Risk management

Gary Strickland
Nuffield Department of Medicine

1 October 2013
Workshop objectives

Beginner
- Obtain an understanding of risk management
- Know how and where to start the risk management process

Intermediate
- Know how to complete a risk register and go through the risk management cycle
- Show how to make risk management part of everyday activity and how risk management should be used in developing your department

Advanced
- Use of risk management strategies in making business decisions
- Understanding of the term proactive risk management
- Share best practice

BE PROACTIVE RATHER THAN REACTIVE
What is a risk?

Definition
The chance of something happening that has the potential to affect the achievement of aims and objectives – negatively and positively.
Types of risks - opportunity risks

- Sometimes called speculative’ risks
- Deliberate risk taking
- Most organisations will have a specific appetite for this type of risk
- Risks/dangers arise from:
  - taking the opportunity
  - not taking the opportunity
- Opportunity risks are often financial but within the University environment they can be a number of things:
  - Supporting blue sky research
  - Undertaking first in man clinical trials
  - Expanding accommodation
  - Setting up University offices overseas
  - Investment in technology
  - Setting up a service – creating a demand and having a business plan to recover the running costs (SRF, MRF)
Step 1: Risk identification

START

- Make a list of things that have gone wrong in the past or areas of the business that you are concerned about
- You have control over or things decided by others
- Talk to both senior and junior staff support staff
- Widen the discussions to section heads, financial managers, IT, building facility managers, scientific project managers, business development, academics
- Look at other departmental risk registers
- DRAFT 1st STEP TOWARDS risk register

You will probably have far too many, but this is a good thing at the start
Previous examples

- **EQUIPMENT** - Freezer failure with up to £1m worth of approved vaccine ruined
- **BUILDING** - Electrical power outage for Old Road Campus
- **FINANCIAL** - Selling of services without charging appropriate amount of VAT
- **RESEARCH AWARDS** - European Court of Auditors review of FP6 EU award – difficult discussion about acceptable costs potential £0.5m loss to department
- **UK BOARDER AGENCY** - Failure to manage right to work in UK – formally suspended individual
- **H&S or RESEARCH** - Individual enrolled on clinical trial potentially infected with malaria went missing
- **DATA MANAGEMENT** – WTCHG asked to reduce the level of research activity using the connection from ORC to Science area due to limited capacity.
Step 1: Risk identification (cont.)

**Framework/structure**

- Each risk is put into a risk area/category
- Given a unique ID
- What would be the consequence?
- Identify a risk owner
Step 1: Risk identification (cont.)

Risk areas

- Financial
- Academic
- Governance and compliance
- Administration
- Health & Safety
- Relationship
- Accommodation
- Research
- Teaching
Step 1: University of Oxford risk management framework

- Failure to recover FEC
- Failure to attract Bioinformatics staff

Strategic RR

Divisional RR

Dept/Unit RR
Step 2: Risk measurement – class or tolerance

- **Class 1 Risk:**
  The University has little or no willingness to tolerate it  
  *e.g. HR or financial management*

- **Class 2 Risk:**
  The University is willing to accept the possibility of a moderately adverse occurrence in light of the benefit that may be achieved  
  *e.g. Financial management of operations – new amenities building, ORC*

- **Class 3 Risk:**
  The University is willing to accept the possibility of a significantly adverse occurrence in light of the substantial benefit that may be achieved  
  *e.g. overseas developments*
Step 2: Risk measurement (cont.)

Gross likelihood and impact (inherent risk)

**Likelihood** - probability of the risk occurring
- Probability
- Measured H(igh), M(edium), L(ow)

**Impact** – consequences if the risk occurred/was realised
- Consequences, Exposure
- Measured H(igh), M(edium), L(ow)
Step 3: Risk mitigation or control strategies

- Acceptance
- Avoidance
- Transfer
- Mitigation

Once a risk has been identified, it’s important to take or implement action
Step 4: Review and monitor

Review questions:
Having taken action, have you actually reduced the risk?
What is the net or residual risk?
What is the status of the risk?

Colours and shapes to visually identify status

Red ‘action required’
Amber ‘keep a watching brief’
Green ‘OK’
▲ has increased
▼ is unchanged
▼ has decreased
■ is new

Is there any further action required? If so, assign owner of action and agree frequency of review.
What can go wrong & how can you be more proactive?

‘**Known risks**’ are those that organisations can identify and plan for in an effort to avoid or mitigate them (Hazards or Controls).

‘**Unknown risks**’ are those that may have come onto the radar, but whose full extent and implications are not yet completely clear – or are seen as ‘too difficult’.

‘**Unknowable risks**’ - or ‘black swans’ - are those which hit without warning, such as 9/11 attacks or the Indian Ocean tsunami, meaning they - virtually - cannot be predicted or avoided.

Black swan events should only occur at unpredictable intervals
Yet, recent experience suggests they are happening more frequently
Rather than being infrequent ‘outlier’ events, are they now just part of a faster-changing and more uncertain world?”

**Horizon scanning** – systematic review of internal and external activities to enable the early identification of emerging, or changing, risks; ‘**Mirror**’ & ‘**Windscreen**’
What can go wrong?

- Focus on the wrong type of risks
- Managers tend to focus on what they know
- Remember risks can be negative and positive
- Contingency plans – not tried and tested
- Disaster recovery plan – too late (minimise damage only)
- Risk registers can be seen as a ‘chore’; “I’ve done the Risk Register”
- Risk registers can be seen as the end in their own right
- Risk registers are often incremental, reducing the likelihood of a fundamental review
Best practice in risk management: proactive

- Embedded in everyday activities/processes
- Regularly updated & reviewed – contingency planning
- Standard format, measures, integrated issues etc
- Senior management focus
  - Regular agenda item
  - Lead from the top
- Traceability – version control, senior sign-off, recorded in minutes
- Action planning & delivery!
- Timely – and done with genuine commitment
Example of a risk

Jenner Institute

- Has a number of research agreement with commercial sponsors who supports part of the costs associated with the research and in return receive a share of any intellectual property

Risk

- Staff or students presenting unprotected data or commercially sensitive information to an audience external to the institute / University
Step 1: Risk identification (framework / structure)

Risk area/category
  – Commercial (reputational, financial, research)

Given a unique ID
  – C1

List actual risk
  • Staff or students presenting unprotected data or commercially sensitive information to an audience external to the University

What would be the consequence?
  • Loss of IP if data is published or released to third party
  • Breach in collaborative agreement
  • Loss of competitive edge
  • Reputational risk

Identify a risk owner
  • Head of department
Step 2: Risk measurement

Class 1 Risk:
- The University has little or no willingness to tolerate it – breach in commercial contract and loss of IP

Inherent / gross risks
- Likelihood - High
- Impact - High
Step 3: Risk mitigation or control

Control measure

- Agreed internal procedures for working on commercial agreements to include access to data, publication and release of data
- Training for staff and students on procedures – ISIS/OUC
- Strong project management on commercial agreements
- Review of what can or cannot be published
- Regular checks to make sure procedures are being followed
- Advice from ISIS Innovation and Legal Services

Net risk

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>medium</td>
</tr>
</tbody>
</table>

Status

▼ ‘OK’ - has decreased
Risk matrix

- **Impact**
  - High Impact
    - Low Likelihood
  - Low Impact
    - Low Likelihood

- **Likelihood**
  - High Likelihood
  - Low Likelihood

Acceptable risk
Managing risk…

Predict and prevent …

… NOT find & fix
QUESTIONS?