Guideline

High Volume Short Stay Surgical Model Toolkit

Summary The High Volume Short Stay Surgical Model emerged as a model of care from the Surgery Futures - A Plan for Greater Sydney Project (released January 2011). The toolkit provides Local Health Districts with information about the key features of the model, processes for service delivery, staff roles, diagnosis related groups suitable for HVSSS, key success factors, benefits and the steps for implementation of the model.

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Author branch Agency for Clinical Innovation

Branch contact (02) 9464 4711

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Audience Nursing staff;operating theatres;surgeons;anaesthetists;allied health;hospital managers

NSW GOVERNMENT Health

GUIDELINE SUMMARY

HIGH VOLUME SHORT STAY SURGICAL (HVSSS) TOOLKIT

PURPOSE

The High Volume Short Stay Surgical Model emerged as a model of care from the *Surgery Futures- A Plan for Greater Sydney Project*[1] *(released January 2011).* The toolkit provides Local Health Districts with information about the key features of the model, processes for service delivery, staff roles, diagnosis related groups suitable for HVSSS, key success factors, benefits and the steps for implementation of the model.

The High Volume Short Stay surgical model builds upon the Surgical Services Taskforce and NSW Health Department's successful Day Only and Extended Day Only (EDO) model. As there are strong linkages between the Extended Day Only (EDO) and HVSSS models this toolkit replaces the *Surgical Services-23 hour Care Unit Toolkit for Implementation* (GL2005_076).

KEY PRINCIPLES

The aim of this model of care is to concentrate suitable planned surgical cases in dedicated high-volume, short stay surgical units. There is considerable evidence that this model has a number of benefits including improved access to planned surgical services and improved service efficiency in terms of both operating theatre and bed utilisation. It seeks to extend the range of procedures that are suitable for the short stay environment as models of care and medical technologies make early mobilisation and early discharge not only possible but preferable.

The High Volume Short Stay Surgical model can release additional clinical capacity (including beds, staff and other resources) within tertiary/quaternary surgery centres and provide the opportunity for reinvestment of this additional capacity into emergency and complex service needs.

High Volume Short Stay Surgical Units will manage planned surgery/procedures requiring admission up to 72 hours. It includes both Day Only and Extended Day Only surgery and is expected to attract patients from surrounding Local Health Districts as well as locally.

USE OF THE GUIDELINE

The Toolkit should be used by Local Health Districts to inform and guide the development and implementation of the HVSSS model at a facility.

Managers who are involved in the implementation of the HVSSS model should use the Toolkit as the framework for implementation.

REVISION HISTORY

Version	Approved by	Amendment notes
January 2012 (GL2012_001)	Deputy Director-General System Purchasing and Performance	New guidelines replacing GL2005_076
December 2005 (GL2005_076)	Director-General	

ATTACHMENTS

1. High Volume Short Stay Surgical Toolkit

High Volume Short Stay Surgical Model Toolkit

NSW GOVERNMENT | Health

NSW MINISTRY OF HEALTH
73 Miller Street
NORTH SYDNEY NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

SHPN (HSPI) 110248
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For further copies of this document please contact:
The Better Health Centre
PO Box 672
NORTH RYDE 2113
Tel. (02) 9887 5450
Fax. (02) 9887 5452

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Content

SECTION ONE

Introduction

The High Volume Short Stay Surgical model builds upon the Surgical Services Taskforce and NSW Ministry of Health's successful Day Only (DO) and Extended Day Only (EDO) model. The aim of this model of care is to concentrate suitable planned surgical cases in dedicated high-volume, short stay surgical units. There is considerable evidence that this model has a number of benefits including improved access to planned surgical services and improved service efficiency in terms of both operating theatre and bed utilisation. It seeks to extend the range of procedures that are suitable for the short stay environment as models of care and medical technologies make early mobilisation and early discharge not only possible but preferable.

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SECTION TWO

What is High Volume Short Stay Surgical Model?

2.1 Definition

High Volume Short Stay Surgery is defined as planned surgery/procedures requiring admission up to 72 hours. It includes both Day Only surgery and Extended Day Only (EDO) surgery (23-hour surgery). It does not include minor surgery under local anaesthetic conducted in procedure rooms or surgeon's office.[1]

2.2 Linkages between EDO and HVSSS Model

Many Local Health Districts/Network facilities already have well established Extended Day Only Units[2]. The Extended Day Only Model and the High Volume Short Stay Surgical Model share many key elements including:

- Resources that are specifically designated for these models (e.g. beds & staff)
- Identification of Diagnosis Related Groups that are suitable for the models
- Routine screening of all admissions and a streamlined pre admission assessment process.
- Defined care protocols that inform, direct and record the patient's clinical pathway, admission, discharge and post discharge management

SECTION THREE

Why the High Volume Short Stay Surgical model?

3.1 Business Case for Change

The Surgery Futures- A Plan for Greater Sydney[3] identifies High Volume Short Stay Surgical Model as integral to the future delivery of surgical services in NSW. The aim of the High Volume Short Stay Surgical Model of care is to concentrate suitable planned surgical cases in dedicated high-volume, short stay surgical units. There is considerable evidence in the literature that such a model has a number of benefits including improved access to planned surgical services and improved service efficiency in terms of both operating theatre and bed utilisation.

This model assumes that certain operational procedures within the surgical disciplines lend well to operating within a High Volume Short Stay type model. Generally, these types of procedures are frequently performed, have a predictable length of stay (not just day only or extended day only) and are amenable to standard care protocols. However, the procedures are also often dependent upon advanced skills, appropriate operating theatres and appropriate technology.

The 72 hour timeframe identifies over 80% of the planned surgery undertaken in NSW public hospitals.

SECTION FOUR

Features of the High Volume Short Stay Surgical Model

A High Volume Short Stay Surgical Model is a dedicated and uniquely identifiable surgical unit. For many High Volume Short Stay Surgical units, this will involve use of existing hospital facilities (with assigned operating theatres and dedicated wards within a hospital) to create the service. For other sites it may involve reconfiguration of an existing campus or construction of a new building.

The major features of a High Volume Short Stay Surgical Model include:

- defined care protocols into and out of the service;
- a system of effective communication to handover patient care to their General Practitioner or other relevant community services.
- defined case-mix of procedures and services;
- performed by qualified consultant surgeons and with trainees under consultant supervision;
- clear and safe inclusion or exclusion criteria for the unit;
- expected LOS for all cases is no more than three bed days;
- streamlined pre-admission assessment and preparation
- designated operating theatres and beds;
- dedicated staff that are allocated to High Volume Short Stay Surgical unit only;
- clearly defined procedures for the management of any unplanned or untoward circumstance;
- enhanced predictability of surgery with no interruptions from emergency surgery; and
- dedicated recurrent funding related to a case mix model.

SECTION FIVE

Processes of Service Delivery for High Volume Short Stay Surgical Model

5.1 Location of Unit

The High Volume Short Stay Surgical Unit is ideally located in close proximity to the operating theatre suite to allow easy access and minimise travel time to and from the unit.

While physical proximity to the Pre Admission Clinic is not essential, sound communication links with this area are essential.

5.2 Layout of Unit

The layout of the unit should facilitate a seamless patient journey. Ideally the unit should have:

- A reception area and waiting room where patients can complete the necessary documentation associated with admission to hospital in privacy
- An area where patients can be assessed & be prepared for surgery
- Physical space to accommodate day only and non-day only HVSSS post operative patients
- A physical space that allows streaming of day only and non day only patients post operatively
- Suitable space for isolation of patients (if required)
- Layout that allows easy observation of patients
- Suitable bathroom facilities for day only and non day only patients
- Adequate storage space for sterile and non-sterile supplies
- Suitable offices for the Director and Nursing Unit Manager of HVSSS
- Amenities for staff breaks and staff education

5.3 Assumptions of the HVSSS Model

Operating Theatres

- A minimum of two operating theatres should be designated for the HVSSS model
- A minimum of 6-8 cases per HVSSS operating theatre/ day should be able to be performed
- That surgery is performed Monday – Friday for approx 230 days per year

Beds

Bed requirements per operating theatre should be based on:

- 2.5-3 beds per HVSSS theatre in Post Anaesthetic Recovery Unit
- The HVSSS may incorporate Day Only, and Extended Day Only Patients
- HVSSS units are expected to have an average length of stay of approximately 1.5 days (for full calculation see appendix 2)

Suggested Business Rules

- HVSSS cases may be drawn from a number of hospitals inside and outside the LHD
- HVSSS beds will be available Monday to Saturday
- Designated HVSSS theatres are quarantined for HVSSS patients only
- HVSSS activity can still occur in non-HVSSS theatres

There may be variation to these assumptions depending on the casemix of a particular facility.

5.4 Patient Pathway

The patient pathway in the High Volume Short Stay Surgical Unit

Pre Admission	■ The Nurse Screener reviews the patient Recommendation for Admission (RFA) form and identifies that the procedure and planned length of stay are within the parameters for admission to the High Volume Short Stay Surgical Unit ■ The patient is also assessed for level of preadmission assessment e.g. telephone assessment or pre admission clinic attendance. Pre operative instructions are provided at this time
Admission	■ Patient's are admitted to the High Volume Short Stay Surgical Unit. Admission times are staggered ■ Patients undergo a nursing interview and pre surgery checks are performed in the patient consultation room ■ An Anaesthetic consultation may also be undertaken ■ Patient waits in designated preoperative waiting room ■ Clinical Protocol commenced
Pre operative	■ The operating theatre requests the patient's transfer ■ Patients change into gown in preparation for transfer to operating theatres ■ Patients are escorted to operating theatre ■ Patient Check in procedure is undertaken in presence of unit nurse and operating theatre nurse
Intra operative	■ The patient undergoes their procedure ■ The surgeon documents post operative instructions, medication orders and discharge instructions. ■ The patient is transferred to Post Acute Care Unit (PACU) for Stage 1 recovery ■ Once discharge criteria met patient is transferred to Stage 2 recovery in the High Volume Short Stay Surgical Unit
Post operative Stage 2	■ Transfer to main area ward area once discharge criteria met for stage 2
HVSS Unit Area	■ Patient care managed as per clinical protocol ■ Variances reported to surgical team for action/advice
Discharge	■ Patient prepared for discharge ■ Contact with family re: estimated time for discharge ■ Discharge medications / special equipment ■ Discharge summary for General Practitioner ■ Arrangements made with CAPAC services where required ■ Patient education
Post Discharge	■ Post discharge phone call ■ Care taken over by CAPAC service if indicated ■ Transfer of care to General Practitioner

5.5 Roles of Staff

A number of key roles have been identified as essential to the successful establishment and operation of the High Volume Short Stay Surgical Unit.

The identified roles are illustrated below:

Role	Description & Responsibilities
High Volume Short Stay Surgical Unit Director	■ The clinician that is responsible for the service delivery and operational performance of the unit ■ Initial and ongoing assessment of volume and activity ■ Supervision of compliance of medical staff with operational policies ■ Management of medical staff who fail to comply with operational policies ■ Assist in the development, review and monitoring of clinical protocols used in the unit
Nursing Unit Manager	■ The Nursing Unit Manager coordinates the service delivery and the day to day operation of the unit. ■ Supervision of nursing and ancillary staff of the unit ■ Active role in ensuring access to beds ■ Liaising with Admissions, Pre Admission, Operating Theatres and Patient Flow in preparation and planning for future workload. ■ Actively promote the use of protocols and liaising with surgical specialty staff
Nursing Staff	**Pre operative** ■ Prepare patients for surgical procedure according to operational policies ■ Provide Pre operative patient education ■ Escort patients to operating theatre and handover to operating theatre staff **Intra operative** ■ Provide patient care for anaesthesia, operation and stage 1 recovery. **Post operative** ■ Provide patient care for second stage recovery as per clinical protocol ■ Provide patient care for ward area as per clinical protocol ■ Assessment for allied health interventions ■ Prepare patient for Discharge – Patient Education (verbal & written) – Discharge Checklist
Administrative Staff	■ Prepare admission paperwork for patients ■ Update of Patient Administration System for admissions and discharges and transfers.

5.6 Pre Admission

The Pre Procedure Preparation Toolkit[4] outlines the processes that prepares and optimises the patient for their surgical episode.

All patients require pre admission review using a triage process. The Nurse Screener reviews the Patient Health Questionnaire and the Recommendation for Admission (RFA) form for the triage process.

The triage process identifies those patients who require further assessment and preparation and will direct them to a Pre Admission Clinic.

The process results in only a portion of patients needing telephone review and fewer patients needing to attend either a general or multidisciplinary pre admission clinic. The actual proportion will be influenced by the patient population and the nature of surgery performed.

5.7 Admission Criteria

Admission to the High Volume Short Stay Surgical Unit requires:

- An expected Length of stay less than 3 days (this may include Day only and extended Day only patients)
- The surgery undertaken has predictable post operative course
- All patients to have a pre admission review

Patients who require complex care or in the end stages of a condition may not be suitable for the High Volume Surgical Short Stay Model

5.8 Clinical Protocols

Clinical protocols are a key feature of the High Volume Short Stay Surgical Model. They are used to inform, direct and record the patient's clinical pathway, admission, discharge and post discharge management. Clinical protocols streamline patient care processes and support quality clinical management of the patient. Clinical protocols should also include protocol driven discharge.

5.9 Relationships with other key hospital departments

Booking Office

The Booking/Admission Office receive all the Recommendation for Admission forms and coordinate patient pre admission appointment and surgery dates. The Booking Office is the usual first point of contact for patients and a key function is the gathering of essential information including:

- Patient and next of kin contact details
- Completion of Patient Health Questionnaire

Pre Admission

The Pre Admission Service screens patients for suitability for the High Volume Short Stay Surgical Unit. The aim of the preadmission service is to gather and analyse medical information, surgical requirements, address patient expectations and ensuring the efficient coordination of hospital services in order to optimise the patient for their planned surgical procedure.

Operating Theatres

Streaming of a High Volume Short Stay Surgical Service (Figure 1) includes the use of designated Operating Theatres for patients. Streaming plays a key role in the throughput for significant volumes of patients. Designated theatres reduce the likelihood of disruption by emergency surgery and therefore reduce hospital initiated cancellations.

Additional surgical case volume requires consideration of additional inventory of instrumentation to ensure that there is adequate instrumentation to allow cases to proceed without delays.

Allied Health

Allied Health play an important role in the delivery protocolised care of the patient. Allied Health staff can include (but not limited to) physiotherapy, occupational therapy, pharmacy, social work, radiology and pathology.

Systems should be developed with Allied Health staff to ensure seamless discharge for patients, for example, fast track for discharge medications in pharmacy.

Sterilising Services

Additional case volume and instrumentation inventory will increase workload for Sterilising Services department. The impact of this increased workload should have the necessary resources allocated to reduce delays in processing of instruments.

Hotel services – Linen, catering

The volume of patients that are treated in the High Volume Short Stay Surgical Unit will necessitate a good relationship with hotel services to ensure that adequate supplies of resources are readily available.

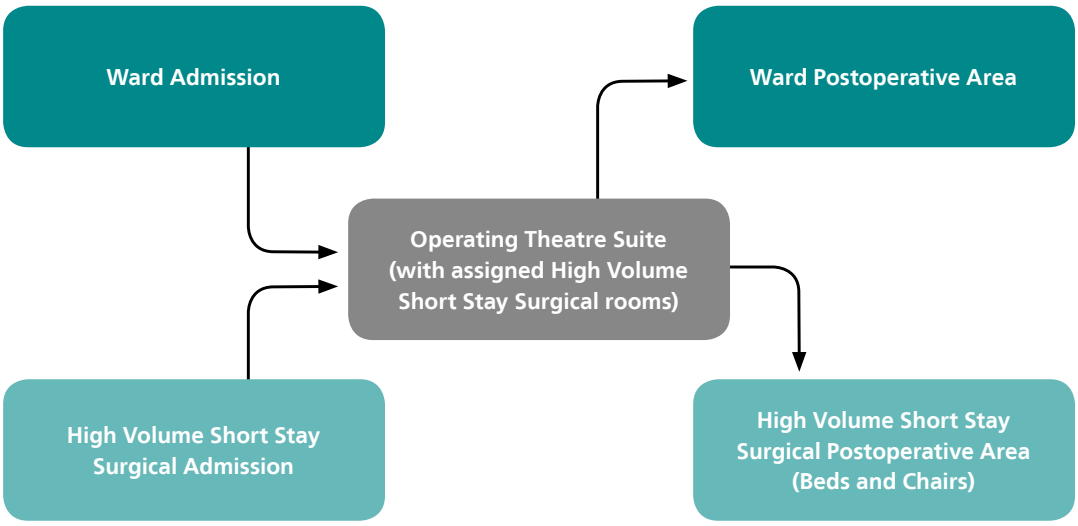
Hospital in the Home Services

For some surgical conditions patient may be initially treated in the High Volume Short Stay Surgical Unit with transfer to the Hospital in the Home (HITH) Service.

Hospital in the Home services provide alternatives to inpatient hospital care for patients with conditions that can be treated either in the home, including Ambulatory Care settings.

Services are able to deliver this care without the patient needing to stay in hospital due to clinical expertise of staff, and clear medical responsibility is established for each patient.

Figure 1: Streaming of a High Volume Short Stay Surgical Service in a hospital.



SECTION SIX

Key Success Factors

Figure 2 outlines key success factors for a HVSSS unit adapted from a report based on information gathered from nine sites with short stay facilities in the United Kingdom and United States.[5]

Safety	■ Relationship with support services is crucial to support patients who become unwell. ■ Procedures should be within the capabilities of the unit.
Anaesthetic Pre-assessment	■ Pre-assessment protocols are necessary to increase clinical safety and ensure appropriateness of referral. ■ Certain anaesthetics are more appropriate for different procedures, e.g. spinal anaesthesia rather than general anaesthesia.
Patient Experience	■ Setting patients' expectations (e.g. standardised pathways) early is key to reducing length of stay.
Patient Flow System & Process	■ Standardised pathways and protocols for individual procedures increase efficiency by providing goals and setting expectations for patients. ■ IT support is crucial for efficient pathway progression.
Operational Management	■ Establishment of volume and activity levels should be done early. ■ Planned and emergency cases need to be physically separated. ■ Nurse Managers need to focus on clinical care and processes. ■ Data management is vital in determining volume, activity and capacity.
Workforce Redesign	■ Innovative workforce models which are evolving and support or enhance delivery of care should be promoted. ■ Ensuring that systems and processes are in place to support people's changing roles. ■ This includes training in new skills, new models of care (such as High Volume Short Stay Surgical units) cultural change and updating skills on a regular basis.
Change Management	■ Early employment and engagement of staff in development of systems and processes provides a sense of ownership. ■ Early development of partnerships with doctors is vital. ■ It is possible to challenge a 23-hour model of care by making more procedures day cases. ■ High Volume Short Stay Surgical Director is vital for clinical leadership. ■ Engagement of senior clinicians for change is vital, as clinical leaders influence other clinicians.
Policy	■ Investment into innovation and improvement is crucial to support sustainable change within the health system.

Figure 2 – Key Success Factors for High Volume Short Stay Surgical Unit

SECTION SEVEN

Benefits

The benefits of the High Volume Short Stay Surgical Model are that it can release additional clinical capacity (including beds, staff and other resources) within tertiary / quaternary surgery centres and provide the opportunity for reinvestment of this additional capacity into other areas of complex service needs. Most importantly, it can improve the patient experience by reducing waiting times for surgery, improving the patient perception of care through the delivery of standardised care pathways through dedicated short stay surgical facilities and increasing the predictability.

Figure 3: Benefits of the HVSSS Model

High Volume Short Stay Surgical facilities have the potential to create significant efficiencies and cost savings. Studies have found that hospital costs for day surgery are 11 to 68 per cent lower than for the same procedure on an inpatient basis[6].

Similar benefits would be expected from the development of the High Volume Short Stay Surgical model.

7.1 Service Co ordination

- Improved bed turnaround times through reduced length of stay (LOS); and improved accuracy in prediction and communication of bed availability and demand
- As cases move into the High Volume Surgical Short Stay unit, there is an increased focus on reducing the Length of Stay of short stay cases to Day Only or to Extended Day Only.
- Potential to place hospital technology and medical specialists closer to the community
- New technology has the potential to improve patient outcomes and reduce risk, but also to significantly increase the time and initial cost of procedures. Internationally this is driving a trend to consolidate high cost specialist technology into fewer centres
- The trend towards minimally invasive surgeries leads to faster recovery times, which means that LOS and overall costs decrease over time. They also allow procedures to be performed outside the operating rooms and hospitals and into other settings such as day clinics and surgeon's rooms.
- Planned surgical procedures in the High Volume Short Stay Surgical Unit are less subject to cancellation
- Overall greater efficiency in the use of resources.

7.2 Quality of Care

- Improvements in length and quality of recovery through protocolised care
- Reduction of inpatient days and Length of Stay
- Care is provided through an evidence based pathway which in turn is likely to produce better outcomes with reduced rates of hospital acquired infection.

7.3 Patient Satisfaction

- Provision of adequate and accurate verbal and written information so patients are able to take responsibility for their own care
- Patients are ensured access to a senior anaesthetist and surgeon
- Benefits from early mobilisation
- Less disruption to patients' and their families' domestic and working life

7.4 Staff Satisfaction

- Staff who are involved in short stay surgery are able to work flexibly with more family friendly rotas.
- Nursing staff have a greater level of autonomy and patient contact as they can be responsible for nurse led pre admission assessment post op care and discharge.

Implementation Plan – Step by Step Guide

No.	Step	Level	Activities
1	Demonstrate the need for change	Local Health District	■ Review surgical data at LHD level to identify surgery volumes & then by facility level. ■ Identify any opportunities to move some surgery to a designated High Volume Short Stay Surgical Unit ■ Select most suitable facility based on location, physical capacity, equipment and personnel
2	Obtain Executive Level support	Local Health District	■ Secure commitment to allocate resources to implementation of High Volume Short Stay Surgical Model ■ Establish Project Sponsor ■ Establish Budget for the project
3	Determine most suitable location & identification of designated operating theatre(s)	Facility	■ Identify physical location ■ Identify number of theatres ■ Identify number of beds
4	Identify dedicated staff member to lead the implementation	Facility	■ Identification of Project Manager to lead the implementation ■ Establish Project Plan
5	Identify timeline for project and key stakeholders for the project	Facility	■ Identify key stakeholders: surgeons, anaesthetists, nurses, allied health, hotel services, administrative services ■ Identify a realistic timeframe for implementation
6	Establish a group of key stakeholders who will champion the establishment of the High Volume Short Surgical Short Stay Service	Facility	■ Establish a steering committee with representatives from key stakeholder groups to meet regularly to: – Direct and guide work – Be an escalation point for decisions – To monitor the project against milestones, timelines & outputs
7	Determine targeted procedures/ specialties for High Volume Short Stay Surgical Service	Facility	■ Assess what procedures/specialties can be offered in the designated service. ■ Assess whether new specialties/procedures could be offered with additional equipment
8	Determine specialist equipment/ resources required based on target procedures/specialties	Facility	■ Assess equipment requirements, identify gaps and liaise with LHD to address gaps.

No.	Step	Level	Activities
9	Develop and enact communication plan with key stakeholders	Facility	■ Communication plan – mode, message & target audience
10	Determine physical layout and staffing	Facility	■ Identify any minor capital works to be undertaken to optimise patient flow ■ Prepare staffing plan for unit
11	Agree on clinical protocols and business rules for operation	Facility	■ Business Rules/Policies & Procedures determined in consultation with Steering Committee ■ Clinical Protocols for identified surgical procedures
12	Clarify Roles and Responsibilities (including job descriptions)	Facility	■ Job analysis undertaken for positions in HVSSS ■ Job descriptions developed for key roles
13	Provide staff with training specific for High Volume Short Stay Surgical Service	Facility	■ All staff to have basic training in principles of the HVSSS units

APPENDIX 1

Diagnosis Related Groups Suitable for HVSSS

an_drg V6	Description
A11B	Insertion of Implantable Spinal Infusion Device W/O Catastrophic CC
A12Z	Insertion of Neurostimulator Device
B01B	Ventricular Shunt Revision W/O Catastrophic or Severe CC
B03B	Spinal Procedures W/O Catastrophic or Severe CC
B04B	Extracranial Vascular Procedures W/O Catastrophic CC
B05Z	Carpal Tunnel Release
B06A	Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W CC
B06B	Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W/O CC
B07A	Peripheral and Cranial Nerve and Other Nervous System Procedures W CC
B07B	Peripheral and Cranial Nerve and Other Nervous System Procedures W/O CC
C01Z	Procedures for Penetrating Eye Injury
C02Z	Enucleations and Orbital Procedures
C03Z	Retinal Procedures
C04Z	Major Corneal, Scleral and Conjunctival Procedures
C05Z	Dacryocystorhinostomy
C10Z	Strabismus Procedures
C11Z	Eyelid Procedures
C12Z	Other Corneal, Scleral and Conjunctival Procedures
C13Z	Lacrimal Procedures
C14Z	Other Eye Procedures
C15A	Glaucoma and Complex Cataract Procedures
C15B	Glaucoma and Complex Cataract Procedures, Sameday
C16Z	Lens Procedures
D01Z	Cochlear Implant
D02C	Head and Neck Procedures W/O Malignancy W/O CC

an_drg V6	Description
D03Z	Surgical Repair for Cleft Lip or Palate Diagnosis
D04A	Maxillo Surgery W CC
D04B	Maxillo Surgery W/O CC
D05Z	Parotid Gland Procedures
D06Z	Sinus and Complex Middle Ear Procedures
D10Z	Nasal Procedures
D11Z	Tonsillectomy and/or Adenoidectomy
D12Z	Other Ear, Nose, Mouth and Throat Procedures
D13Z	Myringotomy W Tube Insertion
D14Z	Mouth and Salivary Gland Procedures
D15Z	Mastoid Procedures
E02B	Other Respiratory System OR Procedures W Severe or Moderate CC
E02C	Other Respiratory System OR Procedures W/O CC
F01A	Implantation or Replacement of AICD, Total System W Catastrophic CC
F01B	Implantation or Replacement of AICD, Total System W/O Catastrophic CC
F02Z	Other AICD Procedures
F09C	Other Cardiothoracic Procedures W/O CPB Pump W/O CC
F10B	Interventional Coronary Procedures W AMI W/O Catastrophic CC
F12B	Implantation or Replacement of Pacemaker, Total System W/O Catastrophic CC
F13B	Upper Limb and Toe Amputation for Circulatory Sys Disorders W/O Cat or Sev CC
F14B	Vascular Procs Except Major Reconstruction W/O CPB Pump W Sev or Mod CC
F14C	Vascular Procs Except Major Reconstruction W/O CPB Pump W/O CC
F15A	Interventional Coronary Procs W/O AMI W Stent Implantation W Cat or Sev CC
F15B	Interventional Coronary Procs W/O AMI W Stent Implantation W/O Cat or Sev CC
F16A	Interventional Coronary Procedures W/O AMI W/O Stent Implantation W CC
F16B	Interventional Coronary Procedures W/O AMI W/O Stent Implantation W/O CC
F17A	Insertion or Replacement of Pacemaker Generator W Catastrophic or Severe CC
F17B	Insertion or Replacement of Pacemaker Generator W/O Catastrophic or Severe CC
F18A	Other Pacemaker Procedures W CC

an_drg V6	Description
F18B	Other Pacemaker Procedures W/O CC
F19Z	Trans-Vascular Percutaneous Cardiac Intervention
F20Z	Vein Ligation and Stripping
F21B	Other Circulatory System OR Procedures W/O Catastrophic CC
G03C	Stomach, Oesophageal and Duodenal Procedures W/O Malignancy W/O CC
G04C	Peritoneal Adhesiolysis W/O CC
G05C	Minor Small and Large Bowel Procedures W/O CC
G06Z	Pyloromyotomy Procedure
G07B	Appendicectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC
G10A	Hernia Procedures W CC
G10B	Hernia Procedures W/O CC
G11Z	Anal and Stomal Procedures
G12B	Other Digestive System OR Procedures W Severe or Moderate CC
G12C	Other Digestive System OR Procedures W/O CC
H02C	Major Biliary Tract Procedures W/O Catastrophic or Severe CC
H05B	Hepatobiliary Diagnostic Procedures W/O Catastrophic CC
H06B	Other Hepatobiliary and Pancreas OR Procedures W/O Catastrophic CC
H08A	Laparoscopic Cholecystectomy W Closed CDE or W (Cat or Sev CC)
H08B	Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC
I02B	Skin Graft W/O Catastrophic or Severe CC, Excluding Hand
I05B	Other Joint Replacement W/O Catastrophic or Severe CC
I10B	Other Back and Neck Procedures W/O Catastrophic or Severe CC
I11Z	Limb Lengthening Procedures
I12C	Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W/O CC
I13B	Humerus, Tibia, Fibula and Ankle Procedures W/O CC
I16Z	Other Shoulder Procedures
I17A	Maxillo-Facial Surgery W CC
I17B	Maxillo-Facial Surgery W/O CC
I18Z	Other Knee Procedures

an_drg V6	Description
I19A	Other Elbow or Forearm Procedures W CC
I19B	Other Elbow or Forearm Procedures W/O CC
I20Z	Other Foot Procedures
I21Z	Local Excision and Removal of Internal Fixation Devices of Hip and Femur
I23Z	Local Excision and Removal of Internal Fixation Devices Excl Hip and Femur
I24Z	Arthroscopy
I25A	Bone and Joint Diagnostic Procedures Including Biopsy W CC
I25B	Bone and Joint Diagnostic Procedures Including Biopsy W/O CC
I27A	Soft Tissue Procedures W CC
I27B	Soft Tissue Procedures W/O CC
I28B	Other Musculoskeletal Procedures W/O CC
I29Z	Knee Reconstruction or Revision
I30Z	Hand Procedures
J06Z	Major Procedures for Breast Conditions
J07Z	Minor Procedures for Breast Conditions
J08A	Other Skin Graft and/or Debridement Procedures W CC
J08B	Other Skin Graft and/or Debridement Procedures W/O CC
J09Z	Perianal and Pilonidal Procedures
J10Z	Skin, Subcutaneous Tissue and Breast Plastic OR Procedures
J11Z	Other Skin, Subcutaneous Tissue and Breast Procedures
J12C	Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W/O Skin Graft/Flap Repair
J13B	Lower Limb Procs W/O Ulcer/Cellulitis W/O Cat CC W/O (Skin Graft and Sev CC)
K04A	Major Procedures for Obesity W CC
K04B	Major Procedures for Obesity W/O CC
K05B	Parathyroid Procedures W/O Catastrophic or Severe CC
K06A	Thyroid Procedures W Catastrophic or Severe CC
K06B	Thyroid Procedures W/O Catastrophic or Severe CC
K08Z	Thyroglossal Procedures
K09B	Other Endocrine, Nutritional and Metabolic OR Procs W Severe or Moderate CC

an_drg V6	Description
K09C	Other Endocrine, Nutritional and Metabolic OR Procedures W/O CC
L02B	Operative Insertion of Peritoneal Catheter for Dialysis W/O Cat or Sev CC
L04C	Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W/O Cat or Sev CC
L05B	Transurethral Prostatectomy W/O Catastrophic or Severe CC
L06B	Minor Bladder Procedures W/O Catastrophic or Severe CC
L07A	Transurethral Procedures Except Prostatectomy W CC
L07B	Transurethral Procedures Except Prostatectomy W/O CC
L08A	Urethral Procedures W CC
L08B	Urethral Procedures W/O CC
L09B	Other Procedures for Kidney and Urinary Tract Disorders W Sev CC
L09C	Other Procedures for Kidney and Urinary Tract Disorders W/O Cat or Sev CC
M02B	Transurethral Prostatectomy W/O Catastrophic or Severe CC
M03Z	Penis Procedures
M04Z	Testes Procedures
M05Z	Circumcision
M06A	Other Male Reproductive System OR Procedures W CC
M06B	Other Male Reproductive System OR Procedures W/O CC
N04B	Hysterectomy for Non-Malignancy W/O Catastrophic or Severe CC
N05B	Oophorectomies & Complex Fallopian Tube Procs for Non-Malig W/O Cat or Sev CC
N06B	Female Reproductive System Reconstructive Procs W/O Catastrophic or Severe CC
N07Z	Other Uterine and Adnexa Procedures for Non-Malignancy
N08Z	Endoscopic and Laparoscopic Procedures for Female Reproductive System
N09Z	Conisation, Vagina, Cervix and Vulva Procedures
N10Z	Diagnostic Curettage or Diagnostic Hysteroscopy
N11Z	Other Female Reproductive System OR Procedures
N12B	Uterine and Adnexa Procedures for Malignancy W/O Catastrophic CC
O03A	Ectopic Pregnancy W CC
O03B	Ectopic Pregnancy W/O CC
O04A	Postpartum and Post Abortion W OR Procedure W Catastrophic or Severe CC

an_drg V6	Description
O04B	Postpartum and Post Abortion W OR Procedure W/O Catastrophic or Severe CC
O05Z	Abortion W OR Procedure
Q02A	Other OR Procedure of Blood and Blood Forming Organs W Cat or Sev CC
Q02B	Other OR Procedure of Blood and Blood Forming Organs W/O Cat or Sev CC
R01B	Lymphoma and Leukaemia W Major OR Procedures W/O Catastrophic or Severe CC
R02C	Other Neoplastic Disorders W Major OR Procedures W/O CC
R03B	Lymphoma and Leukaemia W Other OR Procedures W/O Catastrophic or Severe CC
R04A	Other Neoplastic Disorders W Other OR Procedures W CC
R04B	Other Neoplastic Disorders W Other OR Procedures W/O CC
T01C	OR Procedures for Infectious and Parasitic Diseases W/O CC
X02A	Microvascular Tiss Transfer or (Skin Graft W Cat/Sev CC) for Injuries to Hand
X02B	Skin Graft for Injuries to Hand W/O Catastrophic or Severe CC
X04B	Other Procedures for Injuries to Lower Limb W/O Catastrophic or Severe CC
X05A	Other Procedures for Injuries to Hand W CC
X05B	Other Procedures for Injuries to Hand W/O CC
X06B	Other Procedures for Other Injuries W/O Catastrophic or Severe CC
X07B	Skin Graft for Injuries Ex Hand W/O Microvascular Tiss Tfr W/O Cat or Sev CC
Y02B	Other Burns W Skin Graft W/O CC
Y03Z	Other OR Procedures for Other Burns

APPENDIX TWO

Calculation of Beds for HVSSS

No. of beds	Per HVSS OT
8	8hrs operating hours per day
6	6 cases per day on average
230	230 operating days per year (average of 46 weeks per year)

No. of beds	Patients per year = 6 cases per day X 230 operating days
1380	1380 patients per year

No. of beds	Day only Patients = 60% patients are day only
828	828 patients per year are day only Bed Days = 828 patients per year X 1 day ALOS
828	828 bed days Beds required = 828 bed days/365 days per year
2.268493	3 beds required for day only patients **On average this would equate to 1 bed & 2 recliners**

No. of beds	Over Night Patients = 40% patients
552	552 patients per year spend on average 1.5 nights in hospital Bed days = 552 patients per year X 1.5 day LOS
828	828 bed days Beds required = 828 bed days/365 days per year
2.268493	3 beds required for day only patients **On average this equates to 3 beds**

Per HVSS OT you would need to accommodate 4 beds & 2 recliners (OR 4.5 beds & 3 recliners)
This calculation is based on 60% Day only and 40% the remainder.

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