pharmacoeconomic

Lec 8

perspective

- Point of view from which the study is taken
- Determine what will be measured what are the costs and benefits, and how they will be valued
- It will affect the types of costs (resource expenditure) and benefits that will be considered relevant to the analysis
- Determine which costs and outcomes are included in the analysis

Types of perspective

- Societal
- Provider
- Payer
- Patient

Societal perspective

- The broadest of all perspective that comprehensively evaluates all costs and consequences
- Considers the benefits to society at a whole
- Include costs:
- Direct overall cost of providing care
- Indirect: loss of productivity

Provider perspective

- Concerned with the expenses of providing products or services
- Included cost
- Direct cost only

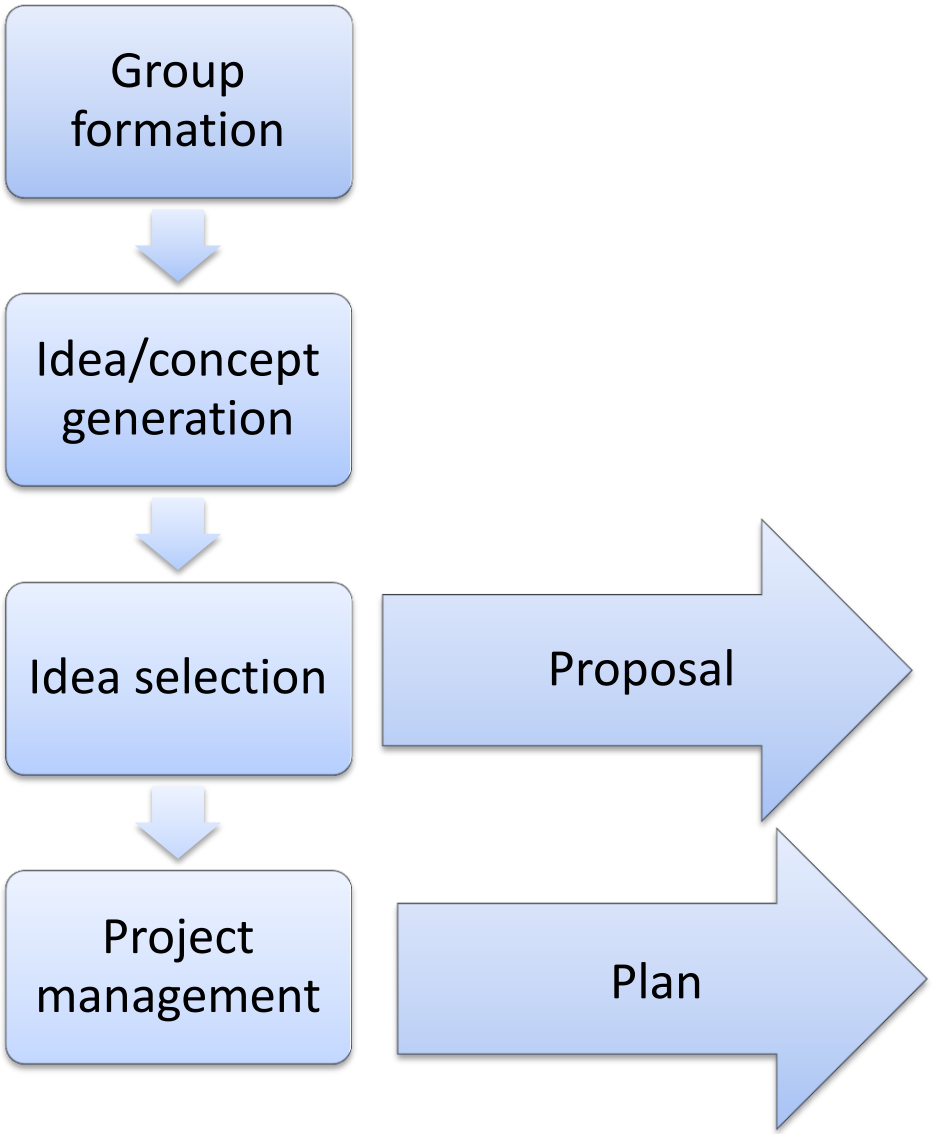
Payer perspective

- Social/government, third part payers
- E.g: private insurance companies
- Included cost:
- Direct cost
- Indirect costs
- Relevant to employers
- Lost workdays
- Lost productivity at work

Patient perspective

- All the relevant cost and consequences experienced by the patient
- Included cost:
- Direct
- Indirect
- Intangible

A framework of business Development



Filtering or Selection Criteria

- Following criteria can be employed while selecting an idea
  - Market Factors
  - Competitive advantage
  - Management Capability

Stages of Biobusiness evolution

Idea generation and validation	• IP from University/parent body • Technology validation – “Proof of Concept” • Commercial prototype and early pre – clinical trials.
Early Stage – Start up	• Technology platform and IP broadening • Management team & Scientific group hiring • Partnership and building company infrastructure
Late stage – Expansion/public offering	• Continue with clinical development (Launching of product) and prepare exit • Aim for cash flow, break – even and lastly profit

Funding Process

- **Idea development and validation** – typically £50,000 - £1 Million
  - University challenge seed funds, family, friends and angel funding; small business initiatives and grants
- **Early Stage Start – up –** typically £1 M – 10 Million
  - Start-up focused on broader. Very high net worth angels, smart grants
- **Later stage –** typically - £10 – 50 Million per round
  - Institutions willing to invest
  - Pharma/biotech partners

Difficulties involved in biosciences start – up 1

- Long lead time. Concept to market may take 10 – 15 yrs
- High cost (some pharmaceuticals cost up to $1 Bn/year)
- High risk. Failure rates are high (10% success!)
- Low cash inflow in early years & problems accessing funds

Difficulties involved in biosciences start – up 2

- A complex regulatory framework
  - FDA approval, patent protection..
- A highly competitive market
  - E.g., Mergers, take – overs, alliance, new competitors
- Negative public sentiments towards some products and testing processes
  - E.g., animal testing..
- Lack of management and business expertise in scientists

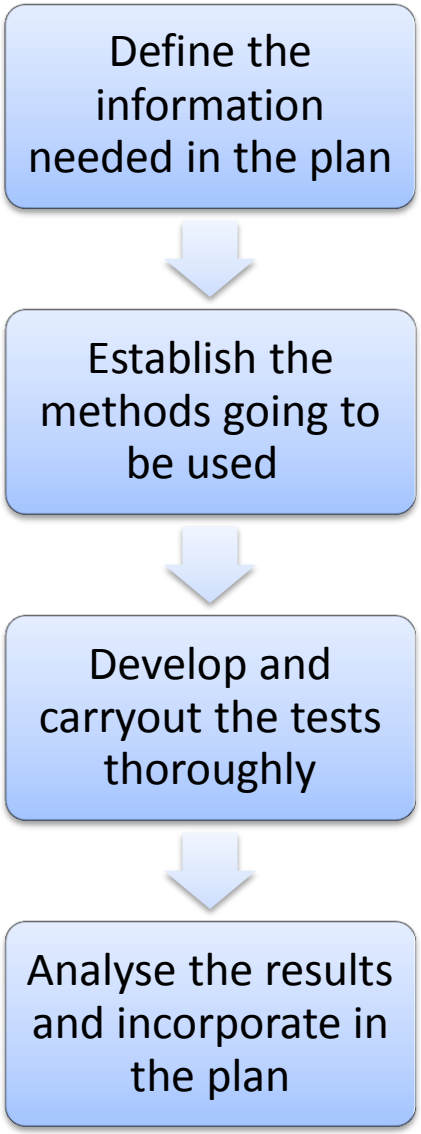
Business plan and its objectives

- A plan that explains and justifies the business concept
  - It provides information on the nature and context of the business opportunity
  - Approach taken to exploit the opportunity
  - Recognise factors that will play a role in the success of the venture (also looks at obstacles and ways to overcome it)

Analysing Competitors

- Competition can be analysed based on certain key factors
  - Market share
  - Distribution
  - Brand Image
  - Product Quality
  - Product Variety
  - Patents and other IPs
  - Research and Development
  - Financial Resources

Market Research Plan



Sources for Market Research

- Primary : Non – published current market and competitor data.
  - Focus groups
  - Observations
  - Surveys
  - Test marketing
  - Web based new groups
- Secondary: Published data from libraries, discs and online
  - Biotechnology handbooks
  - Euromonitor
  - Bioindustry association website
  - Jordans Ltd
  - MSI marketing research for Industries

Start-up: ‘shopping list’

Five elements for a start – up

- Premises
  - Size, location, rateable value, security, servicing, utility costs
- Operational needs
  - Laboratory, safety equipments, marketing costs, monitoring equipments, tools and other consumables
- Administrative needs
  - Office equipment, Communications hardware, stationery and consumables
- Intangible needs
  - Critical breakdown cover, insurance, licenses and permissions, legal, accountancy etc.
- Working capital