

# **Improving the Absorptive Capacity (ACAP) of Commissioning Networks for Critical Review of Evidence to Reduce Unplanned Elderly Care Admissions into Acute Hospitals**

## **Protocol**

### **Summary of Research**

#### ***Conceptual Problem:***

Under the theme of knowledge mobilisation, numerous studies have been commissioned by NIHR HS&DR, including one focused upon knowledge brokering in elderly care led by the Principal Investigator (PI) on this proposal, Currie (NIHR HS&DR commissioned study 09/1002/05, which runs 2011-13). Currie's current study, like many others commissioned under a previous knowledge mobilisation call, tends to empirically focus upon the organisational level of knowledge mobilisation. Such studies are useful, but the evidence base for effectively mobilising knowledge might be enhanced further through a system level of analysis (e.g. of a complete commissioning network, which encompasses healthcare providers & other organisations supplying commissioning intelligence). In a similar vein, studies commissioned under the previous mobilisation call, conceptually, take a relatively narrow perspective upon the knowledge mobilisation problem, & the evidence base might be enhanced through the application of organisation concepts that are more encompassing of the various dimensions of the challenge of effectively mobilising knowledge. 'Absorptive capacity' (Cohen & Levinthal, 1989), henceforth referred to as ACAP, represents such a concept that can be applied at the healthcare system level of analysis. ACAP maps on to the term, 'critical review capacity' & ACAP can be applied to consider the empirical case of healthcare commissioning networks. In so doing, our study addresses calls for the development of a model of ACAP that is more tailored to healthcare, highlighted in a NIHR HS&DR study (Ferlie et al., 2012) & the original HS&DR KTI call. We highlight studies of ACAP in healthcare already published (Berta et al., 2010; Easterby-Smith et al., 2008; Hotho et al., 2012), & seek to extend such studies. We seek to develop a model of knowledge mobilisation focused upon ACAP of healthcare commissioning networks, but one which is transferable more widely across the healthcare system. Within our study we draw upon a more generic literature to set out some of expected characteristics of healthcare that impact dimensions of ACAP & its antecedent combinative capabilities (Cepeda-Carrion et al, 2012; Jansen et al., 2005; Lane et al., 2006; Todorova and Durisin, 2007; Van Den Bosch et al., 1999; Volberda et al., 2010; Zahra & George, 2002). We then consider distinctive features of the healthcare context that may impact ACAP.

#### ***Practical Problem:***

We highlight that exploratory interviews with Clinical Commissioning Group (CCG) leads & clinical leads & managers for elderly care provision suggest that the critical review capacity of the existing & intended, new commissioning networks may be relatively weak. For example, CCG leads explain the following: We have the intelligence & strategic intent, but the challenge is how we exploit that intelligence & use it to drive transformation, with the problem of moving resource from hospital-based elderly care to primary care given as an example of such strategic intent. Such a practical conception of the commissioning problem maps on to the four dimensions of ACAP (acquisition, assimilation, transformation & exploitation) as later detailed. We suggest the challenge of commissioning high quality elderly care in a productive, but preventative, way, is exemplary of a more general challenge of commissioning complex care, which often encompasses more than a single disease pathway & crosses boundaries within & outside the NHS.

Our study is particularly timely in the face of NHS commissioning reforms, but we note knowledge mobilisation in commissioning is a longstanding concern evident in previous Primary Care Trust arrangements, & is likely to extend to any other commissioning structures & processes in the future. In short, our study is intended to produce & disseminate analytical lessons regarding the enhancement of critical review capacity beyond current arrangements & with a focus upon the wider commissioning network, not merely focus upon CCGs as organisational entities. Our analytical lessons also extend beyond the tracer study of elderly care.

Focusing upon current policy reforms, central to their success is the critical review capacity of commissioning networks that are going to be led by CCGs. To emphasise, our conception of the commissioning network includes not only CCGs, but: NHS Commissioning Board, including their Local Area Teams; GPs & their practices; public health; local authorities; commissioning support units (CSUs); acute hospitals & other providers, such as community health, mental health & care homes providers; other bodies that provide commissioning intelligence, such as out of hours service, emergency services, Care Quality Commission, Healthwatch England. In short, we are concerned about commissioning at the

network level, although our starting point for examining the wider network is the new organisations, namely CCGs. CCG led commissioning networks are expected to increase positive clinical outcomes, financial management & service effectiveness through critical review (acquisition, assimilation, transformation, exploitation) of formal (external) & local knowledge/evidence in making commissioning decisions. They must also drive innovation throughout their local health & social care economy. Interaction with new CCG-led commissioning networks, through the research process, is likely to accelerate development of critical review capacity. Specifically, exploratory interviews with CCG Leads & our on-going NIHR funded study of knowledge mobilisation in elderly care within acute hospitals, highlights a struggle to commission effective, targeted interventions for reducing unplanned elderly care hospital admissions. This forms the empirical basis of our study, but we emphasise that our analysis is intended to be generalisable across a wide range of healthcare organisations, beyond CCGs, at the commissioning network level, & to a wider range of care domains than elderly care. We seek to validate analysis (and the ACAP tool we develop in the study) across these wider organisational & care domains.

**Research Questions (RQs):** Our conceptual contribution is the development of a model of ACAP, encompassing its' 4 dimensions (acquisition, assimilation, transformation, exploitation) & antecedent combinative capabilities (co-ordination, systems, socialisation) applicable to a wide range of healthcare organisations. This is derived from an empirical study, encompassing an over-arching empirical RQ is: How can we enhance ACAP of CCG led commissioning networks in healthcare to inform decisions to reduce unplanned elderly care acute hospital admissions? This breaks down over the course of the study into the following RQs: RQ1. What is the 'state of play' regarding ACAP of the commissioning networks immediately following their inception? RQ2: How has ACAP of the commissioning networks progressed in the first 12 months? RQ3: How is patient experience knowledge acquired & utilised to enhance ACAP of commissioning networks? RQ4: How can we ensure potential ACAP is realised in commissioning networks?

### **Research Plan**

The setting for study is the new NHS commissioning landscape, specifically the new CCG led commission networks, thus inclusive of NHS Commissioning Board, including their Local Area Teams; GPs & their practices; public health; local authorities; commissioning support units (CSUs); acute hospitals & other providers, such as community health, mental health & care homes providers; other bodies that may provide commissioning intelligence, such as out of hours service, emergency services, Care Quality Commission, Healthwatch England. The success of wider reforms, & associated clinical, cost & patient/carer improvements, hangs on the effectiveness of the CCGs led networks in commissioning healthcare (& jointly with local authorities, social care). In turn, this is reliant upon the critical review capacity of the new commissioning networks as it extends to the use of formal & informal evidence, conceptualised as absorptive capacity (ACAP). This provides the focus of our study. Given the breadth of the domain of care commissioned by the CCG led networks (commissioning in areas other than specialist commissioning, the latter includes primary care, an area that might be prone to particular tensions between the new commissioning networks & NHS Commissioning Board Local Area Teams), we follow a tracer study (Hornby & Symon, 1994), that of commissioning interventions to reduce unplanned elderly care admissions into acute hospitals. Practically, we suggest the relationship between the new CCG led networks & acute hospitals may be prone to tension in this area as productivity gains ensue through transfer of care outside hospitals, so in this regard, the tracer is interesting. Clinically, elderly care exemplifies a care domain that crosses organisation & professional domains, including beyond the NHS. More generally, this tracer is viewed as a particularly pressing issue by CCG leads whom we interviewed in an exploratory study, & lessons from which are likely to be generalised to other commissioning domains.

Case study research explains process (Stake, 1995), such as how we enhance the critical review capacity of the new commissioning networks. Comparative case analysis allows more robust analysis, particularly when concerned to draw out contingencies, such as those external & internal contingencies framing the critical review capacity of the new commissioning networks (Eisenhardt, 1989). Through location of comparative cases in East & West Midlands (this represents an economic sampling strategy), our study sites are nationally representative of CCG led commissioning networks, such as those that are near & distant from a major academic health science centre. Comparative study is underpinned by qualitative fieldwork, with data gathering mainly conducted by 132 semi-structured interviews (Kvale, 1996). These are informed by themes generated by literature review, which is thematic, & follows narrative models (Greenhalgh & Wieringa, 2011). Our sample of interviewees from the 12 CCG led commissioning networks are those stakeholders influential &/or articulate in commissioning decisions, & likely (PPI reps aside) to carry some 'managerial' responsibility for commissioning within their organisation.

Regarding interviewees, we have set out numbers of interviewees, & identified many a priori. We also adopt snowball sampling (Biernacki & Waldorf, 1981). Our expectation is that interviewees are sampled until themes that emerge from the study are theoretically saturated (Yin, 1994), & that we cover a wide range of organisations encompassed within the commissioning network. Semi-structured interviews are complemented by observation of CCG network meetings (such as their formal board, & also, for example, acute hospital accident & emergency department meetings). We also hold PPI 'focus groups' (Steyaert & Bouwen, 1994) with patients/carers, facilitated by Redwood/Staniszewska in WP3, incorporate questions in interview schedules in WP2 & WP5, & use co-investment from East Midlands Regional Transformation Fund to support a further 60 interviews (beyond WP2 & WP5), to generate data about acquisition & use of patient/carer experience in commissioning around elderly care. Subject to agreement, we will also attend & present at PPI Forums (commonly labeled, 'stakeholder reference groups') of those commissioning networks participating in our study. Our board observations at CCG led commissioning networks (12 CCG led commissioning networks observed once per year over the period of study – 36 Board observations in total) is aimed more at contextualising the research than gathering substantive data about critical review capacity of CCG led commissioning networks, since we recognise commissioning decisions might be made outside such formal arenas. A psychometric tool for ACAP, drawing on measures & tools developed by others in non-healthcare contexts, whilst developmental, will provide also insight to ACAP (see: Jiminez et al., 2011; Camison & Fores, 2010). Following validation of the tool, the tool will be used to support the development of action plans for critical review improvement within WP4, which will be followed through by PI, Currie within WP6 (Warwick Business School Dean has agreed to release 16 days additional time to Currie, beyond NIHR funded time, to support this). Throughout our study, we will gather relevant secondary data to further contextualise analysis, in part gleaned from data analysts employed by the CCG/Commissioning Support Unit/hospital accident & emergency departments, but also documentation linked to service development linked to elderly care, thus generating a 'substantial archival residue' (Gephart, 1993: 1469).

**Time Plan:** The 4 RQs link to 7 Work Packages (WPs), carried out over 36 months (beginning June 2013). There is a pre-NIHR funding research stream, consisting of two projects (WPO), which represent co-investment in the NIHR funded study. The first of these, funded £30,000 by NHS Institute for Innovation & Improvement (Oct 12-Mar 13), examines 5 CCG led commissioning networks, with a focus upon ACAP of the commissioning network pre-authorisation of CCGs. The second of these is funded £50,000 by a Regional Transformation Fund (April 13-September 13), and examines how patient experience constitutes a source of knowledge for service development within CCG led commissioning networks. Within these two studies, we are carrying out a literature review, progressing ethics & R&D approvals, so that we can 'hit the ground running' with fieldwork at the start of the NIHR funded study we propose. Within our NIHR funded study, there will be 7 Work Packages –

WP1 (December 2013): 'Organisational learning event'. Linked to RQ4. This learning event will be used to transfer lessons from 5 CCG led commissioning networks in the exploratory study to the 12 CCG led commissioning networks participating in NIHR funded study. This will enable us to build a relationship with the 12 CCG led commissioning networks & give them something in exchange for their engagement, & help in further scoping dimensions of critical review capacity that we will focus upon in other work packages. Our approach to learning in WP1, WP4, WP7, can be characterised as 'open space learning'. Interactions with peers are emphasised so that ideas & practices can be exchanged across commissioning networks in a way that suspends traditional 'expert' & learner relationships. We hypothesise that such an egalitarian approach to organisational learning will become institutionalised amongst commissioning networks that participate in our study.

WP2 (September 2013- July 2014/Months 1-11): 'Critical review capacity of commissioning network at their inception'. Linked to RQ1. Primary fieldwork within 6 CCG led commissioning networks (cases A-F), selected for their heterogeneity (e.g. size of population served, proximity to academic health centres, collaborative arrangements). This encompasses observation of CCG Board & other relevant commissioning network meetings in elderly care, 60 interviews with CCG/GP Leads, national & local level NHS Commissioning Board & Commissioning Support Unit staff, Health & Wellbeing Board member, public health staff, accident & emergency hospital manager, hospital clinical director elderly care, mental health provider elderly care senior manager, Care Quality Commission representative, patient stakeholder representatives, focused upon wider CCG network to understand how intelligence flows, & is utilised, to drive service development. Primary data will be complemented with secondary data analysis where appropriate, in part gleaned from data analysts employed by the CCG/Commissioning Support Unit/hospital accident & emergency

departments, but also documentation around service development linked to elderly care.

WP3 (September 13 – July 14/Months 1-11 & February 15 – November 15/Months 18-26): 'Using patient experience evidence to enhance critical review capacity of commissioning networks'. Linked to RQ3. This WP3 comprises analysis of data collated in other WPs (WP2 & WP5), but is constituted as a separate WP reporting upon the potentially critical role of the service user who may represent the 'grit in the oyster' that enhances commissioning networks' critical review capacity. Empirically, it is encompassed within interviews in WP2 & WP5, through asking stakeholders, including PPI representatives, about the acquisition, & more importantly utilisation of patient experience evidence for service development in elderly care. WP3, led by PPI experts, Redwood & Staniszewska, will also manage PPI structures & processes that inform the study.

WP4 (August 14-January 15/Months 12-17): 'Application of ACAP psychometric tool'. Linked to RQ4. One day learning event for 12 CCG led commissioning networks participating in our study. Prior to the learning event, drawing upon fieldwork in WP2 & WP3, & taking account of pre-existing ACAP tools (Jansen et al., 2005; Jimenez et al., 2011), the ACAP tool will be validated for use in a wide range of healthcare organisations to provide self-assessment of critical review capacity. Taking their ACAP profile generated by the tool into account, within this learning event, each of the participating commissioning networks will be asked to draw up action plans for enhancing their critical review capacity. The action plan will be followed up in WP6. The approach to the learning event in WP4 will follow similar lines to that in WP1.

WP4 is a learning event where participating CCG led commissioning networks develop action plans, based upon their ACAP profile that is generated via an ACAP tool derived from existing similar tools, but contextualised following fieldwork in WP2 & WP3. The ACAP tool for use at the learning event will be validated prior to use in WP4 across a wide range of healthcare organisations. The detail of the development & validations of the ACAP tool are as follows:

- (a) Role & aim: The aim of the tool is to provide CCG led commissioning networks with information about their performance on a number of relevant ACAP dimensions & combinative capabilities.
- (b) Tool contents: The contents on the tool will be based on the results of the interviews conducted in WP2 & WP3, as well as on existing theory & research (e.g. Jimenez et al., 2011; Jansen et al., 2005). The tool will capture the differentiation between Potential ACAP (PACAP) & Realised ACAP (RACAP). It will include all four ACAP dimensions (acquisition & assimilation (PACAP), transformation & exploitation (RACAP)) & combinative capabilities (co-ordination, systems, socialisation). The tool will differ from existing measures in a number of significant ways: (i) we are asking all CCG members about their perceptions of ACAP, rather than rely on chief executives or outsiders' views: (ii) our tool is based upon, & adapted from, existing validated scales, using a multi-dimensional approach to capture different aspects of ACAP, rather than relying on single items, which increases its reliability; (iii) the tool is designed as self-assessment tool for developmental purposes, rather than as research tool. Therefore group scores & comparison scores will be made available online (in an anonymised way, so that neither individuals nor CCGs are identifiable)
- (c) Tool development & validation process: We will follow Hinkin's (1995) three-stage process to develop & validate the ACAP tool. Stage 1: item generation; stage 2: scale development; stage 3: scale evaluation.
- (d) Item generation: Items will be developed based on -- (i) existing tools (Jimenez et al., 2011; Jansen et al., 2005) & adapted if necessary; (ii) the one day workshop (WP1) (iii) targeted interviews with CCG led commissioning network members. A panel of 'judges' (consisting of the research team & Study Advisory Board) will subsequently evaluate these items for clarity, ambiguity, & consistency with the underlying theoretical constructs. A pilot version of the tool will be tested on a small number of CCG led commissioning network members.
- (e) Scale development: Based on stage 1, the tool will be finalised & all members of all commissioning networks will be asked to fill in the online survey, consisting of the tool & additional relevant variables. We will evaluate the items statistically, by assessing (1) inter-item correlations & item variances (DeVellis, 1991), (2) factor weight & cross-loadings using an Exploratory Factor Analysis to establish dimensionality (Podsakoff et al. 2003a; Schwab, 1985). We will follow recommendations from Podsakoff et al. (2003b) to reduce & test for common method bias concerns.
- (f) Scale validation: The tool will be validated conducting a Confirmatory Factor Analysis (using Lisrel 6.1), differentiating between reflective & normative constructs if necessary (e.g. MacKenzie et al.,

2005). Furthermore, we will conduct rigorous discriminant validity analysis to establish the dimensions are sufficiently distinct from each other & other related constructs, such as paired construct tests (Anderson & Gerbing, 1988, average variance extracted (Farrell, 2010; Fornell & Larcker, 1981), comparative models (Edwards, 2010).

- (g) Potential challenges: We envision two main challenges for the development & validation of the tool, one of theoretical & one of practical nature. First, a challenge will be to develop a tool that is well grounded in theory, as well as taking account of the particular context for which it is developed. In order to achieve this, we will work closely with all stakeholders involved through interviews within WP2 & WP3. Second, the quality of the tool development & validation will depend largely on being able to recruit a sufficiently large sample of respondents. We aim to encourage every participating CCG led commissioning network to support the tool development, by offering individualised feedback to CCGs, as well as, if necessary, recruiting a sample beyond the involved CCG led commissioning networks to gather further validation data.
- (h) Using the tool: The tool can be filled in by individuals. The scores of each commissioning network will be available & comparable to other networks (anonymised). Furthermore, the scores provide information about how much commissioning network members differ in their views about their own ACAP. Each sub-score will be explained in the documentation & interpretations of low or high score will be available. Recommendations for how to improve ACAP are also available. The scores should provide a basis for discussion on how to improve & what measures to take to develop the commissioning network's ACAP. The tool will be available for free use in the future to any commissioning network (whether CCG led or not) & can be repeated at any time.

WP5 (February 15 - November 15/Months 18-26): 'How has critical review capacity of commissioning networks progressed?' Linked to RQ2 & RQ4. In-depth primary fieldwork will take place within another 6 CCG led commissioning networks (cases G-L) additional to those in WP2, selected for their heterogeneity (e.g. size of population served, proximity to academic health centres, collaborative arrangements). This encompasses primary & secondary data gathering as set out above in WP2. A strict longitudinal comparison of the development of ACAP within similar cases will not be generated. Nevertheless, by selecting a second set of case of 6 cases to match the characteristics of the set of 6 cases in WP2, we will be able to assess the development of CCG led commissioning networks regarding their critical review capacity. Further, by allowing time for analysis of the first set of 6 cases, prior to embarking upon further fieldwork, this allows the research team to 'progressively focus' (Stake, 1996) upon the most significant antecedents of ACAP.

WP6 (December 15-March 16/Months 27-30): 'Organisation Development': Linked to RQ4. PI, Currie, will be available for consultancy support as participating commissioning networks implement action plans from WP4, & so enhance the pathway to impact of the NIHR funded study. A further 12 interviews with nominated CCG led network staff responsible for action plans will also be undertaken in WP6.

WP7 (December 14- August 16): 'Dissemination': Final report written. One day national learning event. On-going dissemination through website. Corporate level communication through 'glossy pamphlet'.

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