



## PREVENTABLE ERROR

The state of the NHS and UK cancer care raises many design issues. Billions has been spent on cancer research, and we have little to show for it. Yet the UK could easily become the leader in fixing another embarrassing cause of death: preventable error. In hospitals, it is the third-leading cause of death, behind heart disease and cancer. Preventable harm, rather than death, is about 20 times worse.

I suspect the true figures are much worse, since the estimates of death from error are based on analysis of patient notes, which are hardly likely to freely admit errors. My father died from a preventable error in a hospital last year, and his patient notes and death certificate of course don't say as much.

In my laboratory at Swansea University, we can significantly reduce error using novel design techniques, in some cases by factors of two or more. So far, sadly, nobody has been interested in funding this research because attention focuses on disease and fancy technology (such as big data and going paperless) rather than rethinking design to make healthcare safer. Cancer is tragic, but error more so, because it is obviously preventable.

Why is your iPad wonderful, but your infusion pump or dialysis machine a disaster? Why are cars safer than they were in the 1950s? In both cases, market pressures drive manufacturers to produce better things. But the market pressures that make consumer technology continually improve has yet to gain traction in hospitals. Still, if there was more awareness, we could save more lives than, say, an advance in treating breast cancer.

After thalidomide, we learned that drugs have side effects. Technology does too, but who is taking any notice? Until there is more research, patients across the NHS will be dying unnecessarily from preventable errors that could have been fixed by better design and the research that informs it.

In the UK, a third of cancer patients die within a year. My father died only a few hours after a preventable error. It's time to take error and design seriously.

**– Professor Harold Thimbleby FRSA**