### PROTOCOL v3

# *Full title of project:* An evidence synthesis of risk identification, assessment and management for young people using tier 4 inpatient child and adolescent mental health services (CAMHS)

#### Short title of project: RiSC (Risk Study in CAMHS)

#### **Investigators:**

Dr Ben Hannigan, School of Health Care Sciences, College of Biomedical and Life Sciences, Cardiff University, Eastgate House, 35-43 Newport Road, Cardiff, CF24 0AB. Email: <u>hanniganb@cardiff.ac.uk</u>

Deborah Edwards, School of Health Care Sciences, College of Biomedical and Life Sciences, Cardiff University, Eastgate House, 35-43 Newport Road, Cardiff, CF24 0AB. Email: edwardsdj@cardiff.ac.uk

Nicola Evans, School of Health Care Sciences, College of Biomedical and Life Sciences, Cardiff University, Eastgate House, 35-43 Newport Road, Cardiff, CF24 0AB. Email: evansng@cardiff.ac.uk

Elizabeth Gillen, Information Services, Cardiff University, Health Library, The Cochrane Building, University Hospital of Wales, Heath Park, Cardiff, CF14 4YU. Email: <u>gillene@cardifff.ac.uk</u>

Professor Steven Pryjmachuk, School of Nursing, Midwifery and Social Work, University of Manchester, Jean McFarlane Building, Oxford Road, University of Manchester, Manchester, M13 9PL. Email: <u>steven.pryjmachuk@manchester.ac.uk</u>

Dr Gemma Trainor, Greater Manchester West Mental Health NHS Foundation Trust, Junction 17, Prestwich Hospital, Bury New Road, Prestwich, M25 3BL. Email: <u>gemma.trainor@gmw.nhs.uk</u>

Dr Mirella Longo, Faculty of Life Sciences and Education, University of South Wales, Glyntaff, Pontypridd, CF37 1DL. Email: <u>mirella.longo@southwales.ac.uk</u>

## Full title of project

An evidence synthesis of risk identification, assessment and management for young people using tier 4 inpatient child and adolescent mental health services (CAMHS).

#### Aims and objectives

The overall aim of this project is to synthesise the international research and other (UK-only) evidence for the identification, assessment and management of 'risk' in young people (aged 11-18) with complex mental health needs using inpatient mental health services, and to establish what is known about the costs and cost effectiveness to the NHS of different approaches. In this project 'risk' is viewed broadly, including not only the risks of (for example) harm to self or harm to others but also the risks mental ill-health and hospital admission pose to young people's physical, psychological, social and educational development.

Specifically this project will examine and synthesise the evidence for, and the costs to the NHS of, approaches to risk used as young people:

- 1. make the transition into inpatient CAMHS;
- 2. are cared for in inpatient CAMHS;
- 3. make the transition from inpatient CAMHS to the community;
- 4. make the transition from inpatient CAMHS to adult mental health services.

Drawing on our synthesis, and through working with a stakeholder advisory group, we will also make recommendations for future commissioning, service development and research in this area.

#### Background

One in ten children and young people between the ages of five and sixteen living in Britain has a diagnosable mental health problem (Green et al., 2005). In England the total number affected is projected to increase by over 13% in the period to 2026 (McCrone et al., 2008). A priority for the NHS and its partner agencies is to make sure that the needs of each child are met in a tailored and timely way. To this end services in England and Wales continue to be organised using a tiered approach (Davidson, 2008; Wales Audit Office/Healthcare Inspectorate Wales, 2009).

The most specialised interprofessional child and adolescent mental health services (CAMHS) are available at tier 4 to young people with complex and/or severe needs. Young people using services at this level often have multiple disorders, and until relatively recently tier 4 was largely synonymous with hospital care (Kurtz, 2009). New service developments reflect the idea that care at this highest level should be provided in the least restrictive environment possible. Against this background an NIHR SDO-funded team systematically reviewed alternatives to hospital admission for children and young people and the evidence of their effectiveness, acceptability and cost (Shepperd et al., 2008). They describe a number of

alternatives to inpatient care in a typology of evaluated models, and from their mapping exercise report a variety of services in use across the UK.

This evidence, plus evidence secured by the independent CAMHS review team (Davidson, 2008) and by the National CAMHS Support Service (Kurtz, 2009), points to a diversification at tier 4 which includes an expanded array of community and residential services. However, inpatient CAMHS units continue to play an important part in overall systems of mental health care, and it is these services that will be exclusively focused on in this study. Given that highly specialised health care normally constitutes a substantial component of health service costs this evidence review in the tier 4 hospital services field is timely.

Over 2,000 young people are admitted to English and Welsh CAMHS inpatient units each year, with the majority of specialist centres catering exclusively for the over-11s (O'Herlihy et al., 2001). Variations in the characteristics of young people admitted are believed to exist, reflecting differences in the socioeconomic features of regions and differing levels of bed availability. Pressure on inpatient beds is considerable, and many who are referred for inpatient treatment are not accepted (O'Herlihy et al., 2008). Other young people who are admitted find themselves in adult mental health wards, with many reporting negative experiences (The Children's Commissioner for England, 2007).

Identification and assessment of risk are key considerations at the community/CAMHS hospital interface. In a context of bed scarcity and of regional variations in patterns of provision clinicians describe the most significant reasons for admission as the young person's high risk of suicide, risk of physical deterioration due to mental illness, need for round-theclock observation and the presence of serious deliberate self-harming behaviour (O'Herlihy et al., 2008). The example of deliberate self-harm can be used to illustrate one way in which this proposed project will add to the body of knowledge and inform future NHS policy and practice, with findings being incorporated alongside other sources of evidence such as those contained within current and anticipated NICE guidelines. Although treatment in the least restrictive environment is advocated as good practice, serious harm to self is difficult to manage in the community and is a common trigger for hospital referral. However, practicebased evidence available to members of this research team suggests that hospital managers and professionals often find self-harm difficult to manage due to problems of contagion and imitation. Significant gaps in knowledge exist surrounding the assessment of self-harm risk as young people are considered for hospital admission, and the management of this risk during episodes of inpatient care. Findings from this project will help fill these gaps (and others like them), and inform future decision-making.

Until recently little was known of the interventions offered to young people admitted to mental health hospitals, or the advantages of providing inpatient care. This general situation is changing, helped by the commissioning (including by the NIHR SDO Programme) of investigations such as Tulloch et al.'s (2008) into costs, outcomes and satisfaction in inpatient CAMHS. The wider evidence base has also been strengthened by new knowledge of systems and processes supporting young people making the transition from CAMHS to adult mental health services (Singh et al., 2010). However, although individual (and sometimes small-

scale) investigations have been conducted in the broad areas of risk identification, assessment and management in inpatient CAMHS (see for example: Dean et al., 2008; Crocker et al., 2010) we know of no studies bringing together research and other evidence in this area in the way that is planned here.

In this context, with the aim of informing future NHS policy and practice the proposed investigation will identify, appraise and synthesise the available evidence (including international research papers, and UK-only grey evidence such as reports of local initiatives) in the inpatient CAMHS 'risk' area. The existence of widespread knowledge gaps in this area is signalled by risk identification, assessment and management failing to feature strongly in relevant English and Welsh strategies and guidelines, and by the relatively limited way in which 'risk' is considered in CAMHS settings.

Across everyday mental health services, 'risk' is overwhelmingly used as a shorthand to refer primarily to the possibilities of direct harm to self or others, or harm through self-neglect. Risk management interventions typically focus on direct actions taken to minimise the likelihood of these events happening. Whilst assessment and action in these areas is important for young people, there is a case that consideration ought also to be given to other, lessrecognised, risks. These include the risks mental ill-health and hospital admission present to the achievement of developmental milestones, psychological maturity, educational attainment, social integration with family and peers, and personal physical well-being.

This study therefore adopts a broad conceptualisation of 'risk', acknowledging that the word itself has a number of different meanings. 'Risky behaviour' and 'posing a risk' are two, correlating closely with the dominant ways in which risk is thought of in mental health services but contrasting with the ideas of 'risk factors' and 'being at risk' (Coleman and Hagell, 2007). To this Coleman and Hagell add the idea of risk 'reframing', through which behaviours typically seen as risky might be reinterpreted as opportunities to develop resilience. In the mental health service context this connects with the idea of 'positive risk-taking' (Morgan, 2004), used as a route to the promotion of individual responsibility and personal development.

Reflecting these ideas, in this study research and other evidence will be sought in connection with the identification, assessment and management of constellations of 'risk' in their broadest sense. This is first reflected in the project team's strategy for an initial scoping of the inpatient CAMHS 'risk' literature where no *a priori* exclusions will be placed on papers because of the way 'risk' is thought of and is used by authors (see below). Beginning with this initial scoping, and progressing through a more targeted search, calls for evidence, appraisals and synthesis the study overall will be guided from start to finish by a project advisory group. This group will be populated by service managers, professionals, young people and carers. Members will be invited to shape the study's priorities for the in-depth review (see below), and to help with the presentation and dissemination of findings and to maximise the mobilisation of knowledge and impact. For the benefit of NHS decision-makers the review will provide accessible and useable summaries and/or typologies (or similar), including where possible evidence of the cost effectiveness of different approaches.

Recommendations will also be made for future commissioning, service development and research.

#### Need

Improving the mental health and well-being of all children and young people is a national and international priority (Davidson, 2008). In most cases, this need can be met through community services. A small number of young people have needs which can only be met through highly specialised care. Services at the highest (tier 4) level have diversified to include community and residential care providers.

For young people (principally of secondary school age) with the most complex problems – for example, those with early onset psychosis and related difficulties – specialist inpatient CAMHS continue to play a key role (O'Herlihy et al., 2001). This is a group with distinct needs, and knowledge about the identification, assessment and management of risk which is derived from adult mental health services cannot automatically be used to inform the decisions which are taken in this context. Very little is known about how overall constellations of risk (where 'risk' is broadly conceived, as outlined above) are identified, assessed and managed for young people being considered for inpatient CAMHS admission, for those being cared for in hospital or being prepared for discharge into the community, or at the juncture where young people are making the transition to adult mental health services. This study will identify, appraise and synthesise this evidence for the benefit of decision-makers with the ultimate aim of improving services to better *meet health need*.

By identifying and bringing together the research and other evidence in the inpatient CAMHS 'risk' area this review will clearly *build on and synthesise existing work*, and through the production of accessible summaries, reports and papers *create knowledge of immediate use* to NHS managers, practitioners and others. In a context of funding constraint this review and synthesis, and particularly the plan to consider the costs of different approaches to risk, is consistent with the NIHR HS&DR Programme's *organisational focus* and will have direct utility to managers and others concerned with making decisions which are informed by the evidence and knowledge of value-for-money. Findings will meet the *expressed needs* of CAMHS and other managers and practitioners in clarifying approaches to 'risk', including clarifying what risks need to be taken seriously and what risks may reflect, to some degree, the anxieties of those caring for young people in inpatient settings. It is anticipated that interest in knowledge in these areas will be sustained over the foreseeable future.

#### Methods

## Theoretical framework

This study is underpinned by an appreciation of the *complexity* found in health systems and services (see for example: Byrne, 1998; Geyer and Rihani, 2010), this being an orienting framework members of this team have drawn on in previous studies (Hannigan and Coffey, 2011; Hannigan, in press). Variants of a complexity perspective are found across different disciplines (Waldrop, 1992), with interest growing within the social sciences particularly over

the last 15-20 years (Urry, 2005). More recently, applications of a complexity approach have been used to improve understanding of the interrelationships between policymaking, service delivery and organisation across all public services (see for example: Chapman, 2004), whilst the idea of health care as a complex adaptive system has been proposed (see for example: Plsek and Greenhalgh, 2001).

There are contemporary, largely theoretical, debates surrounding the precise meaning and application of 'complexity' ideas within the health care context (see for example: Paley, 2010; Greenhalgh et al., 2010; Paley, 2011). These will be sidestepped in favour of using some foundational principles, derived from a sympathetic reading of broad complex systems literature, being used to furnish this study with a robust and practicable conceptual framework. These principles include the idea that, in developed health care settings, people and organisations co-exist in interdependency. Interrelating systems can be thought of as existing at different scale, and are both 'nested' and vertically connected. For example, at the largest (macro) scale national policies and guidance help shape how child and adolescent mental health services are organised at local (meso) level. Horizontal connections run across the different parts of a single system. In the case of a local CAMHS system, an inpatient unit will share interfaces with community health, education and adult mental health services. Systems adapt and emerge in ways which reflect their interrelatedness, and in sometimes unexpected fashion producing unintended consequences. National-level policy, for example, can trigger both planned and unplanned change in local organisations. Within single NHS trusts or health boards, particular interacting constellations of people and processes mean that local policy, services and practice can vary from one place to another. Perceptions of problems and priorities have to be actively identified and may differ from system to system, and actions taken (e.g., to initiate new responses to inpatient 'risk') may reflect this. This also informs the observation that whilst local managers and practitioners need knowledge to support decision-making (including, for example, decisions in the areas of risk identification, assessment and management), the knowledge that is available to them is often partial, contextual, fragmented and potentially contested (Pawson, 2006). Applied to the substantive CAMHS inpatient arena this perspective also supports the idea that the identification, assessment and management of risk in mental health settings are intrinsically complex and situated processes, always involving more than the deployment of standardised measures and the activation of pre-prescribed interventions (see for example: Webb, 2012).

This broad framework for thinking about policy, people and processes in health systems also draws attention to the idea that whilst some 'risks' will be noted and attended to, others will not. In the context of this project the observation has already been made that where certain types of risky behaviour are always likely to attract the attention of practitioners and managers (self-harm, for example), other types of 'risk' (for example, those posed by mental illness and hospital admission in setting back the social or educational development of young people) are not. In all cases, risk decisions are made, and actions taken, in conditions characterised by uncertainty and by people working in interdependent systems of mental health services which themselves are organisationally complex (Hannigan and Allen, 2006).

These general orienting ideas on the complexity and diversity of the 'risk' and mental health system fields inform this study in a number of ways. They underpin the importance of searching for evidence of a variety of types and from different sources, including from local services. They guide the study towards an initial, inclusive, search for evidence in which no a priori exclusions are placed on papers because of the ways 'risk' is thought of and is used. These foundational ideas rule out a conventional Cochrane-style systematic review of the effectiveness of prescribed interventions, or a review closing with the production of standardised procedures to guide future policy and practice. A variety of alternative approaches are available, including (for example) narrative and realist syntheses (Pope et al., 2007). In this project an evidence synthesis guided by the EPPI-Centre framework will be conducted (Evidence for Policy and Practice Information and Co-ordinating Centre, 2007). This is an approach particularly recommended for reviews where the findings are destined for practical use by policymakers, managers and other decision-makers (Harden, 2006). The approach is two-stage, and supports the searching, appraisal and synthesis of the research and other evidence in ways which are transparent, rigorous and sensitive to the priorities of stakeholders, but which also reflect the complexity of the field and the contingency of knowledge.

## **Research** questions

The overarching research question in this proposed project is: 'What is known about the identification, assessment and management of risk (where 'risk' is broadly conceived) in young people (aged 11-18) with complex mental health needs entering, using and exiting inpatient child and adolescent mental health services in the UK?'

## **Objectives**

Specific objectives are:

- 1. To summarise and appraise the evidence for the identification, assessment and management of 'risk' for young people: as they make the transition into inpatient CAMHS; as they are cared for in inpatient CAMHS; as they make the transition from inpatient CAMHS to the community; and as they make the transition from inpatient CAMHS to adult mental health services.
- 2. To identify and describe any underlying theoretical explanations for approaches used in the identification, assessment and management of risk.
- 3. To understand the views and experiences of 'risk' of young people (11-18 years) with complex mental health needs using inpatient mental health services, and of those involved in the identification, assessment and management of risk in these settings.
- 4. To synthesize the evidence for the identification, assessment and management of risk in young people (aged 11-18) with complex mental health needs entering, using and exiting inpatient services.
- 5. To synthesize the evidence on the costs and cost effectiveness to the NHS of different approaches to identifying, assessing and managing these risks.

6. To identify the future priorities for commissioning, service development and research for young people (aged 11-18) with complex mental health needs entering, using and exiting tier 4 inpatient services.

#### Mapping exercise

Guided by the idea that knowledge to support decision-making is derived from quantitative and qualitative research but also from other forms of evidence (cf. Davies et al., 2008), an evidence synthesis will be conducted using a mixed methods approach including a narrative synthesis. The approach to searching, appraising and synthesising the research and other evidence will follow guidelines produced by the EPPI-Centre (Evidence for Policy and Practice Information and Co-ordinating Centre, 2007), in which members of this project team have expertise.

To begin meeting objective 1 above an initial scoping search will be conducted using the databases Medline and PsycINFO. Keywords will be drawn from the natural language of the topic, where the initial scoping keywords and combinations will be refined and agreed within the project team prior to running searches. Candidate preliminary keywords include 'young people', 'young adult\*', 'young person\*', 'juvenil\*', 'teen\*', 'adolescen\*' *with* 'inpatient\*', 'hospital\*' *with* 'mental health service\*', 'mental health' *with* 'risk\*', 'risk identification', 'risk assessment\*' and 'risk management', *with* 'development', with 'education', *with* 'transition'. At this stage no attempts will be made to define the meaning/s of the word 'risk', in order to support as comprehensive an initial scoping as possible. Abstracts for each English language paper identified will be read (where abstracts are not available full papers will be retrieved) by two members of the research team and considered against the inclusion criteria: that the publication must address risk identification and/or risk assessment and/or risk management in the case of young people moving into, through and/or out of mental health hospital.

From this first phase of the review a broad, descriptive, map will be produced of the different ways in which 'risk' has been conceptualised, investigated and otherwise written about in the international literature, and what is currently known in the risk identification, assessment and management field in the inpatient CAMHS area. Categorisation and presentation of the evidence in this descriptive map will be agreed within the project team, and will reflect the type and spread of papers retrieved and the overall aim of bringing together what is known about the different ways 'risk' is conceived and used, and the different junctures at which risk is identified, assessed and managed. Where this is supported by the reports identified in this initial search and descriptive mapping, attention will also be paid to distinguishing authors' theoretical explanations for risk approaches used (objective 2) and the experiences of those involved (objective 3).

#### In depth review

Armed with this descriptive map, and working with stakeholder representatives, key areas to take forward for the second phase of the review will be determined. To facilitate the priority-setting process a dedicated, combined, project and advisory group meeting will be scheduled. A particular concern at this juncture will be to listen to the priorities for in-depth review identified by young people and carers who are members of the project advisory group and by those who represent NHS decision-makers. Care will be taken prior to this critical, priority-setting, event to prepare and support the young people who will be participating. One member of the project team (with specific expertise in the CAMHS field) is identified as having a lead in this area. The support to be provided, and the processes to be followed, to promote young people's participation before, during and after this meeting will be informed by the advice we receive from Young Minds (see below).

Having agreed the focus for this second phase of the project, and to continue the task of meeting objective 1, initial electronic searches and the broad descriptive mapping will be supplemented by other methods. A second, extensive, search will be undertaken using all keywords and index terms identified as relevant (including for the economic analysis component – see below), and reflecting the project's agreed priorities. Individual search strategies will be developed for each database using the different terminology found in index thesauri. Materials published in the English language since the introduction of the tiered system in CAMHS in 1995 will first be sought through searches of health, social care and other bibliographic databases: ASSIA, CINAHL, the Cochrane library, EMBASE, ERIC, HMIC, Medline, PsycINFO, BNI, DARE, TRIP, EconLit, Scopus, Social Care Online, Social Services Abstracts, Sociological Abstracts, Web of Science.

The sources to be searched for relevant unpublished ('grey') material include OpenGrey, the HMIC and Index to Theses databases, relevant key organisations' websites and GoogleScholar. Key journals reflecting the focus of our review (for example, Child and Adolescent Mental Health) will be hand searched for relevant papers appearing in the previous two years. Where these are available (for example, via Web of Knowledge), searches will also be made of conference abstracts published in the same time period. Searches for additional materials will be guided by members of the project advisory group, by other colleagues already known to members of the project team (for example, colleagues who are members of the All Wales Senior Nurse Advisory Group) and by new colleagues identified through snowballing techniques. Contact will be made with all NHS and non-NHS inpatient CAMHS units with a call for evidence (where this strategy of including non-NHS units reflects the increasing prominence of independent sector providers in recent years (O'Herlihy et al., 2007)). Searches and calls for evidence will also be made through relevant JISCMail (and other) online lists, and through the Royal College of Psychiatrists' Quality Network for Inpatient CAMHS (QNIC) and their Quality Network for Community CAMHS (QNCC), through the Royal College of Nursing's Children and Young People forums, and through other professional networks identified in the course of the project.

Titles and abstracts for each research report identified will be read (where abstracts are not available full papers will be retrieved) by two members of the research team and considered against the topic inclusion criteria developed in consultation with the advisory group. Disagreement on the inclusion of reports based on topic relevance will be resolved by discussion with a third member of the research team. Studies identified from reference list searches will be assessed for relevance based on publication titles. Reports of service developments, case studies and non-research materials found in the grey literature will also be read by two members of the project team and considered against the topic inclusion criteria, with disagreements resolved as above.

#### Assessment of quality

Using an approach members of this project team have deployed in previous studies, each research report that passes the initial topic inclusion screening process will be read and assessed independently for quality (using agreed appraisal checklists) by two team members. Where possible (see below regarding the appraisal of surveys), studies will be assessed for methodological quality and data will be extracted using the design-appropriate checklists available from the Critical Appraisal Skills Programme (CASP) (www.casp-uk.net). CASP is part of an international evidence review network, and its appraisal checklists are freely available for download and use under the terms of the programme's Creative Commons Licence. Specific checklists support the critical appraisal of a wide range of study types (for example, randomised controlled trials, cohort studies and qualitative investigations). As no CASP checklist exists to support the appraisal of quantitative studies using a survey design, all examples of these will be assessed using the checklist designed by Rees et al. (2010). Resolution of discrepancies in the independent assessments of quality within each pair of reviewers will be resolved, where possible, through discussion. In cases where disagreement cannot be resolved in this way a third member of the team will be invited to help achieve consensus and to arbitrate. If necessary, further discussion will take place at a project meeting.

Research reports identified through searches of the grey literature will be assessed in the same way as those identified through bibliographic database searching. Other types of (non-research) knowledge (for example, descriptions of local practice developments, discussion papers, expert opinion pieces, theoretical expositions) identified through the in-depth search will be appraised using the generic checklist developed by Wallace and Wray (2006).

## Economic analysis

The way the economic analysis develops, through which objective 5 will be met, will largely depend on the amount and type of evidence retrieved. Where evidence of effectiveness is accompanied by robust costing and/or cost effectiveness analyses the Drummond checklist (Drummond and Jefferson, 1996) will be used to assess the quality of the economic evidence. If little or no such economic evidence is found, an attempt will be made to estimate the cost of the most effective alternative approaches using resource data from the published/grey

sources together with the most appropriate unit costs (for example: Curtis, 2011; NHS Reference Costs, 2011). Costs will be differentiated according to objectives 1 to 4 above and for each, a further analysis will be carried out to identify key cost drivers and how they vary across the NHS and the private sector. Relevant cost and economic terms will be added to the search strategy to identify documents which include an economic component. In terms of identifying grey literature the economist team will contact key research centres such as the Personal and Social Services Research Unit (PSSRU) at the University of Kent, and will contact key informants in the economics of mental health such as Professor Martin Knapp (PSSRU) and David McDaid (LSE).

## Syntheses of evidence

The overall organisation and synthesis of materials will also be guided by the EPPI-Centre framework. This organisation and marshalling will additionally be underpinned by the general orienting idea of risk as a complex process which takes place in complex systems (see above).

Materials located and appraised to reflect each of the agreed project team/advisory group priorities will first be brought together in a series of separate, parallel, narrative syntheses. Without pre-empting the critical process of priority-setting for the in-depth review (as described in detail above), a candidate for one of these parallel syntheses could be (for example) the search, appraisal and bringing together of research and other knowledge in which the views and experiences of staff, young people and carers in the context of self-harm risk during episodes of inpatient care are described. Another candidate topic area could be the search, appraisal and synthesis of the evidence supporting (and the costs of) specific risk assessment *pro forma* used to inform decision-making across the community/hospital interface. In each separate synthesis materials will be brought together in narrative fashion, with the pooling or integration of findings impossible given the diverse range of literature likely to be included (Pope et al., 2007). These syntheses will be prepared by members of the project team working together in sub-groups, and will be discussed and finally approved within the whole project team before being presented for further discussion and recommended refinement with the project advisory group.

Following the EPPI-Centre framework means closing the review with a final meta-synthesis, through which a matrix will be developed to bring together the findings from each separate synthesis and economic analysis. Here (for example), what is known about the views of young people, carers and staff will be juxtaposed with what is known about effectiveness and costs. This matrix will be written and presented in accessible style (e.g., using summary diagrams and tables) in order to maximise its immediate use to NHS managers, other decision-makers and to wider stakeholder communities. Key findings will be clearly highlighted with a view to guiding future action. Consistent with our underpinning theoretical orientation, in the narrative accompanying this matrix the implications of what has been learned for NHS policy and practice will be set out in the context of a complex systems framework. For example, where possible and relevant the meta-synthesis will explicitly flag the significance of the study's findings on 'risk' identification, assessment and management

for people and organisations located across all parts of interconnected CAMHS systems. Appropriate attention will also be paid to making sure that the key messages arising from this final synthesis are useful to managers whose decisions both affect, and are affected by, the decisions and actions of others.

To answer objective 6 the project team will again work with members of the advisory group. By drawing on the completed synthesis and on an understanding of stakeholder needs, the project will close with the identification of gaps in knowledge, and of commissioning and service development priorities and future research questions.

#### Plan of investigation and timetable

Project start: February 1<sup>st</sup> 2013 Project finish: April 30<sup>th</sup> 2014

Months

wonths	
1-2	Project initiation, development of online search strategy, broad descriptive mapping of the field.
3	Meeting with project advisory group to agree priorities for in-depth review.
3-8	Detailed database and other searches (including searches of the grey literature, and calls for evidence).
4-12	Focused, in-depth, quality appraisals and data extraction primarily using
	CASP checklists, categorisation of materials, and parallel syntheses of the evidence.
11-13	Development of meta-synthesis and production of matrix.
12	Meeting with project advisory group to review and refine meta-synthesis, to develop plans for maximising knowledge mobilisation and impact and to identify future priorities for commissioning, service development and research.
13-15	Preparation of final report to HS&DR Programme.
14-15	Preparation of accessible summaries and other outputs for identified audiences, identification of commissioning, service development and research priorities.
15	Delivery of final report.

#### Approval by ethics committees

No ethics committee approval is needed.

#### **Project management**

The project manager for this study, Deborah Edwards, is a health services researcher and systematic reviewer with current experience of managing complex projects across institutional boundaries. As the researcher with the greatest time attachment to the project her responsibilities will include the day-to-day management of the study. Oversight and overall responsibility for the project will fall to the chief investigator, Ben Hannigan, who is an experienced mental health services researcher and who (with Deborah Edwards and others) has successfully completed a competitively funded systematic review in the mental health field in the past. The project advisory group will be populated by stakeholder representatives

drawn from across the field of people with interests in the area of tier 4 CAMHS risk. This group will meet with the project team, in Cardiff, at three strategically agreed time points in the life of the study.

A first meeting will be scheduled where the initial, descriptive, mapping of the field has been completed. It is at this critical juncture that project and advisory group members (young people included) will be expected to agree priority areas for the more detailed, focused, evidence appraisal and synthesis. A second group meeting will take place during the in-depth evidence appraisal and synthesis, allowing advisory group members to monitor progress. Plans for dissemination, knowledge mobilisation and maximising impact will also be discussed here, along with identifying future priorities for commissioning, service development and research. The costs attached to this project include those associated with the convening and running of the advisory group: travel and possible overnight stays, refreshments and subsistence. Information on plans for working collaboratively with young people and carers is given below.

Members of the project team are located in four institutions (Cardiff University, the University of Manchester, Greater Manchester West Mental Health NHS Foundation Trust and the University of Glamorgan). Weekly communication between project members will take place via email, telephone and/or videoconference to ensure that packages of work are distributed according to team members' identified responsibilities, and to ensure that work plans proceed according to agreed schedules.

### Public users/public involvement

The project team is committed to working collaboratively and effectively with young people and carers in their capacity as members of the project advisory group. An experienced Cardiff-based CAMHS practitioner, researcher and teacher (Nicola Evans) will have particular responsibility to support the process of working with and involving young people. The project team will also invite advice from Young Minds, and will be informed by Steven Prvimachuk's recent experiences of involving young people in SDO 10/1008/30: Identifying and evaluating mental health self-care support for children and young people. Lessons from this ongoing study, and from national guidance in this area (see for example: Kirby, 2004), include the importance of adopting a flexible approach in the pursuit of meaningful collaboration. Whilst young people and carers will be welcomed at the three scheduled advisory group meetings the project team is open to additional and/or alternative ways of securing the views and experiences of young people in particular. In this regard the team will be advised by Young Minds representatives on the most suitable ways of identifying, supporting and actively involving young people over the duration of the project. Noting guidance in this area (see for example: Involve, 2010), the costs for this project include a sum to support payments (or tokens of appreciation) for young people and carers participating. These will be paid, in addition to paying for all out-of-pocket expenses, directly to individuals or to organisations as appropriate.

#### References

- Byrne, D. (1998) Complexity theory and the social sciences, London, Routledge.
- Chapman, J. (2004) System failure: why governments must learn to think differently (2nd edition), London, Demos.
- Coleman, J. and Hagell, A. (2007) *Adolescence, risk and resilience: against the odds*, Chichester, John Wiley and Sons.
- Crocker, J.H., Stargatt, R. and Denton, C. (2010) 'Prediction of aggression and restraint in child inpatient units', *Australian and New Zealand Journal of Psychiatry*, 44, 5, 443-449.
- Curtis, L. (2011) Unit costs of health and social care, University of Kent, Personal Social Services Research Unit.
- Davidson, J. (2008) *Children and young people in mind: the final report of the national CAMHS review.*
- Davies, H., Nutley, S. and Walter, I. (2008) 'Why 'knowledge transfer' is misconceived for applied social research', *Journal of Health Services Research & Policy*, 13, 3, 188-190.
- Dean, A.J., Duke, S.G., Scott, J., Bor, W., George, M. and McDermott, B.M. (2008) 'Physical aggression during admission to a child and adolescent inpatient unit: predictors and impact on clinical outcomes', *Australian and New Zealand Journal of Psychiatry*, 42, 6, 536-543.
- Drummond, M.F. and Jefferson, T.O. (1996) 'Guidelines for authors and peer reviewers of economic submissions to the BMJ', *BMJ*, 313, 7052, 275.
- Evidence for Policy and Practice Information and Co-ordinating Centre (2007) *EPPI-Centre methods for conducting systematic reviews*, London, Institute of Education.
- Geyer, R. and Rihani, S. (2010) *Complexity and public policy: a new approach to 21st century politics, policy and society*, London, Routledge.
- Green, H., McGinnity, A., Meltzer, H., Ford, T. and Goodman, R. (2005) *Mental health of children and young people in Great Britain, 2004*, Basingstoke, Palgrave Macmillan.
- Greenhalgh, T., Plsek, P., Wilson, T., Fraser, S. and Holt, T. (2010) 'Response to 'The appropriation of complexity theory in health care'', *Journal of Health Services Research & Policy*, 15, 2, 115-117.
- Hannigan, B. (2013) 'Connections and consequences in complex systems: insights from a case study of the emergence and local impact of crisis resolution and home treatment services', *Social Science & Medicine*, 93, 212-219.
- Hannigan, B. and Allen, D. (2006) 'Complexity and change in the United Kingdom's system of mental health care', *Social Theory & Health*, 4, 3, 244-263.
- Hannigan, B. and Coffey, M. (2011) 'Where the wicked problems are: the case of mental health', *Health Policy*, 101, 3, 220-227.
- Harden, A. (2006) 'Extending the boundaries of systematic reviews to integrate different types of study: examples of methods developed within reviews on young people's health', *in* Popay, J. (ed.), *Moving beyond effectiveness in evidence synthesis. Methodological issues in the synthesis of diverse sources of evidence*, London, National Institute for Health and Clinical Excellence.
- Involve (2010) Payment for involvement: a guide for making payments to members of the public actively involved in NHS, public health and social care research, Eastleigh, Involve.
- Kirby, P. (2004) A guide to actively involving young people in research, Eastleigh, Involve.
- Kurtz, Z. (2009) *The evidence base to guide development of tier 4 CAMHS*, London, Department of Health.

- McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton-Smith, S. (2008) *Paying the* price. The cost of mental health care in England to 2026, London, The King's Fund.
- Morgan, S. (2004) 'Positive risk-taking: an idea whose time has come', *Health Care Risk Report*, 10, 10, 18-19.
- NHS Reference Costs (2011) http://www.nelm.nhs.uk/en/NeLM-Area/News/2011---November/18/Publication-of-2010-11-reference-costs/.
- O'Herlihy, A., Lelliot, P., Bannister, D., Cotgrove, A., Farr, H. and Tulloch, S. (2007) 'Child and adolescent mental health in-patient services in England between 1999 and 2006', *Psychiatric Bulletin*, 31, 12, 454-456.
- O'Herlihy, A., Lelliott, P., Cotgrove, A., Andiappan, M. and Farr, H. (2008) *The care paths* of young people referred but not admitted to inpatient child and adolescent mental health services, London, Royal College of Psychiatrists.
- O'Herlihy, A., Worrall, A., Banerjee, S., Jaffa, T., Hill, P., Mears, A., Brook, H., Scott, A., White, R., Nikolaou, V. and Lelliott, P. (2001) *National in-patient child and adolescent psychiatry study (NICAPS)*, London, Royal College of Psychiatrists.
- Paley, J. (2010) 'The appropriation of complexity theory in health care', *Journal of Health Services Research & Policy*, 15, 1, 59-61.
- Paley, J. (2011) 'Complexity in health care: a rejoinder', *Journal of Health Services Research* & Policy, 16, 1, 44-45.
- Pawson, R. (2006) Evidence-based policy: a realist perspective, London, Sage.
- Plsek, P.E. and Greenhalgh, T. (2001) 'The challenge of complexity in health care', *BMJ*, 323, 7313, 625-628.
- Pope, C., Mays, N. and Popay, J. (2007) *Synthesizing qualitative and quantitative health evidence: a guide to methods*, Maidenhead, Open University Press.
- Rees, A., Beecroft, C. and Booth, A. (2010) 'Critical appraisal of the evidence', *in* Gerrish, K. and Lacey, A. (eds.), *The research process in nursing* (6th edition), Chichester, Wiley-Blackwell.
- Shepperd, S., Harris, L., Bull, L., Doll, H., Fitzpatrick, R., Gowers, S., James, T., Fazel, M. and Pollack, J. (2008) Systematic review and mapping study of alternatives to inpatient care for children and adolescents with complex mental health needs, London, National Coordinating Centre for NHS Service Delivery and Organisation R&D.
- Singh, S.P., Paul, M., Islam, Z., Weaver, T., Kramer, T., McLaren, S., Belling, R., Ford, T., White, S., Hovish, K. and Harley, K. (2010) *Transition from CAMHS to adult mental health services (TRACK): a study of service organisation, policies, process and user and carer perspectives*, Southampton, National Institute for Health Research Service Delivery and Organisation Programme.
- The Children's Commissioner for England (2007) Pushed into the shadows: young people's experience of adult mental health facilities, London, The Children's Commissioner for England.
- Tulloch, S., Lelliot, P., Bannister, D., Andiappan, M., O'Herlihy, A., Beecham, J. and Ayton, A. (2008) The costs, outcomes and satisfaction for inpatient child and adolescent psychiatric services (COSI-CAPS) study, London, National Coordinating Centre for NHS Service Delivery and Organisation R&D.
- Urry, J. (2005) 'The complexity turn', Theory, Culture & Society, 22, 5, 1-14.
- Waldrop, M.M. (1992) Complexity, London, Penguin.
- Wales Audit Office/Healthcare Inspectorate Wales (2009) *Services for children and young people with emotional and mental health needs*, Cardiff, Auditor General for Wales.
- Wallace, M. and Wray, A. (2006) *Critical reading and writing for postgraduates*, London, Sage.

Webb, L. (2012) 'Tools for the job: why relying on risk assessment tools is still a risky business', *Journal of Psychiatric and Mental Health Nursing*, 19, 2, 132-139.