

# Biomedicine Roadmap User Guide

## What is the biomedicine roadmap?

The biomedicine roadmap was developed to help shape ethical approaches to innovation and the move towards further responsibility by companies within the healthcare technology and services sector. It takes into consideration the changing demographics, public health challenges, new service models, and market changes that mean individuals (users, consumers, patients) are increasingly taking responsibility for their own lifestyles and health behaviours, often in partnership with clinicians and others. It is based on the results of consultations undertaken through interviews and workshops with a sample of biomedicine companies and on relevant published information.

## Why/when should you (the company) use the roadmap?

The roadmap that follows should be used by companies involved in the healthcare technology and services (biomedicine) sector to develop high levels of attentiveness in terms of unintended consequences and ethical issues of their innovations. It will help them to be alert to market changes and opportunities and to be ready to act in the face of new knowledge.

The roadmap spells out fundamental company management requirements and precautionary actions that need to be in place at the time the design and innovation process begins. An immediate commitment to such fundamentals is considered here as an aspect of ‘responsible innovation’ with an accompanying commitment to make progress in other areas of responsible innovation where such an expectation is reasonable.

## How to use the roadmap

**Firstly**, company management must determine whether the ‘vital’ aspects indicated in the ‘Company Management’ document are already embedded in the practices and structure of the company. These are fundamental practices of business that require time and expertise to implement. Where necessary, assistance should be sought to enable the company to commit to these fundamentals.

**Meanwhile**, investigate the company’s position with the ‘desirable’ elements of the aforesaid document. These accompanying commitments help reaffirm the company's commitment to responsibility and business development.

**Ultimately**, use the roadmap to see how elements of responsible innovation can be linked to the entire processes of business development – research, design, production, marketing, and after-sales stages of development.

### Important:

- i. Pay attention to the important role of external engagement throughout this process – without external feedback into all stages the process cannot be considered responsible.
  - ii. Understand who constitutes a “user”. This is defined deliberately vaguely here as different companies are likely to have different users, perhaps patients, families, carers, doctors, etc. which they should reflect upon in terms of who is likely to be impacted and therefore needing to participate in user feedback mechanisms.
- **NOTE:** In the roadmap, solid lines represent the **transitions between stages**, while dotted lines represent **feedback**.