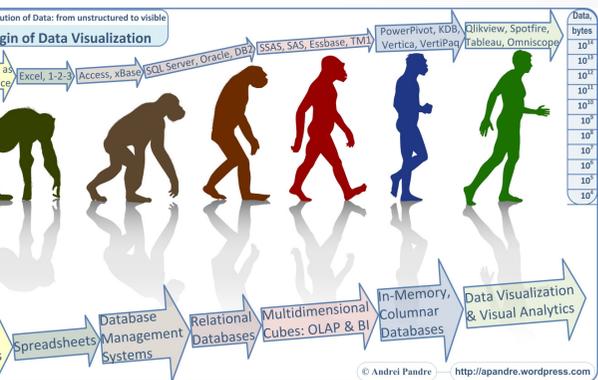


Introduction:

In fifteen years ago the legal and financial sectors moved from paper to computerized systems; only now is the medical field considering electronic medical records (EMR) on a large scale. With the introduction of EMR there is an unprecedented opportunity to capture data about patients. Adaptation of Business Intelligence (BI) software is relevant to the modern burns unit. Data visualisation can be considered to be "information that has been extracted in some schematic form, including attributes or relationships, for the units of information"¹. The data that is collected is under utilised because the way in which it is presented does not engage the user and the lack of flexibility of perspective. This poster illustrates our attempts to use modern software to improve user engagement.



As speed and software improves, users are now able to intuitively interact with data visualisation software that facilitates multiple end user perspectives...

Methods:

Permission was obtained from the state adult burns unit to run a DIY Report for the past 10 years of South Australian burn data. De-identified data was uploaded to a secure business intelligence platform.

A password protected and interactive report was generated 'Ten years in the Royal Adelaide Hospital Adult Burns Service', this report includes interactive graphs/tables allowing the clinician to not only read but to interact with the presented data. Data visualisations were embedded into the NBR (National Burn Repository) 2013 report, such that the public document was made interactive.

Results & Discussion:

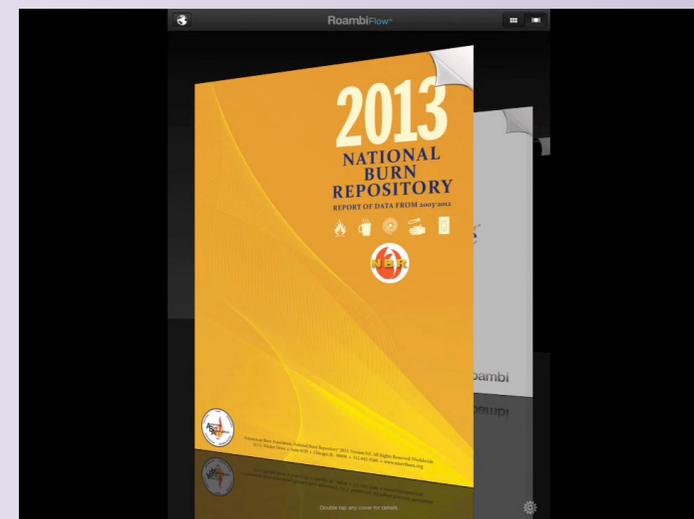
The interactive report was published in July 2013. All publications for the RAH Burns Unit, including videos, powerpoint presentations, journal articles and websites can be included and viewed in a single secure password protected document.

The feedback we have had when demonstrating this tool both locally and internationally (with the NHS UK) is unanimously positive. The predicted growth in this sector is phenomenal (compound annual growth rate of 23.7 percent from 2012 to 2017)²

We propose a demonstration and discussion of this software. Future studies (for the 2014 ABA meeting) have been designed to construct a 'user engagement/satisfaction' likert scale, allowing the team to assess more accurately the engagement of users with an interactive data visualisation tool vs. the traditional static PDF.

Conclusions:

It is high time for the medical industry to use the data it collects. There is a significant effort involved collecting data for the BI and other registries, users need to engage more frequently and fully with available data to maximise the influence of these registries on practice.



1. An outline of the business intelligence software we adapted.
2. A demonstration of the NBR 2013 interactive report.
3. Burn type and theatre utilisation data illustrated over years.

References:

1. Yau, Nathan (2011), Visualize this, the flowing data guide to design, visualization and statistics, Wiley, p. 384.
2. Markets & Markets 2013, viewed 02/04/13 <http://www.marketsandmarkets.com/PressReleases/healthcare-data-an>

Guide to Data Visualisation in the Modern Burn Unit

