

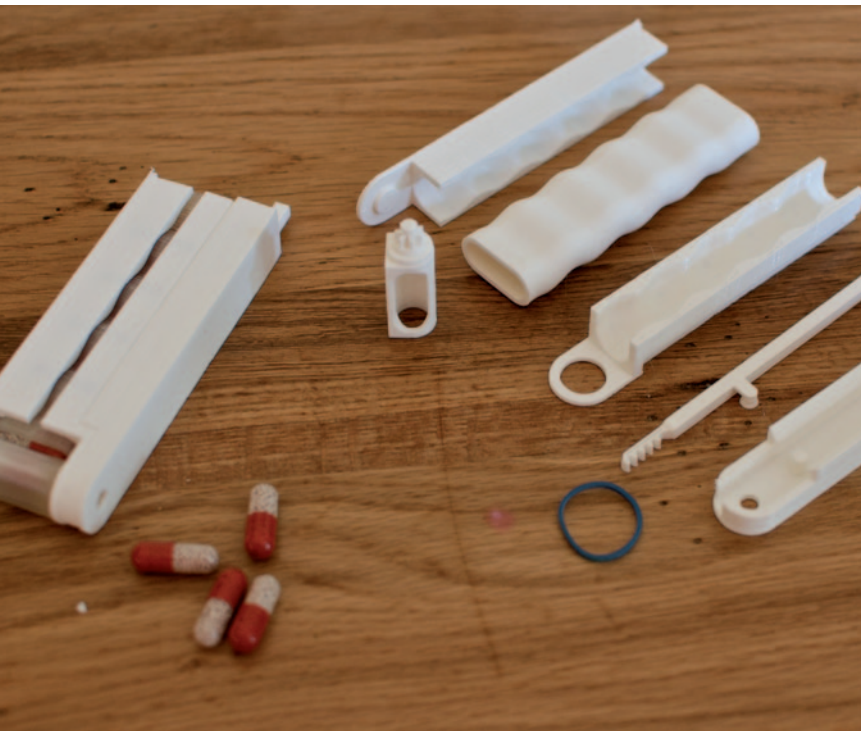
# CLAHRC BITE

Brokering Innovation  
Through Evidence

Collaboration for Leadership in Applied Health Research and Care

**BITE 14**  
September 2013

A bite-sized summary of a project within CLAHRC for South Yorkshire



## Open Design and Medical Products; 3D printing and Cystic Fibrosis

Using open source design, a community of people who live with cystic fibrosis was created who meet online to collaboratively design medical products from their own lived experience.

The project is linked to the Cystic Fibrosis ward at Sheffield Teaching Hospitals NHS Foundation Trust, as well as encompassing participants from around the UK and North America.

This method allows people typically barred from collaborative design (through being immunocompromised) to have a voice for the first time in the development of devices crucial to their quality of life.

△ This project is hosted by the CLAHRC SY User-Centred Healthcare Design theme.

Including the people who use medical products in their design and development is a positive activity to undertake, with benefits shared by the user (products that better fit their lives), and the producer (products that are more desirable / less likely to be abandoned).

Some medical product companies use inclusive design methods to achieve this, yet the industry as a whole does not follow this trend.

Some people *cannot* participate in a collaborative design process due to:

- being immunocompromised
- having a rare condition and therefore being geographically remote
- having a taboo condition

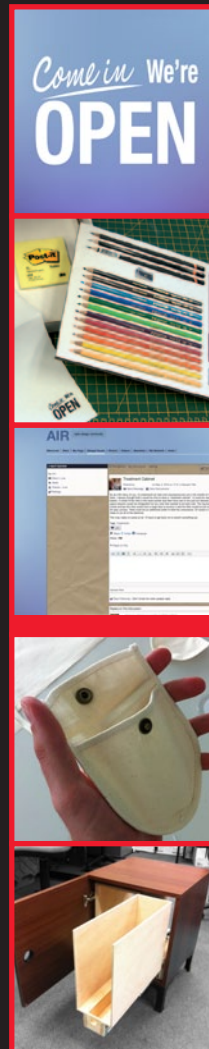
Open source design presents an opportunity to allow those people traditionally barred from collaborative design to participate and to have a voice. Facilitated by the internet, and distributed digital manufacturing such as 3D printing, people can collaborate via a social network without the requirement to meet at a specific time and place.

For further information about the UCHD theme please contact: **daniel.wolstenholme@sth.nhs.uk** or visit our website at: **[www.clahrc-sy.nihr.ac.uk/theme-uchd-introduction.html](http://www.clahrc-sy.nihr.ac.uk/theme-uchd-introduction.html)**



## References

DEXTER, M. ATKINSON, P. DEARDEN, A. (2013). Open Design and Medical Products: Irreconcilable Differences, or Natural Bedfellows? [online]. In: Crafting the Future, the 10th European Academy of Design conference, Gothenburg, April 17-19 2013. Last accessed 09 September 2013 at: [http://meetagain.se/papers/four/ead\\_2013\\_matt\\_dexter.doc.pdf](http://meetagain.se/papers/four/ead_2013_matt_dexter.doc.pdf)



## About CLAHRC for South Yorkshire

There are nine CLAHRCs in England. Our remit is to undertake applied research and implementation activities, and to build capacity within our partner organisations. CLAHRC for South Yorkshire is a partnership between universities, the NHS, other NIHR initiatives, patients, charities and industries.

This is a summary of independent research within CLAHRC for South Yorkshire. This project was kindly supported by Sheffield Hospitals Charity (Registered Charity No. 1059043) via NIHR CLAHRC for South Yorkshire.

CLAHRC for South Yorkshire acknowledges funding from the National Institute for Health Research. The views and opinions expressed in this document are those of the authors, and not necessarily those of the NHS, the NIHR or the Department of Health. CLAHRC SY would also like to acknowledge the participation and resources of our partner organisations. Partner details can be found on our website.



**National Institute for Health Research**