

One to One Million



I have told the Physiopedia story many times, but I've never told the full story. I've been saving that for the people brave enough to invite me to do my first keynote. So it is truly a great honour to tell you this story today.

This is a story about about illness and injury, adversity and opportunity, having fun and making a difference. The power of dreaming big and working hard to make that dream a reality.

Lessons from illness

Now, not a lot of people know this but 23 years ago I was diagnosed with ME. Prior to this I had been a very active and ambitious young lady. I had just cycled around England, I had just come back from expedition in Mongolia, I was learning to windsurf, I was in my first year of my physiotherapy degree, I was loving learning and also enjoying a new and exciting social life. I was devastated. I left university, went home and spent the next 6 months in bed.

Those two years that I spent at home were life changing. The lack of understanding of ME at the time meant that I had no medical support, to the point that people questioned whether I was making it all up. I lost all my energy, I had a headache, boy did I have a headache for a long time, I lost my ability to concentrate, to read and to listen, I lost my muscle tone, I lost my social skills, and most of my confidence. I'm sure that you all have a picture of this challenging patient in your heads.

Skip forward 10 years. I have graduated from university, I'm married (to Tony), am running three small private clinics, I'm on a Masters program and an adventure racing team. I am living life to the max! I also have a new skill, I know how to take responsibility for my own health, and at this point in time, I knew I was on a downward spiral of energy consumption so, again, I gave it all up (apart from the marriage!), it wasn't for me.

Stepping out of the rat race

We moved to the south coast of England and became wardens on a caravan site, I think you all may know this better as a trailer park. Now this was fun! We spent time outside everyday, we did manual work and we lived on the beach. My 95 year old grandfather who was wheelchair bound following a stroke loved to visit us from his nursing home for his favourite fish pie. He called our rustic accommodation the shack!



Now living in a shack, being a gardener, a cleaner and a host is fun but it didn't challenge my brain, this is when I started to play on the computer. I was completely useless, but I was lucky to have in house techie help from Tony who was busy building his e-learning business. "Can I ask you a quick question" is etched onto his brain and still echoes around the office on a daily basis today!

The first website I built was Physiospot. I wanted a way to keep up to date with new research for my own professional development and so made a commitment to blog about the things that I found interesting and useful. These days this isn't very special but at the time Blogging was very new and it was the perfect way for me to keep up with to date with my clinical knowledge. It's also a great way to share my learning openly, to help others. This is now core to all that I now do. Through this openness I was discovered by Eugene Barsky, who some of you might know, he was at the time the

physiotherapy librarian at the University of British Columbia. His support and positive communications were a great confidence boost!

Next on the agenda was some e-learning work for a University to change some of their masters modules into online modules. I think this may have been one of the very first moves for the physiotherapy profession into e-learning, at least in the UK! At the time what we produced was at the very forefront of online learning, we were proud of what we had built. Working in this way, in the shack, with Tony, we became this small unique elearning team of an educator and clinician turned techies.

The big idea

In 2007 Tony dragged me, not quite kicking and screaming, to an elearning conference. It was completely eye-opening stepping into another profession, I was surrounded by nerds on laptops.



I didn't have a clue what was going on, a lot of it went straight over the top of my head, but the presentations on Wikis fascinated me. I wanted a physiotherapy wiki. Imagine if we could build a Wikipedia for physiotherapy, how amazing would that be! If we could capture the sum of all physiotherapy knowledge in one place online, one big online constantly updating textbook....

Installing the mediawiki software, the same software that Wikipedia runs on, was a bit beyond my techie skills at the time. It took me 6 months to persuade Tony to install it for me so that I could play with my little wiki. I would say to him, imagine if we can get hundreds, no thousands of physios all over the world editing this wiki how amazing is that going to be, and he'd say, it'll never happen. I would try to persuade him regularly, can I have a wiki, no. Can I have a wiki, no. Can I have a wiki, no. Now Tony is usually my voice of reason, he makes me see sense in some of the crazy ideas that I have, he keeps me grounded and helps me stay focussed. Just this time, I didn't want to back down. 6 months later he was prepared to do anything to shut me up so I got my wiki.

Starting from zero... (the lone nut finds some followers)



It's funny because, you know that video on youtube where the man is dancing at a summer festival on his own, initially everybody's looking at him wondering what he's doing, laughing at him, and then some people join him, and then more followers, and it ends up with the entire field of people dancing with him, it's all about him, a lone nut, starting a movement, people use it in presentations to demonstrate leadership. Well in those early days I got sent that video by several people, with the clear message that I was that lone nut!

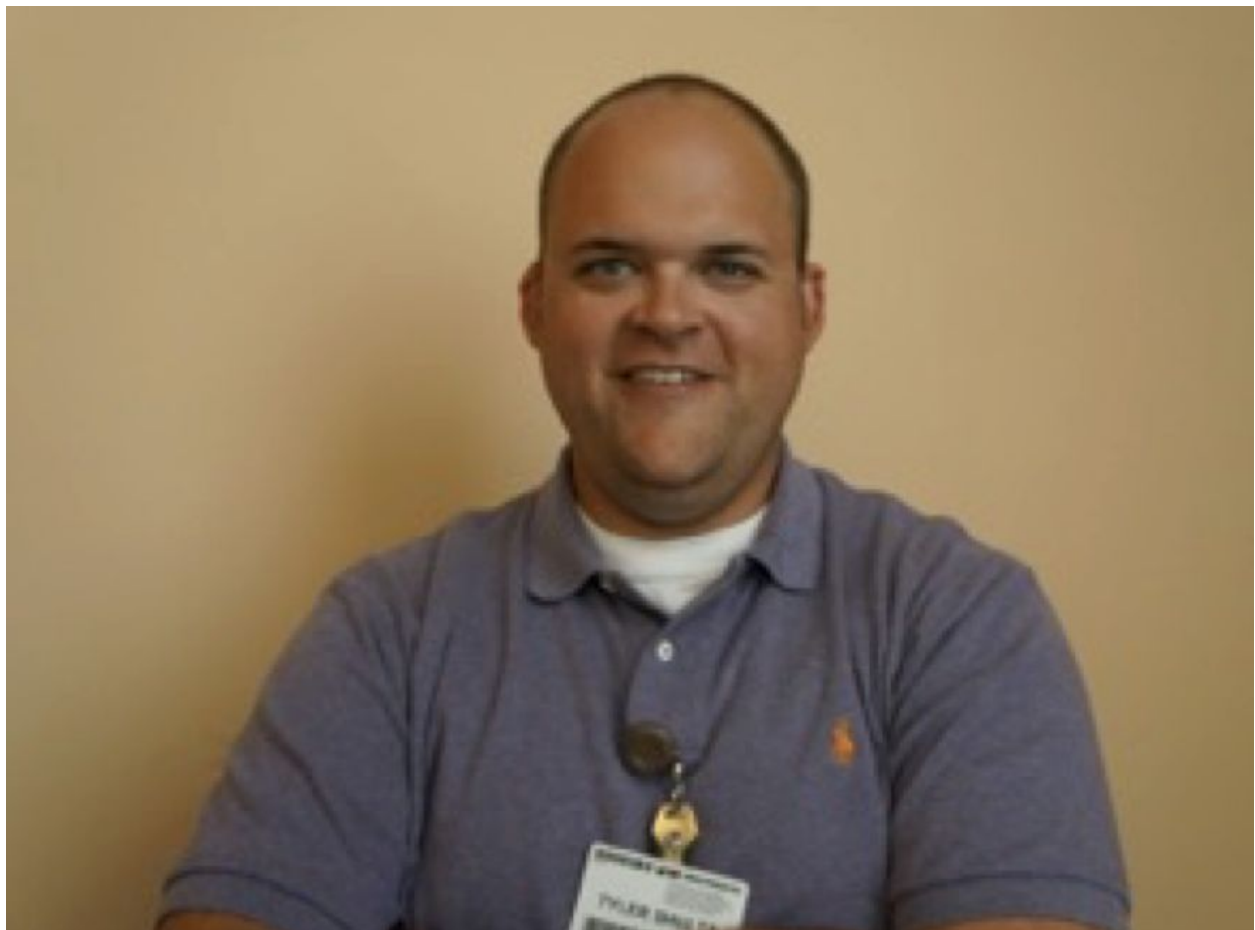


There I was, in the shack, creating a structure for the content of my wiki and then adding page after page after page, some with content but most just with a template waiting for everyone else to come along and do some writing with me. I think I initially created over 200 pages to make it look like we had some content! Then in March 2009 out of the blue I was contacted by aileen Barrett from the Royal College of Surgeons in Ireland. She had overheard me chatting to David Baxter from New Zealand about Physiopedia and wanted to run a student project. How exciting! It was an elective module and they worked in groups to create two new pages. One of those pages, the Auscultation page, remains one of the most popular pages on the site.

Then word gets out and we start to see some activity on the site, content being written, someone else writing pages!! The site begins to build momentum, other people are participating and the writing begins to be driven by the community. Only 6 years later we have run over 30 content building projects and there are nearly 2000 articles on the site. Did you know that we actually officially ran educational projects before Wikipedia?

As we've gone on this journey, building the roadmap as we go, I have learnt a lot about our global profession and many people who have contributed to PP have been a source of inspiration and motivation.

Meet Tyler Shultz



At the time Tyler was a physical therapy student in Georgia in the United States and had heard about Physiopedia from one of his tutors who we were running some ideas by at the time. Tyler's independent use of Physiopedia taught us how useful it can be

for people to write content to use at a later date for their own personal reasons. He wrote many new pages in Physiopedia and used them as revision notes for his exams. Amazingly Tyler did so much editing that he only dropped out of the top ten editors a few weeks ago.

I am always impressed with the people that work in PP in their second language and these days I am hearing about more and more training courses, in Brazil, Japan, Mongolia, that are including English components to their courses simply because if they don't know English they won't be able to access all the literature.

Meet Professor Peter Vaes



Peter is an educator from the University of Brussels in Belgium. He put a lot of faith in us in the very early days and 5 years ago started a content creation and review project with his students in their second language. They continue to review and update over 100 pages in Physiopedia on an annual basis. By putting so much faith in us in those early days Peter gave me a very good reason to make the Physiopedia project work, he also gave me the confidence to encourage people to work in PP in their second, or sometimes third language. We have learned a lot for the educational projects that we have run over the years.

Meet Elaine Lonnemann



Elaine is one of the hardest working people I know, she makes me feel very lazy! Not only does she have 4 boys, run a small farm, has alpacas, goats, dogs, bees and who knows how many other animals, she is the secretary of AAOMPT, distant tutor at University of Saint Augustine in Florida and associate professor at Bellarmine University in Kentucky. Elaine has run 5 different projects in Physiopedia with her students several of which continue on an annual basis. It is through her projects that we have learnt how much students enjoy working on projects in Physiopedia. From their feedback, we understand that students will produce better work when a paper based assignment moves over into an online professional resource. We also learned that they love working in a public professional resource because they feel that they are contributing to their professional community.

It's not just students working these projects, we have professional organisations like the PPA (Physiotherapy Pain Association) in UK that are developing the pain section as part of a CPD project for their members, IPTOP (International Association of Physical Therapists working with Older People) that are working on the older people section and the clinicians in St George's University Hospitals in London creating a trauma section.

So in Physiopedia we curate, analyse and openly publish the information and evidence that is available as a digestible source of clinically relevant information. This makes Physiopedia a great knowledge translation tool. This idea has been reinforced by two of your colleagues here in Canada. Anita Gross and her team at McMaster University gave us their Manual Therapy and Exercise for Neck Pain: Clinical Treatment Tool-kit and Alison Hoens, physical therapy knowledge broker in British Columbia gave us their toolkits on tendinopathy, electrotherapy, safemob and total joint arthroplasty. They truly saw the value that Physiopedia has to open and share their work to reach the masses. To translate the knowledge.



And let's not forget these guys, our long standing volunteers. We received some feedback recently from a volunteer that had just completed their orientation course "I have found that the experience of doing this course has re-invigorated my passion for ensuring clinical excellence". Wow! You know who you all are, you are amazing, you are our greatest supporters, you keep me going, you help me in my hours of need, and you have turbocharged the Physiopedia project. And some of you are CPA members, Laura Ritchie in the bottom left and Evan Thomas in the bottom right have both been with us for several years.

So my first followers gave me reason and confidence to carry on dancing, I was no longer that lone nut!



I am just a caretaker, Physiopedia is not mine, it's yours. It's a non-profit project that is free for you to use. There is no roadmap, it is simply the ideas and contributions of many that have given me something to build and take care of for our profession.

“Never doubt that a small group
of thoughtful, committed people
can change the world, indeed it is
the only thing that ever has”

-Margaret Mead



Making a positive from a negative

In January 2012 we moved to Chamonix in France where the sole aim was to become awesome at skiing. Where better than the adventure capital of Europe right? 4 days later after metres of fresh powder I am skiing down a slope on the last run of the day and make a tired duff turn. Knowing I wouldn't make the turn I consciously gave in to the fall. It was a slow twisting fall, and as I went down I heard two very audible rips. I sat there in the snow with my ruptured ACL, MCL, and tibial fractures, I waved helplessly at Tony far down the slope who waved back at me.



It was a surprisingly calm moment. What now....? I thought as I sat up to my waist in snow with 12 months of rehab stretching out in front of me? OK, lets turn this into a positive, I'll put all my energy into Physiopedia and see if we can make something special. I really did think that!

It's funny now when you look at the visitor stats for Physiopedia because from January 2012 the visitors dramatically started to rise and the increased engagement with the project was obvious.

Fortunately for Physiopedia (not so fortunate for me!) my knee injury was a bit more complex than a simple ACL and my rehab took three years. As a target, Tony and I gave ourselves until WCPT Congress in 2015 to build a valued and sustainable project for our profession.

Open courses - sounds like a great idea lets do it!



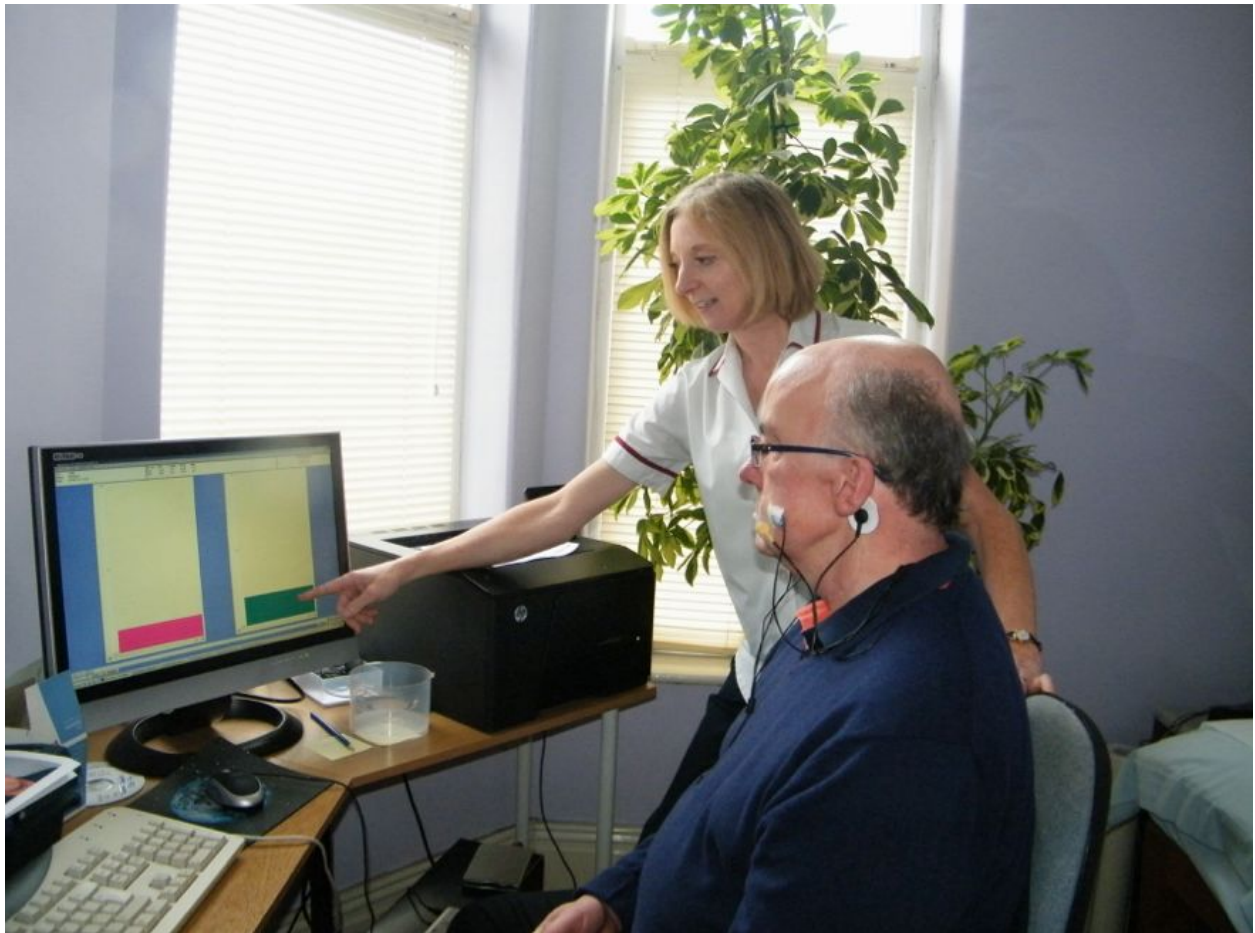
In early 2013 Michael Rowe, a university lecturer at the University of Western Cape in South Africa, came to us with the idea of using Physiopedia to deliver his ethics course for his own students whilst also opening it up for any physiotherapist to join in. At this time MOOCs (Massive Open Online Course) were all the rage in elearning so we were interested in exploring how this might work in Physiopedia. Now Michael had just finished his PhD and had designed a set of design principles for creating learning spaces so him taking the lead on this project was great. We had around 120 students on the course. Half were Michael's students and half were our own Physiopedia students from all over the world. The course was eye opening, it went really well with some interesting little stories and we met some great people. There were people from all races, all religions from all over the world. We talked about discrimination, euthanasia and torture.

Meet Sheik Abdul Kadhir



We met Sheik on this ethics course. Sheik introduced himself as someone who didn't really want to be a physio, he had wanted to be a doctor! However, with some direction, Sheik engaged in that course and today is one of our most enthusiastic volunteers, recently being the project assistant on our open course on management of the individual with amputation. It feels like he's proud to be a physio and we're proud to have him on the team.

Meet Wendy Walker



We also met Wendy on the professional ethics course. Wendy is an experienced clinician in the UK who specialises in Facial Palsy with super amounts of energy. I remember meeting her at the CSP conference in the UK, we went for a coffee and ate huge slices of cake. I came away thinking, if only I had all that energy, how does she do it? Maybe I should eat more cake!! Being of a slightly older and less techie generation, Wendy had serious concerns about the learning portfolio that students had to complete as part of this course as it was written online in a personal blog. This lack of confidence wasn't helped by her son who laughed at her when she told him she was going to start blogging! However, she persevered and today she is a confident Physiopedia editor, our resident Neurology manager and the Facial Palsy expert in Physiopedia. She has created a small section of Physiopedia that is dedicated to Facial Palsy which she uses with her patients and in the teaching to fellow PTs.

Physiopedia open courses get massive

Through the course that we ran with Michael we ended up with a great little model for running and scaling up with other courses.

Meet Lisa Harvey



I met Lisa, an associate professor at the University of Sydney, on a technology panel at the WCPT Congress in Amsterdam. Several years later when I asked Lisa in an interview why she decided to run the physiotherapy management of spinal cord injury course in Physiopedia she said, because you persuaded me to! It's true, I remember when I first put the idea to her over Skype, it was very soon after my first knee surgery from my bed at home. Lisa had told us that she was troubled by the poor management that individuals with spinal cord injury were getting around the world. So she went on a

one woman mission to teach people how to better manage this client group. An open course seemed like the perfect way to reach the masses. Despite some nervousness about this new form of online education Lisa was excited about the prospect of using an open online course to expand her teaching, and it worked. We had around 4000 people from over 100 countries register for that course which was accredited with the WCPT.

That course was completely mind blowing. The interactions and peer-to-peer learning that took place were amazing, also in the discussion forum we could see evidence of direct impact on clinical practice and patients lives being improved or possibly even saved. Sanette from South Africa was able to educate the doctors in her work place about the dangers of mobilising people with DVT's, this was actually a common theme! There was a comment from someone in the Philippines who said that they had a spinal injury patient in the clinic for the first time and they were delighted because they now knew what to do with them. We even had classes of students and their tutors taking the course to earn their certificates together.



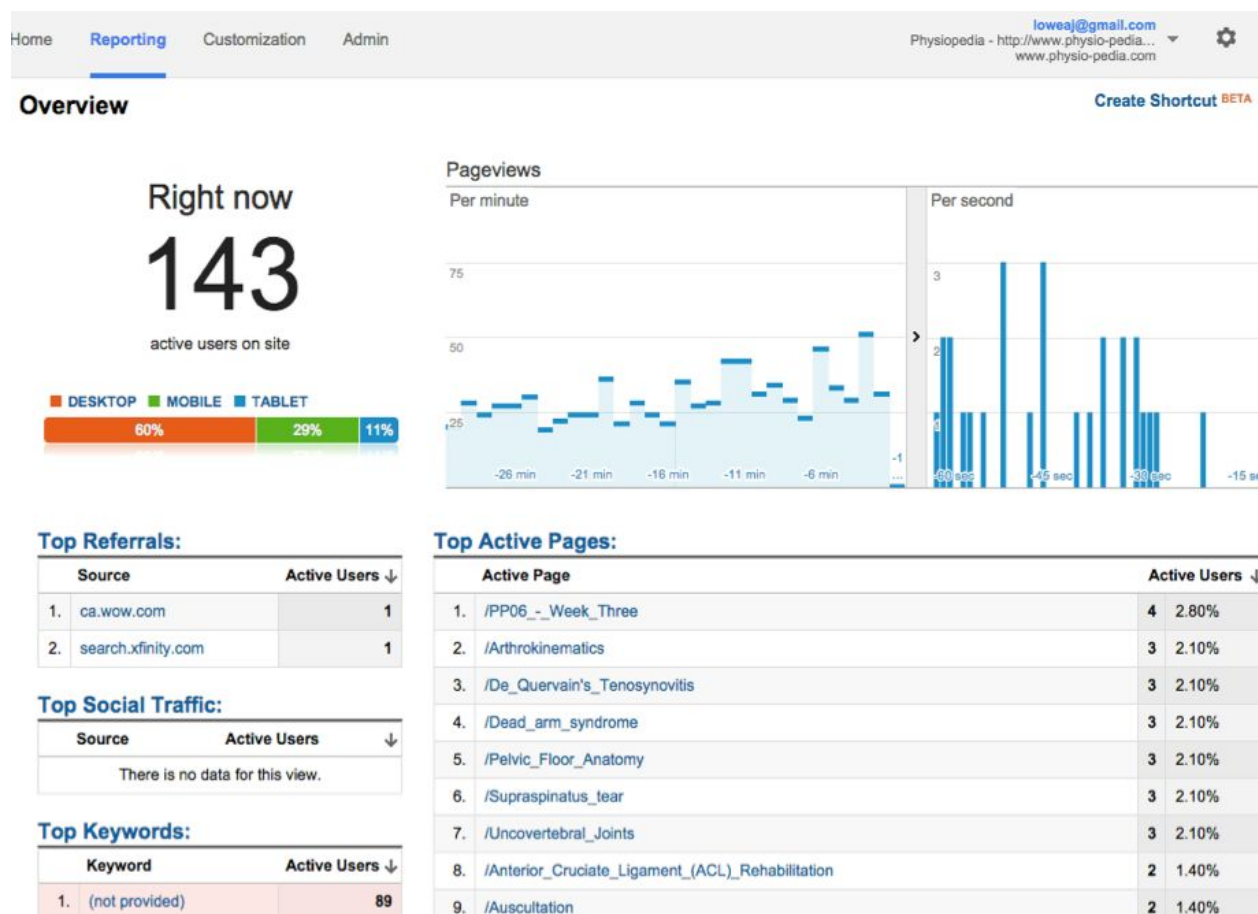
This whole course opened up our eyes to the reach that Physiopedia now had and the possibilities for future global networking and learning. It was clear that this could be a great complement to existing physiotherapy education.

Currently we are running our third open online course on the management of the individual with lower limb amputation. It's a 6 week course that we are running in collaboration with the ICRC, International Committee of the Red Cross and we are just coming to the halfway point. There are 7500 people registered on this course, 577 are from Canada. Hands up! I hope that you are enjoying it!

Where are we now



So it's June 2015. We became the first non-profit partner of the WCPT IN 2013 and the recent WCPT Congress in Singapore was our deadline. We were completely blown away by the constant love and positive vibes that populated our stand in the exhibition hall. Everyone knew who we were, we had people coming to find us to specifically say thank you, one person even said "thank you, you saved my degree", which is also a little bit concerning!



At any one given time there are around 90 to 120 people using Physiopedia and this use is approximately doubling every year. We've been visited from every country in the world except Western Sahara. So if you're off to western sahara anytime soon you know what to do! In the last month alone we had around 850,000 visits. We're not quite at that one million mark (which I was aiming for for this conference!) but we aim to be there very soon. We've gone from one person, me, to nearly one million visits every month. I think we are on the verge of realising this one big idea for a free open resource that contains the sum of all physiotherapy knowledge.

We, Tony and I, consider Physiopedia a success, we made it happen. It still hasn't reached its potential and we are going to try hard to fulfil that potential. What hasn't been a success is my quest to become awesome at skiing! I have a lot of potential and I am going to try hard to fulfil that potential. I did however get a bit better at ice climbing!



The future

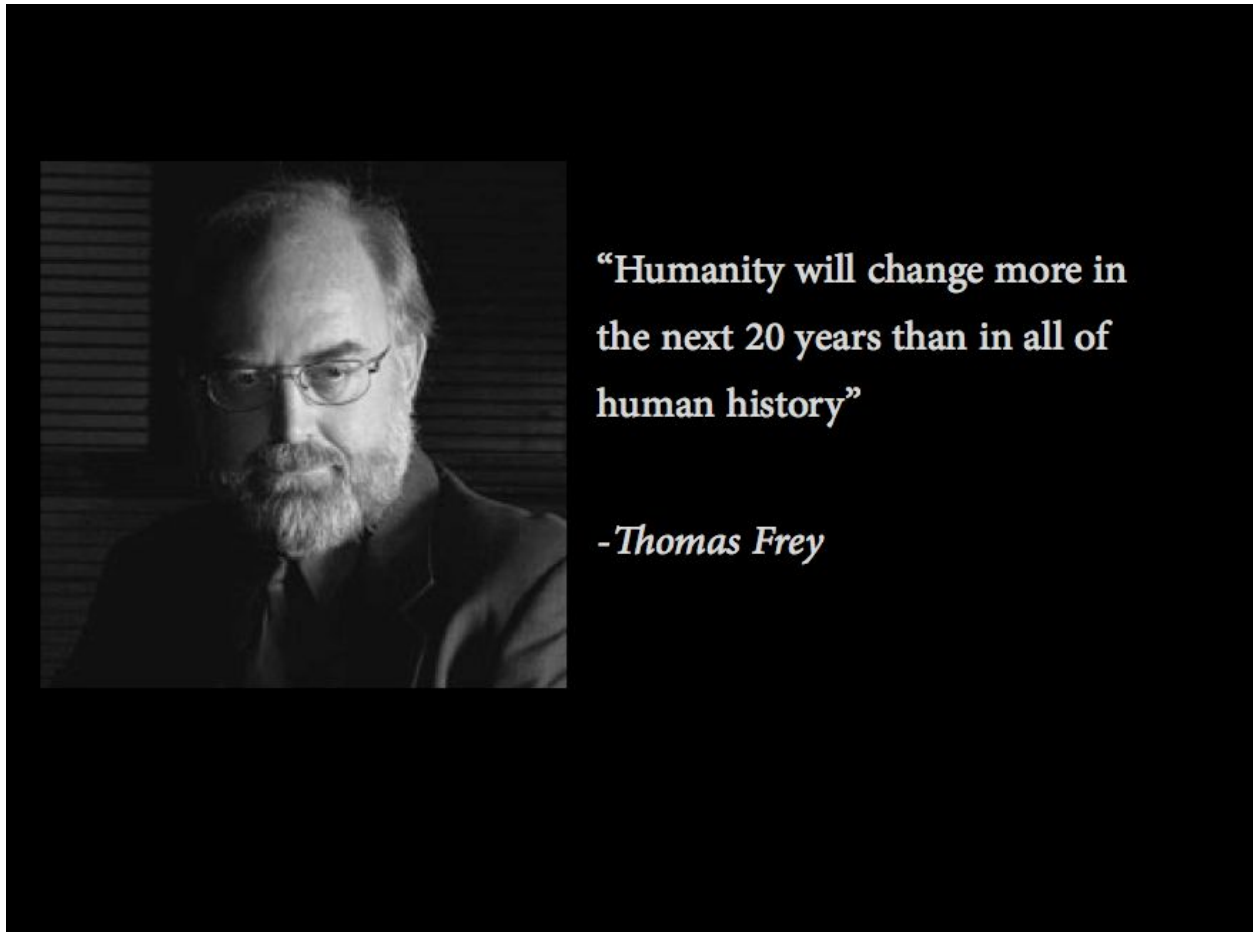
So what does the future have in store for Physiopedia? We want to run more courses that reach all corners of the physiotherapy world, we want to involve more people in content building, reviewing and updating, we want to make a difference. But mainly it will be directed by you, our users, we will take the project where you want it to go and in some respects where healthcare and technology developments take us.

I am always wondering what is around the corner for our profession. We are going to become more involved in preventing ill health. We will be threatened by other professions encroaching upon our domain. We will be dictated to by health insurers and we will have to respond. But this isn't the future, this is the present, we should be acting on this now!

We are a very traditional profession, we are reactive and slow to change. This has been evidenced recently by the profession's recent slow embrace of social media. The

way that we are using social media today, I saw the same at that elearning conference 8 years ago. It doesn't have to stay this way. The world is changing and we need to change with it! There are big health care changes ahead and our profession is ripe for disruption.

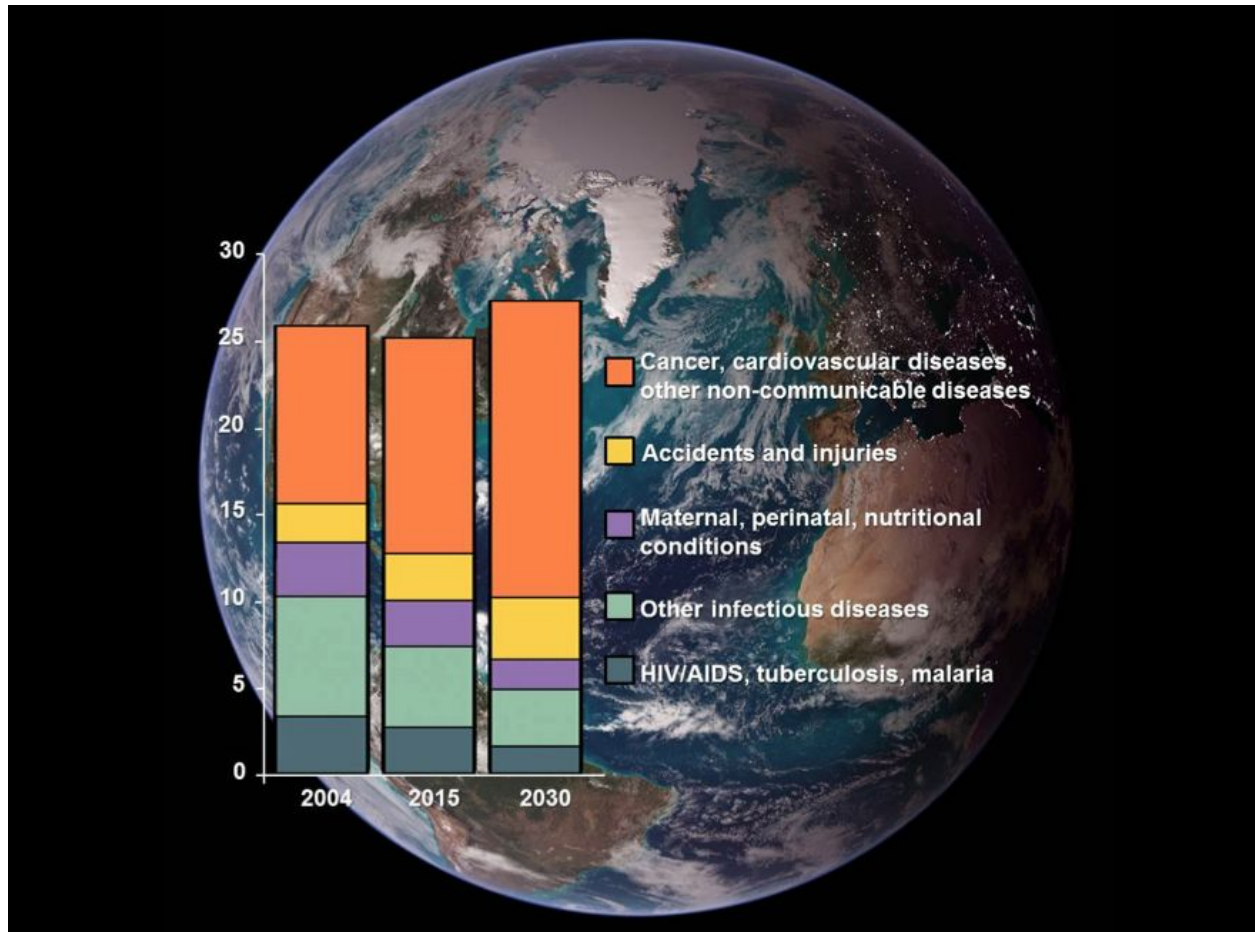
Thomas Frey couldn't have put it better than when he said "Humanity will change more in the next 20 years than in all of human history"



Non communicable diseases

What if ill health becomes normal? Non-communicable diseases are the leading cause of death worldwide and they are on the rise. More than 38 million people die annually from NCDs (63% of global deaths), and 40% of those are premature. Right now you all have a 20% chance of dying prematurely due to a non-communicable disease. And the predictions for the enormity of the human and financial burden of chronic disease is staggering. WHO predicts that if we go on as we are by 2030 55 million people will die

every year from preventable non-communicable diseases. What if we continue to lose the battle? Imagine a world where every person has a non-communicable disease. A world where every person becomes disabled in some way by their NCD. A world where our children don't know what it means to be healthy. It's not beyond the realms of possibility.



On the world stage the focus is shifting from communicable disease to NCDs, WHO have an agenda with the Global NCD Action Plan and many are considering how they fit into the post 2015 development goals. We can also contribute but there is going to have to be a paradigm shift in our profession to get involved and alter the course of this global threat. We need to step up.

Technology

Conversely, the progression in technological development is unrelenting and staggering and may lead to a world where there is no ill health!

It is predicted that by 2025 a single computer will have the processing power of all the human brains on the planet, and it's likely that will fit in your pocket! This gives rise to conversations about, artificial intelligence, and the rise of the machine. Maybe health care professionals will be replaced by machines?



IBM's Watson, is a super computer that can learn. It can observe, interpret and analyse over 30,000 documents per day. He is famously the computer that went on Jeopardy and beat the two previous reigning champions. Now Watson is learning to make diagnoses and treatment recommendations. People are talking about machines' taking the place of doctors, doing the same work, with better results, for a lot less money. But just how far can the automation of medicine go?

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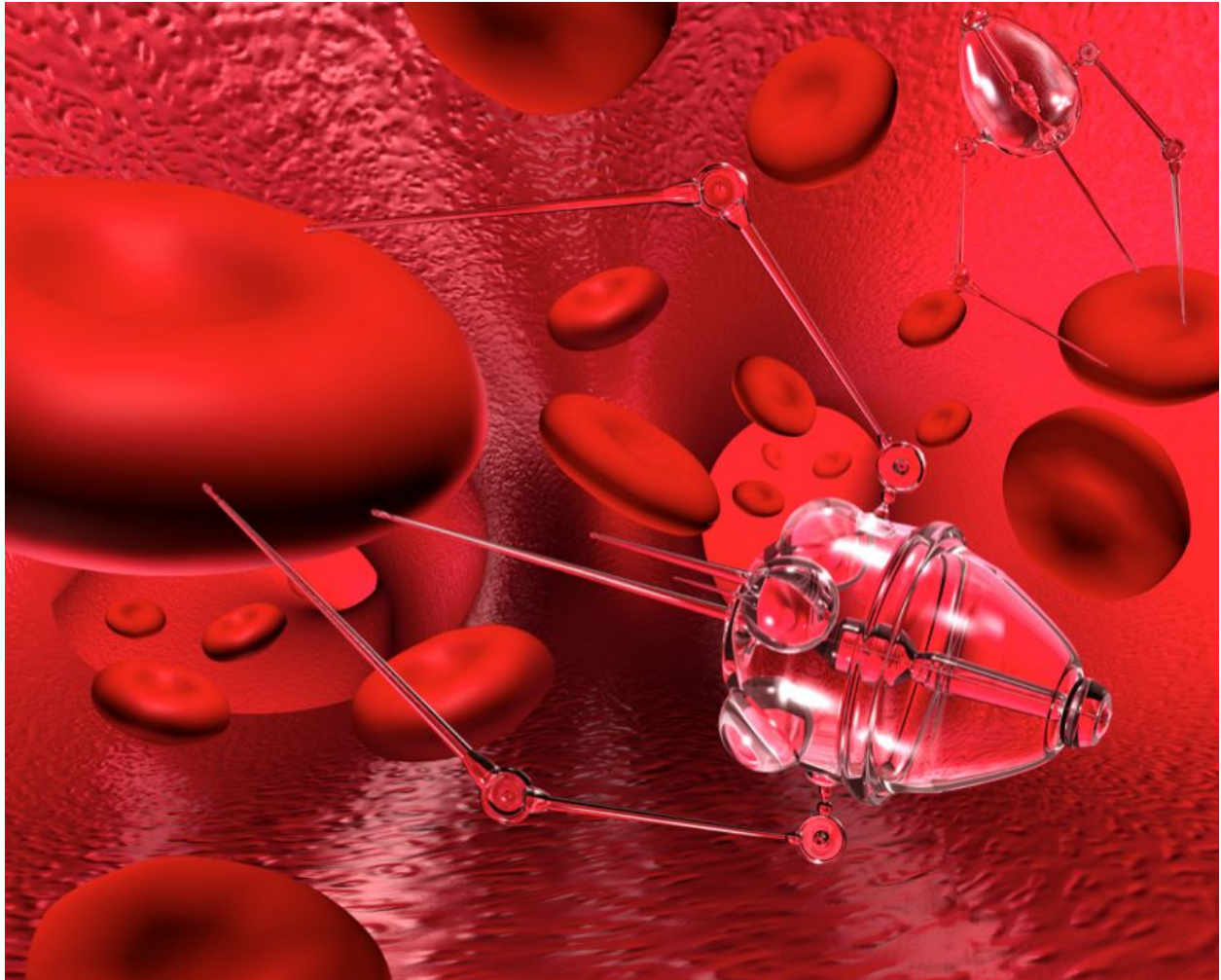
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Have you heard of the X Prize? It's founder Peter Diamandis is an inspiration for us all to think big. Peter wanted to go to space so he trained to be an astronaut, realising that he would never actually become an astronaut he created a competition where winners would be the first team of people to create a vehicle that would take 2 people to space. There was a \$10 million prize. It took 8 years. Since then there have been many X-prizes and one of the current contests is for the first team team to build a portable, wireless device in the palm of your hand that monitors and diagnoses your health conditions, a device that fits in your pocket that is effective as a team of specialists. The end result will give individuals far greater choices in when, where, and how they receive care. This time it's not going to take 8 years.

What if health care goes completely online with patients doing all medical consultations virtually, with their X prize pocket device and Watson? What would this mean for us?



Who's heard of nanobots? Nanobots are small artificial organic devices that travel the body seeking out and removing disease even before it presents itself. There are people training bacteria to detect and treat cancer tumors from within. These nanobots may remove disease, inflammation and other cellular changes even before we know it is there. And if they can't do this they will synthesise and deliver medications directly to the systems and at the specific time of need. Just imagine if ultimately there is no ill health in the future?

Let's not even get into human genomics, informatics, next generation DNA sequencing technologies, and stem cell advances. This brings us to a world where people will be offered personalised medicine that matches their genome, they will be storing stem cells to heal themselves at a later date, growing organs and even limbs. Where do we fit into lives being extended in this way?



One disruptive medical technology that is happening right now is quantitative health, self health monitoring. Patients will start to bring you their personal medical data that they have recorded on their phone or watch. They will tell you exactly how much exercise they did, what they ate, their sleep patterns, what their heart rate, blood pressure and other vital statistic trends are. Health insurers are going to use this data to allow or deny treatments. Health care will be more data driven and about wellness instead of sick care. How are you going to use this data to improve your patient outcomes or your client lifestyle management?

Major challenges ahead, thrive not react

There are major challenges ahead for our profession. We all need to think about the future, being proactive, instead of trundling along in the present, being reactive. We need a business plan in place for all these potential scenarios, and to have our position, our role in place. We need to thrive in the face of change. We are in a position to respond and create our own disruptions to the medical systems and the health and quality of life of our patients. We could be the profession that really takes on the challenge presented by NCDs. We could be a profession that thrives in the developments of technology.

Lessons

Ill health and injury have been two personal adversities in my life but both have presented me with great opportunity. I have learnt to take responsibility for my own health and I have learnt to make opportunity out of adversity. I have also learnt that it takes hard work and selfless unlimited perseverance to make things happen. Without these lessons I am sure that I wouldn't be as healthy as I am and I am sure that Physiopedia wouldn't exist today.

So what does all of this mean for you? What challenges am I leaving you with?

I want to encourage you to nurture your ideas, however big or small. We all have ideas and we all have the ability to make them happen. It's doesn't have to be about business plans and fundraising and venture capitalists and endless meetings, it's about having faith in your idea, being brave and starting small. You have the power to make a big difference.

The big idea to build a free open online resource that contained the sum of all physiotherapy knowledge did not seem possible. But look where we are today. From just one of you you can make a difference to a million people.

What's your big idea? What ideas have you had at this conference? How can you affect one million people? What is the physiotherapy X prize? In the words of Peter Diamandis, this isn't about egos, I want to shift your aspirations to think big.

But, having big ideas isn't for everyone, all big ideas need supporters. Be a follower, help other people to realise their big ideas. And what better place to start today than by supporting Stephen Fletcher.

You are the future of our profession

Following Scott Jones message - Don't be afraid, be brave. Think big, think global and be inspiring!

Or hang out with a lone nut!

“Some people want it to happen,
some people wish it would
happen, others make it happen”

-Michael Jordan

