NATIONAL CLINICAL
PROGRAMME
IN SURGERY (NCPS)

MINIMUM STANDARDS FOR
ACUTE SURGICAL ASSESSMENT
UNITS (ASAU) IN IRELAND
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The purpose of this document is to provide template standards and guidelines for Acute Surgical Assessment Units (ASAU) in Irish public hospitals. These apply for units that are already in existence as well as those which are being planned de novo.

This document will:
» Endorse the core principals of the National Clinical Programme in Surgery to provide safe and efficient patient-centered care
» Define minimum acceptable operating standards for an ASAU in Ireland
» Detail an ASAU’s work stream and output information which will be beneficial for healthcare managers

This document has been produced by the authors based on the early experiences of several ASAU’s in Ireland. A draft was circulated in a consultation round in May, June and October 2017. The authors acknowledge, with thanks, the material supplied and advice from:
» Professor Michael Walsh, National Clinical Adviser (ENT), NCPS
» Mr Eamonn Rogers, National Clinical Adviser (Urology), NCPS
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» National Clinical Programme in Emergency Medicine
» National Clinical Programme in Acute Medicine
» National Clinical Programme in Trauma & Orthopaedics
» National Clinical Programme in Radiology
» The Acute Floor Information System (AFIS) Working Group
» The Healthcare Pricing Office (HPO)
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» Dr Geraldine Shaw, Area Director of Nursing & Midwifery, ONMSD
» Dr Colm Henry, National Clinical Advisor and Group Lead Acute Hospitals, HSE
» Hospital Group Chief Directors of Nursing and Midwifery
MINIMUM STANDARDS FOR ACUTE SURGICAL ASSESSMENT UNITS (ASAU) IN IRELAND

TEN GUIDING PRINCIPLES OF AN ACUTE SURGICAL ASSESSMENT UNIT:

1. The primary aim of an ASAU is to deliver Senior Decision Making early in the pathway of selected acute surgical patients.
2. The main quality measures are to reduce Patient Experience Times (PET)\(^1\) and reduce inappropriate admissions thus providing better patient care.
3. Additional gains should include savings in average length of stay (AvLOS), increased patient satisfaction, and decreased time to diagnostics and surgery (if necessary).
4. There should be a critical referral population size in order to deliver cost and other efficiencies.
5. The ASAU should have robust clinical governance.
6. The engagement and ongoing support of the hospital Senior Management Team is important.
7. The ASAU should be in a designated area separate from other units\(^2\).
8. ASAU patients must have formally agreed access to a dedicated emergency theatre, diagnostics and inpatient beds.
9. A review clinic to facilitate admission avoidance and interface with ambulatory care must be available to ASAU patients.
10. An ASAU may contain bespoke elements to provide for specific local or regional needs.

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1 PET in this document refers to the period from registration to disposition from ASAU.
2 In smaller units, merging with an Acute Medical Assessment Unit (AMAU) may be considered.
USERS OF AN ACUTE SURGICAL ASSESSMENT UNIT:

PATIENTS:
Any accepted patient suffering with acute surgical illness, fulfilling the admission criteria (as discussed in appendix C). The ASAU is not an acceptable pathway for scheduled patients, regardless of urgency (e.g. suspected neoplasms). The ASAU is not a suitable area to board admitted patients; patients must move to a dedicated inpatient bed. Separate admission units may be collocated, but the ASAU area must not be used for overflow of admitted patients.

The ASAU review clinic may be used for review patients with acute postoperative complications, subject to local agreement.

SURGICAL TEAMS:
The primary specialties that will utilise ASAUs include General Surgery, Vascular Surgery, Urology and Plastic Surgery.

Other local or regional high volume surgical specialties may participate, in particular to stream suitable Emergency Department (ED) surgical patients from other networked/ group hospitals with limited generalist or specialist capacity. Orthopaedic trauma patients have not traditionally been included in the model in other networks/ hospital groups as they have well-developed pathways through the Acute Floor (see appendix A), including the use of fracture clinics.

HOSPITALS:
An ASAU provides the hospital (or as part of a networked group solution for acute surgical care) an area where acute surgical patients can be managed effectively. It also offers the hospital an opportunity to develop pathways for ambulatory/ shared community care, with the implementation of care pathways in a range of surgical conditions; however we would recommend a phased implementation once the ASAU has developed some maturity.

COMMUNITY CARE PRACTITIONERS:
Although it is recommended that the initial phase of ASAU implementation does not facilitate direct General Practitioner referral, later phases may include incorporation of direct referral for a basket of cases.
Acute Surgical Assessment Units (ASAU), as defined in the NCPS Acute Model of Care 2013 (RCSI press, 2013), set out a process whereby considerable efficiency and safety benefits may accrue to acutely ill surgical patients.

The Acute Floor refers to the area of the hospital where unplanned patients who arrive with acute medical, surgical, and psychiatric conditions are assessed and treated. An ASAU constitutes one component of the Acute Floor. The Acute Floor will also include an ED, a Resuscitation Unit, an Acute Medical Assessment Unit and other named units as required.

ASAU are designed to deal with a significant throughput of acutely unwell surgical patients, but not unwell to the level where they require active resuscitation. These Category 1 and 2 patients (Manchester Triage System, 2014) would still continue through the default ED/Resuscitation streams.

The majority of surgical attendances will still be seen through the existing Emergency Medicine stream (ED) but an ASAU provides the potential to stream less high-acuity patients directly to specialty decision makers. Treatment may be either on the spot, by ambulatory or outpatient care, or require admission.

The concept of an ASAU is not new. Many healthcare systems have advocated for them since the mid-1990s when they were first proposed (Dookeran et al, 1996). The early enthusiasm for ASAs was based around efficient planning to deal with increasing numbers of emergency surgical patients, and meeting prescribed Patient Experience Times within ED. Today, this expected increase in numbers has become reality, with up to 5% year on year increases in emergency hospital attendances. In parallel with this, the increased pressures on inpatient bed stock has led to a resurgence in interest of the ASAU concept. In Ireland today, there are 29 EDs open to the public daily. These units are staffed 24/7 and have grown organically over time, with resources not always reflecting local population density or need.

By cohorting preselected acute surgical patients at initial streaming (which may be co-located with triage), patients are reviewed by Senior Decision Makers earlier in their clinical journey. This allows early senior decision making for specialty specific, Category 3 and 4 patients (Manchester Triage System, 2014), while freeing up resources in other areas of the Acute Floor, such as the ED. The resultant improved patient flow should lead to earlier treatment decisions and treatment, in addition to increased admission avoidance and ambulatory/remote care, and potentially shorter hospital stays. Other benefits should follow, including more rapid access to diagnostics and increased patient satisfaction. The overall improvement leads to more efficient, safer care for the patient.

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3 The definition of a senior decision maker is at least Senior Registrar grade (ST3) or equivalent, and has been empowered to autonomously make a decision to admit or discharge a patient.
Internationally, the target time from ED referral to consultation by in-house, on-call surgical teams is usually less than 30 minutes. However, in reality, in Ireland this target may be frequently missed and is often dependent on the specialty or illness severity (Kelly et al, 2015). This has occasioned consideration around what better on-call model the surgical service should utilise. The majority of on-call teams in Ireland operate a supra-elective model, where the on-call team carries out their normal planned, surgical work in addition to any on-call responsibilities required. These on-call responsibilities are “fitted in” around the normal working day and hence there is significant potential for delays and inefficiencies of care. Ideally, the on-call team should be freed of all other duties. The more efficient, dedicated on-call ‘surgeon of the week’ model is the exception rather than the rule in Ireland (Kelly et al, 2015). This model is where the on-call senior decision maker and team have only to deal with their on-call responsibilities while their elective commitments are significantly or entirely curtailed.

There are many reasons why the ideal ‘surgeon of the week’ model is uncommon; these include staff shortages, difficulties with rotas, an inadequate demand of emergency surgical presentations, and pressure to continue with elective work to manage waiting lists. Ideally, for the ‘surgeon of the week’ model to be cost effective, there must be a critical referral mass to allow emergency work to be separated from elective work. This may be achieved within a single hospital’s adequate catchment population or by reconfiguring networks of smaller hospital catchments feeding into a single ASAU.

This document sets out minimum standards for the construction of an ASAU, or the improvement of an existing ASAU. Any local modification must meet these minimum standards to satisfy HPO agreed funding streams. Each ASAU applicant will be required to satisfy HPO criteria and the NCPS standards document.

This ASAU guideline document will be structured under the following headings:
1. Catchment Needs Assessment
2. Governance
   a. Clinical
   b. Administrative
3. Staffing
   a. Clinical
   b. Nursing
   c. Administrative
   d. Portering/ Support services
4. Estates and Acute Floor administration
5. Inputs/ Patient referral pathways
6. Patient Flow
7. Financial
1. CATCHMENT NEEDS ASSESSMENT

As a first investigation into whether an ASAU would be useful to the delivery of acute surgery in a hospital/group, an initial needs assessment should be carried out (see example Appendix B).

As an initial scope of the needs of the local population, at least 75% of standards 1A-E below should be met. Each unit should aim to meet 100% of all standards (1-6) within 3 years of the date of application. If the suggested standards are not currently achieved, then it is suggested to contact the Clinical Leads for the National Clinical Programme in Surgery for guidance and support.

Acute attendances: The utility of an ASAU is to support a critical mass of acutely presenting surgical patients. Whereas one hospital may fall short of the required basic standard, a planned group/network redesign would allow progression with lesser numbers. The following standards are developed based on national ED attendance figures and the surgical admits generated from the same.

**Standard 1A:** Minimum Adult hospital or networked ED attendances per year >30,000

**Standard 1B:** Acute General, Urology, Plastics and Vascular Surgical admissions should be more than 1,200 per year, or recorded ED attendances for General and Vascular Surgery number in excess of 1,500

**Standard 1C:** The consultant on-call rota for General Surgery should be no less than 1:4, ideally at least 1:8

**Standard 1D:** There should be formal designated access to Theatres, Radiology/Diagnostics and Inpatient beds

The ASAU is not designed to replace outpatient or community-based systems of care. It is estimated that approximately 40-60% of attendances within an ASAU would result in discharge home or to the community without admission. A surrogate for the ability for an ASAU to discharge into an effective outpatient-based care pathway is the discharge ratio of the adult ED General and Vascular Surgery admissions of 30% or greater.

**Standard 1E:** Sampled ED attendances for abdominal pain for 2 consecutive months with a discharge rate of 30% or greater

Proposed group/regional structure changes: The above standards (1A - E) are developed for units who have met, or expect to meet, current usage criteria. Some units will be developed de novo as part of a group or network redesign of acute care services. Standard 1F is written to account for future/planned units. In order to avail of Standard 1F, written support of the group Chief Executive Officer (CEO), in addition to written support of the CEO from each individual site contributing to the ASAU (pending enabling legislation regarding group CEO decisions).
1. CATCHMENT NEEDS ASSESSMENT

Standard 1F:  The network redesign emergency catchment exceeds standards 1A, 1B, 1C and 1D

Once the above standards have been achieved, a business case should be written outlining how the following standards will be met.

2. GOVERNANCE

a. Clinical and Operational: The ASAU should have robust processes from the outset, which will be agreed at local level. Clear clinical governance patterns should be present and any changes should be ratified by a steering group with adequate representatives from all relevant stakeholders.

Standard 2A:  There must be a nominated Clinical Lead (Consultant Surgeon) and Business Manager with close links to the executive management team.

Standard 2B:  There should be an ASAU Steering Group comprising of nominated Clinical Leads of all service users (General, Urology etc.), Business Manager, Nursing Manager, Radiology/ Diagnostics Lead, Clinical Director and Executive Manager at least the grade of Chief Operations Officer or similar. This Steering Group would ideally contain representatives from the ED and a patient advocate/ representative. Other members, such as the Theatre Manager, may be added, dependent on local needs. The group should meet at least once per year, but have regular programmed business reports in between meetings.

Standard 2C:  The Steering Group should be kept informed of the Key Process Indicators (KPI) quarterly (separate to Steering Group periodic meetings).

b. Administrative: Managing the ASAU is not dissimilar to any other part of the Acute Floor. Processes on the Floor should be subject to usual hospital and network/ group standard operational procedures and line management.

Standard 2D:  The ASAU governance group should have a documented reporting structure within the overall surgical governance body for the organisation.

c. Clinical: There must be no ambiguity around who is responsible for the patient at any time during the patient journey.

Standard 2E: The on-call Surgical Team and Consultant are the default governance structure. Local changes may be made to this structure, dependent on need. All substantive standard
2. GOVERNANCE

operating procedure changes should be clearly documented and agreed by the Surgical On-Call teams and the Steering Group.

**Standard 2F:** A Senior Decision Maker must be immediately contactable, if not resident in the unit.

**Standard 2G:** Eighty percent of on-call reviews should occur within 30 minutes of arrival in the ASAU. The on-call surgical model may differ dependent on local needs/resources. Where possible, the on-call team should have no/reduced elective work to facilitate emergency reviews in the ASAU.

d. **Nursing:** Nurses staffing an acute surgical unit must have relevant skills and knowledge specific to the clinical area i.e. surgical and wound care, and assessment of an acute surgical patient.

**Standard 2H:** An appropriate number of WTE Registered nurses and healthcare assistants should be allocated to the ASAU. Dependent on opening hours and size of the unit, appropriate nursing WTEs should be allocated. Nursing and healthcare assistant levels, including variation on a shift by shift basis are agreed locally taking into consideration bed capacity, patient acuity, admission criteria, hours of operation, turnover and patient dependency.

**Standard 2I:** The unit should be under the responsibility of a CNM2 who may also have responsibility for other units across the acute floor.

The recommendations of the Department of Health Taskforce, nurse staffing and skills mix Phase 11 - Emergency settings which is currently underway will inform future evidence based determination of nursing ranges across the acute floor. Whilst the report from the taskforce is awaited it is envisaged that where possible an evidence based patient dependency tool will be utilised to determine nursing input requirements.

Consideration should be made to the role of an Advance Nurse Practitioner carrying out the role of a senior decision maker for certain disease pathways, however this should be considered at local level.

e. **Administrative:** It is suggested that a fledgling ASAU would open Monday – Friday with minimum opening hours of 0800 until 1600. Patient flows outside of these hours are not to be recorded as ASAU patients. Phased introduction of longer opening hours and co-located admission units should occur once initial efficacy is confirmed and supported by an appropriate economic model.

**Standard 2J:** The unit should be supported by at least 0.5 WTE Clerical Staff and at least 0.25 WTE ICT staff. There may be less need for the ICT support once the Acute Floor Information System (AFIS) is operational.
3. ESTATES AND ACUTE FLOOR ADMINISTRATION

**Standard 2K**: The clerical staff should be trained to provide monthly KPI reports to the Clinical and Business leads.

**f. Portering/ Support services**: Existing WTEs should cover these patients as they are the same patients that would otherwise be seen in the ED stream. Specific discussions and agreements regarding needs should be conducted locally.

The ASAU should be constructed near or in the Acute Floor (ED and Acute Medical Assessment Unit) to aid in patient flow.

**Standard 3A**: There should be at least 2 dedicated monitored bays for trolleys and 2 chairs.

**Standard 3B**: The bays should be suitably equipped with piped Oxygen, suction and monitoring equipment.

**Standard 3C**: There should be easy access to a Procedure Room.

**Standard 3D**: There should be an ICT solution (an Acute Floor Information System, AFIS) to monitor patient flow and KPIs.

4. INPUTS/ PATIENT REFERRAL PATHWAYS

The ASAU should be populated from a centralised referral streaming or triage unit for the Acute Floor. Secondary inputs from ED and AMAU assessed patients may be permitted. Patients from Triage Categories 3 and 4 (Appendix C) should be easily routed to the ASAU. A written, agreed process should facilitate the same.

**Standard 4A**: The ASAU should be populated from a centralised referral streaming/triage unit for the Acute Floor.

**Standard 4B**: The documented inputs from triage for Category 3 and 4 patients to the ASAU should be agreed among the surgical on-call teams.

Direct GP referrals should only be considered when the unit has been running for at least 6 months, and appropriate feedback processes are in place to deal with inappropriate referrals.

**Standard 4C**: There should be an agreed written guideline for Triage Nurses describing the admission criteria and presentation groups suitable for treatment in an ASAU.

There should be a daily review clinic with easy bookable slots. These patients ‘for review’ may be booked from patients reviewed out of ASAU hours by on-call surgery in ED. This would allow patients to be discharged during the night, and return for a scheduled acute review clinic the following morning.
5. PATIENT FLOW

**Standard 4D:** There should be a daily review clinic with clear written admission criteria. The patient journey requires structure and time stamping to ensure efficient care. Clear flow diagrams are required to document the structure and outputs of the unit. An example of a patient flow diagram used in Tallaght Hospital is attached (Appendix D). The patient’s episode of care will be treated as an inpatient stay; they will therefore need their care documented on an electronic or paper chart.

**Standard 5A:** There should be a written flow diagram documenting inputs and outputs from the unit.

**Standard 5B:** The following minimum time stamp data should be recorded:
- Registration time of Triage within ED or Acute Floor triage
- ASAU referral time
- ASAU registration (if different from Triage registration)
- ASAU registration to time NEWS completed
- ASAU registration to time seen by Senior Decision Maker
- ASAU registration to disposition decision (PET)
- ASAU registration to departure time
- Disposition decision time to bed booked
- Bed booked to departure time

Patient disposition outputs from the unit are categorised into discharge home, discharge to standard outpatients, discharge to ASAU review clinic, discharge on a community care pathway (e.g. Cellulitis using OPAT at home IV antibiotics), or admit to inpatient care.

**Standard 5C:** The disposition output should be recorded for each patient.

**Standard 5D:** Summary reports for the Clinical and Business leads should be prepared monthly and must be prepared for the Steering Group quarterly.
6. FINANCIAL

**Standard 5E:** The primary studied outcome for reports is Patient Experience Time (PET).

**Standard 5F:** If an admission is avoided it should be recorded as such. The following is a minimal dataset for accreditation.

**Standard 6A:** The following data should be recorded for each patient:
- Type of activity (diagnoses, procedures and DRG assignment)
- Admission Type (default to emergency)
- Duration of stay

**Standard 6B:** The following data should be recorded for the unit:
- Direct costs of unit
- Direct costs should be documented in a separate financial ledger
- Accuracy of indirect costs such as procedures, diagnostic tests and paramedical referrals
- Repeat attendances
- Type of activity (diagnoses, procedures and DRG assignment)
- Admission Type (default to non-elective)
- % same day activity
- Length of stay
- If the patient is a review clinic patient, this should be separately recorded

**Standard 6C:** The clinical efficacy of the ASAU is defined by Quarterly KPIs which should be prepared for the Clinical Lead and Steering Group. The following minimal data set should be recorded. Local needs might reflect additions to the data set but the minimum core data set should be retained.

**KPI1:** PET time less than 4 hours for 80%
**KPI2:** Admissions less than 60% per month
**KPI3:** Review in the ASAU in less than 30 minutes in 80% or greater
**KPI4:** Less than 10% Triage Category 5 patients
**KPI5:** Patient satisfaction sample of at least 25 patients in any quarter
NCPS Acute Model of Care 2013.
Keane FB, Mealy K; RCSI press 2013

Manchester Triage System version II and resource utilisation in the emergency department.

Audit of general practitioner referrals to a surgical assessment unit: new methods to improve the efficacy of the acute surgical service.

Time to surgical review: an assessment of the traditional model of emergency surgical care.

Developing the Acute Floor Model for Ireland.
### APPENDICES:

#### APPENDIX B

**INITIAL NEEDS ASSESSMENT**

<table>
<thead>
<tr>
<th>Standard</th>
<th>As an initial scope of the needs of your local population, at least 75% of standards 1A-D below should be met.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Minimum Adult ED attendances per year &gt;30,000</td>
</tr>
<tr>
<td>1B</td>
<td>Acute General, Urology, Plastics and Vascular Surgical admissions should be more than 1,200 per year, or recorded ED attendances for General and Vascular surgery number in excess of 1,500.</td>
</tr>
<tr>
<td>1C</td>
<td>The consultant on-call rota for general surgery should be no less than 1:4, ideally at least 1:8</td>
</tr>
<tr>
<td>1D</td>
<td>There should be formal designated access to Theatres, Radiology/ Diagnostics and Inpatient beds</td>
</tr>
<tr>
<td>1E</td>
<td>Sampled ED attendances for abdominal pain for 2 consecutive months of 30% or greater.</td>
</tr>
</tbody>
</table>

The above standards (1A-D) are developed for units who have or expect to have met current usage criteria. Some units will be developed de novo as part of a group or network redesign of acute care services. Standard 1E* is written to account for those planned units. In order to avail of Standard 1E*, written support of the group Chief Executive Officer (CEO), in addition to written support of the CEO from each individual site contributing to the ASAU (pending enabling legislation regarding group CEO decisions).

<table>
<thead>
<tr>
<th>Standard</th>
<th>The network redesign emergency catchment exceeds standards 1A, 1B, 1C and 1D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1F</td>
<td>*This Standard replaces Standards 1A-E where group redesign has been agreed.</td>
</tr>
</tbody>
</table>

**Once standards 1 A-D have been achieved a business case should be written outlining how following the standards will be met.**

#### Governance

<table>
<thead>
<tr>
<th>Standard</th>
<th>There should be a nominated Clinical Lead (Consultant Surgeon) and Business Manager with close links to the executive management team.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A</td>
<td>The ASAU governance group should have a documented reporting structure within the overall surgical governance body for the organisation.</td>
</tr>
<tr>
<td>2B</td>
<td>The on-call Surgical Team and Consultant are the default Governance structure. Local changes may be made to this structure dependent on need but all substantive standard operating procedure changes should be clearly documented and agreed by the Surgical On-Call teams and the steering group.</td>
</tr>
<tr>
<td>2C</td>
<td>A senior decision maker must be immediately contactable, if not resident in the unit.</td>
</tr>
<tr>
<td>2D</td>
<td>Eighty percent of on-call reviews should occur within 30 minutes of arrival in the ASAU. The on-call surgical model may differ dependent on local needs/ resources. Where possible, the on-call team should have no/ reduced elective work to facilitate emergency reviews in the ASAU.</td>
</tr>
<tr>
<td>2E</td>
<td>An appropriate number of WTE Registered nurses and health care assistants should be allocated to the ASAU.</td>
</tr>
<tr>
<td>2F</td>
<td>The unit should be under the responsibility of a CNM2 who may also have responsibility for other units across the acute floor.</td>
</tr>
<tr>
<td>2G</td>
<td>The unit should be supported by at least 0.5 WTE Clerical Staff and at least 0.25 WTE ICT staff. There may be less need for the ICT support once the Acute Floor Information System (AFIS) is operational.</td>
</tr>
<tr>
<td>2H</td>
<td>The clerical staff should be trained to provide monthly KPI reports to the Clinical and Business leads.</td>
</tr>
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</table>
## APPENDICES:

### Estates and Acute Floor administration

3A There should be at least 2 dedicated monitored bays for trolleys and 2 chairs.
3B The bays should be suitably equipped with piped Oxygen, suction and monitoring equipment.
3C There should be easy access to a Procedure Room.
3D There should be an ICT solution (an Acute Floor Information System, AFIS) to monitor patient flow and KPIs.

### Inputs/ Patient referral pathways

4A The ASAU should be populated from a centralised referral streaming/triage for the acute floor.
4B The documented inputs from triage for category 3 and 4 patients to the ASAU should be agreed among the surgical on-call teams.
4C There should be an agreed written guideline for Triage Nurses describing the admission criteria and presentation groups suitable for treatment in an ASAU.
4D There should be a daily review clinic with clear written admission criteria.

### Patient flow

5A There should be a written flow diagram documenting inputs and outputs from the unit.
5B The following minimum time stamp data should be recorded:
   - Registration time of Triage within ED or Acute Floor triage
   - ASAU referral time
   - ASAU registration if differs from Triage registration
   - ASAU registration to time NEWS completed
   - ASAU registration to time seen by senior decision maker
   - ASAU registration to disposition decision (PET)
   - ASAU registration to departure time
   - Disposition decision time to bed booked
   - Bed booked to departure time
5C The disposition output should be recorded for each patient
5D Summary reports for the Clinical and Business leads should be prepared monthly and must be prepared for the steering group quarterly.
5E The primary studied outcome for reports is Patient Experience Time (ASAU PET).
5F If an admission is avoided it should be recorded as such.

### Financial

6A The following data should be recorded for each patient:
   - Type of activity (diagnoses, procedures and DRG assignment)
   - Admission Type (default to non-elective) Duration of stay
6B Direct costs of unit
   - Accuracy of indirect costs such as procedures, diagnostic tests and paramedical referrals
   - Repeat attendances
   - Type of activity (diagnoses, procedures and DRG assignment)
   - Admission Type (elective/non-elective)
   - % same day activity
   - Length of stay
   - Direct costs should be documented in a separate financial ledger
   - If the patient is a review clinic patient, this should be separately recorded.
6C The clinical efficacy of the ASAU is defined by Quarterly KPIs which should be prepared for the Clinical Lead and steering group. The following minimal data set should be recorded. Local needs might reflect additions to the data set but the minimum core data set should be retained.
### APPENDICES:

<table>
<thead>
<tr>
<th>KPI 1</th>
<th>ASAU PET time less than 4 hours for 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPI 2</td>
<td>Admissions less than 60% per month</td>
</tr>
<tr>
<td>KPI 3</td>
<td>Review in the ASAU in less than 30 minutes in 80% or greater</td>
</tr>
<tr>
<td>KPI 4</td>
<td>Less than 10% Triage Category 5 patients</td>
</tr>
<tr>
<td>KPI 5</td>
<td>Patient satisfaction sample of at least 25 patients in any quarter</td>
</tr>
</tbody>
</table>
APPENDIX C:
Manchester Triage System as modified for the Tallaght Hospital ASAU. The Categories 3 and 4 (Green) or equivalent patients are appropriate to be assessed in the ASAU. Selected Category 2 patients may sometimes be appropriately seen in an ASAU, only if locally agreement is reached a priori.

<table>
<thead>
<tr>
<th>Triage Category</th>
<th>Surgical description/example</th>
<th>Management location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resuscitation</td>
<td>e.g. active intraperitoneal bleeding, trauma</td>
<td>ED – surgical team will review in ED/resus</td>
</tr>
<tr>
<td>2. Emergent</td>
<td>e.g. incarcerated hernia with bowel entrapment, diffuse peritonitis due to hollow viscus perforation, necrotizing fascitis, any patient with haemodynamic (HD) instability (e.g. unstable bleeding), all UGI bleeding.</td>
<td>ED – surgical team will review in ED/resus</td>
</tr>
<tr>
<td>3. Urgent</td>
<td>Acute appendicitis, uncomplicated cholangitis (not septic and HD unstable), diverticulitis not septic, not HD unstable</td>
<td>ASAU</td>
</tr>
<tr>
<td>4. Less urgent</td>
<td>Uncomplicated cholecystitis requiring admission (not meeting criteria for necrotizing fascitis), abscess requiring drainage, LGI bleed (not unstable) LBO (not perforated or HD unstable</td>
<td>ASAU</td>
</tr>
<tr>
<td>5. Non urgent</td>
<td></td>
<td>Appropriate outpatient referral</td>
</tr>
</tbody>
</table>
APPENDIX D:
An example of a flow diagram showing inputs and outputs through Tallaght Hospitals ASAU model. It is noteworthy that the example unit was implemented in 2 phases, not until a year had elapsed that consideration for a direct GP referral pathway was undertaken.
NOTES