



A4M: How To Generate Great New Ideas Information Sheet

The genesis of an amazing idea can come from anywhere. For many medics it comes from seeing a problem in their daily work and thinking of a great new solution. That can be enough to start the process and develop a whole new concept.

Sometimes ideas can be created in other ways – by using a systematic approach to idea creation. This is often the way that many R&D (Research & Development) teams approach the task of coming up with new ideas.

This document will give you some methods for how you can release your creativity and work on inventing new concepts.

Contents

- A) Find the problems
- B) What is done today
- C) Get Crazy – think outside of the box
- D) Imagine the future
- E) Systematically collect ideas
- F) Write it down

A) Find the problems

For an idea to be really great in the world of medical devices – it **MUST** solve a problem.

Many ideas come to companies that are amazingly great ideas (The Water Speculum being the classic) but they don't solve any real problem.

A great starting point for having a creative idea is to review your practice and work out all of the current problems that either have a poor solution today, or even no solution today.

Is there a disease state that is inadequately resolved?

Is there a procedure where you need to use several 'Home made' set ups to get the procedure done?

Is the efficacy low on something you do today?

You need to map out all of the problems (especially if and when they happen) and highlight exactly what the problem is. Once you have the problem, you can embark on the road to the solution.

Why is finding a problem so important? Because a problem is converted into medical device speak as “An Unmet Need”. This is the trigger that will get companies interested in your ideas, because if your idea fits an “unmet need” then it has a chance of becoming a success. It tells people there is a potential need for your solution. A need for a solution means – there’s a market for it!

B) What is done today

By looking at what is done in your practice today, you may identify un-identified problems. You need to be critical in every aspect of your work and continually ask – “Is what we do today optimal or sub-optimal? – Can it be improved?”

This will often uncover needs – you need to log these down – no matter how small they are. Some of the smallest needs in the world can eventually become a major product

C) Get Crazy – think outside of the box

Now you have found some problems – you need to start to work out how to fix them.

During this critical phase, no idea is too crazy as it will lead to more rational ideas as you “filter down” the idea to something that could be real (This in patent terms is called ‘Reduced to practice’)

But in the initial phase of your creative process – get crazy. Think of the most outlandish way to solve the problem and write them all down.

D) Imagine the future

Most great ideas were never based in the past or in the present – but in the future. Some of the greatest ideas in the medical device world have been the ones that have been considered “breakthrough” devices. Stents for example – At the time Palmaz & Schatz came up with this idea, it was inconceivable to imagine driving a small metal cage through an artery to prop it open. Today it is a gigantic business.

You must also lose the constraints of conventional thinking. If your idea is obvious today, then there's a good chance that it has already been thought of and tried. You need to move further out, think further ahead for your solution. Don't always think of "technology" constraints – most technological problems can find a solution. New methods and materials are invented every day that could make your idea become a reality. So think about the future.

The more original and futuristic your idea - the greater the chance that no one will have thought of it. already

E) Systematically collect ideas

Some great ideas have been sudden "bolts of lightning" but this is leaving your idea creation to chance. It is much better to become a systematic thinker of ideas. Many of the world's greatest inventors of medical devices (Semm, Foley, Ulmsten...) have been systematic in their approach to thinking of new ideas. They have mapped out the problems and systematically worked through possible solutions. Filtering out the impossible to be left with the probable.

Take time to do this in your day. Assess what you have seen that day in your practice and apply the principals above. Some days you will see nothing and think of nothing. But other days will be golden days when there are many problems – and many solutions.

Create a notebook and a system for collating these processes.

F) Write it down

So many ideas are lost because they are not written down. Make this a habit; it will pay dividends in your creative process.

Have a dedicated notebook –"Lab book" in technical speak. This is the place where you must date and record all of your systematic approaches to creating your medical device ideas.

Make sketches, write notes – write what does work and importantly what doesn't work and why.

When you have something that you think is important you **MUST** write it out clearly and have a witness (you can trust) sign your idea and date it. You must also sign that idea and date it.

These lab books will form a central basis to moving to the next phase – applying for patents and protecting your ideas.

Final notes

No matter how tempting you find it.

No matter how much you want to get advice (or compliments)

Under no circumstances should you ever share your ideas (in any format) or you risk losing the right to create a patent and make money from the idea.

Worse – as has happened so many times – your ideas can be stolen.

Log down the name of anyone that has access to your ideas, and date when they have seen it.