Shared Decision Making
Risk assessment tools and how to use them in a perioperative medicine clinic

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Risk Prediction Models

- P-POSSUM
- SORT Score
- Nottingham Hip Fracture Score
- American College of Surgeons - NSQIPP
- John Carlisle calculator
SORT Score

Surgical Outcome Risk Tool (SORT)

Main Group
Select procedure group....

Sub Group
Select procedure sub-group....

Procedure Description
Select procedure....

Severity
Minor ○ Intermediate ○ Major ○ Xmajor/complex ○

ASA-PS
1 ○ 2 ○ 3 ○ 4 ○ 5 ○

Urgency
Elective ○ Expedited ○ Urgent ○ Immediate ○

Thoracics, gastrointestinal or vascular surgery
Yes ○ No ○

Cancer
Yes ○ No ○

Age
<65 ○ 65-79 ○ >80 ○
<table>
<thead>
<tr>
<th>Condition</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 65 years</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Female</td>
</tr>
<tr>
<td>Functional Status</td>
<td>Independent</td>
</tr>
<tr>
<td>Emergency Case</td>
<td>No</td>
</tr>
<tr>
<td>ASA Class</td>
<td>Healthy patient</td>
</tr>
<tr>
<td>Steroid use for chronic condition</td>
<td>No</td>
</tr>
<tr>
<td>Ascites within 30 days prior to surgery</td>
<td>No</td>
</tr>
<tr>
<td>Systemic Sepsis within 48 hours prior to surgery</td>
<td>None</td>
</tr>
<tr>
<td>Ventilator Dependent</td>
<td>No</td>
</tr>
<tr>
<td>Disseminated Cancer</td>
<td></td>
</tr>
<tr>
<td>Hypertension requiring medication</td>
<td>No</td>
</tr>
<tr>
<td>Congestive Heart Failure in 30 days prior to surgery</td>
<td>No</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>No</td>
</tr>
<tr>
<td>Current Smoker within 1 Year</td>
<td>No</td>
</tr>
<tr>
<td>History of Severe COPD</td>
<td>No</td>
</tr>
<tr>
<td>Dialysis</td>
<td>No</td>
</tr>
<tr>
<td>Acute Renal Failure</td>
<td>No</td>
</tr>
<tr>
<td>BMI Calculation:</td>
<td></td>
</tr>
<tr>
<td>Height: [] in / [] cm</td>
<td></td>
</tr>
</tbody>
</table>
**Procedure:** 44146 - Colectomy, partial; with coloproctostomy (low pelvic anastomosis), with colostomy

**Risk Factors:** 85 years or older, ASA Severe systemic disease, HTN, CHF, Dyspnea with moderate exertion, Acute renal failure, Over Weight

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Your Risk</th>
<th>Average Risk</th>
<th>Chance of Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Complication</td>
<td>34.6%</td>
<td>22.4%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Any Complication</td>
<td>43.4%</td>
<td>28.5%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>7.2%</td>
<td>2.9%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Cardiac Complication</td>
<td>6.9%</td>
<td>1.2%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Surgical Site Infection</td>
<td>10.7%</td>
<td>12.8%</td>
<td>Below Average</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>7.5%</td>
<td>2.9%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Venous Thromboembolism</td>
<td>3.7%</td>
<td>2.1%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Renal Failure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ileus</td>
<td>28.9%</td>
<td>20.8%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Anastomotic Leak</td>
<td>3.1%</td>
<td>3.9%</td>
<td>Below Average</td>
</tr>
<tr>
<td>Readmission</td>
<td>22.4%</td>
<td>13.9%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Return to OR</td>
<td>6.1%</td>
<td>6.0%</td>
<td>Average</td>
</tr>
<tr>
<td>Death</td>
<td>11.5%</td>
<td>1.5%</td>
<td>Above Average</td>
</tr>
<tr>
<td>Discharge to Nursing or Rehab Facility</td>
<td>66.2%</td>
<td>12.0%</td>
<td>Above Average</td>
</tr>
</tbody>
</table>

*Note: Your Risk has been rounded to one decimal point.*
Things you need to know before using a risk calculator

- How they work: the inputs that matter
- The “normal risk range” to spot input error
- What’s not in the calculator (dementia, liver failure, low creatinine, low weight)
- Population used
- Last recalibration
Risk Communication

- Ask before giving a prediction
- Risk is bad v Chance is less bad
- Overload v Withhold
- Precision v Round up
- 1 in 100 or 1%, consistency
- 1 in 100 die, 99 in 100 survive (framing)
- Woe is me catastrophe v Eternal optimists
Barriers to Risk Communication

• Dealing with uncertainty is difficult
• Surgical outcome measures are not the same as patients outcome measures
• There is more uncertainty in what the individual patient wants than the prediction model

• The answer is Shared Decision Making
Medical shared decision making

- Clinicians unaware of patients and their families personal preference
- I will share my decision with you
- Clinicians knowledge and experience about outcomes is from a clinicians perspective
Patient shared decision making

**Shared Decision Making**

- Patients and their families personal preference is known
- Clinicians knowledge and experience about outcomes is from a patients perspective
- Shared decision making consultation skills
Consultation

1. Checklist
2. Medical Diagnosis
   - Medical Treatment
3. Shared Decision
   - Patient Choice
Structure of a SDM consultation

• Prepare patients and families before consultation
• Identify the patients and your agenda
• Review all options, discuss harm and benefits, acknowledge uncertainty
• Find the patients personal perspective
• Summarise and communicate a plan
Torbay Hospital Perioperative Medicine Clinic

- AAA, Colorectal, Nephrectomy, THR and TKR estimated 30 day mortality 1%, Difficult decisions
- 1 hour per patient
- CPET and SDM consultation
- 850 patient a year
John Carlisle Calculator

- Age
- CCF, CVA, MI, PAD
- Hb, Albumin, Creatinine
- Two CPET variables
- Type of surgery
- https://sites.google.com/site/site/informrisk/
Risk Models - John Carlisle Calculator

• [http://www.pre-op.org/useful-resources/calculating-perioperative-risk](http://www.pre-op.org/useful-resources/calculating-perioperative-risk)


Thank You: michael.swart@nhs.net
Shared decision-making

Clinicians and patients working together to select tests, treatments, management or support packages, based on clinical evidence and the patient’s informed preferences.

Coulter and Collins. Making Shared Decision Making a Reality. King’s Fund 2011
Clinicians’ Concerns

- My patients don’t want it
- I don’t have the time!
- We do it already!
- Will it work?
- What if they don’t do what I think they should do?
The case for involving patients in decisions

- Because patients want and need it
- Because it’s the right thing to do
- Because it’s the law
- Because it reduces over-treatment
- Reduction in 2nd victim effect
- Less decisional regret
- Sustainable Healthcare (Because it may help contain costs)
- Because it leads to more appropriate care
- Increased clinical autonomy
- Because it leads to better health outcomes
Where to find patient decision aids

• NHS England: https://www.england.nhs.uk/rightcare/shared-decision-making/
• NICE SDM Collaborative: https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines/shared-decision-making
• Health Foundation MAGIC programme: https://www.health.org.uk/programmes/magic-shared-decision-making
• International: https://decisionaid.ohri.ca/
• Dartmouth Hitchcock: http://med.dartmouth-hitchcock.org/csdm_toolkits.html
• Mayo Clinic: https://shareddecisions.mayoclinic.org/
National agencies

- NHS England
- NICE
- General Medical Council
- Royal Colleges
- Choosing Wisely
- National Voices
- Health Education England
- AQuA
- Year of Care Partnerships
- NHS Digital
- Health Foundation
- National Institute of Health Research
- Universities
Shared Decision Making

Shared decision making (SDM) has been a concept in healthcare for over thirty years, first mentioned in the President’s Commission for Study of Ethical Problems in Medicine and Biomedical and Behavioural Research Report (1982), which questioned the validity of informed consent where all viable options were not discussed with a patient.¹ The concept of involving patient in decisions about their health remains just as topical today, as displayed by the recent Montgomery vs Lanarkshire Health Board (2015) ruling which has fundamentally changed the ethics of informed consent.² At the frontline, there remains gross heterogeneity in the understanding and practice of shared decision making. Education and training is a fundamental key to unlocking professional engagement in SDM, which complements patient activation, engagement and involvement strategies. At a national level in the UK, there is a strong commitment to deliver SDM with the National Institute of Health and Care Excellence (NICE), NHS England, Health Education England (HEE) and the Academy of Medical Royal Colleges (AoMRC) synchronously and collaboratively working to make SDM a reality. This national commitment was described as 'the only way to achieve truly patient-centred care' in a recent British Medical Journal editorial.³
References


2. Chan SW, Tulloch E, Cooper ES et al. Montgomery and informed consent: where are we now?

   BMJ 2017;357:j2224

3. Leng G. Ingham-Clarke C, Brian K, Partridge G. National commitment to shared decision making

   BMJ 2017;359:j4746
Reports and Papers


A comprehensive overview of Shared Decision Making, including tools and decision aids, consultation styles, looking at barriers to implementation and strategies to roll out shared decision making across the NHS.


BMJ 2017;357:j1744

Overview of the MAGIC programme and how it has been implemented, highlighting solutions to the challenges encountered for example comments that ‘we don’t have enough time’, ‘we already do it’, ‘patients don’t want it’, ‘we can’t measure it’. 

A commentary on Shared Decision Making in perioperative practice.


Chan SW, Tulloch E, Cooper ES et al. Montgomery and informed consent: where are we now? BMJ 2017;357:j2224

Analysis of the implications of the Montgomery judgement on UK medical practice.

**Patient decision aids**

Stacey D, Légaré F, Lewis K, Barry MJ, Bennett CL, Eden KB et al. Decision aids to help people who are facing health treatment or screening decisions. Cochrane database of systematic reviews 2017. Issue 4, article number CD001431

Systematic review involving over 30000 patients using decision aids, which demonstrated improved knowledge, more accurate expectations of outcome less decisional regret, and demonstrated a 16% reduction in elective procedures.
Videos and Podcasts

MAGIC Programme YouTube Site

1. Key Skills in SDM Sound bites: https://www.youtube.com/playlist?list=PL2eX-TS1WdVMZgHsSLxHeeWsFrU32Tb2a

Pitfalls on SDM sound bites: https://www.youtube.com/playlist?list=PL2eX-TS1WdVOjxHhVLjCfjXd1HL5Go4w3

Full-Length Clips: https://www.youtube.com/playlist?list=PL2eX-TS1WdVNRsQkLQ1-DBfHh2ewF3n_Z


4. UCL/RCoA Perioperative Medicine In Action: Shared Decision Making UCL/RCoA Massive open online course (MOOC) in perioperative medicine. Week 2 SDM https://www.futurelearn.com/courses/perioperative-medicine/0/steps/28743