided by nurses, ANPs or doctors is a complex change for any ED team. Recommended steps in start RAT are:

- Assess demand patterns and throughput times in your ED to determine:
 - whether basic RAT can be provided by all nurses all the time or if an additional dedicated resources are needed at peak demand times;
 - whether or when expanded or senior clinician RAT might be advantageous;
 - if staffing redeployment or additional resources are required - consider if it may be possible to provide limited hours RAT within existing resources;
- Identify protocols and training required to support RAT and address needs;
- Use a “small test of change approach’ – Plan, Do, Study, Act.
 - Try RAT for a few hours on one day first;
 - Measure what happened;
 - Revise your approach if necessary and test again until the team is confident that RAT is effective and can be sustained;
- Measure, monitor and improve the effectiveness of RAT in your ED.

RAT Measures



- EDIS may need to be configured to support capture of process data to enable RAT efficiency to be measured and managed.
- The *Time to First Clinical Intervention* is the time-point descriptor that enables measurement of the time interval from patient registration to RAT. This can be used to capture the timing of critical interventions e.g. first ECG.
- The *Time Seen By Treating Clinician* is the time-point descriptor that is used to capture the time of senior clinician RAT. The interval from patient registration to *Time Seen By Treating Clinician* is measured to the time of senior clinician RAT or to the time the patient is assessed by a EM doctor or ANP if RAT has not occurred.

Potential Pitfalls to Avoid



- Unrealistic expectations for the delivery of senior clinician RAT within or out-with the ED;
- Failure to sustain RAT due to inadequate planning or resources;
- Clinician fatigue or overload reducing decision-making reliability;
- Risk of misdiagnosis or decision-making bias associated with incomplete initial assessment;
- Risks of miscommunication between sequential EM clinician assessors;
- Prolonged assessment and treatment of RAT patients, delaying assessment for waiting patients;
- Duplication of effort and re-work if the receiving clinician does not agree with initial assessment.

Top Tips for RAT



- Use improvement science methods to develop the most effective nurse-provided RAT system for your ED;
- Keep patients ambulatory where possible and appropriate;
- Share and adapt RAT protocols from other EDs.

Senior clinician RAT:

- Apply senior clinician RAT at peak demand times, but start before a queue develops;
- Develop a multidisciplinary team approach to RAT with appropriate task allocation;
- Don't over-treat patients in RAT, delaying assessment for waiting patients;
- Use assessment templates/proformas for effective, efficient clinical documentation;
- Ensure effective patient handover to other clinicians.

References



1. Crane J, Noon C. The Definitive Guide to Emergency Department Operational Improvement 2011. Productivity Press, Taylor & Francis Group. New York NY 10017.
2. Bullard MJ, Villa-Roel C, Guo X, Holroyd B et al., The role of rapid assessment zone/pod on reducing overcrowding in emergency departments; a systematic review. Emerg Med J. April 2011. Accessed 22nd December 2012 at :
emj.bmj.com/content/early/2011/04/22/emj.2010.103598.full.pdf
3. Cooke M, Fisher J, Dale J et al. Reducing Attendances and Waits in Emergency Departments A systematic review of present innovations Report to the National Co-ordinating Centre for NHS Service Delivery and Organisation R & D (NCCSDO). January 2004. Available at:
<http://www.sdo.nhr.ac.uk/files/project/29-final-report.pdf> Accessed 16th January 2010
4. Wiler JL, Gentle C, Halfpenny JM. Optimising Emergency Department Front-End Operations. Annals Emerg Med 2010;55:142-160 15.
5. White BA, Brown DF, Sinclair J, Chang Y et al., Supplemented triage and rapid treatment (START) improves performance measures in the emergency department J Emerg Med 42(3):322-8. Mar 2012; doi: 10.1016/j.jemermed.2010.04.022.

For further information see the Emergency Medicine Programme Report 2012.