

All Things Open

Harry Truman is credited with saying “It is amazing what you can accomplish if you do not care who gets the credit.”. At a recent care show I heard care providers bemoaning what they saw as a lack of progress in homecare IT over the last decade and the absence of “end-to-end” systems. If ever there was a time to collaborate and find more efficient and effective ways of working, it is now. This article explains how using open technologies (open standards, open source and open data) and not caring who gets the credit could speed up progress and lead to more joined-up solutions.

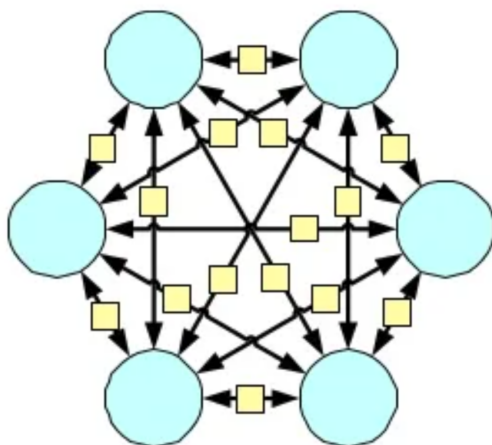
An “open” technology is one where the user has the right to see “under the hood” and even to make changes (sometimes with restrictions). This is in contrast to proprietary technology which is generally a black box that an end user has little understanding of and which can only be modified by the supplier. This can lead to supplier lock-in, a lack of innovation and increasing prices. In this article I aim to show how more “Open-ness” could lead to better, cheaper systems.

Open Standards

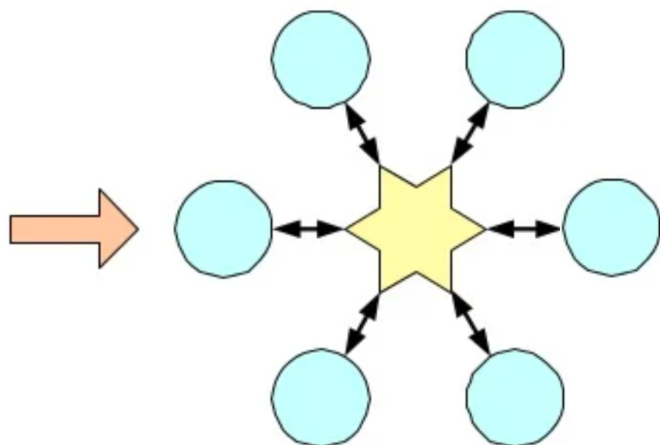
Where there are gaps between systems (eg. between scheduling and point-of-care systems in homecare) interfaces are developed to specifications agreed by the system providers involved (in practice this generally means that the smaller / newer company does what it is told).

If open standards existed then each software provider would only have to interface to the standard(s) rather than every other software supplier. The market could develop more quickly, with new entrants only having to write one interface.

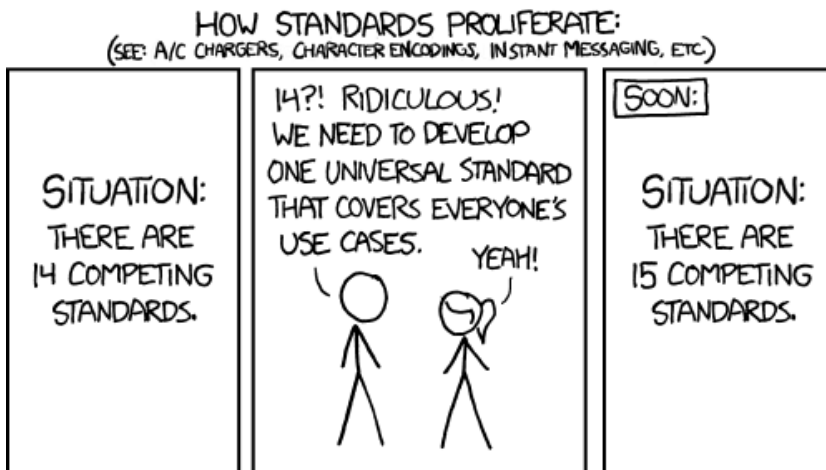
Without Standards



With Standards



Open standards have transformed many industries - booking a hotel room is much easier (and more competitive) than it was a decade ago. In health there are *several* standards (not a good thing - see cartoon below) that allow interoperability between systems including SNOMED-CT, OpenEHR and HL7-FHIR - the last two of which are open standards. When HL7-FHIR was launched there was a step change in the rate of development of health software.



The [PRSB](#) last year launched the “About Me” standard, which is the first open standard applicable to home care. It should ensure a good standard of care provision and could (if adopted by commissioners) save significant work setting up care plans.

Open Source Software

Often known (much more enticingly) as “free and open source software” or FOSS, this is software where anyone (including user organisations) can access and modify the source code. As explained in the introduction, this is in contrast to proprietary software, where the source code is kept under wraps. Sometimes companies will try to jump on the open source bandwagon declaring “we are open source”, when actually they only use some FOSS libraries (which these days almost everyone does).

FOSS allows users to avoid supplier lock-in, generally keeps prices in check and ensures minimum standards are met. Users (or more likely a consortium of users) can add required functionality. The precise details of how they can do that varies according to [licence type](#) - a liberal licence has no requirements, whereas a copyleft licence requires them to make their code available as FOSS.

Most open source projects are around the technology stack itself (operating systems, databases, almost all internet tools) but increasingly FOSS solutions are available for vertical markets including [healthcare](#). One of the most successful healthcare products of all time was open source - the VistA system was used by the largest integrated national healthcare delivery system in the USA and had the highest [user satisfaction ratings](#).

There have been several commercial successes in the open source space, including WordPress and Red Hat (who were first to turn over \$1 billion in 2011). As licences cannot be sold, other business models have been adopted - such as charging for support, hosting, training and consultancy.

There is currently no open source homecare system, but ReallyCare CIC’s Plait (as in interlocking strands) will be open sourced and to that end is built on an entirely open source stack.

Open Data

Open Data is data that is freely available without charge. Open Data can [lead to great improvements in people's lives](#) - when public transport providers started publishing their routes and operational data suppliers developed apps that today massively simplify travel.

Clearly, due to privacy concerns, homecare providers are mostly consumers (rather than publishers) of open data. Examples include lists of medicines, GPs and practices, pharmacies etc.

There are ways, though, in which homecare providers do contribute to open data, albeit in a convoluted way. Data that is provided to Skills For Care, CQC and local authorities frequently contributes to open datasets available on the NHS websites and elsewhere.

An Explosion?

Inventor of the world wide web Tim Berners-Lee said "Technology innovation is starting to explode and having open-source material out there really helps the explosion". The converse is perhaps true - the absence of open source and open standards is a brake on progress, which explains the perceived stagnation. Maybe we could all do with a more "open" mindset?