HEDS develops model to measure cost-effectiveness of telemonitoring

Mainstreaming Assistive Living Technologies – the MALT project – is a three-year project funded by the Technology Strategy Board looking at barriers to the uptake of ALTs. Led by Professor Mark Hawley within the Health Services Research section in ScHARR, this ambitious project consisted of four workstreams to examine individual facets of this problem.

Workstream 1 has looked at providing more accessible cost-effectiveness and financial information to assist in the planning, commissioning and contracting of telemonitoring services. This workstream undertook interviews with stakeholders from the NHS, private service providers and technology manufacturers, to identify what information they required to make informed decisions about the procurement and provision of telemonitoring services. These specifications were then transformed into a research model of financial flows and cost-effectiveness, which was then tested on two planned deployments of telemonitoring. Finally, this research model was converted into an online model that is free to use.

The key features of the model are that different telemonitoring service models can be specified in terms of number of units, effectiveness, patient sub-group, length of deployment, etc., and then cost-effectiveness estimated via a disease model based on Clinical Commissioning Group specific hospitalisation data. Costs are specified for each stakeholder as ‘one-off’, fixed and variable, thereby allowing detailed profiles of costs over time to be calculated for multiple perspectives. It is this ability to produce detailed financial outputs for service providers, together with cost-effectiveness information for commissioners, that makes this modelling unique.

Piloting of the online model was completed in October, with final reviews due in November, with the model going live on December 1st, via the MALT website (http://malt.group.shef.ac.uk). The team involved in this were Simon Dixon, Alan Brennan, Praveen Thokala, Pete Dodd and Kinga Lowrie.

To read more on this story, visit www.sheffield.ac.uk/scharr/sections/heds/newsletter/malt

Short Courses

<table>
<thead>
<tr>
<th>Dates</th>
<th>Name of course</th>
<th>Course content</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 November 2014</td>
<td>Identification and Review of Evidence for Models</td>
<td>The course will enable participants to develop an understanding of the methods available for the identification and review of evidence to inform cost-effectiveness models.</td>
</tr>
<tr>
<td>12-13 March 2015</td>
<td>Utility Data for Health Technology Assessment</td>
<td>The course outlines the practical requirements of measuring utility and obtaining utility data for health technology assessment for agencies such as NICE and explores recent research in utilities including EQ-5D-5L valuation and measuring subjective well-being.</td>
</tr>
<tr>
<td>14-16 April 2015</td>
<td>Systematic Reviews and Meta-analysis</td>
<td>The course provides participants with an introduction to methods for conducting systematic reviews in health care, with delivery of sessions based on lectures and practical exercises.</td>
</tr>
<tr>
<td>29 April – 1 May 2015</td>
<td>Application of Psychometrics for Health Measurement</td>
<td>The course provides an introduction to psychometrics as applied to health, covering the core psychometric and statistical methods used in scale construction and the development of multi-item patient-reported outcome measures (PROMs).</td>
</tr>
<tr>
<td>12 May 2015</td>
<td>Rapid Review Methods</td>
<td>The course provides insight into the range of rapid review methods that can be used for, and adapted to, any particular review, enabling the delivery of methodologically rigorous reviews that meet the needs of decision makers.</td>
</tr>
</tbody>
</table>

Further details and booking information can be found on our website www.sheffield.ac.uk/scharr/shortcourseunit

MSc Courses

- MSc International Health Technology Assessment, Pricing & Reimbursement
- MSc Health Economics & Decision Modelling
- MSc Economics & Health Economics

For information on all masters courses, visit www.sheffield.ac.uk/scharr/prospective_students/masters

HEDS regularly recruit new staff. For information on jobs, visit www.sheffield.ac.uk/scharr/vacancies

HEDS Blog

The HEDS blog can be found at http://scharrheds.blogspot.com and is kept regularly updated. It is a mine of useful information for anyone working in the areas in which we specialise.

HEDS offers more training in decision-making

Also in this issue...

- Superfast Value in Information tool
- New model for telemonitoring cost-effectiveness
- Research challenges Government policy on alcohol

Visit us at...

www.sheffield.ac.uk/scharr/sections/heds

HEDS Newsletter

Winter 2014 – Volume 9.2

The University Of Sheffield.

Health Economics & Decision Science.
ScHARR

Athena SWAN Silver Award

The team involved in the MALT project received the Athena SWAN Silver Award in September 2014 in recognition of the department’s commitment to gender equality.

HEDS

The HEDS newsletter is distributed twice a year and contains information on training opportunities, recent publications and news from the team.

MSc International Health Technology Assessment, Pricing & Reimbursement

MSc Health Economics & Decision Modelling

MSc Economics & Health Economics

HEDS regularly recruit new staff. For information on jobs, visit www.sheffield.ac.uk/scharr/vacancies

For information on all masters courses, visit www.sheffield.ac.uk/scharr/prospective_students/masters

HEDS Newsletter

Winter 2014 – Volume 9.2

The University Of Sheffield.

Health Economics & Decision Science.
ScHARR

Athena SWAN Silver Award

The team involved in the MALT project received the Athena SWAN Silver Award in September 2014 in recognition of the department’s commitment to gender equality.

HEDS

The HEDS newsletter is distributed twice a year and contains information on training opportunities, recent publications and news from the team.

MSc International Health Technology Assessment, Pricing & Reimbursement

MSc Health Economics & Decision Modelling

MSc Economics & Health Economics

HEDS regularly recruit new staff. For information on jobs, visit www.sheffield.ac.uk/scharr/vacancies

For information on all masters courses, visit www.sheffield.ac.uk/scharr/prospective_students/masters

HEDS Newsletter

Winter 2014 – Volume 9.2

The University Of Sheffield.

Health Economics & Decision Science.
ScHARR

Athena SWAN Silver Award

The team involved in the MALT project received the Athena SWAN Silver Award in September 2014 in recognition of the department’s commitment to gender equality.

HEDS

The HEDS newsletter is distributed twice a year and contains information on training opportunities, recent publications and news from the team.

MSc International Health Technology Assessment, Pricing & Reimbursement

MSc Health Economics & Decision Modelling

MSc Economics & Health Economics

HEDS regularly recruit new staff. For information on jobs, visit www.sheffield.ac.uk/scharr/vacancies

For information on all masters courses, visit www.sheffield.ac.uk/scharr/prospective_students/masters

HEDS Newsletter

Winter 2014 – Volume 9.2

The University Of Sheffield.

Health Economics & Decision Science.
ScHARR

Athena SWAN Silver Award

The team involved in the MALT project received the Athena SWAN Silver Award in September 2014 in recognition of the department’s commitment to gender equality.

HEDS

The HEDS newsletter is distributed twice a year and contains information on training opportunities, recent publications and news from the team.

MSc International Health Technology Assessment, Pricing & Reimbursement

MSc Health Economics & Decision Modelling

MSc Economics & Health Economics

HEDS regularly recruit new staff. For information on jobs, visit www.sheffield.ac.uk/scharr/vacancies
A word from the Director

All of these new developments are in addition to the return of old favourites. As mentioned above, the Utility Measures short course will be returning in 2015, as too will our three-day Systematic Reviews short course. This portfolio of training has also provided us with the opportunity to provide bespoke training to clients, both in the form of traditional face-to-face sessions and running online methods. So, if you have any training needs that are not covered by our short course portfolio, then let us know and we will endeavour to put something together.

Other HEDS activities that have made the news or are newsworthy include our work on alcohol pricing, supertaut value of information and our online telemonitoring model. First, alcohol pricing – our most recent analysis estimates the impact of the government’s below-cost pricing ban. Next up is the work led by Mark Strong that allows value of information calculations to be performed in seconds, rather than the usual hours or days. And last of the three, is a report on the end of a three-year project looking at Maintaining Congestive Assistive Living Technologies – the MALT project – which provides a free-to-use financial and economic model of home assessed telemonitoring for patients with chronic obstructive pulmonary disease or congestive heart failure.

Also within these pages is news on our Technology Appraisal contract with NICE and our Athena SWAN Award. More information on these and other stories can be found on the online version of this newsletter, including collaborations in New Zealand and work on psychological therapies for people with mental health problems

www.sheffield.ac.uk/scharr/

sections/heds/newsletter

And finally, if you can’t wait for another six months for the next HEDS newsletter, keep an eye on the HEDS Blog which has just passed the 100,000 visitor mark! Our Blog has two or three posts very week and will keep you informed about our research projects, papers, conference presentation and relevant methods and policy news

http://scharrheds.blogspot.co.uk

Simon Dixon

Methodological solutions for decision-making - new HEDS short courses

Two new subjects have recently been added to HEDS’ short course programme, to provide guidance on the latest advances in decision-making methodology. Identification and Review of Evidence for Models (27 November 2014) and Rapid Review Methodology Training (12 May 2015) are both designed to provide practitioners with the skills and knowledge required for specific issues in decision-making, with particular reference to Technology Appraisals. The popular three-day Systematic Reviews Course: Practical Skills for Undertaking Reviews will be held again in April 2015.

Short course on Identification and Review of Evidence for Models one-day short course (27 November 2014)

Helping information specialists, systematic reviewers and modellers to identify and review evidence for cost-effectiveness models was first identified by HEDS staff working on health technology assessments (HTAs) as an issue warranting methodological guidance. A series of seminars and workshops were held with members of the SchHARR Technology Assessment Group (SchHARR-TAG) and external HTA experts resulting in the publication of the NICE DSU Technical Support Document (TSD13) and two further peer reviewed publications. The short course builds on this guidance and is delivered by the authors of TSD13, Drs Eva Kaltenthaler, Paul Tappenden and Suzy Paisley. It was first held last year, with excellent feedback.

Rapid Review Methodology Training one-day short course (12 May 2015)

Increasingly commissioners are asking for systematic reviews to be undertaken within time frames that mean a full systematic review (generally requiring 3 years) is not possible. Rapid reviews use methods that accelerate or streamline the traditional systematic review processes in order to facilitate timely decision making. There is an area of methodological development which is still in its infancy and one in which staff within HEDS are contributing in significant ways in terms of pioneering some of the processes that might be used to produce a rapid, but nonetheless rigorous evidence synthesis. In order to ensure staff are kept at the forefront of these developments, the SYRIUS 2014 (Systematic Reviewers Issues and Updates Symposium) focused on the rapid review ‘toolbox’. Staff within SchHARR presented accounts of their own rapid reviews and Dr. Jason Horsley and Andrew Lee presented “The Commissioner’s voice giving a valuable insight into what decision makers need.

The Rapid Review Methodology Training course is being developed to share HEDS’ expertise in this area. Please contact Fiona Campbell (F.Campbell@sheffield.ac.uk) for further information.

More details and booking information for all HEDS short courses can be found at:

www.sheffield.ac.uk/scharr/scharrshortcoursesuniv/index

A team at SchHARR led by Dr Mark Strong has developed a free-to-access, open-source, web-based application for cost-effectiveness researchers which facilitates estimation of Partial Expected Value of Perfect Information (EVPPI) within seconds. Traditionally, these estimations have required extensive calculations over and above those required for cost-effectiveness and probability sensitivity analyses.

The new application generates value of information analyses quickly, regardless of model complexity or correlated model inputs, saving considerable computational time.

The statistical methods underpinning the application have been developed by at SchHARR Mark Strong and Jeremy Oakley (Oakley, Oakley and Brennan 2014 Medical Decision Making, Apr;34(3):311-26). The working version of the application, SAVI (Sheffield Accelerated Value of Information) Version 1.0, will be showcased at the forthcoming ISPOR 17th Annual European Conference, Amsterdam, Nov 2014.

£6million TARS contract renewed

The SchHARR Technology Assessment Group (SchHARR-TAG) has been awarded funding for another five years from the National Institute for Health Research (NIHR), to undertake technology assessment reviews for the National Institute for Health Care Excellence (NICE) and other customers. SchHARR-TAG has been involved in TARs work since 2001, producing reports of the highest quality and value to decision makers. The team, which is largely based within HEDS, is also committed to developing and applying new and rigorous methodology that directly address some of the current issues for technology appraisal. Since 2001 SchHARR-TAG has produced 89 reports, 79 peer reviewed publications and HEDS now holds three short courses on methodological issues which have been identified as a result of the assessments process (see p4).

Currently 26 members of staff are funded from the TARs contract. The £6.125million award will run from April 2016 until March 2021. For more on this story visit

www.sheffield.ac.uk/scharr/scharrsection/heds/newsletter/tars

SchHARR publish research on the potential benefits of minimum unit pricing for alcohol

The SchHARR Technology Assessment Group (SchHARR-TAG) has been awarded funding for another five years from the National Institute for Health Research (NIHR), to undertake technology assessment reviews for the National Institute for Health Care Excellence (NICE) and other customers. SchHARR-TAG has been involved in TARs work since 2001, producing reports of the highest quality and value to decision makers. The team, which is largely based within HEDS, is also committed to developing and applying new and rigorous methodology that directly address some of the current issues for technology appraisal. Since 2001 SchHARR-TAG has produced 89 reports, 79 peer reviewed publications and HEDS now holds three short courses on methodological issues which have been identified as a result of the assessments process (see p4).

Currently 26 members of staff are funded from the TARs contract. The £6.125million award will run from April 2016 until March 2021. For more on this story visit

www.sheffield.ac.uk/scharr/scharrsection/heds/newsletter/tars

The SchHARR-TAG team

The SchHARR Technology Assessment Group (SchHARR-TAG) has been awarded funding for another five years from the National Institute for Health Research (NIHR), to undertake technology assessment reviews for the National Institute for Health Care Excellence (NICE) and other customers. SchHARR-TAG has been involved in TARs work since 2001, producing reports of the highest quality and value to decision makers. The team, which is largely based within HEDS, is also committed to developing and applying new and rigorous methodology that directly address some of the current issues for technology appraisal. Since 2001 SchHARR-TAG has produced 89 reports, 79 peer reviewed publications and HEDS now holds three short courses on methodological issues which have been identified as a result of the assessments process (see p4).

Currently 26 members of staff are funded from the TARs contract. The £6.125million award will run from April 2016 until March 2021. For more on this story visit

www.sheffield.ac.uk/scharr/scharrsection/heds/newsletter/tars

The SchHARR-TAG team

The SchHARR Technology Assessment Group (SchHARR-TAG) has been awarded funding for another five years from the National Institute for Health Research (NIHR), to undertake technology assessment reviews for the National Institute for Health Care Excellence (NICE) and other customers. SchHARR-TAG has been involved in TARs work since 2001, producing reports of the highest quality and value to decision makers. The team, which is largely based within HEDS, is also committed to developing and applying new and rigorous methodology that directly address some of the current issues for technology appraisal. Since 2001 SchHARR-TAG has produced 89 reports, 79 peer reviewed publications and HEDS now holds three short courses on methodological issues which have been identified as a result of the assessments process (see p4).

Currently 26 members of staff are funded from the TARs contract. The £6.125million award will run from April 2016 until March 2021. For more on this story visit

www.sheffield.ac.uk/scharr/scharrsection/heds/newsletter/tars