Response to NHS Chief Executive’s Open Call for Evidence and Ideas

Respondent ID: 193

Organisation name: NIHR CLAHRC Directors

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The NIHR Collaborations for Leadership in Applied Health Research and Care believe the dissemination and adoption of high value innovations can be driven through:
1. Academic input to improve outcomes and deliver value for money
2. Collaboration with NHS partners and industry
3. Capacity building and staff engagement
4. Public and patient involvement

The NIHR CLAHRCs underpin, drive, evaluate and facilitate creative innovation based on sound research evidence, thereby helping systematically harness the benefits and manage the risks of innovation.

18 case studies are provided in a separate document to provide real-world examples of transferable, sustainable and research-based innovation funded by the NIHR, designed and implemented for diffusion and adoption across the NHS.

What specific actions do you think national NHS bodies, such as the NHS National Commissioning Board, need to take to encourage and stimulate the successful and rapid adoption and spread of innovations throughout the NHS?

The NIHR CLAHRCs believe the dissemination and adoption of high value innovations can be driven through:
1. Academic input to improve outcomes and deliver value for money
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The National Commissioning Board could harness these key messages to help explain the importance of closing the second translational gap, and encourage and stimulate a research-based
approach to disseminating and adopting high value innovations.

The specific NCB actions for Clinical Commissioning Groups could be to support new relationship for academic input to improve outcomes and deliver value for money using credible evidence. Without a credible evidence base, frontline clinicians will not accept claims of improved practice. Working together with frontline NHS staff and other partners the NIHR CLAHRCs use research methods to underpin and evaluate innovation. The main benefit of academic input is the ability to drive and facilitate the diffusion and adoption of innovation using evidence-based insights. This enables frontline clinicians to engage with credible, evidence-based plans and stories to adopt to support innovation implementation.

The NIHR CLAHRCs believe the dissemination and adoption of high value innovations can be driven through:
1. Academic input to improve outcomes and deliver value for money
2. Collaboration with NHS partners and industry
3. Capacity building and staff engagement
4. Public and patient involvement

NHS Partners can use the example of the NIHR CLAHRCs as a model to combine NHS, academic and industry stakeholders in their structures, governance and daily-operations. CLAHRCs currently unite disparate groups to make joint decisions about service redesign and technology adoption. The main benefit of NHS and industry collaboration is the ability to drive sustainable innovation from actionable research insight. Partnership working over the five year duration of the NIHR CLAHRCs will ultimately attract the same amount in local funding as the original NIHR investment.

Do you have any further comments about accelerating the adoption and spread of innovation in healthcare?

The NIHR CLAHRCs are a vital component of the innovation landscape and can make an immediate and sustainable impact to disseminate high value innovations for widespread adoption.

18 case studies are provided in the appendix to provide real-world examples of transferable, sustainable and research-based innovation funded by the NIHR, designed and implemented for diffusion and adoption across the NHS.

The NIHR CLAHRCs have the will, capability and capacity to help the DH accelerate the pace by which research evidence is implemented into frontline practice. The NIHR CLAHRCs are ready to contribute to the DH mission to improve outcomes in line with the Outcomes Framework and future Commissioning Outcomes Framework.

We would like to be able to follow up interesting comments and case studies. Can we contact you for this purpose?

Yes

Do you want to be kept in touch with the next steps in this process?

Yes

Do you want to be included in a wider community of interest?

Yes

What specific actions do you think local NHS bodies, such as providers and Clinical Commissioning Groups, need to take to encourage and stimulate the successful and rapid
The NIHR CLAHRCs believe the dissemination and adoption of high value innovations can be driven through:
1. Academic input to improve outcomes and deliver value for money
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Local NHS organisations including Clinical Commissioning Groups could use research-based insight from the 9 CLAHRCs to build capacity in all staff to drive sustainable improvement. To facilitate innovation as part of the daily role of working in the NHS, the NIHR CLAHRCs support education, coaching and leadership development to help deliver the cultural changes needed to implement innovation and improvement.
Dear Sir Ian

This is the combined response of all nine NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) to your call for evidence of innovation. These are the collective views of the NIHR CLAHRC Directors. The NIHR CLAHRCs represent a five year NIHR financial investment, featuring a local matched funding model. The shared aim of the NIHR CLAHRCs is to bring together academics and practitioners to bridge the second translational gap, that is the gap between research and practice. Specifically for the NIHR CLAHRCs, this means the widespread diffusion and adoption of best evidence into frontline practice. We believe the CLAHRCs are a vital component of the innovation landscape.

The purpose of this letter is to explain how the NIHR CLAHRCs underpin, drive, evaluate and facilitate evidence-based innovation at the NHS frontline through:

1. Academic input to improve outcomes and deliver value for money
2. Collaboration with NHS partners and industry
3. Capacity building and staff engagement
4. Public and patient involvement

18 case studies are provided in the appendix to provide real-world examples of transferable, sustainable and research-based innovation funded by the NIHR, designed and implemented for diffusion and adoption across the NHS.

Quotes from The Guardian’s coverage (25 Aug) of Lord Howe’s contributions to the BBC Radio 4 documentary, “An Unhealthy Wait” will be used to frame each section of the response.

1. Academic input to improve outcomes and deliver value for money
   “There is also a difficulty in enabling people to find out about best practice and put that into use. Howe believes that is changing too, through things like NHS Evidence”

Without a credible academic evidence base, frontline clinicians will not accept claims of improved practice. Working together with frontline NHS staff and other partners the NIHR CLAHRCs use research methods to underpin and evaluate innovation. The main benefit of academic input is the ability to drive and facilitate the diffusion and adoption of innovation using evidence-based insights. This enables frontline clinicians to engage with credible, evidence-based plans and stories to support innovation implementation.

2. Collaboration with NHS partners and industry
   “He said there is also a reluctance by the NHS to collaborate internally and externally with academia and with industries. However, believes that “thankfully” that is starting to change.”
The NIHR CLAHRCs combine NHS, academic and industry stakeholders in their structures, governance and daily-operations. CLAHRCs unite disparate groups to make collaborative decisions about service redesign and technology adoption. The main benefit of NHS and industry collaboration is the ability to drive sustainable innovation from actionable research insights. These partnerships have attracted considerable industry support for co-producing innovative ideas that can be researched, developed and swiftly implemented to benefit clinicians and patients. Partnership working over the five year duration of the NIHR CLAHRCs will ultimately attract the same amount in local match funding as the original NIHR investment.

3. Capacity building and staff engagement
"If we can only break down the barriers that we know exist and foster a creative and entrepreneurial spirit, in the best sense, within the NHS I think we will see that we will see that time lap [sic] speeding up considerably,"

To break down barriers to innovation, drive creativity and facilitate innovation as part of the daily role of working in the NHS, the NIHR CLAHRCs support education, coaching and leadership development to help deliver the cultural changes needed. The educational approach of each NIHR CLAHRC focuses on driving cultural change to implement innovation and improvement.

4. Public and patient involvement (PPI)
The NIHR CLAHRC Directors believe the PPI experiences of the NIHR CLAHRCs can be disseminated and spread across the NHS for transformational benefit. With an academic evidence-base underpinning and evaluating the contribution of PPI, the business case for adoption of actionable, research-based PPI insights will be impossible to decline.

Summary
The NIHR CLAHRCs represent a five year NIHR investment in solutions to diffuse and adopt innovation in healthcare delivery to help improve patient outcomes. They represent collaborations of NHS, academic and industry stakeholders that have the will, capability and capacity to help the DH accelerate the pace by which research evidence is implemented into frontline practice. The NIHR CLAHRCs are ready to contribute to the DH mission to improve outcomes in line with the Outcomes Framework and future Commissioning Outcomes Framework.

These are the collective views of the CLAHRC Directors and neither the view of the NIHR nor the Department of Health.

Yours sincerely
Directors of the NIHR CLAHRCs

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## Appendix: NIHR CLAHRC Case Studies

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Improving mental health services for young people

The primary aim of our early detection and interventions in psychosis theme is to identify and examine delays in accessing treatment for serious mental health disorders such as psychosis. The main study, to measure the Duration of Untreated Psychosis (DUP) for young service users in Birmingham and Solihull, shows that the highest rates of DUP (50% of all first episode cases) actually occur within child and adolescent mental health services due to poor recognition of symptoms. A further 30% of first episode cases with high DUP are caused by ‘poor help-seeking’ behaviour or reluctance to access services.

These results have informed the strategy to adopt new service developments in the region.

Firstly, a new scheme to improve mental health awareness and help-seeking behaviour has been implemented. This initiative includes the development of a youth focused mental health website (www.youthspace.me), led and informed by a ‘Youth Board’ of over 60 service users.

Secondly, to reduce the delay within child and adolescent mental health services in the region, the following procedures are now in place:

- The referral process has been amended to ensure that all new referrals of people aged between 16 and 25 are scanned for possible signs of psychosis to allow more rapid referral to specialist teams.

- The Youth Board members are now very closely linked to the service development team to ensure service user input to the innovation and delivery of new child and adolescent mental health services.

Improving patient safety by studying medication errors

The primary aim of this project is to address the issue of improving patient safety by using the electronic prescribing system at the University Hospital in Birmingham. Over one million prescriptions were analysed to study medication errors over a six month period. Findings show that there is very little correlation between a doctors’ propensity to make serious and minor errors. This argues against the idea of an error prone phenotype or
'sloppy doctor’. Nevertheless, there are massive differences in the tendency to make major prescribing errors among doctors, even in the same service.

A new intervention study has therefore commenced to evaluate the effect of providing individualised feedback to junior doctors. This will test the hypothesis that informing doctors that they have high rates of error compared to their peers will result in improved performance.

We also found that the majority of computer generated error messages are ignored as doctors’ experience ‘alert fatigue’. These results have been subjected to widespread discussion within the clinical governance department within the Trust. A more selective approach to reduce alert fatigue is being designed.

On a reassuring note, we have disproved the hypothesis that August, when new doctors start, is a dangerous month to be a patient. There were no more errors at this time than any other month of the year.

**Cambridgeshire and Peterborough**

**Implementing palliative care research into practice through systems design**

As in many areas of England, major gaps in care provision were identified in the Cambridgeshire and Peterborough community for people close to the end of life. To combat this several initiatives have been funded by Cambridgeshire PCT and local partners, with design input from the Cambridge University Engineering Design Centre. New care pathways expand and greatly improve continuity of services, including: high intensity nursing care at home to enable people who wish to remain at home rather than be admitted to hospital or hospice; and facilitating discharge from inpatient settings to home for the last days of life. The CLAHRC End of Life Care research team have both shaped these service developments and will be undertaking a research evaluation of their impact.

In addition, applied health research undertaken by the CLAHRC End of Life Care team is also informing the educational initiatives in end of life care for health and social care providers, with strong links to the local HIEC. The CLAHRC has identified significant gaps in prescribing knowledge and practical experience of GPs and community nurses. A team of doctors and nurses started work in May 2011, tasked with developing and delivering an educational programme in end of life care for staff in hospitals, primary care and care
homes across Cambridgeshire and Peterborough following a successful bid to secure additional funding.

This combination of comprehensive service review and commissioner commitment to new investment has provided a unique opportunity to ensure that research evidence and engineering design principles are used in service developments.

Engaging adult service users with learning disability for service redesign

The CLAHRC CP is committed to the involvement of patients, service users and the public (PPI) in all stages of the research process, from design to implementation.

Within the Adult theme, a Service User Advisory Group (SUAG) has been established with nine service users with mild or moderate intellectual disabilities to ensure that the health and social care improvements CLAHRC develop and deliver, address the needs and preferences of service users, carers and the wider community. The Advisers, who were identified from across Cambridgeshire through our collaboration with the integrated NHS and LA teams managed by the Cambridgeshire Learning Disability Partnership, work with the clinicians, clinical academics and researchers on a study examining how integrated community-based specialist teams can best support people with intellectual disabilities and complex and enduring needs.

Our Advisers bring a range of relevant experiences to the group and regular meetings include both general teambuilding and skills in working together, and more specific training in quantitative and qualitative research methodologies. For example, Advisers have carried out research within the group and have gained skills in presenting their findings to the study group.

So far, the SUAG model has proven successful in contributing to the direction of the project, and all of those who came to the initial ‘information event’ more than a year ago, remain active members of the Group and attend regularly. The SUAG is also contributing to CLAHRC’s strategic PPI goal to ensure that service users, carers and the wider community are informed about research and have the opportunity to engage.
**Greater Manchester**

*Improved post-stroke management*

The National Stroke Strategy recommends that stroke survivors receive a 6 month post-stroke assessment to identify unmet needs - but no guidance was provided as to how this should be done. Our aim was to develop and test a suitable assessment tool.

Working in partnership with The Stroke Association (TSA), local primary care and acute care NHS Trusts, and the Greater Manchester and Cheshire Cardiac and Stroke Network, the GM CLAHRC developed the Greater Manchester Stroke Assessment Tool (GM-SAT) which can be used to identify and address individuals’ unmet post-stroke needs. **Speakeasy**, a communication support charity, helped adapt GM-SAT for use with people suffering from aphasia.

Evaluation of GM-SAT showed the tool was acceptable to patients and carers, and could easily be administered by a range of potential providers in both primary and acute care settings and by Stroke Coordinators employed by TSA. The estimated cost/benefit ratio to the NHS of using a Band 4 staff member to deliver the review was 0.46, suggesting that for every £1 it costs to implement the improvement the NHS will save £2.17 in avoidable morbidity and mortality among patients.

The GM-SAT tool and evaluation report has been disseminated nationally through the UK Stroke Forum and Stroke Improvement Programme, and by The Stroke Association. The results have been used to inform the commissioning of post stroke assessment by PCTs in Greater Manchester as well as in the SHA areas of: South West; Yorkshire and Humber; West Midlands; North East; and East of England.

*Improved management of chronic kidney disease*

Nationally there is a problem with the under diagnosis and under treatment of chronic kidney disease (CKD) in general practice. The objectives of this healthcare improvement initiative were to:

- Close the gap between the actual and expected prevalence of people with CKD on general practice registers by 50%.
- Ensure 75% of registered CKD patients achieve NICE blood pressure targets.

The GM CLAHRC used the Institute for Healthcare Improvement’s Breakthrough Series Collaborative methodology to work with local general practice teams to improve the
identification and management of CKD patients, supported by improvements in staff education, leadership, information and patient involvement.

Findings from the initiative showed that:

- The measured prevalence of CKD rose by 1.2% with practices achieving 92% of target numbers.
- The percentage of patients managed to NICE blood pressure targets increased from 34% to 74%.
- Staff gained confidence in managing CKD, resulting in a 43% reduction in referrals to specialist care.
- The estimated cost/benefit ratio to the NHS was 0.45, suggesting that for every £1 it costs to implement this improvement, the NHS will save £2.20 over five years in avoidable morbidity and mortality among patients.

The improvement initiative was disseminated more widely across Greater Manchester in partnership with the Greater Manchester Kidney Care Network and other NHS stakeholders; and the approach has been adapted and adopted outside the GM CLAHRC by NHS Bradford & Airedale (in LYB CLAHRC) from November 2010. Presentations at the British Renal Society conference have facilitated national dissemination.

Leeds, York and Bradford

Understanding public preferences towards NHS innovation priorities

NHS decision makers face an increasing array of innovations or “ways of doing things differently”.

Systematic reviews\(^1\) of how best to implement innovations suggest that policy and decision makers will have to prioritise which they dedicate time and resources to. In the NHS, with its finite and limited resources, such decisions are important; but guidance on how such prioritisation decisions should be made is less clear.

One option is to examine the preferences of the public and ask them which options they would choose to spend money on. National surveys demonstrate that the public do want to influence local decision making in services\(^2\).

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One means of efficiently and effectively gathering opinion from the public about the service is the conjoint survey;\(^3\) an approach with its roots in marketing and the design of products and services that reflect the preferences of the people who purchase and consume them.

TRiP-LaB is working with Bradford Teaching Hospitals NHS Foundation Trust to undertake a conjoint survey of Trust members with the aim of informing innovation implementation strategies within the Trust by revealing what the local population thinks of potential Trust choices before they are made. The survey will involve over 4000 members of the local population.

The survey will tell us how the Membership feel as a whole as well as differences and trends between and within key socio demographic sub groups. As the survey is built around preferences for characteristics rather than specific innovations, the results will be able to be used more than once for management strategy in the future; saving time and money and reducing the burden on Trust Members.

**Use of systematic review evidence to inform local decision making in the NHS: a case study of eating disorders**

Primary care trusts are currently responsible for commissioning a range of health care services. As part of the TRiP-LaB research programme a knowledge translation service is being provided to local decision makers translating research evidence into actionable messages tailored to the local context to inform local commissioning decisions.

NHS Bradford and Airedale currently commissions out of area inpatient services for adolescents with eating disorders. In collaboration with the specialist commissioner and local health care providers for this service, TRiP-LaB prepared an evidence briefing comparing the clinical and cost effectiveness of the inpatient model with other models of care to support a potential reconfiguration of service. In addition, the views of the patients’ themselves and their carers was sought to identify their experiences of the current service and any preferred options regarding a change in service.

The evidence briefing identified little evidence to demonstrate the clinical effectiveness of one model of care over another, with no difference in outcomes between groups of patients. Specialist outpatient provision was the most cost effective option and corresponded to the preferences expressed by patients and carers for the need for more locally provided services.

The commissioners and local health care providers agreed to work towards configuring a service based more on outpatient specialist service provision with the intention of reducing expensive out of area inpatient admissions.

The evidence briefing was effective in supporting local commissioning decisions and has been used to inform strategic commissioning at a regional level. Further evaluation of the format and content of the evidence briefing document is in progress.

**Leicestershire, Northamptonshire and Rutland**

**100,000 People benefit from Leicester Self-Assessment Diabetes Test**

There are over 2 million cases of Type 2 Diabetes (T2DM cases in the UK; the condition is often undetected, and untreated, for many years. Identifying people at high risk of T2DM early would improve patient outcomes; reduce the risk of associated complications and save money.

The Leicester Self-Assessment (LSA) score is the first questionnaire to detect “high risk” people developed for use within a multi-ethnic UK population. It is based on seven questions and can be calculated without help from health care professionals. The LSA is now available on the Diabetes UK website and has been completed by more than 100,000 people since it became available in July 2010. A smart phone app is now also in development.

The LSA Practice Risk (LSA PR) score is an automated tool for ranking individuals within GP practices to help target high risk individuals for follow up care. It will be hosted on the Royal College General Practitioners website for use across the UK. The tool is currently being successfully used to identify those at risk in the NIHR funded Let’s Prevent Diabetes trial and the NIHR CLARHC for LNR funded Walking Away from Diabetes trial.

The LSA has been adopted by Sandwell PCT and it is also being used in a number of studies looking at identifying people at high risk of T2DM.

**Innovative software helping GPs manage Chronic Kidney Disease**

NIHR CLAHRC for LNR has developed a software tool that pulls together all relevant information on patients with Chronic Kidney Disease (CKD) held in GP computer systems. The tool can significantly improve the management of patients with CKD as, until now, it
has been extremely time consuming to easily and quickly collate all this disparate information. The tool was developed to support the Primary-Secondary Care Partnership to Prevent Adverse Outcomes in Chronic Kidney Disease Study (PSP-CKD).

In addition to facilitating PSP-CKD access to this data provides an innovative way for practices to improve the management of CKD by:
- accurately coding CKD patients
- completing CKD registers
- focusing clinical care on patients at high risk of developing progressive disease
- auditing clinical performance against evidence based criteria on a regular basis

The tool is now being used in practices across Leicester City, Leicestershire and Rutland to help general practices to better organise and improve the quality of their CKD care.

NIHR CLAHRC for LNR has worked closely with other CLAHRCs to promote and implement the benefits of the software in terms of improved CKD management and patient outcomes. CLAHRC for Greater Manchester are using it to support their local CKD quality improvement work. Initial discussions, facilitated by the CLAHRC Support Programme Manager, are taking place with CLAHRC for North West London to implement it through local primary care networks.

Although initially developed for research purposes the benefits of the tool in improving CKD management were quickly recognised and exploited.

Northwest London

A transferable and research-based model for sustainable Patient and Public Involvement

Aim
The NIHR CLAHRC for Northwest London aims to reframe Patient and Public Involvement (PPI) to make it integral for healthcare research and service improvement by maximising the benefits of authentic involvement and minimising tokenistic practices.

Methods
In collaboration with patients and the 3rd sector, a multi-method approach has been adopted and evaluated to increase engagement and help to build PPI confidence, capacity and capability. Partnership working has developed a structured programme for patient and
community representatives to gain transferable skills to improve the quality of discussion and shared decision making, including influencing research projects and local policy.

A range of methods such as action learning, Open Space Technology and multimedia digital stories have been used to generate productive discussion across diverse patient, clinical and academic audiences. An accessible web-based reporting tool captures project team and patient advisers’ perceptions about the experience of involvement in NIHR funded projects. These quantitative and qualitative data are being used to evaluate and support the further development of a research-based framework for implementing PPI.

Impact
The CLAHRC-facilitated PPI approach is applicable across service and local authority boundaries and encourages self-management in long-term conditions. Specifically as a result of CLAHRC-facilitated PPI, NIHR-funded projects in Northwest London have generated products including a medication passport for patients to support self-management of multiple medicines and created the possibility of national database for patients with sickle cell disease.

Furthermore, a PPI framework for Quality Accounts has been delivered to improve the usefulness of Northwest London Quality Accounts for public transparency and accountability.

A transferable and research-based model for Chronic Obstructive Pulmonary Disease (COPD) improvement

Aim
The NIHR CLAHRC for Northwest London aims to systematically and sustainably improve COPD service delivery locally and nationally.

Methods
Multiple projects across Northwest London, aligned with the Model for Improvement and fundamental principles of Improvement Science, were implemented to establish the use of care bundles to encourage integrated cross service management of COPD service users. The CLAHRC facilitated extension of successful practice from one ward at one hospital to four provider organisations with integration into routine care. The projects were supported by a Web-based Reporting Tool to gather and evaluate measures for improvement.

Results
The CLAHRC-facilitated improvement approach has improved clinical outcomes by improving the use of smoking cessation services, improving appropriate access to pulmonary rehabilitation and improving the use of inhalers to improve the efficacy of inhaler-delivered COPD medications. Safety of in-patient COPD care has improved by increasing the percentage of admitted COPD patients with a follow-up outpatient appointment at 4 weeks post-discharge. The experience of care has improved by involving and engaging COPD patients in their ongoing and future care, specifically improving provision of appropriate patient information and immediate continuity of care with follow-up post-discharge communication and engagement.

**Conclusion**

These substantial improvements in service delivery have been recognised by the adoption of COPD care bundles by the London Strategic Health Authority as part of Commissioning for Quality and Innovation (CQUIN) across all London. Ongoing collaboration with the London Respiratory team, the London Health Observatory and London Health Programmes underpins innovation in COPD improvement with research-based public health data.

**Nottinghamshire, Derbyshire and Lincolnshire**

**Successful implementation of Early Supported Discharge services for stroke**

**Aim;** Work by the Stroke Rehabilitation Theme of CLAHRC NDL has had a quick and successful impact on the commissioning and implementation of Stroke Early Supported Discharge (ESD) services. The aim of the first phase of our programmatic work was to create a consensus to clarify key messages from the research literature and make research evidence about ESD more accessible to commissioners and service providers.

**Methodology;** Our research involved the use of a modified Delphi approach to create consensus statements about ESD. Statements confirming less clear messages in the literature were constructed and circulated through several iterative rounds in order to reach agreement. Consensus was agreed amongst 10 international trialists who contributed to the 2005 Cochrane Systematic review on ESD.

**Results;** The aim of making research evidence accessible was achieved locally, through a successful collaboration with the East Midlands Cardiac and Stroke Network who have used our findings to guide their ESD service specification in the region. This was achieved by our proactive collaborative working with local commissioners, service providers and
members of the East Midlands Cardiac and Stroke Network and has also paved the way for future joint work.

**Conclusion;** Our innovative approach to make evidence accessible is being promoted by the National Stroke Improvement Programme and our results are being used to facilitate the implementation of ESD services throughout the UK. Our work is also influencing services across the world following publication in an International Stroke Journal.

**CATO; Consensus Assessment and Treatment Outcome measures for child and adolescent mental health**

There is a general recognition that use of standard tools for assessment and outcome in Child and Adolescent Mental Health Services (CAMHS) are necessary to streamline care pathways and measure clinical effectiveness. Developing Consensus in Treatment Outcome (CATO) aims to develop consensus across NHS, Local Authority and voluntary sector service providers and commissioners on the implementation of standardised assessment and outcome measures.

Using a web-survey and case note audit, the study team has reviewed the range of assessment and outcome measures currently in use across Nottinghamshire, Derbyshire and Lincolnshire (NDL). A stakeholder event, supplemented by interviews with practitioners and service users and carers was conducted to learn more about the barriers and drivers to the use of routine assessment and outcome measures (ROMs) and their implementation in practice. Findings highlighted general support for the use of ROMs among service users and clinicians, but a lack of feedback and integration with Trust IT systems hampered their use.

The CATO team is currently conducting a feasibility study of session by session monitoring, developed in conjunction with collaborators in London and service user input, to be piloted in clinics across CLAHRC-NDL. The pilot will use the latest IT developments, including tablet computers, to enable service users to enter data in the clinic waiting room to be fed back to clinicians in ‘real time’. This will enable us to determine the feasibility of incorporating a relatively inexpensive method of integrating ROMs into clinical practice to evaluate treatment for patient and service benefit.
South Yorkshire

**Accelerated Telehealth implementation**

This case study describes an approach to overcoming the persistent culture within the NHS that avoids using or buying existing products, research, standards or knowledge because of their external origins. CLAHRC has established a strategic partnership with an NHS Partner, a commercial Med-Tech vendor and the Veterans Administration in the USA. The aim is to help take elements of US best practice that have delivered significant gains in patient satisfaction and reduction in unplanned hospital utilisation and tailor them to an NHS setting.

The Department of Health has signalled the importance of using assistive technology to support self care and avoid unnecessary hospital care. Within South Yorkshire the implementation of telehealth is being explored at scale. CLAHRC has supported its NHS partners in the delivery of telehealth to COPD patients being discharged from hospital. The generic principles of telehealth deployment by the VA have been distilled and those which are translatable to a South Yorkshire context have been disseminated.

CLAHRC has played an active role in facilitating communications between industry and the NHS acting as a third party critical friend. We believe that this provocative third party role is essential to the successful adoption and diffusion of innovations. The role fills a niche, being facilitative rather than directive. CLAHRC has been able to capture & share international best practice in a way that is palatable locally. The result is the step change from an 80 person telehealth pilot to plans for a 2500 person mainstream service supported by evaluation data.

**Improving Quality and Effectiveness of Services Therapies and Self-management of long-term depression (IQuESTS)**

This case study demonstrates how disruptive change can be facilitated by new mathematical models. The models can promote constructive dialogue between providers and commissioners to shape change in services. Through QIPP such models could have national impact.

Depression is a common and debilitating mental health condition, from which the majority of people recover only partially. Relapse is common (approximately 80% of cases) and patients experience an average of four lifetime major depressive episodes. As most clinical trials focus on symptomatic improvement from a single episode, the current research evidence does not tell us enough about how to provide or commission cost effective
services for this oscillating condition. NICE guidelines acknowledge the importance of relapse prevention, but do not provide guidance on how to foster self-management.

The IQuEST project uses an innovative method of knowledge transfer culminating in the development of a mathematical model to describe the care pathway and predict the cost, patient flows and outcomes of specialist services for depression. It has been developed through a collaboration between health economists, therapists, health and service user researchers. The model was revised through a series of interactive stakeholder workshops, involving patients, clinicians and service managers.

The modelling methodology developed is unique because it incorporates the epidemiological trajectory of the condition and the characteristics of service provision. It was validated with ‘real world’ data from two NHS Trusts and used to inform the choice of cost effective interventions to test within a large mental health trusts in South Yorkshire.

South West Peninsula

Peninsula Health Technology Commissioning Group

Commissioning organisations face a challenge in making best use of evidence in decisions about the use of new technologies to provide the best use of healthcare resources. Research carried out locally by Peninsula Medical School identified insufficient capacity, quality issues and weak links to the commissioning process. In response, four Primary Care Trusts established a coordinated framework for assessing new health technologies and making a single commissioning decision for their populations.

Since April 2009, the Peninsula Health Technology Assessment Commissioning Group (PHTCG) has worked with PenCLAHRC to provide locally relevant cost-effectiveness models to underpin consistent joint decisions about the use of new technologies.

With academic input, NHS staff carry out reviews of available effectiveness data and develop decision analytic model-based economic evaluations. The incorporation of economic evaluation allows value for money to be considered in the commissioning decision. The use of explicit methods for such evaluations provides the NHS with a firmer basis for concluding that technologies should not be commissioned in cases where value for money is poor.

This work had a direct impact on the quality of specific commissioning decisions: The PHTCG Annual Report for 2010/11 estimated that £1.2M of cost minimisation had resulted directly from decisions taken. The group’s work has also helped to increase receptivity
amongst NHS partners to the explicit use of evidence in decision making. Continuous improvements to the process, including a new Peninsula Commissioning Priorities Group working in parallel, delivers a whole system approach that is fit for purpose in the future commissioning landscape.

**Leadership in Innovation & Diffusion Program**

Even where clinicians and managers are convinced by evidence to underpin service redesign, personal, organisational and cross-disciplinary conflict can prevent change. PenCLAHRC, supported by NHS South West, aimed to create a responsive faculty of business coaches able to support close learning in clinical pathway redesign toward QIPP to address this problem and evaluated its effectiveness.

Coaching faculty was provided by the University of Exeter Business School and the model was developed in partnership between PenCLAHRC and the NHS.

The approach was evaluated within the redesign of the frail elderly care pathway and is currently being trialled in acute paediatric redesign. Clinical teams delivered a new clinical service across geriatric and liaison psychiatry within three months rather than the projected year. An initial return on investment of £115K was demonstrated by admissions avoided and discharges facilitated, with continuing financial benefits thereafter.

Preliminary evaluation suggests that this model can successfully help clinicians to deal more effectively with conflict as a barrier to implementation. It also highlighted three other key needs for implementation of service redesign:

- Visible board level support
- Rapid availability of NHS data during implementation
- Connecting leadership development and work place based coaching

The project facilitated change in one service pathway, developed a potentially effective model now being further evaluated and produced research outputs to inform implementation. Subsequently, the approach has been adapted and incorporated into NHS leadership development programs in Devon and for the Royal College of General Practitioners.