NHS England

Improving Value for Patients from Specialised Care

CQUIN Schemes for Prescribed Specialised Services for April 2016 to March 2017

Volume II - The Schemes

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CQUIN Schemes for Prescribed Specialised Services for April 2016 to March 2017 Volume II - The Schemes

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Prescribed Specialised Services CQUIN 2016/17

Contents

1 Executive summary

The CQUIN programme for specialised care is described in 'Volume I – the Guide to Prescribed Specialised Services CQUIN schemes in 2016/17'. Individual schemes are set out below, organised according to the Programme of Care to which they relate. This section provides a summary of the benefits arising from each scheme for patients and for taxpayers.

1.1 All Services

- Clinically appropriate shorter stays in hospital through clinical-evidence-based decision support tools to ensure patients are promptly placed in the right clinical care settings, and avoiding preventable hospitalisation. (GE1)
- Patients with long term conditions who find adherence to their care plan most challenging will benefit from targeted care and support, enhancing their confidence and skills to self-manage, following systematic measurement of activation across different patient groups. (GE2)
- Reduced healthcare acquired infection through adopting ward-based RFID technology. (GE3)
- Assurance that use of high cost medical devices is consistently aligned to patients' clinical needs. (GE4)

1.2 Blood and Infection Services

- Hepatitis C Patients will see national rollout of new curative treatments, with those with greatest clinical need benefiting first. (BI1)
- Haemophilia patients will be supported in improved condition management, to better manage bleeds and use of high cost 'factor VIII' treatment. (BI2)
- For Sickle Cell Patients, outcomes will be transformed through the use of automated exchange meaning fewer and shorter hospital visits, less need for transfusion, and prevention of the costly health impact of iron overload. (BI3)
- Thalassaemia and Sickle Cell patients will enjoy more integrated, better co-ordinated consistent care through new networks of care. (BI4)

1.3 Cancer Care

- Patients with advanced cancer will see greater access to enhanced supportive care to improve quality of life, lengthen survival, and a reduced need for aggressive treatment near end of life. (CA1)
- Nationally standardised dose banding will improve provider accuracy and efficiency and secure greater value for money for chemotherapy drugs. (CA2)

1.4 Internal Medicine

- Non-elective coronary artery bypass graft patients will benefit from faster treatment, reduced hospital delays, with better outcomes at a lower cost. (IM1)
- Cystic fibrosis patients will benefit from improved control of their condition with clinical team support through a dedicated software app, reducing the need for intensive rescue therapy, underpinned by a national research evaluation. (IM2)

- A new more multidisciplinary approach to managing auto-immune rheumatic diseases should reduce progression to end stage renal replacement, or respiratory failure, and secure fast track treatment for the 12,000 patients per year with suspected Giant Cell Arteritis. (IM3)

1.5 Trauma & Critical Care

- For critical care patients, prompt transfer to ward based care, progressing towards daytime transfer within 4 hours of readiness. (TR1)
- New standards for Spinal Cord Injury centre local visits within 5 days of referral so patients in all hospitals experience fewer complications. (TR2)
- For patients referred for possible spinal surgery, specialist multidisciplinary assessment to ensure the best treatment options for patients, avoiding inappropriate surgery and associated patient and system costs. (TR3)

1.6 Women's and Children's Services

- Children and young people with difficult asthma will receive rapid access to multidisciplinary supported treatment plans better to prevent attacks, avoid hospitalisation and disruption to family life and education. (WC2)
- A 90% reduction in mortality risk for univentricular infants in between stages of cardiac surgery through home monitoring programmes. (WC3)
- Incorporation of mental health screening tools into routine care in physical health services. (WC6)

1.7 Mental Health Services

- An evaluation of "Sense of Community" intervention across high-secure service wards to reduce intra-group aggression, to improve ward operation and patient safety. (MH1)
- "Recovery College" peer-led education and training in all medium and low secure care to promote recovery focussed change, and reduce length of stay and readmissions. (MH2)
- A co-ordinated programme safely to reduce the use of restrictive practices within adult secure services leading to reduced seclusion, segregation, medication led restraint, and to positive ward culture, conflict resolution, and user, carer and advocate involvement. (MH3)
- Measuring and improving the involvement and satisfaction of family and carers in CAMHS admissions, transitions and discharge processes. (MH4)
- Benchmarking programme to promote excellence and improve outcomes across Deaf Child & Adolescent and Adult Mental Health Services. (MH5)
- Consistent new quality standards for Gender Identity clinics. (MH6)
- Improved involvement and support for partners in Perinatal Mental Health Services to improve partner and parental relationships and outcomes. (MH7)

2 General Schemes

2.1 GE1 Clinical Utilisation Review

Scheme Name	**GE1 Clinical Utilisation Review**
QIPP Reference	QIPP 16-17 S40-Commercial
Eligible Providers	The CUR CQUIN is aimed at large NHS acute providers of specialised services. This is supported by the national CUR Framework, which has four accredited CUR suppliers. In order to secure the CUR CQUIN, NHS Providers will be required to procure from one of the suppliers identified on the CUR Framework. CUR can also be applied to Community and Mental Health Providers. However, the CUR Framework did not include mental health and therefore this would need to be procured locally for Mental Health providers to ensure that the CUR supplier has anglicised mental health criteria sets. Those providers who have already implemented CUR in 2015/16 should now continue to implement the second year (previously CUR CQUIN 2 and 3).
CCG Complementarity	A CCG CUR CQUIN has also been developed to encourage CUR to be applied across whole health systems. This will provide greater benefits realisation across all healthcare providers including smaller NHS Providers, community and mental health providers. In many providers this will therefore be a joint NHS England / CCG CQUIN, with payment set across the two contracts in rough proportion to Prescribed Specialised Services (PSS), non-PSS bed-days and admissions. The supporting worksheets for this scheme facilitate the creation of a joint scheme.
Duration	April 2016 to March 2018 (for those now commencing second year) or to March 2019, without-years' performance payments based upon early years' achievement.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should aim to achieve payment of the sum derived using the excel workbook, 'GE1 CUR CQUIN Baseline Calculator, on the 'Joint Baseline Calculator' tab, on the basis of the agreed scope of the scheme should be used as a guide to the initial CQUIN value. See Annex B, which describes supporting spreadsheets – all available from the CQUIN page on the NHS England website. The calculator allows for a joint scheme with a CCG. Target Value: Add locally CQUIN %: Add locally

Scheme Description
Clinical Utilisation Review (CUR) - Installation and Implementation; reduction in inappropriate hospital utilisation; reporting of results CUR is a proven approach, supported by robust medical intelligence in the form of an internationally developed clinical evidence base built into clinical decision-support software. CUR can prevent unnecessary hospital admissions and reduce length of stay for patients by determining the most suitable level of care according to clinical need. The software has demonstrated the following benefits: • Reduction in unnecessary Length of Stay, • Reduction in acute inpatient hospital admissions, • Reduction in total acute inpatient hospital bed-days, • Reduction in avoidable discharge delays, • Reduction in unexplained clinical variation, • Improved patient experience and satisfaction. The behaviour sought by implementation of this CQUIN is: • Establishment of project team and agreed plans for implementation of CUR; • Implementation; • Consequential reduction in bed utilisation at NHS Provider or whole system level; • CUR Reporting. The software and training costs for implementing the CUR tool are estimated between £80,000 and £250,000 over a 3 year period, dependent on the number of beds and the chosen CUR software. Additional indirect costs, including the time required for staff training, IT costs (getting the system running and linked via Trust IT systems), hosting arrangements etc. are also taken account of in scaling the CQUIN payment. Under the national CUR software Framework contract, licence costs are based on the total bed-base of the provider so a wider rollout in the hospital incurs no additional software cost. Some of the savings achieved through CUR may be needed to commission gaps or capacity shortfalls in services that improve the flow of patients, once CUR has identified the reasons for patients remaining in inappropriate levels of care. Cash releasing savings will be dependent on local circumstances, and expectations should be explicit at the outset – reductions in length of acute stay may release cash where beds are closed as a consequence; where RTT pressures exist or would emerge in the absence of measures to reduce bed usage, savings are made as a result of cost avoidance – no expensive care outsourcing or additional estate required to meet demand pressures. The level of ambition will need to be set year by year for each provider. Overall the aspiration is for year on year improvement through the course of the CQUIN scheme and sustained thereafter; achieving a reduction in bed days and admissions to levels achieved in other health systems where CUR is embedded. Achievable improvement goals in each year will depend upon the level of ‘criteria-not-met’ admissions and bed-days, and the balance of effort on factors wholly within a provider’s control, collaboration to improving pathways across the health economy using the capacity insights in the CUR tools yield.

Improvements in patient flow can be achieved progressively, beginning within a few weeks of implementation. Reductions in length of stay may take over 18 months to fully implement, and will be dependent on both the scale of the initial roll out, and findings from the baseline data. Key to performance improvement will be the requirement for change management to address internal and external obstacles that prevent patients being cared for in more appropriate settings.

Bed and service coverage is a critical factor in the overall scale of improvement possible – a well-constructed roll out that is able to expand quickly into many wards / service areas will achieve greater benefits more quickly. The baseline position will highlight the source of obstacles and delays, and will indicate areas that can be addressed as a priority (within the first year of implementation) to improve patient flow, as well as those areas requiring multi-agency intervention. These areas will sometimes take longer to implement, the benefits of which should be obtainable within year 2 of the CQUIN.

Calculating the target Payment Amount and CQUIN %.

The excel workbook, 'GE1 CUR CQUIN Baseline Calculator', on the 'Joint Baseline Calculator' tab, should be used as a guide to the initial CQUIN value.
See Annex B, which describes supporting spreadsheets – all available from the CQUIN page on the NHS England website.

For Year 1, the CQUIN payment is designed to cover the set-up costs (CUR licence) and training (clinical and non-clinical) costs for elements 1-7 above (implementation and 'go-live). Some costs will also be incurred for element 9 - Reporting.

Beyond this, a payment is for achievement of reduction in bed days (and, for schemes joint with CCGs, emergency admissions) not meeting CUR criteria. Achievement of such outcomes may incur costs in reorganising pathways. Where bed days saved are beyond National Tariff Trim Point, they will reduce both provider costs and excess bed day revenue, and where within trim point providers retain full cost savings with no change in revenue. Emergency admissions similarly will save provider costs but also reduce the 70% marginal emergency tariff payments due. Gains to the whole system extend beyond the CQUIN where improved systems yield enduring improved usage of hospital capital and/or running services less 'hot' reduces the knock on problems this can cause.

The second year CQUIN payment needs to fund an achieved reduction in the proportion of emergency admissions and bed-days for patients that do not meet the CUR criteria beyond the baseline reached in year one. The scope of CUR, in terms of the number of beds covered, must be equal or greater than what was implemented in year 1.

The CQUIN proportion for this outcome element of the CQUIN payment should be determined as a percentage point reduction in the proportion of bed-days and emergency admissions for patients not meeting the criteria. This is shown in the benefits realisation section of the calculator.

This involves setting a number of parameters (see separate calculator spreadsheet referenced above):

i. the estimate of the proportion of criteria not-met bed-days (and, for joint schemes, of criteria not met emergency admissions) that will be identified in the baseline review

[standard estimates: 42%[1], 14% respectively],

ii. an appropriate incentive payment per reduction in criteria not met utilisation. The standard estimates depend upon whether this will be a joint scheme with the CCG or just with NHS England:
    - For a joint scheme, incentive payments are £100 per bed day and £750 for emergency admission.
    - For an NHS England only scheme, only reduction in criteria-not-met bed days is incentivised, for each ward at £180 scaled by the average PSS proportion of bed days in that ward.

iii. the number of wards and beds to which CUR will be implemented in the year in question

iv. the period available for action beyond set up, according to the agreed ambition (i.e. circa 9 months in year one – with a minimum 6 months, 12 months in year 2)

v. a reasonable ambition regarding the percentage point reduction in "criteria not met" for both bed-days and emergency admissions, (typically a third or so of the blockages are within the hospital's direct control, and the balance can be addressed through collaboration).
    - Bed Days ambition. A reasonable ambition might be a one third reduction in criteria-not-met bed days (e.g. a 14 percentage point reduction in criteria-not-met bed days from 42% to 28%), with a minimum acceptable ambition of a six percentage point reduction.
    - Emergency Admissions ambition. A reasonable ambition might be a fifth reduction in criteria-not-met bed days (e.g. a 2.8 percentage point reduction in criteria-not-met bed days from 14% to 11.2%), with a minimum acceptable ambition of a 1½ percentage point reduction.

The last three parameters (the number of beds, the date of implementation, the level of ambition) are determined locally (subject to the minima specified) according to the provider's and commissioner's assessment about what can be achieved, and how large a portion of the CQUIN payment is available for this scheme. Hospitals who commit to more stretching rollout and goals will receive more CUR CQUIN funding accordingly. There is advantage in being ambitious – setting a cautious improvement ambition, whether in terms of bed coverage, speed of implementation, or reduction in criteria-not-met utilisation, will reduce the CQUIN payment proportion contracted. Over performance will not then be rewarded through CQUIN (though it will still yield provider operational cost savings and benefits to patients).

The result of these calculations is a Standard CQUIN payment value for Benefits Realisation. This is payable in proportion to achievement of the target reduction in criteria-not-met bed-days.

The Standard CQUIN Value assumptions detailed above and in the Calculator will not automatically be adjusted once the actual baseline is determined during initial implementation of the tool. The percentage point reduction is fixed, and maintains the same overall CQUIN payment value irrespective of the actual starting proportion of criteria not met days. If the starting point turns out to be much lower than anticipated, commissioners will consider reasonable proposals to achieve the same reduction in criteria-not-met bed

[1] subject to modification as suggested in the calculator according to the proportion of bed days in excess of the lower quartile length of stay by HRG

days by implementing the scheme across more wards and/or more rapidly. Commissioners will work with Trusts on the implementation plans to ensure hospitals do not end up with reduced CQUIN earnings potential.

This Benefits Realisation CQUIN sum is added to the Installation and Set Up and Reporting elements of the CQUIN payment (which cover the costs of steps 1-7 and 9), and taken as a proportion of total contract value to determine the appropriate CQUIN proportion – again, as set out in the Calculator.

Measures & Payment Triggers

The Elements 1-9 described within this section match those detailed in the 'GE1 CUR CQUIN Baseline Calculator workbook, on the 'Joint Baseline Calculator' tab, in the column marked 'Payment trigger "Element"'. See Annex B, which describes supporting spreadsheets – all available from the CQUIN page on the NHS England website.

Elements:

1. Provider has established and can evidence a project team with relevant stakeholders to manage CUR installation and implementation. (Year one only.)

2. Provider and commissioner have an agreed and documented plan with a scope of services which includes
   i. beds on which CUR will be used,
   ii. staff roles which will undertake the review function
   iii. numbers of staff to use tool & receive training
   iv. Timeframe for installation and implementation including a "Go Live" date.

3. Provider & commissioner have an agreed and documented operational /mobilisation plan including
   i. governance structure
   ii. reporting mechanisms
   iii. Established IT software & interface methodology.

4. Appropriate information flows established, datasets and a schedule of regular reports are agreed with commissioners.

5. Provider can evidence a signed contract of 24 months payment rules duration or above, with a recognised UR software provider stating "Go Live" dates in line with full/partial

6. Software & interfaces installed & live; training completed by the agreed "Go Live" date.

7. Daily use in practice of CUR can be evidenced in agreed bed numbers - payment is based on % of days used.

8. Delivery against agreed KPIs for the reduction of bed usage throughout the period of CUR operation where patients do not meet clinical criteria for admission or continued stay. For this element, the indicator is the %age point reduction in number of bed days (or admissions) subject to CUR and failing to meet criteria, whilst the Denominator is the number of bed days (or admissions) that would be subject to CUR implemented across the whole year. (The KPI is set with sensitivity to the period of implementation.)

9. Reporting
   9.1. Quarterly reports (from month 7 in year one) to commissioners showing:
      i. numbers of patients with met / not met clinical criteria
      ii. reasons / details for not met criteria
      iii. evidence of actioned plans to reduce admissions / bed usage where not clinically indicated by CUR criteria
   9.2. Production of quarterly Board report (from Q3 in year one) presenting:
      i. CUR data showing numbers patients met / not met clinical criteria
      ii. reasons / details for not met criteria
      iii. progress against plans and future plans to reduce admissions / bed usage where not clinically indicated by CUR criteria
   9.3. From the above, to provide a quarterly report to commissioners and other local system stakeholders, with specific detail of the externally generated delays, to inform system service planning in 2017/18. Active participation in any stakeholder meetings arranged to address the external delays to patient flows.

Definitions

Partial Achievement Rules

Payment types referenced A to I refer to the Calculator spreadsheet, column marked Payment ID.

Elements **1 to 6** by Month 6 – Payment ID A to D paid in full.
Elements **1 to 6** post Month 6 – 80% of Payment ID A to D made.
Element **7** level of payment proportionate to the percentage application of the CUR Software tool (100% application = 100% payment; 50% application = 50% payment) Payment ID E.
Element **8** level of payment proportionate to the level of delivery against agreed target number of admissions / bed days to avoid. Payment ID F & G.
Elements **9.1 and 9.2** delivery of all reporting required for full payment. Payment ID H
Element **9.3** – delivery of all reporting and active participation in stakeholder consideration and planning required for Payment ID I.

In Year Payment Phasing & Profiling

The “Elements” are detailed above within the Payment triggers section and match those detailed in the ‘GE1 CUR CQUIN Baseline Calculator workbook, on the ‘Joint Baseline Calculator’ tab, in the column marked ‘Payment trigger "Element"’.

Payment types are referenced A to I in the Calculator spreadsheet, column marked Payment ID.
Payment Trigger Elements 1 to 6 to be completed by month 6
Payment Trigger Elements 7 to 9 based on month 12 evaluation

	Rules for in year payment and partial payment
Q1	
Q2	Payment Trigger Elements 1 to 6 complete – Payment ID A to D can be made
Q3	
Q4	Payment Trigger Elements 7, 8 & 9 subject to M12 review Payment ID E to I to be made

Rationale For Inclusion

Used on a daily basis, CUR provides evidence-based decision support for clinicians to ensure that patients receive the ***right level of care, in the right place at the right time*** - according to their clinical needs and best practice, highlighting on a 'live' basis where patients may be better treated in an alternative level of care. The data and reports that it provides allows clinical leads, hospital managers and commissioners to address barriers to optimal patient flow and to re-design services to improve efficiency and productivity. Although in most health systems internationally, and in some UK hospitals, providers already recognise the business case for CUR implementation without commissioner funding, the CQUIN ensures implementation can be undertaken without any risk or cost pressure to core operational trust income. The cost of failing to realise the opportunity of CUR will be considerable – hindering improvements in patient flow that benefit individual organisations, health systems and patients. Furthermore, this will reduce our understanding of patient flows across systems and impede our ability to design service and transformational change that is based on clinical evidence.

Data Sources, Frequency and responsibility for collection and reporting's

Elements referred to in this section are detailed within the Payment triggers section below.
The source of data for Elements 1 to 6 of this CQUIN is delivery of the agreed plans and documents that form the basis of the CQUIN requirements. This includes the % of staff who have completed CUR training during the year (including refresher training) vs the planned number of staff to be trained.
For Elements 7, 8 & 9 CUR standard contract data requirements may be sourced from the CUR software tool:

- Extracts from the CUR software tool to confirm active users and active records, transferred monthly, as part of information schedule following implementation.
- Information derived from the CUR standard contract data requirements. Calculated by either commissioner or provider (for local agreement), to include:
    - Total occupied bed days for the wards and services agreed as within scope; % of bed days with a clinical utilisation review record for those wards & services
    - Proportion and numbers of bed days / admissions where 'clinical criteria not met', and a breakdown by the agreed categories (tbc)
- Detailed monthly reporting of actions taken to reduce levels of 'criteria not met' activity to be completed by Provider
- Quarterly CUR activity reports to be prepared for the Provider Board to confirm levels of 'criteria not met' and progress against action plans. Evidence of inclusion in Trust Board Agenda.
- Quarterly CUR reports to be prepared and shared with stakeholders to highlight the number and reasons for external delays to patient flows.

Progress towards and delivery of Elements 1 to 6 will be considered and confirmed at the formal contract meetings (frequency tbc)
Element 7 – monitoring to be submitted on a quarterly basis, in line with the specific CUR CQUIN Report contract data requirements stated within the Information Schedule.
Elements 8 & 9 – reports to be prepared in line with required timescales described, and discussed at either the formal contract meeting or meetings scheduled specifically to discuss the areas highlighted by CUR reporting (commissioner to confirm).
Data extracted from the mandatory CUR CQUIN Report, standard contract information schedules and from commissioner analysis of SUS data will deliver the source data requirements.

The **GE1 CUR Minimum Reporting Data Set** report has been developed for submission to the National CUR programme Team, NHSE and CCG commissioners. The report is to be submitted on a quarterly basis (from month 7 in year one).	
See Annex B, which describes supporting spreadsheets – all available from the CQUIN page on the NHS England website. Advice on the categorisation of reason codes is also attached at Annex A. Reporting of action plans should be sufficiently detailed for stakeholders to be able to identify obstacles to optimum patient flows and the actions required to improve flow. There are a number of smaller risks round data integrity which will be managed locally.	
Baseline period/date & value	N/A
Final Indicator period/date (on which payment is based) & Value	As above
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	CUR data and evidence indicates that savings can be realised from improved patient flows in the mid to longer term, which will more than offset the ongoing costs of the system. We believe therefore that providers and health economies will continue to use the CUR tool once the CQUIN is removed, in order to maintain optimum patient flows and identify blockages on a 'live' basis. A proportion of savings, particularly reduction of bed-days within Tariff, accrue directly to providers. Once implemented, we would expect it to be within provider's financial interest to continue with the scheme in order to secure these savings. The CUR CQUIN is expected to span two or three years to incentivise providers to continue to use the CUR tool until savings can be realised.

Supporting Guidance and References

The Nuffield Trust[2] recently reported: "There is a significant opportunity to reduce length of hospital stay through improvements in internal processes and the development of alternative services. There are often variations in length of stay, even for patients with similar conditions, and wide variations in the proportion of patients with extended stays". This is endorsed in a recent NHS Improvement publication (www.gov.uk/government/publications/improving-patient-flow-evidence-to-help-local-decision-makers/improving-patient-flow-evidence-to-help-local-decision-makers) and is backed up by evidence from the use of CUR.

Data from UK hospitals (concurrent and retrospective CUR audits) over a 3 year period indicated that significant numbers of patients (14[3]% of acute admission, 42[4]% of continued stay) should be managed in alternative levels of care more appropriate to their clinical needs, or discharged to the home setting (East Midlands CUR programme findings 2008-2011). Similar findings are found elsewhere suggesting substantial scope for improvement:

[2] September 2015, Ruth Lewis & Nigel Edwards, "Improving length of stay - what can hospitals do?")
[3] Median 42% bed days (Range 35%-69%) needed less intensive setting
[4] Median 14% admissions (Range 7%-23%) did not meet acute criteria

Country	Patients Not Qualifying for Acute Hospital Level of Care	
	Acute Admissions	Acute Continuing Stay
UK Example 1 Example 2 Example 3 Example 4	 20 – 25% 45 – 51% 5 -10%	 20 – 60 49 -77% 30 -40% c.50%
US Example 1 Example 2	 4 - 6% 30%+	 14 – 22%
Canada	8 – 10%	30 – 40%
Singapore	8%	59%
Australia		30 -40%

Additional UK and international benchmarks are available from the CUR suppliers on the national framework.

Examples of improvements achieved by UK Hospitals using the software of CUR suppliers on the national framework are highlighted below. Note: In line with the procurement process suppliers should be approached directly for their case studies, including a substantial international evidence base.

Setting	Findings
Commissioner working with local hospital Trusts.	Used CUR over 2 years to manage admissions resulting in: • Improved Hospital at Home service by 30% saving >1000 emergency admissions or 700 bed days per month by avoiding admission and facilitating early discharge, almost an entire ward. Estimated saving £1.2m • Avoided over 1500 short stay emergency admissions per year where no significant clinical intervention occurred. Estimated saving £1.3m (1st year saving reinvested in alternative care).
Tertiary Hospital	Use of CUR allowed the closure of 20 cancer beds as a result of more outpatient work and shorter length of stay.
University Hospital	Over two years achieved: 300 bed reduction (11 wards), a +5% patient throughput increase and a ‘4 week LOS’ reduced by 35%.
Large tertiary level hospital.	A large tertiary level hospital reduced average LOS from 5.6 to 4.5 days. The likely length of stay was posted in the patients’ rooms and patient satisfaction scores increased.
Medium Sized Acute Trust	25% reduction in length of stay for unplanned medical admissions.
UK DGH	Using CUR with its GI surgery beds the hospital achieved faster recovery times, - 50% avoidable hospital days and a decrease in GI surgery-related readmissions. Post-op complications fell almost 60% and resulted in cost savings of £4.72m over 18 months.

The cost of the accredited software has encouraged some Providers to consider developing in-house systems in order to secure the CUR CQUIN.

Where there is an exceptional prima facie case that an **existing in-house system** is able to demonstrate that it is delivering all the outputs of clinical utilisation review, and is able to report on a live basis against the CUR CQUIN Minimum data-set, a provider may propose that it be subjected to the rigorous central assessment that has been established to ensure that only those systems that meet the national CUR framework criteria are used.

Providers are asked to note however that all CUR software tools are differentiated from other operational systems (bed management, EPR, acuity management systems etc.) by an extensive international clinical evidence base, developed over 20 plus years by CUR suppliers. This evidence base underpins the CUR software and this is further supported by teams of clinicians who continually review international clinical evidence and best practice to ensure that the software reflects the most up-to-date clinical evidence and best practice guidelines.

For this reason In House solutions will not be approved as eligible for the CUR CQUIN in 2016/17 without this rigorous quality assurance process, which will include demonstrating the breadth and depth of the clinical criteria underpinning the CUR solution.
Providers wishing to develop an in-house CUR solution during 2016/17, or providers whose systems only comply with part of the specification will **not be** approved for the 2016/17 CUR CQUIN.

A number of NHS Providers completed the quality assurance process for in-house systems during 2015/16 but all failed the assessment process. For this reason whilst NHS England are open to providers exploring this option in exceptional cases, it needs to be undertaken quickly so as not to delay the implementation and benefits realization for the local health system.

Providers should request a copy of the CUR In-House Assessment Framework from their commissioner to help to determine the likelihood of being successful in this assessment process.

Providers will need to notify their commissioner of their intention to pursue the in-house assessment process by Friday 29th April 2016 at the latest.

2.2 GE2 Activation System for Patients with Long Term Conditions

Scheme Name:	**GE2: Activation System for Patients with Long Term Conditions (LTCs)**
Eligible Providers	All providers offering services to patients with conditions meeting the specified criteria.
Duration	April 2016 to March 2018, with extension to cover other conditions.
CCG Complementarity	A CCG scheme has been developed to complement this one. It is one of two Patient Centred Care indicators available to CCGs.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £50,000 for each centre with a patient group targeted for PAM of 500 patients or over. Target Number of Patients, by LTC: 1st LTC [Specify] number of patients: Add locally 2nd LTC [Specify] number of patients: Add locally Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Development of a system to measure skills, knowledge and confidence needed to self-manage long term conditions, and with that information to support adherence to medication and treatment and to improve patient outcomes and experience. The CQUIN scheme aims to encourage use of the "patient activation measurement" (PAM) survey instrument, firstly to assess levels of patient skills, knowledge, confidence and competence in self-management for different groups of patients meeting the criteria below. The second stage, to be developed for the second year of the CQUIN, seeks to support Activation Interventions to tailor service provision according to self-management capability and/or to raise activation levels. (See more explanation in the Supporting Guidance and References section below.) The whole scheme will be subject to evaluation - to build on the international evidence and on the work that is already under way in certain services, including the Learning Set of five CCGs and the Renal Registry in England. Before contract, providers must select with the agreement of commissioners an appropriate group of patients (with a minimum to support a £50,000 target payment, of a group of 500 patients completing the PAM instrument – not including those refusing to complete, or who are excluded from being offered participation). A marginal variation in target payment of £25 per patient for smaller/larger groups of patients may be agreed. Patient groups who stand to benefit include those with persistent conditions for which 1. There is a care regime of known effectiveness which is complex 2. Symptomatic abreaction to poor adherence is distal (so that patients will realise that poor adherence is responsible for deteriorating health) 3. Symptomatic consequences of poor adherence may – if poor adherence is not recognised – lead to misdiagnosis and mistaken prescription	

4. The severity of the condition does not itself preclude self-care (e.g. through occluding insight *(an understanding of the nature of the condition and the factors that make it better/worse) or* capacity *(in terms of being able to make informed decisions regarding management of the disorder)*

Suggested conditions include: Teenage and Young Adult Cancer, Cystic Fibrosis (which is subject to a separate CQUIN scheme), chronic kidney failure, HIV, haemoglobinopathy, severe difficult to control asthma, ILD, severe faecal incontinence, inflammatory bowel disease, schizophrenia, severe depression, COPD, adult congenital heart disease, epilepsy. The HIV CRG has expressed a particular interest in developing patient self-management so to enhance the quality of life for people living with HIV.

Year 1 will (largely) be focused upon Measurement and Team capacity Building. Specific activities:

- **Licence**. A licence is needed for setting up a PAM programme for each patient. These would be available under an NHS England contract with Insignia (to be accessed via NHS England[5]) at no additional cost to the provider.
- **Elicitation**. Per patient costs will have to be incurred in eliciting the information using the PAM tool. It is recommended that information is collected in the clinical context – as this has been shown to increase the response rate and to mitigate the risk of non-response bias. There are options regarding administration: paper or (possibly) electronic, to be explored with Insignia, which may affect costs. The administration of the questionnaire may take ten to fifteen minutes including explanation. Costs would depend upon:
    i. Mode of measurement
    ii. Frequency of measurement (per patient)
- **Team Capacity Building**. Staff training in the administration of the instrument element – for example some workshops to develop clinical engagement. The outcome here should be patient activation preparedness of the team: it would be helpful to specify what this will comprise more precisely.
- **Mechanisms for gathering, presenting and analysing Activation information**

Team building costs will be incurred early in the year, elicitation costs as the PAM is administered, in the later quarters of the year. Year 2 costs will be explored and assessed for the ‘17/18 CQUIN scheme.

Measures & Payment Triggers

Before contract

- Agree vision for use of PAM measure with cohorts of patients in context of increasing support for self-care;
- Agree the Year 1 metrics: number of patients in each condition recruited into the programme for application of the PAM; the number of staff to be trained.

Year One payment Triggers

ONE: Planning & Set-Up:

1. A working group has been established;

[5] E-mail ENGLAND.commercial@nhs.net

2. Implementation plan written and submitted to commissioners including:
    a. team building and training plan for staff who will administer PAM
    b. plan for creation of mechanisms for gathering, presenting and/or analysing data, with clarity regarding:
        i. To whom the data should be fed back (e.g. to the patient; to the team; to the PAM oversight group in the provider; for central evaluation in a standard pseudonymised format);
        ii. What immediate use is to be made of it.
3. Secure licence from Insignia of 2 years duration or more (via NHS England).

TWO: Team Building.

1. Team building and training plan for staff to administer the PAM has been implemented
2. Readiness Assessment of Patient Activation preparedness of team and any identified shortfalls have been addressed.

THREE: Elicitation of Activation Information via the PAM.

1. Pilot testing and evaluation of use of survey instrument completed
2. Baseline measure captured from PAM administered to first cohort of patients
3. The proportion of the patient groups targeted in each condition recruited into the programme for application of the PAM.

FOUR: Analysis and Response:

1. Elicited PAM responses gathered and submitted for benchmarking and evaluation.
2. Activation Intervention options developed (to feed into Year 2 planning).
3. Report to commissioners on progress against implementation plan including results from pilot and shared learning.

NOTES:
For consistency, and given its validation and the relationship and contract that is in place with NHS England it is proposed that all schemes involve use of the Patient Activation Measure PAM available from Insignia: see the annex for background and academic studies demonstrating the validity of the measure and the correlation between PAM measured activation and important patient outcomes.

Second year Payment Triggers.

Interventions expected to be covered by the CQUIN will be

1. The introduction of Intermediate Outcome Measures,
2. The introduction of Activation Interventions[6].
3. Improvement in PAM Score, and/or introduction of other interventions to sensitise service delivery to PAM level.
4. Aggregate improvement of patient reported health outcomes, improvement in adherence and a reduction in non-elective attendances/admissions, across patients in an LTC group, weighted by approximate QALY gain. (For some conditions, maintaining the score might be a good outcome – i.e. preventing deterioration.) These metrics might be developed in the context of the evaluation.

[6] The CQUIN Development and Reference Group will develop a list of intermediate outcome measures, by patient group, together with a taxonomy of Activation Interventions to be used for payment triggers.

Definitions	
Denominator for trigger iii.3 Number of patients in each of the targeted LTCs whom it is agreed should be targeted for completion of the PAM. Numerator: Number actually completing the PAM in these groups creating usable data	
Partial Achievement Rules	
No partial payment for Trigger one and two. Payment on completion in full. Payment for Trigger three and four should be scaled down pro rata in line with achievement against Trigger three proportion of targeted group actually completing the PAM.	
In year payment phasing and profiling	
Quarters 1-2 70%: Paid on completion of Trigger one and two Quarter 4 30% Paid on completion of Trigger three and four.	
Rationale for inclusion	
The implementation of a patient activation system is designed to realise significant benefits to the healthcare system from improved patient outcomes and experience of care and from a reduction in the use of non-elective services. Adherence to treatment has been linked to improved health outcomes and has been shown to increase patient satisfaction by supporting independence which can also be linked to higher quality interactions with healthcare professionals.	
Data Sources, Frequency and responsibility for collection and reporting	
The source of data for elements i-iv of the Year One payment triggers (see below), will have to be developed as the PAM CQUIN is adopted at the level of individual providers for specific patient groups. If a software solution is adopted for administration of the PAM, then extracts from the implemented software will be usable to confirm active users and active records. It is likely that providers will need to identify internal systems to identify the patient cohort and record the data. It is likely that specialist nurses would be used as a resource to identify patients and support data collection; though for inpatients admission under the specialty code may be used as a marker, and to validate of report.	
Baseline period/date &Value	To be reported by the Provider for the selected cohorts of patients with LTC.
Final indicator period/date (on which payment is based) & Value	The number of patients above baseline proportion completing PAM, to be reported by provider.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract.
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Incorporation of changes in the cost per care episode or year of care into core tariff payments for activation measures and interventions will be developed during the course of the CQUIN scheme's evaluation, based on the balance of expected savings from improved segmentation of care and adherence between providers and commissioners under the relevant payment mechanism for each patient group. Plans will be developed for each patient group to ensure that funding is sustainable.

Supporting Guidance and References

There has been wide review and implementation of a number of interventions to support the concept of self-care and management of long term conditions. The Kings Fund published an appraisal of the patient activation concept which describes the practical implementation of a behavioural change model and explores some of the potential benefits of implementing a scheme such as this[7].

The concept of a Patient Activation system, such as this scheme is designed to support, denotes an activation method which can first capture patient's knowledge and skills, and, second, includes population segmentation, interventions to improve engagement, and measuring performance across the healthcare system.

There are two broad categories of Activation interventions:

a. stratification of the patient groups to help diagnose problems and determine appropriate care plan;
b. work with patients to raise motivation, skills and self-management, etc)

Regarding activation of patients, there are a large number of behavioural change models available. It is recommended that the COM-B model is used as a default understanding of behaviour change: Capability + Opportunity + Motivation=> Behaviour change.

However, this should not restrict the range of interventions that may be useful in different contexts for different groups, including:

a. commitment support via:
    1. peer group (as proposed for example for HIV patients)
    2. joint appointments (e.g. as default)
    3. carer involvement, etc.
b. health coaching with Clinical Nurse Specialist or other professional input

EVIDENCE BASE:

The fundamental link between activation and outcomes is well substantiated[8]:

A B S T R A C T

Objective: A systematic review of the published literature on the association between the PAM (Patient Activation Measure) and hospitalization, emergency room use, and medication adherence among chronically ill patient populations.

Methods: A literature search of several electronic databases was performed. Studies published between January 1, 2004 and June 30, 2014 that used the PAM measure and examined at least one of the outcomes of interest among a chronically ill study population were identified and systematically assessed. Results: Ten studies met the eligibility criteria. Patients who scored in the lower PAM stages (Stages 1 and 2) were more likely to have been hospitalized. Patients who scored in the lowest stage were also more likely to utilize the emergency room. The relationship between PAM stage and medication adherence was inconclusive in this review.

[7] http://www.kingsfund.org.uk/publications/supporting-people-manage-their-health

[8] Patient Education and Counselling 98 (2015) 545-552. "The association between patient activation and medication adherence, hospitalization, and emergency room utilization in patients with chronic illnesses: A systematic review" Rebecca L. Kinney et al.

Conclusion: Chronically ill patients reporting low stages of patient activation are at an increased risk for hospitalization and ER utilization.

Practical implications: Future research is needed to further understand the relationship between patient activation and medication adherence, hospitalization and/or ER utilization in specific chronically ill (e.g. diabetic, asthmatic) populations. Research should also consider the role of patient activation in the development of effective interventions which seek to address the outcomes of interest.

Adherence to medication and treatment is thus linked to health outcomes and patients who are more empowered were able to report greater level of satisfaction and ownership, which is linked to overall improved patient experience.

Health monitoring of biometric indicators can support the review and improve health outcomes for patients with long-term conditions and reduce non-elective attendances. More active patients engage in their own care so to comply with care regimes and to respond to such indicators.

Patient activation models have been shown also to be effective in improving the quality of interactions between patients and healthcare professionals. They involve assessment of activation levels, for example by use of the Patient Activation Measure, the PAM.

Measurement must be complemented by a range of interventions to make effective use of the information to improved patient outcomes. These may well have to be sourced from a separate provider. This might include supportive decision making, motivational interviewing and other interventions as part of a well-evidenced behavioural change model (such as the COM-B model, improving Capability and recognition of Opportunity and Motivation to achieve Behavioural change), to improve activation or engagement. Or, more simply, the information can be used better to understand outcomes for patients, to avoid misdiagnosis and mis-prescription. Both have been used dramatically to improve outcomes in the Cystic Fibrosis trailblazer for this programme in Sheffield – that is currently being piloted for a national RCT. With a behavioural change component, the PAM can then be used at team level to benchmark success of different approaches to bringing about behavioural change. See ANNEX for more evidence regarding the PAM and its use to improve patient outcomes.

Ambition must be set separately with respect to different patient groups. For the programme as a whole, the ambition is to reach a range of appropriate patient groups. It is well documented that patients with long term conditions avoidably utilise emergency healthcare services on a regular basis resulting in poor outcomes for patients and decreased efficiency in the healthcare system. This scheme is designed to mitigate this phenomenon.

2.3 GE3 Hand Hygiene Technology

Scheme Name	**GE3 Hand Hygiene Technology**
Eligible Providers	All acute providers for whom this is a good value and appropriate mechanism for reducing Health Care Associated Infections.
Duration	April 2016 to March 2017, extendable if more beds are covered.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £2,000 for each bed to be included in the scheme. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Introduction of routine use of monitoring technology so as to achieve consistently high levels of hand hygiene and lower levels of healthcare acquired infections (HCAI). Intervention sought: • Sensors by sanitation points and by each bed • Staff wear a badge as part of their ID • If staff go from one bed to another without the sensor registering their badge turns red and buzzes to alert them • Patient and staff can be assured of hygiene • Daily report for staff of personal achievement • Reporting for leaders of aggregate ward/specialty/provider to measure and to incentivise change, and pinpoint hotspots Whether this is an appropriate CQUIN for a provider depends upon the overall HCAI strategy. Whereas this technology is not the only mechanism for reducing HCAIs, nor is CQUIN the only means to its introduction, it does have a strong evidence base. For some providers, this CQUIN scheme may, where it can be implemented with sensitivity as a mechanism to enable nurses to monitor their own compliance with best hygiene practice, give the funding boost needed to introduce the technology.	
Measures & Payment Triggers	
Baseline assessment. Prior to contract signature. Completion of a baseline assessment, including HCAI rates by service lines, and provider estimates of compliance figures for hand hygiene policy to ascertain a realistic trajectory for improvement and the role of Hand Hygiene Technology in improving outcomes. On this basis, a plan can be agreed covering: the appropriate scope of services (number of beds and service areas in which hand hygiene technology will be used) and identity of staff in roles that will use the tool, and timeframe and extent of reduction in HCAI to be achieved.	

Triggers:

1. Implementation. (Quarters 1 and 2)
    a. Provider can demonstrate a signed contract of 12 months duration or above, with a recognised hand hygiene technology provider;
    b. Appropriate information flows and governance, software and interfaces are completed and have been live tested
    c. Reporting mechanisms, datasets and performance dashboards for hospital staff and commissioners are fully established
    d. Staff training in areas of roll-out – 95% of staff have completed training
    e. Hand hygiene technology is being used in all agreed areas – 95% compliance is achieved, with monthly reporting to indicate progress against trajectory, including a review of the proportion of non-compliance levels.

2. Achievement. (Quarters 3 and 4). Two thirds reduction in levels of HCAI in the selected service areas relative to baseline.

Commissioners and providers should undertake a joint financial benefit assessment that informs 17/18 quality plans & expansion across other key service lines.

Monitoring information: HCAI outturns.

Definitions

Baseline: HCAI numbers in Quarters 3 and 4 2015/16

Partial achievement rules

Payment triggers as above. 20% of payment should be contingent upon successful reduction in HCAI, against an aspiration of a two thirds reduction relative to baseline. (I.e. upon trigger 2.)

In Year Payment Phasing and Profiling

Local determination, bearing in mind the need for initial investment (Non Recurrent start-up costs £1350-1650 per bed).

Rationale for inclusion

Low levels of infection from good hand hygiene is a shared goal of clinicians, leaders, commissioners and patients

- Some studies quote typically extra 8 days in hospital as a result of healthcare infection: major costs to both hospitals and commissioners
- Despite this, sustaining high levels of hand hygiene compliance is a well-documented challenge, with median rates of 40-60%
- Existing interventions (e.g. campaigns, observation) are positive but do not sustain lasting high levels of compliance
- Automated hand hygiene monitoring systems in use internationally provide a major step change in results
- They can be implemented in a way that is empowering to staff, to patients, and to leaders and the public.

Data Sources, Frequency and responsibility for collection and reporting

System provides its own dataflow

Baseline period/date & Value	HCAI information for trigger 2.
Final indicator period/date (on which payment is based)	
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Financial benefit to providers and commissioners from reducing current costs of HCAI failure should mean that technology is sustained in use without further incentives beyond the initial set up period

Supporting Guidance and References

Published Results demonstrate impact upon infection rates, clearly demonstrating VFM – examples:

- Hygiene compliance to 95% (Biovigil)
- Reduction in HCAI of 22% (nGage)
- Miami Children's hospital 2012 study (Hygreen)
    - Initial pilot results on haematology/oncology ward with low baseline
    - Hand hygiene compliance maintained consistently above 90% all shifts
    - In reviewing three years' infection data, urinary tract infections and blood stream infections decreased 100% and CLBI decreased 84.4%
    - Healthcare associated infections decreased by 67% during the time period when this approach was the only change in practice

From reference site, planning estimates for implementation cost have been validated:

- Non Recurrent start-up costs £1350-1650 per bed
- Running costs described as a small fraction of the start-up costs.

Evidence suggests a two thirds reduction in infection rates can be achieved.

Further information www.infectioncontroltoday.com "Hand Hygiene monitoring goes hi-tech"

The 'SafeHands' programme in Wolverhampton using this technology is also included as an exemplar in the Carter report on productivity in English Hospitals 2016 showing wider benefits for using the information from the system to tailor staffing to patient acuity.

2.4 GE4 Optimal Device

Scheme Name	**GE4 Optimal Device**
Eligible Providers	Acute providers that implant High Cost Tariff Excluded cardiac devices with aggregate cost of at least £500,000 per annum.
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] 1% of high-cost cardiac device expenditure subject to a minimum of £20,000. Target Value: Add locally CQUIN %: Add locally

Scheme Description

The aim of the scheme is maintenance / improvement in optimisation of device usage during the year of transition to a centralised national procurement and supply chain arrangement through:

- The enhancement and maintenance of local systems to assure compliance with national policies and specifications;
- And the development of local policies to optimise cost effective device usage and ensuring quality outcomes for patients.

Improved compliance with policies and specifications will result in improved outcomes.

Measures & Payment Triggers

The measure has been designed to ensure that appropriate device specification is maintained and where required improved; this will be measured by the number of medium/standard specification High Cost Tariff Excluded cardiac devices used as a percentage of the total number of such devices used. Policies and specifications clearly set out the instances when low or high specification devices should be used.

The number of medium/standard specification High Cost Tariff Excluded cardiac devices used in 2016/17 as a percentage of the total number of such devices (A) should be equal to or better than the agreed baseline percentage of medium/standard specification device usage (B).
A ≥ B = payment

The baseline will be set based on the higher of either:

- 2015/16 actual performance adjusted for any planned or full year effects of commissioner requested changes in 2016/17
- A 60% minimum base level

Examples:

Baseline	2016/17	
75%	75%	Would trigger payment
75%	77%	Would trigger payment
75%	72%	Would not trigger payment
60%	57%	Would not trigger payment

All high and low specification high cost tariff excluded device usage should be in line with commissioning policies, specifications and contractual requirements and will be subject to review and /or audit in line with existing contractual arrangements.

A quality matrix will be developed from the national service specification (A09) and the BHRS standards to support and allow the commissioners to audit and monitor Clinical quality.

Newly commissioned high cost devices, or increases in the volume of specific high cost devices that have resulted from commissioning decisions, may at the discretion of the commissioner be excluded from the 2015/16 baseline and 2016/17 percentages for the CQUIN payment calculation.

Definitions

- Low Specification device is a device that meets the minimum specification and may not deliver all the quality outcomes and benefits for the patient.
- Standard /Medium Specification device is a device which will satisfy the clinical requirement in the majority of patients, providing the clinical outcomes and quality benefits outlined in the NICE guidance.
- High specification device is a device that has additional features required to treat specific clinical needs.

A table indicating device categorisation is available on the PSS CQUIN webpage in support of this scheme.

Partial achievement rules

Payment will be linked to quarterly maintenance or improvement of the year-to-date selection of medium specification range high cost tariff excluded cardiac devices against the agreed 2015/16 baseline.

In Year Payment Phasing & Profiling

A 50% payment will be triggered if the actual achievement is within 1% the baseline and quality indicators are being met such as box change rates and acute hospital admission rates for disease management e.g. heart failure or arrhythmia episodes
Full payment is triggered if actual achievement is at or above baseline.

Rationale for inclusion

To ensure that device selection for patients remains consistent with the commissioning policy, service specification and contractual requirements in place for providers whilst the new national procurement and supply chain arrangements are put in place.

Considerable improvements in the NHS's purchasing efficiency for high cost tariff excluded devices have been forecast from the centralisation of procurement and supply chain arrangements. This complementary CQUIN scheme is to support the development of systems to ensure that quality is monitored and maintained whilst the procurement benefits are achieved by ensuring device selection remains consistent with the commissioning agreements, and clinical outcomes.

The centralisation of procurement and supply chain arrangements is a significant change to the historic arrangements, and whilst full clinical choice will remain, the CQUIN promotes continued local clinical involvement in device usage during a period of change whilst clinical involvement arrangements in future procurement become fully established.

The target for 2016/17 is to ensure device selection optimisation remains constant or improves. There is a wide variety in the scale of cardiac device expenditure by provider. The total annual expenditure is c.£200m with typical expenditure being c.£1.5m (with specialist centres being in the c.£10m range)

Data Sources, Frequency and responsibility for collection and reporting	
Monthly contract monitoring information. Device usage data should flow to commissioners every month. High, medium and low specification categories can be derived from a simple look-up table that is available on the PSS CQUIN webpage.	
Baseline period/ date & Value	April 2015 to March 2016. Significant data quality issues have been experienced during 2015/16 with device information. In the event that data quality issues are not resolved, providers will have to supply baseline information.
Final indicator period/date (on which payment is based) & Value	Like for like measure of Full year April 2016 to March 2017
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	The CQUIN is to maintain clinical engagement in device cost effectiveness activities and maintain quality through the 2016/17 transition period. It is not anticipated that a CQUIN will be required for this once the new centralised procurement and supply chain arrangements have been implemented and other policies are in place to encourage optimisation. However, there is potential for an enhanced device selection improvement CQUIN for 2017/18.

Supporting Guidance and References

No additional materials.

The project has been supported by a provider expert working group, liaison with industry associations and Clinical leadership is provided by Vaughan Lewis, Medical Director, NHS England South Region.

3 Blood and Infection

3.1 BI1 Improving HCV Treatment Pathways through ODNs

Scheme Name	Hepatitis C Virus (HCV) Improving Treatment Pathways through Operational Delivery Networks (ODNs)
Eligible Providers	Mandatory for all HCV Operational Delivery Network Lead providers
Duration:	April 2016 – March 2018 (with review for 2017/8)
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	Two elements: 1. **Governance and Partnership Working**: £100,000 per network. Where 2 providers share lead status the split of this funding to be agreed with commissioner and the 2 providers. 2. **Stewardship and NICE compliance** 1.6% of provider's overall CQUIN applicable specialised contract value TOTAL CQUIN %: Add locally
Scheme Description	
This CQUIN supports the infrastructure, governance and partnership-working across healthcare providers working in HCV networks in their second and third years of operation to achieve the following outcomes: • Improvements in engagement of patients • The planned rollout, aligned to NICE guidance, of new clinical and cost effective treatments guidance to improve outcomes through Multi-disciplinary team treatment plans • Improved participation in clinical trials • Enhanced data collection to demonstrate the effectiveness and equity of this way of working and the availability of new treatments. Providers across networks are responsible for developing a working group for this CQUIN scheme, mapping patient pathways and producing a plan to improve partnership working. By the end of the CQUIN scheme, ODNs will a. Be part of ongoing HCV clinical care as set out by NICE in published and forthcoming technology appraisal guidance, with all patients receiving Hepatitis C care benefiting from ODN policy-compliant care approved by an MDT b. Have clear and fully understood arrangements for partnership working inclusive of local patient groups and providers. There should be a clear written plan for partnership working with clarity of responsibility. There should be agreed communications about the ODN which allow professionals and patients alike to understand how the ODN operates and how to contact it c. Have developed partnerships which involve providers, commissioners, voluntary organisations and patients d. Provide clear monitoring data on ODN operation and outcomes for patients, including the impact of the ODN model for improving access and real life effectiveness of new treatments. This should contribute to public health, activity, outcomes and experience monitoring needs e. Be actively involved in opportunities to share learning and develop solutions within and across ODNs at regional & national level, to build the ODN collaboration model.	

Measures & Payment Triggers – Governance Payment

I. Quarter 1 Achievement: (25% of Governance Payment)

a. **Baseline report** including: signed ODN arrangements by all partners; governance arrangements; ODN footprint map including CCG boundaries and provider partners; current baseline of pathways and services; gaps in service provision; populations in line with policy / NICE guidance; evidence of appropriate administrative arrangements to enable MDTs / data reporting
b. **Engagement plan** for regional and national ODN network, and for voluntary sector & patients.
c. **Pathway Mapping Group** established (membership confirmed, schedule of meetings).
d. **Dataset reporting arrangements*** for all partners clarified and implementation begins.
e. **Proposals to monitor incidence and re-infection rates** in a defined subset of treated patients at risk of re-infection

II. Quarter 2 Achievement: (25% of Governance Payment)

a. **Develop partnership model and plan** for implementation and submit to NHS England for comments. This to involve non specialised providers and relevant commissioners.
b. **Dataset reporting* fully implemented**.
c. Evidenced commencement of **5 year ODN plan** development.

III. Quarter 3 Achievement: (25% of Governance Payment)

a. Implementation of the improved **partnership model** and partnership working including systems for data collection, activity and incidence monitoring.
b. Process undertaken to **assess patient experience**.
c. **Communication and engagement plan** agreed.
d. **Complete dataset reporting*** in the quarter.

IV. Quarter 4 Achievement: (25% of Governance Payment)

a. **Annual report** of ODN operation submitted including progress on governance, partnership working, activity reporting & patient experience feedback.
b. **Map of pathways /services** published.
c. **ODN 5 year plan** submitted and includes detailed plans for 17/18 priorities and objectives. To include how services and access to be improved for relevant patient groups. Implementation of communication and engagement plan.
d. **Complete dataset reporting***.

Where necessary to fulfil responsibilities providers may use funding from both the governance and stewardship payment to ensure network operation is adequately resourced to fulfil responsibilities for its own patients as well as its role as undertaking independent expert review for ‘prior approval’ patients for another assigned ODN.

Measures & Payment Triggers – Stewardship Payment

TRIGGER A: Managed resources within indicative financial budget forecast

- Each ODN will be issued an indicative forecast financial budget on a half yearly basis. Based on the published run rate for each ODN, and the confidential region-specific prices for HCV treatment options clinically appropriate to each genotype and treatment history, inclusive of fees, taxes and charges.
- To avoid localised differences in populations (such as differing genotype profiles by ethnicity) impacting on assessment of this measure, performance against indicative financial forecast of all 22 networks will be reported individually but risk pooled.
- Where the combined committed spend for the half year is less than or equal to the indicative budget, the full 1.6% incentive will be available to every ODN paid on the basis of the triggers B1 to B4 below
- Where the combined committed spend for the half year exceeds the indicative budget, the incentive available to every ODN and paid on the basis of the triggers B1 to B4 below will be reduced on a £ for £ basis.

TRIGGER B1: ODN MDT decisions aligned to NHS England published run-rate

- One fifth of the stewardship incentive available through trigger A is payable provided the ODN delivers MDT treatment initiations in line with the published run rate for the half year. To quality for payment the ODN treatment rate must be not less than 90% and not more than 100% of the published half year rate. There is no payment for partial achievement of this element.

TRIGGER B2: ODN Treatment cost per patient relative to lowest acquisition cost

- One fifth of the stewardship incentive available through trigger A is payable through this trigger. The indicative financial budget incorporates valid clinical exceptions to lowest acquisition cost and will be reviewed twice yearly.
- Each ODNs lowest acquisition cost measure will be adjusted for genotype, cirrhosis status and treatment history of patients initiated.
- Where the ODN average treatment cost per patient is within 10% of lowest acquisition cost for the network this indicator will be paid in full.
- Where average treatment cost per patient is above 10% of lowest acquisition the 6 networks with highest % variance will receive no payment; the remaining networks will receive half payment

TRIGGER B3: ODN Prioritisation of patients with highest clinical need

- One fifth of the stewardship incentive available through trigger A is payable through this trigger. Each ODN will set out its local priorities within its baseline report in Quarter one, including the objective criteria by which they will assess achievement of these aims. NHS England regional clinical directors, with advice from public health England and the national clinical ODN lead will assess the network Annual report and the supporting data for evidence that the network has been actively implemented. Data may include the levels of patients initiated

with cirrhosis, fibrosis F3 or above, or with relevant comorbidities, and reaching particular patient subgroups relevant to local health needs.

- Where the ODN shows strong evidence of meeting active plans for prioritising highest clinical need it will receive full payment of this element. A partial payment of 75% of this element will be paid where evidence provided gives limited assurance that patients with highest clinical need have been prioritised.

TRIGGER B4: ODN Effectiveness in sustaining benefits of treatment

- One fifth of the stewardship incentive available through trigger A is payable through this trigger. Evidence about reinfection rates is not yet sufficiently developed to use as the basis of incentivisation, so this measure incentivises capturing and analysing ODN data about local incidence of reinfection from follow up testing 48 to 60 weeks after treatment completion and using insights to inform clinical practice interventions to promote reduction of patient risk factors.
- Where evidence is gathered for over 85% of patients treated in the preceding 60 weeks and a report identifying trends and applying learning to treatment practices of the ODN is published full payment of this element will be made.
- Where evidence is gathered for less than 50% of patients treated, no payment will be made
- Where the proportion of patients retested for whom data is captured falls between 50 and 85% and a report identifying trends and applying learning to treatment practices of the ODN is published, the payment for this element will be proportional to the % of patients for whom retest data is captured.

TRIGGER B5: Completeness and Data Quality in the ODN 'registry'

- One fifth of the stewardship incentive available through trigger A is payable through this trigger.
- This payment is made where the ODN has a plan for getting all patients known to services (including those yet to be treated) to have an accurate entry in the registry within 4 months of the registry being made available by Public Health England.
- Full payment will be made where data is above 85% complete and warranted as accurate by the clinical lead in each partner organisation within 4 months and maintained each month thereafter.
- No payment will be made where data which is complete and warranted as accurate is below 50%
- Where between 50% and 85% of data is complete and warranted as accurate the payment for this element will be proportional to the % achieved

The supporting information for these measures which relate to confidential prices of treatments are available directly to ODN lead providers on a commercial in confidence basis and should only be shared as needed with ODN partner organisations who are party to a confidentiality agreement. Further information will be provided to ODN lead providers.

Definitions

1. **MDT Treatment**

a. Numerator: No of HCV patients whose treatment has been subject to MDT review and accords with ODN guideline.

b. Denominator: No of HCV patients in catchment population that should be seen in period (set out in MDT plan for network agreed with commissioners)

2. **Supporting Indicators**

a. Average Drug Treatment Plan Duration (weeks)

b. % patients completing treatment as planned

c. Patients drug treatments initiated by genotype and fibrosis/Cirrhosis status

3. **Dataset Reporting** As described and as specified in supporting documentation: BI1 Hepatitis C CQUIN reporting requirements.docx

4. **Registry data completeness**

The denominator for number of patients for this measure is as follows: The number of RNA positive patients who have attended clinic at all providers within the ODN and have not been discharged after treatment, as extracted from provider clinic systems.

Partial achievement rules

The governance payments are per quarter with no partial payment if not achieved.
The stewardship payments partial achievement rules are set out in the measures and payment triggers section

In Year Payment Phasing & Profiling

Governance payments are quarterly.
Stewardship payments are half yearly for B1 to B3 and full year end for B4 and B5

Rationale for inclusion

New HCV Treatments are recognised to be cost effective by NICE, and ODNs are a specified element of NICE technology appraisal guidance. The operation of managed network principles can

- Ensure clinically appropriate medicine choice and treatment duration is selected in line with latest evidence, and maximise the access to treatment relative to investment, achieving greater health gain.
- Ensure patient treatment interventions maximise adherence to treatment regimen and minimise relapse thus minimising the reduction in health outcomes for real world treatment compared to trial conditions
- Provide an equitable basis to rollout and prioritise patients with highest clinical need.

Data Sources, Frequency and responsibility for collection and reporting

Two types of data requirement:

a) Narrative reports – produced by ODN Clinical Teams
b) Dataset: This is demonstrated via 3 sources – Blueteq, drugs MDS and HCV outcomes dataset all of which must be fully completed and complied with

Providers will need to produce evidence of appropriate administrative arrangements in place to enable MDTs / data reporting.

Baseline period/ date & Value	Not Applicable – performance based on MDT plan not baseline period: MDT Plan Activity for financial year

Final indicator period/date (on which payment is based) & Value	Measures for financial year as at Month 6 and Month 12 except where otherwise stated
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	The set up costs of HCV ODNs were supported financially in ETO provider CQUIN or central funding allocation in 2015/16. As a year 2 and year 3 CQUIN, the governance costs will be embedded in reference costs from the year after the CQUIN concludes. Governance arrangements will need to reflect funding flows needed from Tariff income in year 4 across partner organisations to fund ongoing network infrastructure. Stewardship payments will be reviewed in light of future year requirements to inform CQUIN incentives for 2017/18

Supporting Guidance and References

NICE has concluded that a number of new oral HCV treatments are cost effective for certain patient groups (see https://www.nice.org.uk/guidance/conditions-and-diseases/liver-conditions/hepatitis)

Reducing harm from Hepatitis C is a priority for the NHS. There are estimated to be 160,000 people with chronic Hepatitis C infection in England, of whom 80,000 are diagnosed. In 2012 about 5000 people received drug treatment for HCV in the UK, i.e. about 3% of the prevalent pool of infected patients receives treatment each year. A wide body of literature on generalisability of healthcare research suggests treatment adherence and clinical outcomes achieved in real world settings fall short of clinical trial based outcomes (For example Sculpher et al 2004[9]) Effective clinical networks are one way to minimise this shortfall.

NHS England has implemented the establishment of Hepatitis C networks to ensure clinical and cost effective care is delivered with oversight from Hepatitis C centres and MDTs. Strong partnership working across the complex pathways for patients is essential to ensure patients have access to both clinical expertise and local delivery of care.

There are a large number of commissioners and services involved in the treatment of patients who may have Hepatitis C or are infected and also suffer from other co-morbidities or conditions. Acute services, drug and alcohol services, detained settings, primary and community care providers may be caring for the eligible patient groups. The majority of patients with Hepatitis C are within disadvantaged groups.

The CQUIN scheme is linked to the development of a national group of ODNs which will help support clinicians with identifying the most clinically and cost effective options for patients. It will spread specialist expertise in this rapidly evolving field beyond specialist centres making it more accessible for patients and ensuring all

[9] Sculpher MJ, Pang FS, Manca A et al. Generalisability in economic evaluation studies in healthcare: a review and case studies. Health Technology Assessment 2004; 8:1-206. See also Drummond MF, McGuire A eds. Economic Evaluation in Health Care: Merging Theory with Practice. Oxford University Press

have access to the appropriate therapeutic options and greater integration of care between providers of services whilst preserving local access.

Treatment selection is complex to support adherence, avoid resistance and relapse and to make best use of NHS resources. Hepatitis C ODNs provide a vehicle for ensuring that clinicians are aware of which are the most cost effective, efficacious treatments and to help choose between alternative products and treatment plans England has lacked any national data linking across services to improve accuracy of data on patient numbers, treatment, outcomes and access. This CQUIN scheme supports the innovation required by the whole system to work together to manage access to new treatments in a cost effective way. Networks are expected to play an active role in developing and refining the outcome data collected by partner providers over the next 2 years to develop the evidence base of treatment in routine clinical practice

Governance payment milestones in 2017/18 are expected to include:

Quarterly Milestones: 20% per quarter

- Progress Report (All Quarters)
- Five Year Plan Objectives Refresh in Quarter 3
- Complete Dataset reporting (All Quarters)*

2017/18 measures will be refined in light of the first year of the CQUIN scheme.

3.2 BI2 Severe Haemophilia Haemtrack Patient Home Reporting

Scheme Name	**BI2 Severe Haemophilia Haemtrack patient reporting at home**
Eligible Providers	All providers of haemophilia services
Duration	April 2016 to March 2019.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for the first year should be targeted to achieve payment of £3,000 per provider per quarter for maintaining at least half its eligible patients on Haemtrack, plus £200 per patient per quarter for the targeted increase (from Q3 '15/16 baseline) in numbers of patients with adequate data compliance to 70% enrolment, plus £1,500 per patient per quarter for patients enrolled and compliant between 70% and 95% of eligible patients. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
The HAEMTRACK patient reporting system is an electronic (or paper) patient-reported record of self-managed bleeding and blood product home-therapy usage. This scheme aims to establish the use of the Haemtrack patient home therapy diary as an integral part of clinical care. In centres with high recruitment and good data, staff are convinced of its clinical utility. The scheme offers financial support to all centres to improve recruitment and data quality, and to use Haemtrack as a one of the tools in an increasingly interventionist approach to individual treatment optimisation. The ambition is to raise Haemtrack use to at least 80% of eligible patients in each centre. (Some patients will refuse to participate.) It is also hoped to raise compliance with Haemtrack (data recording) by patients to an adequate standard as defined below. ***Patient eligibility is defined below.*** To calculate the CQUIN payment proportion, the following components should be included in the target payment: **Payment Element (1)**: A base target payment per centre of £3,000 per quarter (payable according to trigger 1, below, payable to all centres for *recruitment* - irrespective of compliance - to Haemtrack of at least 50% of eligible patients). **Payment Element (2**): A target payment of £200 per quarter per patient targeted to be *recruited and compliant* in each quarter during 2016/17 in excess of baseline (2015/16 Q3) up to 70% recruitment (payable according to achievement against trigger 2, below). Baseline is defined below. **Payment Element (3)**: A target payment of £1,500 is made per quarter per patient targeted to be *recruited and compliant* in excess of 70% up to 95% recruitment, (payable according to achievement against trigger 3, below).	

To calculate these figures, a decision has to be made as to how ambitious to be in 2016/17 in respect of compliant recruitment of eligible patients, quarter by quarter. The greater the ambition, the greater the payment available for this scheme.

The funding of the scheme should cover costs of enrolment and feed-back information and for coaching to reach adequate compliance, and recognises the additional incremental cost of pushing enrolment up towards 95%.

The contract CQUIN Payment Proportion is determined by taking sum of the three payment elements (i.e. the payment that would be triggered according to these rules for compliant recruitment of the *targeted* number of eligible patients in each quarter) as a proportion of forecast total CQUIN-applicable contract value for the relevant provider.

For example: -

For example, if a centre has one hundred eligible patients (denominator 100) and 45% 2015/6 Q3 baseline recruitment of whom only forty are compliant, and targets adequately compliant recruitment of eighty patients in Q1 and Q2, rising to ninety-five patients in Q3 and Q4 of 2016/17, its target payments would be:

- £3,000 x 4 = £12,000 base payment to raise recruitment above 50% in each quarter
- 30 x £200 x 4 = £24,000 to raise compliant recruitment from 40% to 70%, i.e. for an additional thirty patients, for four quarters,
- 10 x £1,500 x 2 + 25 x £1,500 x 2 = £105,000 to achieve compliant recruitment respectively above 70% at 80% for two quarters (ten patients), and above 70% at 95% for two quarters (twenty five patients),
- Giving a total CQUIN payment target of £141,000.

The CQUIN payment proportion for this scheme would then be £141,000 as a proportion of forecast CQUIN-applicable contract value.

The three payment elements are payable according to proportional achievement (see below).

Note that a centre with high recruitment but poor compliance can use this scheme to target increased compliance. For example, if a centre with one hundred patients has achieved in the base period (‘15/16 Q3) 85% recruitment (eighty-five patients) already, but only 20% compliance (twenty patients), it might target 80% compliance (an additional sixty patients) without increasing recruitment. The target payment would then be £12,000 for maintaining recruitment above 50% plus 50 x £800 (for four quarters of compliant recruitment for fifty additional patients up to 70%) + 10 x £6,000 (for four quarters of compliant recruitment up to its 80% target for the other ten patients) i.e. £112,000 for improving compliance without increasing recruitment.

Note that that over-achievement relative to target will not be rewarded – hence it is important to agree ambitious targets.

Measures & Payment Triggers

1. Recruitment on Haemtrack in excess of 50% of eligible patients, quarter by quarter.
2. Increase in compliant recruitment (number of patients) on Haemtrack up to 70% relative to Q3 2015/16 baseline (as defined below), as proportion of targeted increase in compliant recruitment up to 70%, quarter by quarter.
3. Compliant recruitment on Haemtrack from 70% to 95% (number of patients) as a proportion of targeted compliant recruitment from 70% up to 95%, quarter by quarter. First 70% of eligible patients must be compliant before these payments are triggered.

(2) & (3) are subject to adequate compliance as defined below.

All numerators and denominators as defined below.
Participation in this scheme also requires the provider to fund a subscription to the National Haemophilia Database of £250 per quarter.

Definitions

Denominator:
Patient eligibility is defined as follows: - Non-inhibitor Patients with severe or moderate-severity Haemophilia A or B on prophylaxis with Factor VIII/IX.

Numerators: Patients with severe and moderate haemophilia A and B on home delivery of Factor VIII/IX registering and reporting on Haemtrack with adequate compliance.

Baseline for Payment Element 2 and for Payment Trigger 2. The increase targeted and that achieved are both relative to the following baseline: the number of patients that were recruited and adequately compliant at that centre in Quarter 3, 2015/16.

Adequate compliance, i.e. completeness of Data is defined as (i) data supplied for > 10 weeks in a quarter, and (ii) >75% of treatment issued recorded. (Fully complete data is defined as >45 weeks data/year, 11 weeks per quarter, and between 90% and 110% of treatment issued to them is recorded.)

Partial Achievement Rules

Actual payment depends upon performance in achieving each of the three outcomes in each quarter.

Payment element (1) in each quarter depends upon achieving Trigger (1) in each quarter. Payment elements (2) and (3) in each quarter depends upon applying triggers (2) and (3) (which are %s) to the targeted payment for that quarter.

The following example extends that given above for a provider with one hundred eligible patients (denominator 100) and 45% enrolment of whom forty are compliant in 2015/6 Q3, which targets adequately compliant recruitment of eighty patients in Q1 and Q2, rising to ninety-five patients in Q3 and Q4 of 2016/17. As set out above, its targeted payment amount would be £141,000.

The CQUIN payment proportion for this scheme would then be £141,000 as a proportion of forecast CQUIN-applicable contract value.
The following illustrates the payments that should be made to such a centre according to various outturns.

1.) If the centre continued without increased recruitment, it would receive no payment under this scheme.

2.) If the centre improved recruitment to above 50% (fifty patients) for all four quarters but compliance remained at 40%, it would achieve a payment of **(12,000/141,000) times the contracted CQUIN payment proportion of actual CQUIN applicable contract value for '16/17.**

3.) If the centre increased recruitment to eighty for all four quarters, of whom sixty were compliant for four quarters (i.e. twenty up on baseline), it would achieve the base payment (targeted at £12,000) plus 20 x the payment for compliant recruitment up to 70% (targeted at £200 per patient per quarter), and so would achieve a payment of (**28k/141,000) times the contracted CQUIN payment proportion of actual CQUIN applicable contract value for '16/17.**

4.) If it increased recruitment to ninety of whom eighty-five (85%) were compliant, its payment would be based on eighty (80%) compliant patients in Q1 and Q2 (as that was the target agreed and there is no payment for over-achievement), and eighty-five compliant patients in Q3 and Q4 (as the target for those quarters was set at 95%). With, in addition to base payment for trigger 1, thirty patients above trigger point 2 for the entire period, and ten above trigger point 3 for Q1 and Q2, and fifteen above trigger 3 for Q3 and Q4 (targeted at £1500 per patient quarter), giving indicative amounts of £12,000 + £24,000 + £3,000 + £45,000, the centre would achieve a payment of **(111,000/141,000) times the contracted CQUIN payment proportion of actual CQUIN applicable contract value for '16/17.**

All payments are subject to Trigger 4 – i.e. an arrangement must be in place to transfer the appropriate funding to NHD quarterly in advance

In Year Payment Phasing & Profiling

Quarterly

Rationale for inclusion

At a patient and centre level, to promote the use of Haemtrack, which may be used for patient education and to optimise patient replacement therapy, so to achieve the most clinically-appropriate approach to Haemophilia treatment whilst maintaining or improving patient outcomes.

At a national level, it will provide insight into the reasons for the considerable variation between Haemophilia Centres in treatment intensity and to explore the relationship between treatment intensity and clinical outcome as reflected by annualised bleed-rate. Information should allow optimisation of treatment.

A previous CQUIN successfully incentivised patient registrations and reporting via Haemtrack giving a patient led record of blood product usage. The annual Haemtrack report shows this had a benign impact on product use and so contributed to the optimisation of dosing. Recruitment increased rapidly and factor use briefly stabilised. Since it ceased to be a CQUIN further recruitment has been slower.

Cost implications of the introduction of Haemtrack are mainly related to nursing input, clinical review of Haemtrack treatment records, explaining and enthusing patients, monitoring and correcting data. As the system beds in, the effort required reduces, but

<table>
<tr><td colspan="2">there is need for ongoing input to maintain patient compliance and to monitor the data. However, since Haemtrack is a central tool in maintaining treatment compliance, optimising home therapy and home stock control, this should be necessary for ongoing patient management anyway. It should be noted that 90-95% of the cost of managing a patient with haemophilia relates to drug costs. The average patient with severe haemophilia costs >£100,000 pa to treat. Staff costs are only about 5%. Increased staff input into treatment optimisation and patient education is appropriate.</td></tr>
<tr><td colspan="2">Data Sources, Frequency and responsibility for collection and reporting</td></tr>
<tr><td colspan="2">The data downloads into the Centre Haemophilia Centre Information System (HCIS), where it is available for review in MDTs and Clinic. It is checked at centre level and downloads, once checked, to the National Haemophilia Database. This data will be rich enough to allow evaluation of impact (see under “evaluation”).

Reporting should be quarterly in arrears.

All IT systems and data collections are already currently in place and operational thus would incur no extra cost. Data analysis may be analysed quarterly and annually and would be submitted to NHS England or any other designated agency. Additional cost may be incurred by the National Haemophilia Database reimbursement may be sought.

Central analysis allows various data quality checks to be conducted.</td></tr>
<tr><td>Baseline period/ date & Value</td><td>Q3 2015/16 as defined.</td></tr>
<tr><td>Final indicator period/date (on which payment is based) & Value</td><td>As above.</td></tr>
<tr><td>Final indicator reporting date</td><td>Month 12 Contract Flex reporting date as per contract</td></tr>
<tr><td>CQUIN Exit Route

How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?</td><td>Lack of staff has been cited by some centres as a barrier to uptake. Once the system is established with CQUIN funding, and producing good data, the clinical utility becomes self-evident to centre staff and it becomes established as an important element in normal clinical management, it should be self-sustaining.

To ensure continued compliance following conclusion of the CQUIN, it is intended that the Haemtrack system be embedded in service specification and built into the payment mechanism for these patients.</td></tr>
</table>

Supporting Guidance and References

There are 28 comprehensive care centres with in excess of forty patients with severe haemophilia. Some centres have more than one hundred patients. There are about 60 smaller centres with fewer than forty patients. Some are networked to larger centres and some not, some with as few as five patients. Larger centres tend to have better recruitment and compliance than smaller centres.

There are in excess of 2,500 patients with all diagnoses and all severities in the whole UK (not just England) using Haemtrack. About 1,200 English haemophilia A patients are using Haemtrack; these are mostly patients with severe haemophilia. Bleeding severity amongst patients with moderate haemophilia is very variable, with some bleeding as badly as patients with severe haemophilia; these patients are on home therapy, and thus appropriate for Haemtrack; others rarely bleed and are not on home therapy. Moderate haemophilia is probably about 10% of the home therapy total. At the moment about 65-70% of eligible haemophilia patients are registered on Haemtrack. This varies between centres in England from about 15% to 90% recruitment. Across all groups, about 50% of recruited patients provide near complete or complete data but that varies amongst English centres between 0% and 90% of those registered with the system. Those with poor recruitment also have the most incomplete data and poor quality data is of very limited use.

Analysis to date has already provided valuable insights into the sources of treatment variability between centres and suggests no correlation between varied treatment intensity and outcome. This suggests that Haemtrack will be a very valuable tool to optimise treatment regimens. More widespread clinically interactive use of Haemtrack will lead to greater optimisation of treatment.

3.3 BI3 Automated Exchange Transfusion for Sickle Cell Care

Scheme Name	**BI3 Automated Exchange transfusion for Sickle Cell Disease Patients**
QIPP reference	QIPP 16-17 S28-B&I
Eligible Providers	All providers of exchange transfusion for SCD
Duration	April 2016 to March 2018.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £350 per automated transfusion for all patients targeted for automated transfusion in a year – both adults and children. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Patients with sickle cell disease require exchange transfusions to manage their condition. This can be done manually or using automated exchange. This CQUIN scheme aims to incentivise the use of automated exchange by specified specialist centres in order to improve patient experience and use of clinical resources. Implementing this CQUIN scheme may require investment in an apheresis machine if not available. Staff training will be required. Patient information will be required. This CQUIN scheme aims to remove resource barriers to using automated exchange in order to secure best access to care for all patients for whom it is appropriate. The payment amount is determined by the targeted number of patients requiring exchange transfusion each quarter, with a £350 payment per automated transfusion. Target is 95% of all transfusion patients. When calculating the number of transfusions likely in a year, account should be taken of any lead in time if a new machine must be acquired, and a norm of 8 ½ transfusions per year per patient. The £350 payment is appropriate for both adults and children. For example, a provider anticipating 60 patients requiring transfusion, and expecting to give 95% of them automated transfusions for three quarters of the year (i.e. c, 6.4 sessions), the CQUIN payment would be £127,680 If the contract value is £Z, this translates into a CQUIN proportion of 134,000/Z.	
Measures & Payment Triggers	
1. Numerator. % of Patients with sickle cell disease requiring exchange transfusion (according to the agreed assumptions, noting the 95% target) who receive this via automated exchange 2. Improvement. % receiving automated exchange increases in each quarter relative to that achieved on average in 2015/16.	

Partial Achievement Rules	
Payment in each quarter is conditional upon Trigger 2 (improvement relative to base year) being achieved. If trigger 2 is achieved, payment is proportional to achievement of Trigger 1, i.e. the number of automated transfusions achieved as a proportion of the total number of transfusions targeted, with a cap of 100%.	
In Year Payment Phasing & Profiling	
Front-loading of payment could be considered to help defray costs of capital equipment required.	
Rationale for Inclusion	
Appropriate use of automated exchange for patients with sickle cell disease (SCD) requiring exchange transfusion for the prevention of strokes etc Desired outcome - Greater use of automated exchange transfusion - Reduced complications of SCD - Reduced cost of chelation treatment - Improved patient access and experience Automated exchange is currently being reviewed by NICE but basic costing shows this is cost effective in terms of staff resource, bed day usage and chelation therapy	
Data Sources, Frequency and Responsibility for collection and reporting	
Additional dataset in addition to usual activity reporting which doesn't currently distinguish between manual and automated exchange.	
Baseline period/ date & Value	Baseline data will be available through a national audit and via Peer Review
Final indicator period/date (on which payment is based) & Value	As above
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Using the CQUIN to fund automated exchange is a holding solution pending the development of an appropriate payment mechanism, e.g. through the introduction of an appropriate tariff code.

Supporting Guidance and References

Sickle cell disease (SCD) is the most common serious genetic disorder in England and affects 1 in 2000 live births, or 350 babies a year (NHS Screening Programmes 2010). Although the disease can vary in severity, all patients experience acute episodes of extreme pain that can have a negative effect on quality of life. For people with more severe forms of SCD, tissue damage can lead to organ failure and stroke. Life expectancy is considerably reduced at 45–55 years.

BSH guidance sets out requirements for exchange transfusion.

National Haemoglobinopathy Register includes data on SCD and requirements for exchange transfusion

Cost implications are mainly related to:

- Machine purchase if not available – the depreciation and maintenance costs
- Offset reduction in staff time
- Staff training if not available
- Blood product use

Overtime should be offset against other costs and avoided

Where a new machine is needed, a lead in of two quarters may be necessary.

3.4 BI4 Improving Haemoglobinopathy Pathways through ODNs

Scheme Name	**BI4 Haemoglobinopathy Improving Pathways through Operational Delivery Networks**
Eligible Providers	Centres (around twenty) who will act as hosts of haemoglobinopathy service MDTs
Duration	April 2016 to March 2019.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £50,000 per provider. Target Value: Add locally CQUIN %: Add locally

Scheme Description

To improve appropriate and cost-effective access to appropriate treatment for haemoglobinopathy patients by developing ODNs and ensuring compliance with ODN guidance through MDT review of individual patients' notes.

Access to specialist haemoglobinopathy care to improve the outcomes and the experience of patients with a haemoglobin disorder is a priority for NHS England in 2016/17.The prevalence of Haemoglobinopathies across England varies widely, with the majority of patients concentrated around urban areas, as does the expertise to manage these conditions. The diseases mainly affect black and minority ethnic populations which often have poorer health outcomes.

In order to provide care to often disperse populations and within limited resources the service specification for specialist haemoglobinopathy services describes a networked approach to care where the specialist haemoglobinopathy centre provides oversight for the configuration of services within an area agreed with commissioners.

Measures & Payment Triggers

1. **Q1 Initial Network Meeting (10% Payment)**
   Specialist haemoglobinopathy centre, identified by commissioners as part of contract negotiation, to arrange an initial network meeting with local providers and commissioners to produce a proposal which defines the local area of oversight and that defines the patient group whose treatment is to be compliant with ODN protocols. This meeting must include patient/carer representation and should consider inclusion of local voluntary organisations. Two or more specialist haemoglobinopathy centres may hold this meeting together but achievement of milestone will be judged on individual submissions. The report following the visits to Area Teams (to be published) should provide a framework for local discussions.

Evidence: Meeting agenda and minutes. Proposal for commissioners defining geographical area and local providers, and also the patient group whose treatment is to be compliant with ODN protocols. Terms of Reference for Network Group.

2. **Q1/2 Agreement of Pathways and Protocols (30% Payment)**
   Commissioners to sign-off proposal. Specialist haemoglobinopathy centre to arrange network meeting with local providers and commissioners to describe care

pathways and agree areas where protocols will need to be developed. This meeting must include patient/carer representation and should consider inclusion of local voluntary organisations. This meeting may be held at the same time as the meeting described above and again may include two or more specialist haemoglobinopathy centres with the same rules applied regarding achievement.

Evidence: Meeting agenda and minutes. Including a description of care pathways and protocol areas which will need to be developed, a lead and a timescale for production.

3. **Q3 Publication of care pathways and protocols & Arrangements for MDTs; Network meetings planned for 2017/18 (10% Payment)).**

Evidence: Copies of all care pathways to be submitted and evidence provided that they are embedded into practice (e.g. screen shot of protocols on trust intranet; evidence of network in use recorded in patient notes; meeting arrangements for MDTs to review patients' notes). Copy of email confirming time of place of 2017/18 meetings.

4. **Q4. Proportion of haemoglobinopathy patients with care reviewed by MDT to assure it accords to agreed ODN protocols. (50% payment)**

Evidence: MDTs in place, patients reviewed, number of haemoglobinopathy patients.

Definitions

To be defined by the ODN: patients within scope.

Partial achievement rules

Payments in Q1, Q2 and Q3 are paid if achieved on time in full.
Payment of Q4 milestone: under 50% achievement – no payment; above 90% achievement: Full payment; between 50 and 90% paid according to % achieved

In Year Payment Phasing & Profiling

In line with milestones

Rationale for inclusion

Providers should be part of an ODN for Haemoglobinopathy. Patients with haemoglobinopathy should have access to appropriate treatments in accord with ODN guidelines. This to be achieved through the development of protocols that will be implemented by MDT review of individual patients' notes.

This CQUIN is to support specialist haemoglobinopathy centres to work with commissioners and the wider haemoglobinopathy community to define and develop networks of care for patients with haemoglobin disorders.

The CQUIN focuses on developing partnership working across services which treat patients with Haemoglobinopathies to define pathways and protocols; these may be commissioned through NHS England or through other commissioners

The establishment of these networks and the defining of local protocols for care has been slow across England; this CQUIN aims to prioritise and support the allocation of resource in order that these models of care may be progressed. There have been recent deaths reported which may have been prevented if protocols for access to specialist care had been in place and followed.

Data Sources, Frequency and responsibility for collection and reporting

Each specialist haemoglobinopathy service to submit routine data the National Haemoglobinopathy Registry
Determination following ODN set up and scope definition: To add measure of patients whose care should be in accordance with policy.

Evidence of compliance with requirements of this CQUIN to be submitted directly to commissioners by trusts hosting a specialist service	
Baseline period/ date & Value	
Final indicator period/date (on which payment is based) & Value	As above
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Three years will allow new procedures to be embedded and costs to flow into reference costs for inclusion in prices

Supporting Guidance and References

None

4 Cancer

4.1 CA1 Enhanced Supportive Care for Advanced Cancer Patients

Scheme Name	**CA1 Enhanced Supportive Care (ESC) Access for Advanced Cancer Patients**
QIPP Reference	QIPP 16-17 S23- Cancer
Eligible Providers	Cancer Centres (Centre level providers of specialised oncology services - Chemotherapy and Radiotherapy). **Note*: This scheme at this stage is not appropriate for all secondary care providers of oncology – it is specifically for roll out to Cancer Centre level providers.
Duration	April 2016 to March 2018. It may be extended to new providers and patient groups in subsequent years.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £500 for each patient targeted to receive ESC within the agreed scope of the scheme. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
The scheme seeks to ensure patients with advanced cancer are, where appropriate, referred to a Supportive Care Team, to secure better outcomes and avoidance of inappropriate treatments. There is growing evidence that good supportive care provided early to patients with advanced progressing cancer can improve quality of life, possibly lengthen survival and reduce the need for aggressive treatment near the end of life. (See references, below.) This scheme will expand the implementation of the Enhanced Supportive Care approach which has been piloted at the Christie NHS Foundation Trust, alongside adoption of best practice to optimise the use of chemotherapy in patients with advanced progressing disease. This scheme will be targeted at addressing more fully the needs of patients on active anti-cancer treatment who have a diagnosis of incurable cancer. In 2014, 60,000 patients were recorded through the SACT Database as commencing chemotherapy for “palliative intent”. This will be an under-representation of total numbers of patients within this definition due to incomplete data collection. The behavioural change sought is the adoption of the enhanced supportive care approach (as outlined in the NHS England Guidance document available on the PSS CQUIN webpage in support of this scheme). This involves a number of recommended steps to establish (1) earlier involvement of the supportive care team with the oncology team, including (2) an ESC team with the right mix of disciplines and MDT meetings to discuss complex patients, (3) a positive rather than a reactive approach to early identification of the patients for whom ESC should be made available [for the CQUIN this means those	

with diagnosis of incurable cancer], (4) evidence based practice in supportive care, (5) IT to improve patient oversight, including remote monitoring, (6) best practice in chemotherapy care. A guidance document has been developed, building on the Christie Pilot that has been approved by the NHS England Chemotherapy Clinical Reference Group and Cancer Programme of Care Board.

These improvements in care will require costs to be incurred in raising the standard of care to that of the ESC model, and in reaching more patients. Elements (4) and (6) in particular will require more intensive MDT input into patient care to personalise the care of each patient, whilst (5) may require system and technology investment.

The use of CQUIN monies will be individual to each provider. Costs may be incurred to increase the capacity of existing palliative / supportive care teams to promote the development of an Enhanced Supportive Care service and in communications systems and technology to allow remote oversight.

The local CQUIN used in the North West was for three years as it incentivised the development and piloting of the scheme. As the concept is now better understood and will be implemented with the help of Christie personnel, it is likely that the CQUIN will be needed for 2 years and, in some cases, only one year.

The CQUIN Payment proportion is set at (N*500)/Z, where

- N is the estimated number of eligible patients (additional to those who would receive it under any existing ESC service), designated by the category of cancer (by site) in which it is agreed that ESC should be implemented, and the diagnosis of incurable cancer, and
- Z is the estimated CQUIN applicable contract value.
- A deduction from the £500 per patient payment is made for any activity payment that the ESC implementation would attract (e.g. an Outpatient appointment payment.)

N is not expected to exceed 800 – if a larger number is proposed, an exception needs to be agreed with NHS England.

Note that if it is agreed with the commissioner to introduce or to scale up enhanced supported care in some specialities but not others, the appropriate CQUIN payment should be scaled by the number of patients intended to benefit. Scaling may be determined by the scale of CQUIN payment available and/or by capacity constraints in the development of the ESC service. (E.g. at the Christie it has been targeted with Breast, Upper GI, skin/melanoma and Hepatobiliary Cancers).

Measures & Payment Triggers

1. Audit is established, baseline data collected and a Clinical Champion for Enhanced Supportive Care nominated.
2. Clinical Champion engages with national peer group and processes in place to provide ESC to patients in target group.
3. Proportion of patients within the payment group receiving ESC.

Definitions

For Trigger 3:
Numerator: Number of patients who are referred to a Supportive Care Team at the point of diagnosis of incurable disease, Relative to
Denominator: Total number of new diagnoses of incurable disease in those disease group areas where the ESC initiative is being focussed, subject to any cap on the number of ESC patients in this scheme agreed with the commissioner.
Where a provider is already funded to provide ESC for some patients, then the trigger, i.e. the denominator for trigger 3, should be set as the additional patients meeting the eligibility criteria to whom the service will be extended.

Partial achievement rules

Given significant set up costs and time, in the first year 20% payment is made for achieving payment trigger 1, and 20% for payment trigger 2, with the remaining 60% paid according to trigger 3, the proportion of the actual number of such patients who actually receive ESC during the second half year.

In Year Payment Phasing & Profiling

	Rules for in year payment and partial payment
Q1	20% of whole-year CQUIN value awarded if the audit is established, baseline data collected and a Clinical Champion for Enhanced Supportive Care nominated.
Q2	20% of whole-year CQUIN value awarded if locally agreed Q2 target of improvement from baseline achieved and Clinical Champion engages with national peer group. Q2 target must be set as soon as possible after Q1 ends using data from Q1
Q3&Q4 Combined	Maximum of 60% of whole-year CQUIN value available according to proportion of eligible patients receiving ESC.

Rationale for inclusion

Enhanced supportive care has developed through recognition of what specialist palliative care can offer – as a cost-effective and life-extending approach to treatment of patients with incurable cancer, but also from recognition of the barriers to achieving earlier involvement of palliative care expertise within the cancer treatment continuum. These barriers may be largely due to the perception of palliative care by the public, patients and many health professionals - in particular the association with care at the very end of life. The excellent care that is provided for patients, who are nearing the end of life, needs to be extended to support them earlier on in the cancer pathway.

Data Sources, Frequency and responsibility for collection and reporting

Trusts should be collecting referrals to the supportive care team (the trigger 3 numerator) through the national Electronic Palliative Care Co-Ordination Systems (EPACCS) initiative. Diagnosis of incurable cancer (the trigger iii denominator) should be registered in SACT – roughly as those receiving Chemo with palliative intent on SACT.

There are a number of suggested outcome measures within the ESC Guidance document. All Trusts need to measure patient experience, utilising a patient questionnaire, patient mortality within 30 days of chemotherapy (through the national SACT data submission), and impact on Emergency Hospital admissions. Baseline levels of performance need to be assessed within the 1st quarter of the 1st year of this scheme.

Baseline period/ date & Value	Base year provision of ESC if any to be quantified by provider.
Final indicator period/date (on which payment is based) & Value	Provider to supply to commissioner in line with submissions to EPACCS (for the numerator of Trigger 3) and to SACT (for the denominator).
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	This scheme transforms the way in which care is delivered. It will be maintained through clinical engagement and acceptance of the benefits to patients. The initial incentive is required to kick-start the process for changing long established clinical practices and potentially to support adjustments to staffing levels/ staff utilisation. The benefits of the scheme to patients and reduced health-care costs will create a very strong case for the continuation of the Enhanced Supportive Care service once the CQUIN investment closes. Any additional net costs incurred will be reflected in future prices for cancer patient care. This will be addressed during the course of the first year of the scheme.

Supporting Guidance and References

"Enhanced Supportive Care"(ESC) is a new term for existing palliative care services and other services that support cancer patients, better to suit the changing landscape of cancer care. It is based around six principles:

- early involvement of supportive care services,
- supportive care teams that work together,
- a more positive approach to supportive care,
- cutting edge and evidence-based practice in supportive and palliative care,
- technology to improve communication,
- best practice in chemotherapy care.

It is intended to introduce ESC in a phased way, starting with those patients who are diagnosed with incurable cancer. Subsequently, ESC may be made available to those patients living with curable cancer, or living with cancer as a chronic illness, as well as cancer survivors.

Whilst the experience of the Christie and elsewhere is that this intervention is cost-saving over all, it will be important that it is adequately funded to ensure that gains for patients and for the system are realised. Adopting this model will impact on a number of outcome areas but in summary the key outcomes expected are:

- improvement in patient and carer experience
- reduced need for aggressive interventions in the last days / weeks of life
- improved survival

The evidence base and the initial findings from the Christie pilot suggests reduced health care costs through a focus on earlier access to supportive care. In particular, the Christie pilot suggests reductions in emergency admissions, a reduction in 30-day mortality and optimisation of the use of chemotherapy at the end of life.

References: Temel et al 2010; Bakitas 2015; Greer 2012

4.2 CA2 Nationally Standardised Dose Banding Adult Intravenous SACT

Scheme Name	**CA2 Nationally Standardised Dose Banding Adult Intravenous Systemic Anticancer Therapy (SACT)**
QIPP Reference	QIPP 16-17 S21- Cancer
Eligible Providers	All providers providing intravenous chemotherapy services
Duration	April 2016 to March 2017, extendable for a further year for additional classes of drug.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. ½ % of the annual value of the chemotherapy spending to be dose-banded by Q4. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
A national incentive to standardise the doses of SACT in all units across England in order to increase safety, to increase efficiency and to support the parity of care across all NHS providers of SACT in England. A set of dose-banding principles and dosage tables have been developed by a small team of Pharmacists supported by the Medicines Optimisation CRG. (The Nuttall-Clark tables). The behaviour change required is that all NHS England commissioned providers of chemotherapy move to prescribing a range of SACT drugs in accordance with a Nationally approved set of dose bands. These drugs and dose bands will be approved by the Medicines Optimisation CRG, and the Chemotherapy CRG. Providers will be expected to 1. Have the principles of dose banding accepted by their local oncology and haematology teams. 2. Have the drugs and doses approved by their local formulary committees. 3. Have SACT prescribed in accordance with the doses of drugs listed in the National dose-banding tables. CQUIN payment should be targeted at ½ % of the annual value of the chemotherapy spending to be dose-banded by Q4. To set the CQUIN payment amount on this basis, as is required, necessitates a judgment in advance of contract signing and thus in advance of formal baseline assessment of the intended scope and approximate value of the dose-banding to be conducted in the ‘16/17 financial year.	

Measures & Payment Triggers

1. Collection of base-line data. For range of dose banded drugs as agreed with commissioner.
2. Dose banding, with target banding levels to be set for quarters 2, 3, and 4. Each quarter target to be set in terms of the following numerator and denominator:

Numerator: Number of SACT doses given of selected drugs that match standardised doses
Denominator: Number of SACT doses given of selected drugs.

Thus success is achieved the agreed % of chemotherapy doses for a defined list of SACT drugs prescribed and administered in accordance with national dose banded doses.

Defined list will need to be agreed locally as certain providers may not use all dose-banded drugs.

An example is shown below.

Drug	Number of doses administered	Number of doses administered in accordance with national dose banded tables	%
Epirubicin	1,000	750	75
Cyclosphosphamide	1,000	800	80
Vincristine	100	70	70
Doxorubicin	500	400	80
Flurouracil	1,000	900	90
TOTAL	**3,600**	**2,920**	**81%**

Definitions

This CQUIN scheme is limited in scope to Adult chemotherapy.

Partial achievement rules

As below. The commissioner will be able to review data submitted, and where exceptions apply will be able to agree to full payment of the CQUIN. In particular where participation in a trial precludes the use of dose-banded SACT, or where patient mix means that larger numbers of patients fall outside of dose-banding dosing tables.

In Year Payment Phasing & Profiling

Q1	10% of CQUIN for collection of base-line data. For range of dose banded drugs as agreed with Hub. Agreement with hub of stretch target for improvement during course of the year. 10% of CQUIN for demonstrating that local Drugs and Therapeutics committee have agreed and approved principles of dose banding, and dose adjustments required.
Q2	20% of CQUIN payable on achievement of Q2 target. If Q2 target not achieved. 15% payable if within 5% of target. 10% payable if within 10% of target. 0% payable if > 10% variance to target.
Q3	30% of CQUIN payable on achievement of Q3 target.
Q4	30% of CQUIN payable on achievement of Q4 target.

Rationale for inclusion	
Dose banding and dose standardisation will support the National Medicines Optimisation agenda. Standardisation of doses of SACT has the potential to improve patient safety, and ensure that patients are in receipt of doses approved nationally. Dose banded SACT may release some cost savings as costs of preparation may be reduced through preparation of fewer “patient-specific” dosages. Wastage of SACT would also be reduced as potential for re-use of unused dosages would increase. National standardisation should further enable greater efficiency in procurement in due course.	
Data Sources, Frequency and responsibility for collection and reporting	
The National SACT data set records the dose of chemotherapy administered. Therefore the range of drugs covered by the dose-banding tables, will be relatively for local Trusts, Local Area Teams and National Commissioners to validate data and confirm adoption of dose banding. Data quality should be good, and will improve further over time as more Trusts adopt E-prescribing systems for chemotherapy.	
Baseline period/ date & Value	SACT data already being collected. Therefore level of improvement can be measured.
Final indicator period/date (on which payment is based) & Value	SACT report, prepared for SACT by provider, made available to the commissioner.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract.
CQUIN Exit Route How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?	This scheme is appropriate to support transition and set up costs for providers who are not yet undertaking dose banding, or who are dose banding to a different protocol. Beyond the conclusion of the scheme, it is intended that dose-banding be included in the quality schedule and also put into the national service specification as standard from 2017/18. It is believed that once the principles of dose-banding are accepted and adopted, then hospitals will not revert back to using non-standardised dosing, given the expected saving in costs accruing to the hospital. A National list of dose-banded drugs will also enable providers of electronic prescribing systems to pre-load these drugs and doses into their systems – thus enabling appropriate doses to be populated at the time of prescribing.

Supporting Guidance and References

In Scotland, where dose banding of SACT has been established for a number of years, it has been estimated that 60-70% of all SACT administered is in the form of dose banded preparations.

While limited data exists in the UK – it is clear that there is not a current consensus on doses of drugs, or the method of dose banding to be used. There is therefore significant potential for the adoption of a **single** standardised set of doses for a range of SACT drugs across England.

The National Dose banding of commonly used SACT has been attempted in England on a number of occasions in the past 10-15 years. It has led to savings of over £1m pa one of ten areas in England.

The ultimate outcome is that for a number of SACT drugs every NHS hospital in England will use the same range of doses of these drugs. This will require acceptance at local level of the benefits derived from dose-banding and the efficiencies that this will deliver. It is anticipated that change will take 1-2 years to embed. It should be noted that different providers are at different stages of their dose-banding journey.

The move to dose-banding of certain SACT agents should, in time, reduce costs of preparation of certain SACT agents and reduce waste.

The move to using a standardised set of doses for a range of SACT drugs will require providers to consider how they provide aseptic chemotherapy services, and the most cost-effective method of delivering that service. Costs may be incurred as Trusts review the on-going viability of the aseptic preparation units, and take difficult decisions as to their long-term futures.

Batch preparation of chemotherapy will have some advantages, and may enable Trusts to procure these drugs at lower cost. Over 1-2 years cost savings should be realised through product standardisation, the potential for commercial suppliers to enter the UK market for dose-banded products.

Overall, the standardisation of doses should reduce costs for providers, while releasing capacity within local units to support other activities and in particular clinical trial and research.

5 Internal Medicine

5.1 IM1 Reducing Cardiac Surgery Non-elective Inpatient Waiting

Scheme Name	IM1 Reducing Cardiac Surgery Non-elective Inpatient Waiting
Eligible Providers	Providers providing semi-urgent Coronary Bypass Surgery with scope for improvement in this dimension.
Duration:	April 2016 – March 2018 (depending upon achievable stretch per provider)
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payments of £10,000 (Payment 1) plus £150 for each targeted reduction in days' waiting beyond 7 (Payment 2) Target Value: Add locally CQUIN %: Add locally based on (Payment 1+ Payment 2) value / CQUIN-applicable contract value
Scheme Description	
The scheme aims to ensure that patients referred for coronary artery bypass grafting (CABG), semi urgently, have CABG as an inpatient (with or without transfer) within **seven** days of an angiogram (wherever that takes place) or within seven days of transfer to a non-elective pathway (whichever is the later). The scheme seeks to realise clinical benefit to patients, but by reducing length of stay can additionally provide a QIPP opportunity for the respective commissioner (CCG or NHS England) by reducing the length of stay. Costs will be incurred in setting up the data systems and in designing pathway improvement at scheme initiation. Costs will further be incurred in monitoring waiting and in ensuring capacity – continuously. The justification of the extra effort to reduce waiting times is in reduced VTEs, infections etc, as well as reduced Length of Stay. The baseline should be reviewed in each specific centre and a realistic but challenging target set.	
Measures & Payment Triggers	
1. Payment 1. Reporting and set-up. The provider will be required to provide administrative and clinical support to ensuring that the data monitoring for this scheme is completed in a timely way and is accurate. The reporting requirements quarter by quarter are set out in the profile section. 2. Payment 2. Performance. The baseline number of bed days in excess of seven days per quarter will be agreed; together with an aspiration reduction in bed days in excess of seven (the denominator). Payment will then reward reduction in number of days waiting beyond seven (the numerator) relative to the aspiration.	

Definitions

For the Payment 2 performance measure (both numerator and denominator) the definition of a day waiting beyond seven is as follows.

Days waiting beyond seven for all patients* referred and accepted who are non-elective urgent in-patients accepted for coronary artery bypass grafting including patients waiting in other Trusts who have been accepted for transfer following angiogram, where the seven day count starts at point of angiogram or transfer to non-elective pathway, whichever is the later.

*The clinical exceptions to this would be:

- Those with abnormal blood results which need investigation and management.
- Those with other inter-current illness such as sepsis or uncontrolled diabetes
- STEMIs who are referred for surgery
- Those who present with a NSTEMI and have had an acute stent inserted

*Exception reporting not to exceed 20%.

Baseline performance – except when the commissioner stipulates otherwise locally, will be outturn waiting times beyond seven according to the above definition for 2014/15 excluding clinical exceptions. (See data sources.)

Partial achievement rules

Payment 2: achieved reduction in waiting as a proportion of aspiration.

E.g. A provider with a relevant caseload of 300 patients per annum, of which it is estimated that 280 wait beyond seven days for an average of 8 days each. There are then 2,240 wait days beyond seven to be reduced, 560 per quarter. The aspiration is set to reduce these by half during quarters 2-4, i.e. to reduce wait days beyond seven by 280 per quarter. This would justify a CQUIN payment of 3x280x£150=£126,000.

NOTE: it will be essential to agree baseline bed days waiting beyond seven before contract finalisation, default being 2014/15 data, and also to agree the aspiration for reducing that number in quarters 2-4, so that an appropriate CQUIN payment amount and CQUIN payment proportion can be set.

In Year Payment Phasing & Profiling

1. Reporting requirements – to yield Payment 1

Quarter 1 –50% of Payment 1 CQUIN monies to incentivise baseline work
Quarter 2- 20% of Payment 1 in line with milestones – see below
Quarter 3- 20% of Payment 1 in line with milestones – see below
Quarter 4 –10% of Payment 1 Final year payment based on agreed milestones – see below:

Reporting requirements to attract Payment 1 (as per Payment Guidance)
Quarter 1

A. Report produced to present baseline data on all the non-elective urgent inpatient waiting times for coronary artery by-pass surgery including those patients waiting to be transferred from other centres and internal referrals. Exceptions recorded with rationale on why all those patients waited 7 days and above.

B. Establish a working group within the clinical network to review current pathway of care for this group of patients including the pathway for those patients requiring transfers between hospitals. Suggested agenda items:
   - identify blocks and challenges to the system,
   - ensure system is fit for purpose to electronically record all referrals regardless of source,
   - agree clinical acceptance criteria including guidance for dual anti-platelet therapy modification and aspirin as per the service specification.

C. Agree trajectory for reduction with regional team consistent with other units in the area.

Quarter 2 and 3

A. Review trajectory and performance within the working party.
B. Identify blocks to improvement and identify resources to support the delivery of these including highlighting serious issues to commissioners.
C. Report Quarterly performance to commissioners in line with agreed trajectory.

Quarter 4

A. Review trajectory and performance within the working party.
B. Develop improvement plan to address the blocks highlighting serious issues to commissioners.
C. Report quarterly and full year performance to commissioners in line with agreed trajectory.
D. Agree with all commissioners the scope for further development during the next financial year including where relevant for inclusion in commissioning intentions. This should include incorporation of the regular monitoring into business as usual practice and using the baseline data develop a service improvement proposal that can be costed and quantify the expected quality and productivity benefits.

2. Performance to determine Proportion of Payment 2-(as per Payment Guideline) to be paid at end of quarters 2-8.

Reduction in number of bed days of waiting beyond 7 days (defined as above) as a proportion of aspiration reduction in bed days waiting beyond 7 days (defined likewise).

Rationale for inclusion

Over the last few years there has been a stabilisation in the numbers of patients being operated upon so that in 2012 the number of heart operations performed was 34,174[10] The ratio of elective vs non-elective has changed so that with the implementation of new acute coronary syndrome guidelines there has been an increase in non-elective referrals for coronary revascularisation. This can result in a long length of stay for patients. This leaves such patients at risk as all will have an unstable syndrome thereby are at increased risk of death from myocardial infarction. Such patients also occupy many beds in district and teaching hospitals so that the flow of acute medical patients is disrupted in all acute hospitals. In addition they undergo an increased risk of acquired hospital infection and complications.

[10] http://www.bluebook.scts.org

Capacity problems exist within the cardiac non-elective pathway when delays to treatment occur, which has a dis-benefit to the referring centre by causing a delayed transfer of care, and in the cardiac surgical unit once the patient is fit for transfer.	
Data Sources, Frequency and responsibility for collection and reporting	
Electronic referrals database – local resource used by providers. Use of this system to track non-elective referrals can generate the required reporting for the scheme. Providers will be required to work with their referring organisations and internally to ensure that all referrals for semi-urgent coronary bypass surgery are entered onto the database. Where a provider does not have access to an electronic system, they should agree a local database with commissioners that provides consistent reporting measures. Many of these patients move between NHS organisations on a non-elective basis; HES data does not provide a platform to collect the relevant information. Reporting frequency: Quarterly. Providers will be required to maintain the database on a real-time basis as this will inform the referral process. This will then generate the reporting for this scheme.	
Baseline period/ date & Value	Baseline performance and aspiration to be agreed before contract signature, in order to set the CQUIN payment proportion. SUS data may be used to source or to validate estimates. This is available for 2014/15, which can serve as baseline, in the file available at the CQUIN website alongside this document. See <IM.i CABG waiting CQUIN Baseline data>
Final indicator period/date (on which payment is based) & Value	Achieved drop in waiting beyond 7 days in Q4
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Costs incurred in performing surgery to reduce waiting times will be recouped through normal payment mechanisms. This scheme supports profiling of cardiac surgery capacity within a centre for elective and non-elective work, providing the incentive to continue work to maintain efficiencies and to avoid delays to surgery. Shorter lengths of stay reward providers within trim point, as do avoiding costs of caring for exacerbations. The 7 day wait standard (LOS from trigger to surgery of 95th centile patient per year at or below 7 days) will be included in the Quality Schedule in the second year of the scheme as a permanent change, with information requirements included in the information schedule.

Supporting Guidance and References

There have been multiple national and local improvements programmes to review this issue over the last decade. NHS Improvement completed a national audit of inter-hospital transfers and identified delays and blocks to care which included, lack of dedicated resource to co-ordinate referrals, balance of managing elective waiting list, transport, clinical criteria.

Cardiovascular networks continued this work and undertook local work to agree the blocks, local pathways and a trajectory for a reduction in waiting times for patients. The implementation of an electronic referral system which could also monitor waiting times for transfer supported the progression of this work.

The cardiac surgery clinical reference group recognise that this remains an issue and with no central monitoring of status there remain perceived and real waiting time issues for non-elective patients. This scheme seeks to review and address the current situation, and to establish the monitoring process

There is clinical and financial cost to the NHS of hospital acquired infections and complications such as VTE.

This scheme needs to be considered in line with elective waiting times and commissioners and providers need to work together to agree a complementary plan which supports both aspects of this patient pathway.

5.2 IM2 Cystic Fibrosis Patient Adherence

Scheme Name	IM.ii Cystic Fibrosis Patient Adherence
Eligible Providers	2016/17 Pilot: Nottingham; Southampton (including for Poole patients); Sheffield 2017/20 Randomised Control Trial across 17 centres providing services for CF patients; the three pilot sites now piloting as Patient Observatories. All centres thereafter if successful.
Duration:	April 2016 – March 2020
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payments for 2016/17 of c. £65,000 for the three pilot sites, with an additional sum (locally agreed) for Sheffield as coordinator. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
This scheme employs an electronic Cystic Fibrosis (CF) adherence indicator captured by an IT platform (CFHealthHub) to deliver a complex behavioural intervention that increases patient activation and adherence, thus delivering better patient outcomes and avoidance of costly escalations. Objective adherence is measured for high cost inhaled therapies collected via chipped nebulisers and displayed in CFHealthHub. CFHealthHub provides feedback to patients and clinicians about the adherence indicator in real time integrated into daily life and routine clinical care. CFHealthHub also provides a co-produced platform delivering a complex intervention designed to increase patient engagement by identifying barriers to patient activation and then using systematic behaviour change strategies to target barriers to patient activation. High cost inhaled therapies are prescribed in CF because randomised controlled trials have shown evidence of effectiveness in improving lung function and decreasing exacerbations. Inhaled medications can be considered to be preventative therapy that enables patients to self-manage in the community whilst working and attending school whereas intravenous antibiotics required to treat exacerbation can be considered to be rescue medications that typically require hospitalisation and will typically disrupt daily life. The benefits of inhaled therapies seen in RCTs are typically associated with adherence levels within RCTs of around 80%, whereas the median adherence rates in routine clinical practice are around 36%. Median adherence rates of only 36% for preventative therapy undermines therapy effectiveness and leads to avoidable hospital admissions. Medicine possession ratio data show that patients who collect less than 50% of their preventative therapy cost much more than those that collect 80% and the additional health care costs are related to unscheduled rescue care in hospital. Currently, routine clinical management in CF in the UK is carried out without knowledge of adherence. Without objective measures neither patients nor clinicians can reliably estimate adherence. This makes clinical encounters ineffective and may lead to important waste of resource: for example commissioning criteria allow escalation from bd tobramycin (approx. £7,000 per year) to tds aztreonam (approx. £12,000 per year) if tobramycin is failing. With median adherence of 36% the most likely reason for tobramycin failure is non-adherence and switching to a tds drug will also fail waste	

money and not allow the clinician to focus on the more important issue of supporting patient engagement and activation. Embedding adherence data in every consultation has been found to be transformative in trailblazing sites.

The sums indicated (£65,000 for Southampton, for Nottingham, with additional funding for Sheffield recognising its coordinating role), as a proportion of CQUIN-applicable contract value, should provide the three providers piloting this scheme in 2016/17 with funding plus CQUIN incentive (of around 25%) to implement the pilot as specified below. Costs are justified in the Supporting Guidance section, below.

Measures & Payment Triggers

'16/17 Pilot.

The pilot requires the centres to deliver the pilot trial in their centres. The pilot study protocol is highly detailed and outlines what will be expected. Pilot centres will attract the CQUIN payment as long as

- they employ an interventionist who works with the research team according the protocol, and
- (through the interventionist) they provide recruited patients with chipped nebulisers and data transfer.

In addition, Sheffield as coordinator will pilot the development of an observatory, with the following deliverables:
1) Data observatory with measurement of adherence across a whole centre.
2) Data reports that show which patients are adhering and which are not to allow identification of at risk groups.
3) Data systems ready to accept Nottingham and Southampton in 2017 and to allow them to also receive centre level patient reports.
4) Data systems allowing Southampton, Sheffield and Nottingham to benchmark and compare.
5) An understanding of adherence changes within the majority of the Sheffield patients over the 12 month period.

Payment triggers for the RCT (from '17/18) are included in Supporting Guidance (below). However, the RCT methodology is under development, and adjustments may be made in advance of finalising the CQUIN scheme for '17/18.

Definitions

See supporting guidance below.

Partial achievement rules

None.

In Year Payment Phasing & Profiling

'16/17 Pilot

Hospitals will need the money to make appointments to support the programme and to recognise that the appointees will need to meet the evaluation team goals.
The centres will require this payment up front.

Rationale for inclusion

CFHealthHub is a platform that collects adherence data for high cost inhaled therapies. CFHealthHub, the focus of this scheme, provides a structured intervention to support patient activation by feeding back patient's adherence and linking this to problem solving and motivational interventions.

Health economic modelling suggests that, if an adherence intervention of modest effectiveness were to be implemented across the 6000 adults in the UK with CF, savings of more than £100 million might be expected over a 5 year time scale.

The adherence indicator is generated by CFHealthHub from data from chipped nebulisers, with data displays co-produced with patients and clinicians. Data capture occurs automatically without interrupting the flow of routine care and without adding any burden. The adherence indicator is available in real time for patients and for clinicians to provide feedback, which is a strong driver of behaviour change.
The behaviour change that is sought is

1) Improved adherence and self-management by patients, enabling better health outcomes and a much less time off work and other life activities.
2) Change in clinical teams so that they devote time to delivering structured evidence based interventions to improve and to support patient activation that in turn supports adherence and self-management.
3) Change in the attitude of clinicians to the challenges of sustained adherence in clinical care. It is likely that patients will only share personal data with teams that have an appropriate and supportive attitude.

CFHealthHub supports this intervention by

1) Making the capture of adherence data automatic.
2) Making adherence data available at all clinical encounters.
3) Providing feedback of data to patients which will support behaviour change
4) Providing structured interventions to allow clinicians to support behaviour change in patients to increase adherence
5) Supporting the fidelity of interventions to increase patient activation through menus available within CFHealthHub
6) Providing unit level adherence data to allow units to understand their unit level adherence as a quality indicator

Link between behaviour change and outcome
Meta-analysis has demonstrated that feedback of adherence data can increase adherence by around 20% and a further 7% increase in adherence results if relatively simple behaviour change strategies such as problem solving are added. High cost inhaled therapies are effective in reducing exacerbations if they are adhered to. Hence improving adherence will be associated with a reduced need for hospitalisation for intravenous antibiotics. The planned 20 centre RCT evaluation is designed to establish the relationship between the process of adherence and the outcome of reduced exacerbations. Once this relationship is established, adherence can be used as a quality indicator. The NIHR programme team are working with HSCIC to establish adherence as a UK quality indicator.

Data Sources, Frequency and responsibility for collection and reporting

2016/17 Pilot
The Clinical trials unit at Sheffield School of Health and Related Research (ScHARR) will monitor involvement of centres in the trial and will be able to confirm to commissioners that the pilot centres have taken part in all the evaluation activities. Data sources for RCT (from ‘17/18) are discussed in the additional information supporting this CQUIN.

Baseline period/ date & Value	n/a. for pilot year
Final indicator period/date	n/a. for pilot year
Final indicator reporting date	n/a. for pilot year
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	The UK CF Registry is currently used for commissioning in CF. Once the evaluation phase is completed, we will report unit level adherence in the CF registry as an important quality indicator that will be routinely collected by CFHealthHub and regular feedback and benchmarking of unit level adherence in the CF registry reports will drive continued use of CFHealthHub to support adherence in clinical care. Financial savings from improved adherence, which support the continuation of the programme, are shared between commissioners and providers. Providers continue to benefit from implementing strategies to increase patient activation since patients require less unscheduled rescue care. Costs will in due course feed through into the CF year of care tariff.

Supporting Guidance and References

Costs

Costs will be incurred in the pilot year ('16/17) of circa £50,000 per centre (with additional costs for Sheffield).(The CQUIN payments exceed these figures by c.25% so to provide an incentive for participation – as is the norm for CQUIN schemes.) Details as follows:

May 2016 to April 2017
Costs include 0.52 of a band 6 interventionist for 12 months in each centre, the provision of 64 chipped nebulisers and the data transfer and peripherals and a hand held computer tablet per centre.

The funding for the interventionist post will need to be made available in a timely fashion so that the individual can be appointed and trained to allow the trial to start on time. The appointed individual will need to work closely with the NIHR research team and observe the research protocols.

Some savings expected from reduced exacerbations may be expected within the pilot but the amount is modest as only 32 patients are included in each pilot site .The emphasis within the pilot is to iterate the intervention further by involving additional hospital teams and patients in co-producing the intervention, intervention manual and data presentation within CFHealthHub.

There are some additional costs at Sheffield in excess of the other pilot sites, which will be reflected in a higher Target CQUIN payment.
Specific additional costs at Sheffield:
(i) Senior input to run the national CQUIN programme including both the NIHR evaluation and the data observatory
(ii) Project manager and support officer (a) to co-ordinate establishing framework and governance structures of data observatory including information governance and ethics, (b) to co-ordinate contracting with all the centres that will enter the RCT in Sept 2017 (c) to co-ordinate the move of Nottingham and Southampton into the data observatory in May 2017
(iii) Programming from Farr Institute Manchester to provide metrics within data observatory: Cost £25,000
(iv) Funding the Phillips to establish I-Neb connectivity >> Cost £15,000

Further details of the intentions for future years are set out in the Annex, based on the NIHR Evaluation and expected rollout:

- Stage 1 March 2015 to April 2016: Intervention development and co-production
- Stage 2 May 2016 to April 2017: Pilot Trial in 2 additional centres
- Stage 3 July 2017 to October 2019: Fully powered Trial.
- Stage 4 September 2019 onwards: Rollout to all CF centres

5.3 IM3 Multi-system Auto-immune Rheumatic Diseases MDT Clinics, Data Collection and Policy Compliance

Scheme Name	IM3 Multi-system Auto-immune Rheumatic Diseases MDT Clinics, Data Collection and Policy Compliance
Eligible Providers	All providers of specialised rheumatology services
Duration	April 2016 to March 2019
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of £150 per projected number of MDTs (up to one per patient in a year). Target Value: Add locally CQUIN %: Add locally
Scheme Description	
This CQUIN is to support the development of coordinated MDT clinics for patients with multisystem auto-immune rheumatic diseases, and to ensure data collection and compliance with existing NHS England Commissioning Policies. This will be achieved by the development of a coordinated network that involves all rheumatology providers in each senate region, in the context of the establishment of national model Specialised Rheumatology centres. Systemic auto-immune rheumatic diseases are rare, multisystem, non-genetic conditions that have high morbidity and mortality. They share overlapping clinical and serological features, affect multiple organ systems, and therefore require coordinated multidisciplinary care. Earlier diagnosis and intervention, enhanced recognition of severe or refractory manifestations requiring specialised centre involvement, and earlier detection/prevention of relapse will reduce avoidable mortality and morbidity, reduce costs, and improve quality of life, aligned with the vision of the NHS Outcomes Framework. To set the target CQUIN payment for this scheme at a level commensurate with the cost of implementation, it is necessary to determine a target number of patients whose care will be considered by MDT and data capture as prescribed. The target payment will be £150 times the number of patients targeted. The CQUIN payment proportion is derived by taking the product of this calculation as a fraction of forecast CQUIN-applicable contract value each year.	
Measures & Payment Triggers	
1. Initiation of regional networks, to review treatment plans of specialised rheumatology patients in line with policies (see Annex). All providers across networks are responsible for developing a working group for this CQUIN and an implementation plan. 2. Ensuring policy compliance and promoting data collection into the BILAG BR, DUO and UKIVAS registries in line with the published Specialised Rheumatology policies. 3. Comprehensive governance of the management of rare autoimmune rheumatic diseases though MDTs. 4. Achieving local data collection in order to define the cash-releasing savings of the network and Commissioning Policies.	

Definitions

For 2 and 3, achievement is measured against the following indicator:

- **Numerator** The number of patients treated within NHS England specialised rheumatology Commissioning Policies during 2016/17 whose treatment plans have been considered by a Specialised Centre MDT where required, and whose data collection into the BILAG BR, UKIVAS and DUO registries is compliant with the published policies.
- **Denominator** The number of patients treated during 2016/17 targeted for MDT consideration and data capture.

Partial achievement rules

Final payment (50% of total) proportionate to achievement of Q4 target 3 (see profiling): proportion of patients reviewed.

In Year Payment Phasing & Profiling

Date/period milestone to which relates	Rules for achievement of milestones (including evidence to be supplied to commissioner)	Date milestone to be reported	Milestone weighting (% of CQUIN scheme available)
Quarter 2	The Provider must submit the following: 1. Show that data completeness meets or exceeds 90% for Q1 and Q2. Provide exceptions (e.g. zero relevant admissions) recorded with rationale. 2. Evidence of agreed process for validating and reporting dataset to be established. 3. Evidence that clinical leads are engaged in network discussions to develop patient pathways with an agreed in-year action plan. 4. Baseline assessment of existing policy-related activity to quantify potential cash releasing savings from implementation of published policies within the network.	Where all the Q1&2 requirements are met, 25% of annual CQUIN monies associated with this indicator will be paid.	
Quarter 3	The Provider must submit the following: 1. Show that data completeness meets or exceeds 90% for Q3. 2. Provide exceptions (e.g. zero relevant admissions) recorded with rationale.	Where all the Q3 requirements are met, 25% of annual CQUIN monies associated with this indicator will be paid.	
Quarter 4	The Provider must submit the following: 1. Show that data completeness meets or exceeds 90% for Q4. 2. Provide exceptions (e.g. zero relevant admissions) recorded with rationale. 3. Demonstrate what proportion of patients have had their care reviewed according to the agreed policies.	Where all the year-end requirements are met, a proportion of the remaining 50% of annual CQUIN monies associated with this indicator will be paid. This proportion should be the ratio of numerator to denominator as above.	

Years 2,3	The Provider must submit the following: 1. Show that data completeness meets or exceeds 90% for Q4. 2. Provide exceptions (e.g. zero relevant admissions) recorded with rationale. 3. Demonstrate what proportion of patients have had their care reviewed according to the agreed policies.	80% payment dependent upon performance, 20% for sustaining system and data flows.

Rationale for inclusion

Currently, there is no coordinated process within each Region that ensures comprehensive governance of the management of rare autoimmune rheumatic diseases or supports a cohesive drive to improve outcomes. As a result, there is significant variation in standards of care and outcome depending on where patients are treated. This tends to be influenced by both the process of care (e.g. within designated specialised as opposed to general clinics) and the degree of availability, support and interaction with specialised centres, where larger volume care, usually combined with research, is delivered.

The Network will provide this essential governance, and also ensure appropriate access to, and compliance with policy pertaining to, the high-cost drugs that are commissioned by NHS England for use in these conditions.

Data Sources, Frequency and responsibility for collection and reporting

Two types of data requirement:
Narrative reports – produced by lead Clinical Teams, Quarterly reporting to commissioner
Dataset: Provider submission to commissioner and the BVAS, DUO and BILAG registries in line with the published Specialised Rheumatology policies. 6 monthly reporting of registry data.

Baseline period/date & Value	See accompanying Worksheet, “IM.iii Rheumatology Datasheet”, for background data on activity by diagnosis and provider. This should guide the setting of the number of patients to be targeted for MDT consideration and data capture
Final indicator period/date (on which payment is based) & Value	MDT actual activity for financial year as at Month 12
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Ongoing network led audit programme and disease registry data will be available to ensure compliance. Savings arising from the MDTs and data collection would largely accrue to the commissioners. In due course, the cost of the MDTs will feed through into reference costs and should be absorbed in tariff and local prices after the cessation of the CQUIN.

Supporting Guidance and References

The benefits that will be delivered by the coordinated network for multisystem autoimmune rheumatic diseases include:

- Ensuring visibility of outcomes across the region, enable Regional and Sub Regional Teams to identify and ensure uniformity across all services
- Enabling structured assessment of disease activity and damage using validated outcome measures, which will ensure both audit benchmarking of outcomes and that treatment decisions are consistently based on disease status active disease, irreversible damage or relapse
- Embedding formal guidelines and pathways across the whole network, which will enable earlier intervention, structured internal organ screening and reduced risk of progression to organ failure (e.g. renal, lung, vision)
- Enhanced recruitment to research studies in these rare diseases, facilitated directly by the network and also the NHS England Commissioning Policies, which is essential in order to develop future treatment strategies
- Earlier intervention for severe disease with clear pathways of specialised centre involvement, which is likely to improve outcome and reduce costs associated with organ failure
- Patient satisfaction will be improved by reduced attendances enabled by coordinated care, and the reassurance that their care is being provided as part of a specialised network. Improved education, social and psychological support delivered through specialised centres will improve economic activity, and improve adherence and outcomes

Costs associated with this CQUIN are estimated (by one provider feeding back on the draft scheme) as follows

- Establishing regional network
- Working group meeting followed by teleconference meeting x 1/ month for 12 months involving consultant, nursing and manager representative at each site - establish patient pathways and NHSE categories for referrals, guidelines / governance for biologics and cyclo prescribing
- Establishing mechanisms for recording NHSE patients and auditable MDT discussions in electronic records / specialist databases
- Establish mechanism for coding and reimbursement of this activity

Maintenance costs:

- Clinical time for discussion patients in MDTs, and recording discussions - estimate 4 hours per week for consultant, nurse and trainee for 20 patients (average 12 mins per patient)
- Clinical time for capture of clinical outcome measures - 2 hours per week currently partially funded by CLRN research- no sustainable funding currently
- Network review meetings quarterly to review data and audit of outcomes, discuss governance issues
- Coding of MDT discussions.

Key outcomes to be the following:

- Savings related to implementation of the Rituximab in ANCA Vasculitis Policy £3.6 million

- Savings related to implementation of the Bosentan and Sildenafil in Digital Ulceration Policy £6.5 million

The improved clinical care arising directly from the Network is likely to lead to direct savings via a ***15-20% reduction*** in each of the following:

- Number of patients with Lupus and Vasculitis who progress to end-stage renal replacement therapy (each single avoided case saves £30,000 per year, estimated minimum 12 cases avoided = £360,000).
- Number of patients with Scleroderma-related Interstitial Lung disease or Pulmonary Hypertension who progress to end stage disease/high cost drugs/respiratory failure. There will also be reduced activity costs of screening (Echo and Lung Function) of 25% by implementing the DETECT screening protocol. This is estimated to reduce the number of echocardiograms by 500-1000 and of CT scans by 500, with a (reference) cost saving of £93,000-£136,000.
- Costs associated with managing suspected Giant Cell Arteritis via the institution of networked GCA Fast Track Pathways. An economic evaluation of a Fast Track pilot in Southend indicates an average saving of £400 per case of suspected GCA, and significant reduction in the risk of permanent visual loss. The Incremental Cost-Effectiveness Ratio (ICER) of implementing the fast-track pathway is -£840 per QALY. There are 12,000 new cases of GCA each year; assuming that only 50% of the savings in the pilot are realisable, equates to a saving of £2.4 million.
- Number of hospital admissions by rapid identification of disease progression and early institution of ambulatory therapy.
- Number of hospital admissions related to complications of non-cancer Chemotherapy.
- Costs associated with accelerated cardiovascular disease (related to both vascular inflammation and chronic corticosteroid toxicity) via regular assessment of risk factors.
- Costs associated in osteoporosis and fracture morbidity by early identification, treatments and reduction in chronic corticosteroid use (a major risk factor).
- Some of these savings will continue to occur each year in addition to recurrent savings (hence savings escalate each year).
- It is expected that with the implementation of the networks it will on average take 3 years for the maximum (apart from escalated cost savings) value of the QIPP to be released.

It is anticipated that change will be made over a 12 month period. The worksheet mentioned above details activity and cost by diagnosis and provider. Potential for, and phasing, of savings will depend on local circumstances and baseline position.

ANNEX **Useful documents**		
	Document	**Location**
1	ANCA Associated Vasculitis (AAV) baseline audit proforma	Data collection
2	Iloprost baseline audit proforma	Data collection
3	Lupus audit form	Data collection
4	Clinical Commissioning Policy: Rituximab for the treatment of ANCA-associated vasculitis in adults	https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/a13-ritux-anca-vascul.pdf
5	Clinical Commissioning Policy: Sildenafil and bosentan for the treatment of digital ulceration in systemic sclerosis	https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/10/a13pb-sildenafil-bosentan-oct15.pdf
6	Clinical Commissioning Policy Statement: A13/PS/a Rituximab for the treatment of Systemic Lupus Erythematosus in adults	https://www.england.nhs.uk/wp-content/uploads/2013/10/a13-ps-a.pdf
7	Patient eligibility checklist for Sildenafil and bosentan for the treatment of digital ulceration in systemic sclerosis	Specifications
8	Patient eligibility check list for ANCA Vasculitis - remission induction	Specifications
9	Patient eligibility check list for ANCA Vasculitis - maintenance therapy	Specifications
10	Rituximab-funding in SLE: Patient eligibility checklist	Specifications
11	NS20 Specialised Rheumatology Coordinated Networks PID	Specifications
12	CQUIN Coordinated network for Specialised Rheumatology	Useful information CQUIN
13	Terms of Reference for Coordinate Network for Specialised Rheumatology	Useful information TOR
14	NS20 Data Pack	Data

6 Trauma

6.1 TR1 Adult Critical Care Timely Discharge

Scheme Name	**TR1 Adult Critical Care timely discharge**
QIPP Reference	16-17 S4-Trauma
Eligible Providers	All Tier 1, 2 and 3 providers with critical care beds
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	TWO APPROACHES: APPROACH ONE (default): CQUIN payment proportion [Locally Determined] should achieve payments of respectively: £400,000 on average for Tier 1 providers, £240,000 on average for Tier 2 providers, £160,000 on average for Tier 3 providers. with payments adjusted to reflect proportion of total ACC discharges in that tier of providers. APPROACH TWO (selected trusts only): CQUIN payment proportion [Locally Determined] should achieve payment of £650 per baseline patients beyond 4 hours up to 24 hours, and £1,000 for stays beyond 24h Target Value: Add locally CQUIN %: Add locally

Scheme Description

To reduce delayed discharges from ACC to ward level care by improving bed management in ward based care, thus removing delays and improving flow. This is to support Trusts with the Year Two QIPP scheme referenced above – to remove delayed discharges of 4 hours or more within daytime hours.

There is a national standard that all discharges should be made within 4 hours of a clinical decision to discharge being taken within daytime hours. Data from ICNARC shows that as of 2014/15 this target was not being met. Of the146,022 discharges in that year from critical care beds in tiers 1,2 and 3 providers, only 39% were within 4 hours of a patient being clinically ready for discharge:

	<4 hours	4-24 hours	>24 hours
Adult Critical Care Delayed Discharges 2014/15	39%	44%	16%

This CQUIN aims to support removal of delays of more than 4 hours, whilst continuing to encourage more emphatically removal of delays of more than 24 hours (these having been the subject of the corresponding QIPP and CQUIN scheme for 2015/16).

It is recognised that even with the scheme in place, providers may decide to leave patients in Critical Care when no beds are available, or when available beds are dedicated to alternative priorities. However, it is also appropriate that patients occupying

beds in Critical Care wards pragmatically in this way should not attract specific critical care payment. This CQUIN scheme has the effect of withholding (a portion of) such payment. Further, such an outcome is not satisfactory as leaving Critical Care wards full creates a risk of the need to cancel operations or discharge at night, or delayed admission to Critical Care, in order to meet the needs of new patients.

This scheme complements the CUR CQUIN scheme, which should help to liberate beds in wards to receive critical care patients.

The maximum CQUIN payment for this scheme must be set in advance using one of the following two approaches.

On Approach One, payment should be calculated as follows:
£400,000 on average for Tier 1,£240,000 on average for Tier 2, £160,000 on average for Tier 3 providers, with payment targets proportioned for each Tier according to the proportion of total ACC discharges. Thus:

- the target payment for one of the Tier 1 providers with 6% of total Tier 1 ACC discharges (44,805) would be 6% of the £7.2m targeted for the 18 Tier 1 providers (18x£400,000), i.e. £432,000.
- For a Tier 3 provider with 1.8% of the 60,361 Tier 3 ACC discharges, the payment target would be that percentage of the £14.4m targeted for 30 Tier 3 providers (30x£160,000), i.e. £259,000.

For a minority of providers (the Trial providers) a more powerful incentive will be set, and payment will be set on Approach Two, on the basis of the number of discharges above 4h in 2014/15, with a CQUIN target payment calculated as follows:

(2014/15 discharges 4-24 h x £650 + 2014/15 discharges >24 h x £1,000).

This approach may in particular be adopted for providers who have already achieved 60% or more discharges within 4 hours. (See Excel workbook on the PSS CQUIN web-page in support of this scheme where these providers are marked in yellow.)

For both approaches the CQUIN payment proportion is derived as usual by taking this sum as a ratio of the projected estimated PSS CQUIN-applicable contract sum.

Concern was expressed in provider feedback that the decision to discharge might be deferred till a bed is available. There is also concern that emptied beds will be filled from elsewhere.

However, it is thought that in most hospitals pressure on Critical Care capacity is such that these responses are unlikely.

Nevertheless, it is recommended that the CQUIN scheme should be complemented by monitoring of (i) cancelled high risk elective operations, (ii) night time discharges from Critical Care, as these tend to be symptoms of a failure to discharge timeously. Success in timely discharge should be associated with reduced problems in these dimensions. Critical Care ODNs should monitor these outcomes.

Measures & Payment Triggers
1. (Reduction in) The number of Critical Care bed days occupied by patients who are clinically ready for discharge, according to ICNARC, for more than 4 hours. 2. (Reduction in) The number of Critical Care bed days occupied by patients who are clinically ready for discharge, according to ICNARC, for more than 24 hours. 3. Achievement of a 30% reduction in the number of Critical Care bed days occupied by patients who are clinically ready for discharge according to ICNARC, for more than 24 hours compared to the 2014/15 base.
Definitions
Partial Achievement Rules
Payment for the year would be the CQUIN payment amount (derived according to the guidance above) less: <u>Under Approach One:</u> Payment for the year would be the CQUIN payment amount (derived according to the guidance above) less :(2016/17 discharges 4-24 h x £325 + 2016/17 discharges >24 h x £500). (Triggers 1 & 2) <u>Under Approach Two:</u> Payment for the year would be the CQUIN payment amount (derived according to the guidance above) less: (2016/17 discharges 4-24 h x £650 + 2016/17 discharges >24 h x £1,000). (Triggers 1&2) Under both approaches, the payment is subject to achievement of trigger 3. No payment is made if trigger 3 is not achieved.
In Year Payment Phasing & Profiling
Quarterly payment with end year reconciliation. In the out turn, quarter by quarter, the CQUIN payment would be ¼ the estimated CQUIN payment proportion times estimated contract value less Approach One: discharges 4-24 h x £325 + discharges >24 h x £500 Approach Two: discharges 4-24 h x £650 + discharges >24 h x £1,000, subject to reconciliation at end year.
Rationale for inclusion
There is evidence that patients who have a delay in their planned discharge to a lower level are more likely to experience a night time discharge or an expedited discharge to accommodate another patient. Such poorly executed discharges frequently lead to a reduced patient experience characterised by unnecessary additional hand-offs of care and the inherent risks this poses. Delays in discharge result in high occupancy rates which reduce efficiency and responsiveness of the service, increased costs for commissioners due to the unnecessary bed day costs and critical care capacity being unavailable to other patients who require admission to critical care. (The payment system for Adult Critical Care reimburses Provider Trusts at a daily rate based on total number of organs supported at any stage during the critical care stay, so efforts to meet the 4 h target will – in the absence of this CQUIN scheme or penalties – will not directly reward the Trust.)

Data Sources, Frequency and responsibility for collection and reporting	
Data source is directly from Case Mix Programme which all Providers should be submitting to ICNARC, national database for ICU. The CRG have put delayed discharges on to the Dashboard as a quarterly indicator, so this now widely available to commissioners and the full databook can also be sent directly to commissioning hubs. Data is available within 2-3 months of the previous quarter.	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Although the national target has been in place for some years, there has been no performance management of this by commissioners. From a provider perspective the change that needs to happen is outside of Critical Care, whilst there is a perverse financial consequence of reducing the length of Critical Care stays as bed day costs are higher than ward based care. Beyond the end of the CQUIN, it is intended to restrict payment in line with this policy: i.e. no payment to be made for patients beyond 4h of daytime readiness for discharge in line with the national service specification.

Supporting Guidance and References

Specialised Commissioning reviews in South Yorkshire and Cheshire, Wirral and Merseyside have indicated that in Critical Care Units, 17% of patients did not meet the clinical criteria for continued stay, and consequentially 16% (298 beds) of all bed-days reviewed were potentially conservable. A London hospital commenting on this CQUIN reckoned that currently 13% of discharges occurred after 24 hours, whilst only 33% of patients are discharged within 4 hours.

Scale of the problem varies widely at an individual provider level and sometimes even at an individual unit level. Data has been provided to the national improving value team that outlines individual provider/unit level data for the last financial year. The ambition to move to the national target is achievable and supported by the CRG.

6.2 TR2 Acute Spinal Cord Injury Centre Outreach Visits to Newly Injured Patients

Scheme Name	**TR2 Acute Spinal Cord Injury Centre (SCIC) Outreach Visits to Newly Injured Patients**
Eligible Providers	All eight spinal cord injury centres.
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c.£1000 times the expected number of eligible patients expected to receive an outreach visit according to the scheme. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
95% of newly injured patients with traumatic and non-traumatic spinal cord injury will receive a face to face outreach visit from the SCIC acute outreach team within **5 days** of the referral of the patient to the SCIC, to support the patient and the treating team. All eight SCI centres need to provide an adequately staffed outreach service, which also, does not deplete the staffing infrastructure at the SCI centre. In provider feedback to this CQUIN, one provider recorded 57% currently received outreach out of a quarterly caseload of around 35 cases. But it is thought that others slip through the net – due to staff shortages and the cost of travel. Rapid outreach can minimise the incidence of pressure sores and other clinical issues which are highly detrimental to the patient and, once incurred, expensive for the NHS to manage. Bed sores are a particular risk; prompt outreach minimises the chances of a patient incurring them. A bed sore delays rehabilitation, which consequently takes longer, is less effective and costs more. Cost runs into thousands of pounds. It is, of course, hideous for a patient. Outreaching to ventilated patient is critical and bowel and bladder management is crucial for a patient's well-being and the outreach team are adept at ensuring the Trust caring for the patient prior to admission to a SCI centre is able to provide good treatment. Costs: An outreach service requires a minimum of two Full time equivalent (FTE) clinical specialists (Nursing, Physiotherapists, Occupational Therapists) at an appropriate banding to make decisions based on assessment (B7 or 8a) plus additional administrative support (B3) (Source: Provider Estimate). They require transport or access to transport and the costs involved in this plus there is expenditure for some over-night stays due to locality of areas being outreached. Catchment areas are large. The cost of the scheme are expected to be outweighed by the costs avoided, whilst providing significant quality benefits to patients.	

The target CQUIN payment should be £1000 times the expected number of eligible patients – i.e. the number expected to receive an outreach visit according to the scheme. This can be based on prior year data for spinal cord injury referrals.

Measures & Payment Triggers

1. Increase in proportion of cases receiving outreach visits:

Numerator:
Newly injured patients referred to the SCIC who have received a face-to-face visit from the SCIC acute outreach team within 5 days of the referral of the patient to the SCIC.

Note: Each patient will be counted once only, even if more than one visit has occurred. What constitutes an "outreach visit" is well understood by the eight centres.

Denominator: Number of newly injured patients referred to the SCIC in the quarter.

Excluding:

- Patients outside the scope of Specialised Spinal Cord Injury Services as defined in the Service Specification,
- Patients who were admitted to any SCIC within 7 days of the referral of the patient to the SCIC,
- Patients for whom another SCIC has agreed in writing to take the lead on outreach,
- Patients who have died,
- Patients whose current location is outside the UK.

2. Payment conditional on providing data to allow robust comparison across providers

Partial Achievement Rules

For Trigger 1: Full payment with 95% compliance; 50% payment with 80% compliance.
No payment without 100% compliance with Trigger 2 – i.e. full information flow.

In Year Payment Phasing & Profiling

Quarterly payment with end year reconciliation.

Rationale for inclusion

There is a national standard that all newly injured patients receive outreach care within five days of admission to hospital.
Timely outreach reduces the likelihood of expensive medical problems.

Data Sources, Frequency and responsibility for collection and reporting

The monitoring data will be taken from the National Spinal Cord Injury Database, which is set up to receive this data. However data is not open to commissioners. Hence providers must also supply summary information to commissioners.

The provider is required to enter the relevant data on a National SCI Database on a continuous basis. This fact must also be confirmed to the commissioner.

Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	The proposed pathway tariff is expected to include provision for this service. Planned to be operative in 17/18 – after a year of shadowing

Supporting Guidance and References
None.

6.3 TR3 Spinal Surgery: Networks, Data, MDT Oversight

Scheme Name	**TR3 Spinal surgery: networks, data, Multi-Disciplinary Team (MDT) Oversight**
QIPP Reference	16-17 S5-Trauma
Eligible Providers	All c.35 spinal centres, providers of specialised spinal surgery
Duration	April 2016 to March 2019.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £50,000 for each MDT network, plus £150 times the expected number of patients scheduled for PSS IR defined spinal surgery expected to receive an MDT for that network (capped in agreement with the commissioner), to be distributed across host and contributing centres. Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Establishment and operation of regional spinal surgery networks, data flows and MDT for surgery patients. The scheme aims to promote the better management of spinal surgery by creating and supporting a regional network of a hub centre and partner providers that will ensure data is collected to enable evaluation of practice effectiveness and that elective surgery only takes place following MDT review. All spinal surgery hubs have several hospitals in their vicinity that tertiary-refer patients for possible treatment. Additionally, some partner hospitals provide a spinal surgical service. (There are currently no formal arrangements to provide a regional spinal MDT.) One of the principal benefits of a network is that a single or double handed service in a DGH has opportunity to discuss elective cases prior to treatment, determine if their practice mirrors those in other providers and the ability to compare outcomes. Closer collaboration also helps with the management of emergency patients. Cases of late diagnosed cauda equina and spinal cord compression can lead to permanent damage (with a typical litigation claim costing many hundreds of thousands of pounds). Many such cases could be avoided by closer working between hospitals, and a network helps produce the closer ties necessary to ensure patient safety is maximised. Further support would be given to four existing pilots and other providers as and when they are ready to develop a network. The target payment per network should be derived as indicated, £50,000 plus the expected flow of MDT cases, i.e. the number of patients scheduled for PSS IR defined spinal surgery expected to receive an MDT. (This averaged 117 patients per centre in the year to September 2015) A ceiling beneath this number may be agreed with the commissioner, or a higher number may be agreed for example to clear a backlog: for providers with a significant backlog, it may be appropriate to schedule MDTs sufficient to clear the backlog over an agreed period – with the expectation that surgery rates will decline through this process, but without removing the scope for affordability gains.	

Division of the targeted sum across the members of each of the 35 networks is for local determination by the commissioner in consultation with the providers.

Measures & Payment Triggers

The CQUIN scheme has three elements

(1) Regional Spinal MDT: (a) establish a regional spinal MDT with core members of all Spinal Consultants in the Region and at least one Radiology Consultant, with input from consultant in Pain management and physiotherapist (to advise on alternatives to surgery). (b) Attendance for all core members must be documented; (c) Meetings must be minuted including the time of the MDT; (d) Regional Policy to manage spinal emergencies including transfer; (e) Regional Policy for emergency imaging.

(2) All specialised and non-specialised spinal surgery will be entered on the British Spine Registry or Spine Tango.

(3) All elective specialised spinal surgery taking place within the network should have the agreement of the regional MDT either by individual case or mandatory audit (including meeting inclusion/exclusion criteria and complications) at the agreement of the MDT and Commissioners.

The payment triggers are therefore:

(1) Achieve 1(a) to 1(e) above. Number of regional MDT meetings attended by each Spinal Consultant.

(2) Entry of specialised and non-specialised spinal surgery activity in the spinal network on to the British Spine Registry or Spine Tango.

(3) Discussion of elective specialised surgery in the spinal network at the regional MDT. Audit of specialised surgery every 2 quarters to be completed and presented at the Regional MDT.

Definitions

Partial Achievement Rules

Payment is proportional to the proportion of patients receiving MDT assessment for whom triggers 1-3 are achieved relative to that upon which the payment amount was agreed, capped at 100%.

In Year Payment Phasing & Profiling

Quarterly payment with end year reconciliation.

Rationale for Inclusion

The aim is to ensure that the regional spinal surgery network operates efficiently, ensuring that patient selection for specialised surgery is carefully discussed and the optimum treatment option is chosen in all cases.

As well as benefiting patients clinically the challenges of meeting 18 week RTT targets are best served by a network approach.

Better patient selection will minimise surgical intervention where not clinically warrented, accumulating considerable savings.

Data Sources, Frequency and responsibility for collection and reporting	
Each provider must provide evidence quarterly of achievement of the three measures for its patients. Information should be submitted to the commissioner drawn from submission to British Spine Registry/Spine Tango. Host provider should confirm MDT attendance. All providers should supply the list of spinal consultants. Providers should immediately notify the MDT Host if a consultant leaves or joins their spinal surgery service and if a consultant is on a period of extended leave. Relevant data should be entered onto BSR/Spine Tango daily. MDT attendance should be submitted monthly. BSR/Spine Tango. This data is not yet available for contract monitoring. In the absence of flow from the registries, providers will need to provide a report regarding the flow of data.	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	A three year CQUIN is proposed to allow the costs of MDTs to feed through into reference costs and to Tariffs and local prices as a routine element in the cost of providing this service.

Supporting Guidance and References

Administrative overhead of organising MDTs, and clinical expert time in participating: for the latter the cancer MDT reference cost collection gives an indicative cost – of some £110 per patient reviewed. For a spinal MDT it would be important to have input from input from consultant in Pain management and physiotherapist to consider alternatives to surgery. (Note these MDTs are do not require patient attendance)

One of the spinal network pilot sites reviewed 92 long waiting patients and concluded only 30 required surgery. This ensured that patients received appropriate care and saved about £70,000 of surgery. (The cost of the avoided surgery varies greatly: many cases will be of fairly low value e.g. £700 to £1,500, with average of £1,100.) The most expensive surgery may cost more than £40,000. Some cases will have less than an hour of surgical time, others a full day. If this example was a proxy for England, the surgical savings would be £140m.

7 Women and Children

7.1 WC1 Difficult to Control Asthma Assessment in Twelve Weeks

Scheme Name	WC1 Difficult to Control Asthma Assessment within Twelve Weeks
Eligible Providers	22 specialised paediatric respiratory centres
Duration	April 2016 to March 2017, with possible extension with higher performance threshold..
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £31,250 per unit. Target Value: £31,250 CQUIN %: Add locally
Scheme Description	

The CQUIN scheme aims to ensure assessment and investigation of children with difficult to control asthma within twelve weeks of referral, so to ensure that all eligible children have appropriate and timely assessment and investigation in order to improve asthma control, reduce hospital admissions and avoid inappropriate escalation of therapy including the initiation of expensive monoclonal antibodies.

In order to achieve this, specialist respiratory services need a dedicated difficult asthma team which requires an appropriate standardised skill set and strong leadership.
Providers need to establish systems and processes within their MDTs to ensure that patients are seen in a timely way and that a comprehensive management plan is initiated.

Currently, where units do not have an MDT approach, there may be different OPD attendances for the physio, psychology etc. An MDT approach would amalgamate these separate reviews but the exact length of appointments would need to be quantified depending on the approach and individual patient.

Problematic Severe Asthma (PSA) services will need to have in place the appropriate members of the team to carry out this assessment. Most services will have a medical lead and children's asthma nurse. Access to specialist physiotherapy and psychology may take longer to establish and providers would need to ensure sufficient personnel with the appropriate expertise are employed to enable the timely assessment of patients.

Estimated additional cost per centre:

- 0.2 WTE (1day) of Band 7 Physiotherapist
- 0.2 WTE (1day) of Band 7/8 Clinical Psychologist
- 0.25 WTE (1day) of Band 4/5 Difficult Asthma Database coordinator.

It is thought that some 50% of patients already receive this level of service however these is some variability. Whilst a baseline assessment of current performance will be

discussed with each provider, a minimum target of 70% of children seen within 12 weeks is being applied to all centres.

This scheme could be considered for extension to a second year with a higher threshold for Year 2.

High performing units may be given a stretch target above 70%, or may be asked to act as champions mentoring and supporting improvement in other centres.

Measures & Payment Triggers

1. At least 70%[11] of (newly referred) difficult to control asthma patients (the denominator) to achieve all three numerator conditions – i.e.

Numerator: Number of patients who

a. undergo a systematic MDT assessment within 12 weeks of referral carried out by a Respiratory Paediatrician, Children's Respiratory Nurse Specialist, physiotherapist and psychologist ideally (but not exclusively) in a one stop clinic. are issued a detailed management plan
b. have assessments entered onto the Difficult Asthma Database.

Denominator:
Number of children referred to the service with a suspected diagnosis of difficult to control asthma.

2. Providers are required to produce an end of year CQUIN report which will be standardised across all centres and will include information to support improved outcomes such as reduced DNAs, reduced hospital admissions etc. This data will be taken from the database and a template for submission of the report by providers will be issued prior to Q1.

Definitions

As above.

Partial achievement rules

80% is payable on achievement of Trigger 1, as above.
Payment for partial achievement follows a RAG principle:

- achieving GREEN, >100% of the threshold, merits 100% of payment;
- achieving AMBER, > 90% of threshold (i.e. 63% compliance with trigger 1, against a 70% threshold), merits 50% of payment.
- No payment for RED.

20% is payable for achievement of Trigger 2; no partial payment is envisaged.

In Year Payment Phasing & Profiling

For local agreement.

Rationale for inclusion

It has been demonstrated that a thorough multi-disciplinary assessment of children with problematic severe asthma (PSA) (poor asthma control despite high intensity treatment) can successfully distinguish children with difficult asthma from those with severe therapy resistant asthma. The former group account for approximately 75% of children with PSA. Attention to the basics of asthma management leads to a reduction in exacerbations and reduced treatment burden.

[11] *A higher target may be agreed locally as a stretch target.

Using the CQUIN tool will accelerate achievement of improved outcomes for patients, not only medical but also socioeconomic in terms of improved school attendance and reduced time off work for parents.	
It has been demonstrated that a thorough multi-disciplinary assessment of children with problematic severe asthma (PSA) (poor asthma control despite high intensity treatment) can successfully distinguish children with difficult asthma from those with severe therapy resistant asthma. The former group account for approximately 75% of children with PSA. Attention to the basics of asthma management leads to a reduction in exacerbations and reduced treatment burden. Using the CQUIN tool will accelerate achievement of improved outcomes for patients, not only medical but also socioeconomic in terms of improved school attendance and reduced time off work for parents.	
Data Sources, Frequency and responsibility for collection and reporting	
Clinical audit would need to be undertaken to determine number and timing of referrals. The National Registry can then be used to determine the date by which the assessment has taken place. The database is up and running – paediatric teams are not inputting yet into the DB and the CQUIN will be used to incentivise data entry and reporting. DB is hosted by E-Dendrite - units will have access to their own data. HSCIC are sighted on this database and are involved in the outputs.	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	Whole year performance.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract.
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	It is intended that the standard required in this CQUIN scheme will be mandated in the service specification in which case providers will need to derogate with a plan to achieve in 12 months. Regional commissioners will need to consider their commissioning position and ensure that risk mitigation is in place with an achievable action plan for delivery/achievement. Achieving waiting time may require additional initial investment via this scheme, but beyond that time should be self-funding. Providers may receive reduced remuneration but also incur less cost per patient if they are having one MDT instead of a number of OP attendances. During the period of this CQUIN scheme, double running costs should be funded by the CQUIN scheme. Thereafter, providers would have to make savings corresponding to reduced non-MDT OP appointments.

Supporting Guidance and References

There are 22 specialised paediatric respiratory centres in England who see the cohort of “difficult asthma patients”. A specialised centre would expect to see approximately 30 new patients per year who would undergo this assessment.

A number of units do not see sufficient patients, and are staffed / resourced to an inadequate standard. The collection of data may facilitate the coalescence of units to maintain adequate resources in line with activity, if appropriate. We expect the numerator to be 30 patients per year for a centre. However, it is likely there are many more children who fit the criteria for PSA but are not referred to the appropriate centre. A more systematic assessment and better organisation of services should lead to a greater number of referrals leading to greater benefit for more patients. Throughput should appropriately rise with support from CCG commissioned services, perhaps to around 1000 patients per annum across England.

At present there are a small number of outstanding centres that have pioneered this approach. This standard should be achievable by all difficult asthma teams.

Evidence of effectiveness:
Chung, K., 2014; International ERS/ATS guidelines on the definition, evaluation and treatment of severe asthma. *ERJ -43;343 – 373*
Bracken, M., et al. 2009. The importance of nurse-led home visits in the assessment of children with problematic asthma. *Arch.Dis.Child* 94:780-784

There is retrospective data from published studies i.e. the study referenced:
Sharples, J., et al. 2012. Long-term effectiveness of a staged assessment for paediatric problematic severe asthma. *Eur.Respir J* 40:264-267.

7.2 WC2 Univentricular Infants Home Monitoring

Scheme Name	WC3 Univentricular Infants Home Monitoring
Eligible Providers	10 Children's Cardiac Surgical Units
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £2,000* for each of the expected number of infants under 6 months of age with univentricular circulations suitable for home monitoring prior to superior cavopulmonary shunt operation. Target Value: Add locally CQUIN %: Add locally *Any face to face outpatient payments that would be triggered should be deducted.
Scheme Description	
Implementation of Home Monitoring Programmes for Children following Palliative Cardiac Surgery for patients with a primary diagnosis of: hypoplastic left heart syndrome, functionally univentricular heart or pulmonary atresia with intact ventricular septum. Collectively these conditions are referred to as univentricular hearts or univentricular circulations. The scheme requires the 10 Children's Cardiac Surgical Units in England formally to establish a home monitoring programme for all infants with univentricular circulations discharged from hospital prior to their superior cavopulmonary shunt procedure (called the "interstage" period). The interstage period is a high-risk time for this group of infants. Mortality during this time is up to 20%, somatic growth is slow and parental anxiety high. The superior cavo-pulmonary shunt procedure stabilises the circulation but its successful completion requires infants to achieve reasonable growth. Evidence suggests the introduction of home monitoring programme reduces interstage mortality, improves rate of growth facilitating an earlier superior cavopulmonary shunt palliation. Providers vary in the number of procedures undertaken. Individually, each centre would be expected to enter between 5 and 37 infants into a home monitoring programme annually. All infants entering this programme will be under 6 weeks of age. The cost of the intervention is dependent on the number of infants on the programme per centre. Each family will require the loan of 1 set of infant scales and 1 portable pulse oximeter. The duration of the loan will vary between 6 – 12 weeks. The number of scales/oximeters required per unit will vary between 3 and 19 according to number of infants entering the programme and constitute the principle capital outlay required. The basic price of a pulse oximeter is £547 +VAT and of a set of infant scales is £664 + VAT. (Hence c.£1500 per child.) Suppliers will offer discount with multiple purchases in some cases. Children's Cardiac Nurse Specialist (CCNS) time will be required to speak to families on a regular basis and review infants when they breach acceptable limits of weight gain or oxygen saturation. In some units this will be accomplished within current staffing levels,	

others may require extra CCNS time. An estimated 60 minutes per infant per week will be required. (c.£100 for five weeks per child.) The lower activity units with an average of 5 children per year entering the programme, each requiring on average 8 weeks of home monitoring will therefore require an additional 40 hours per year of CCNS time. The higher activity units may require up to 296 hours of CCNS time per year. The target payment should be based upon the expected number of patients requiring home monitoring through the year, with payment target based upon £2,000 per patient with deduction of any additional face to face outpatient payments that would be triggered as a consequence of implementation of this scheme.
Measures & Payment Triggers
Numerator: number of infants under 6 months of age, with univentricular circulations prior to superior cavopulmonary shunt operation, who are following the home monitoring programme. Denominator Total number of infants with univentricular circulations prior to superior cavopulmonary shunt operation suitable for home monitoring. (Expected to be 90% of all such infants.)
Partial Achievement Rules
Following the initial capital outlay for equipment, allocation of CCNS time and agreement of extended protocols by individual Trusts, the home monitoring programmes should start immediately. An estimated run-in time of 2-3 months is reasonable, longer if recruitment of an additional CCNS is required. Payment at the end of the year should be based on the % of patients with univentricular hearts discharged home during the interstage period on a home monitoring programme. Allowing Q1 for introduction, payment should be based on performance in Q2-4 in total. 50% of whole-year CQUIN value if 80% infants enrolled 75% of whole-year CQUIN value if 90% infants enrolled 100% of whole-year CQUIN value if 100% infants enrolled
In Year Payment Phasing & Profiling
For local agreement, bearing in mind the need for initial capital investment.
Rationale for inclusion
The availability of a home monitoring programme will allow a greater number of infants to be discharged safely during the interstage period reducing the length of stay and the costs involved. The advantages in terms of greater somatic growth may reduce length of stay after superior cavopulmonary shunt and reduce morbidity. (Whilst current data is indicative of this it has not yet reached significance.) Currently many centres offer home monitoring programmes for infants with hypoplastic left heart syndrome. This project aims to ensure that not only 100% of infants with hypoplastic left heart syndrome benefit from a formal home monitoring programme, but that this is extended to all infants with univentricular physiology in the period prior to superior cavopulmonary anastomosis. This is considered to be a stretch for all units, even the units who have some level of home monitoring will need to expand their programme to fulfil the requirements of this CQUIN scheme.

Data Sources, Frequency and responsibility for collection and reporting	
National Institute for Cardiovascular Outcomes Research (NICOR). The current level of utilization of home monitoring programmes can be assessed by asking each centre to declare a baseline. Data on the utilization of home monitoring will be verifiable by regional or local commissioners through regular dialogue. NICOR data is independently validated.	
Baseline period/ date & Value	Units must provide data on the expected number of babies requiring home monitoring.
Final indicator period/date (on which payment is based) & Value	Units must report on utilisation relative to denominator (i.e. performance against the indicator).
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract.
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	This would be ensured by updating the paediatric congenital heart service specification to make the use of a home monitoring programme a requirement of commissioning. It will be further assured by introducing the utilisation of home monitoring into the quality dashboard for congenital heart services. Additional assurance would come through the peer review scheme mandated in the new standards for provision of congenital heart services. After the initial capital outlay, ongoing costs will be limited to CCNS time and ongoing replacement of lost/damaged equipment. Cost savings in terms of reduced interstage in-patient stay, reduced length of stay around superior cavopulmonary shunt and reduced perioperative morbidity will begin to accrue immediately as increased bed availability permits increased throughput of other patients.

Supporting Guidance and References

Paediatric surgery for England, Wales and Northern Ireland is currently provided by ten centres all located in England. Validated national procedural data but not diagnosis-based data are available for all congenital cardiac surgical procedures undertaken in the UK. In 2013-14, 147 superior cavopulmonary shunts were undertaken in England in children under 1 year of age. Assuming an interstage mortality of between 5% and 15%, the expected number of infants entering the interstage period would be between 154 and 169 nationally. Of these 10 – 20% are likely to remain in hospital throughout the interstage period, up to 90% being suitable for discharge into a home monitoring programme.

Published data from Wisconsin (1) demonstrates a significant reduction in interstage mortality from 10-20% to 2% in patients with hypoplastic left heart syndrome following introduction of the home monitoring programme. Of all univentricular circulations, hypoplastic left heart syndrome have the highest interstage mortality and therefore the improvement is most marked. Extension of the programme to other forms of univentricular heart has not shown a similar mortality benefit, possibly

because the numbers are smaller; however benefits in terms of somatic growth are significant. Improved somatic growth is linked to earlier superior cavopulmonary shunt and improve transplant-free survival at one year (2, 3).

1. Rudd et al, J Thorac Cardiovasc Surg 2014;148:1540-7
2. Petit et al, J Thorac Cardiovasc Surg 2011;142:1358-66
3. Brown et al, JACC 2013;61:E452

The reduction in mortality whilst not immediately cost-saving is clearly cost-effective (if mortality falls by 13 percentage points, and the expected discounted QALYs for a surviving child were as little as five, the cost per QALY on the above figures would be only c. £2500, far short of the threshold of £15,000 per QALY).

Note, given the small numbers of babies involved and the fact that outcomes will not be measurable in terms of survival until 1 -3 years, it is not possible to quantify outcomes as part of the CQUIN scheme.

7.3 WC3 CAMHS Screening for Paediatric Patients with Long Term Conditions

Scheme Name	WC3 CAMHS Screening for Paediatric Patients with Long Term Conditions
Eligible Providers	35 specialised children's providers (those receiving specialised children's top up).
Duration	April 2016 to March 2017, with extension to cover other conditions..
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of c. £25 for each additional patient to receive SDQ mental health screening, with a cap agreed locally (default 2,000 patients £50,000). Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Increase in the number of paediatric patients on whom a mental health screen (using the SDQ Tool[12]) has been completed to a minimum of 30% for **4 long term condition areas chosen with commissioners.** The aim is establish screening and provision of mental health services for specialised paediatric **inpatients** who have a chronic severely disabling medical condition e.g muscular dystrophy, renal failure. Long term Conditions which could be considered include: • Renal • Congenital heart • Rheumatology • Asthma (complex difficult to manage) • Metabolic disorders • Neurology/neurodisability (e.g. Epilepsy) • Gynaecology • Gastroenterology (IBS) This is not an exhaustive list however services where a best practice tariff applies (eg: diabetes / cystic fibrosis) will not be permissible.	
Measures & Payment Triggers	
Increased number of paediatric patients on whom a mental health screen (e.g. SDQ Tool) has been completed to a minimum of 30% for the **4 long term condition areas chosen with commissioners for focus.** On this basis, provider and commissioner should agree a target number of patients with the selected conditions to be screened, focused upon those thought at highest risk, with an agreed cap in overall numbers. The payment trigger is then the proportion of that number for whom screening takes place through the year.	

[12] www.**sdq**info.com/

The SDQ tool needs to be applied with sufficient expertise and followed through with referral and intervention. Denominator: Number of admissions in the LTCs identified. A cap of patients for whom payment can be made should be agreed in setting the scale of the CQUIN – with a default cap of 2,000 patients.
Partial achievement rules
As per trigger
In Year Payment Phasing & Profiling
Payment will be made quarterly – according to achievement each quarter.
Rationale for inclusion
There is a growing evidence base that those with co-morbid mental health and physical health problems present more frequently to hospital, recover more slowly and have shortened life expectancy. A survey completed in 2015 for NHS England by Lee et al demonstrated very patchy provision for CAMHS/psychiatry in paediatric hospitals nationally. The implication is that this high-cost vulnerable group of paediatric patients are not receiving an appropriate assessment or subsequent intervention and support and a target of 30% is therefore being applied. This CQUIN will aim to incentivise paediatric hospitals to identify mental health problems and provide input for this group. The aim is to improve the quality of care and reducing health costs by shortening length of stay and reduce co-morbidity.
Data Sources, Frequency and responsibility for collection and reporting
It is likely that providers will need to identify internal systems to identify the patient cohort and record the data. It is likely that specialist nurses would be used as a resource to identify patients and support data collection. Exploration nationally of a new code in HES would be advantageous. These patients are in-patients and will be admitted to the specialty code. For those patients in the LTC, the provider would need to utilise specialist nurse input to identify the patients.

Baseline period/ date & Value	To be reported by the Provider for the selected cohorts of patients with LTC. Baseline is the proportion of such patients screened for using the SDQ tool in the most recent year for which data is available.
Final indicator period/date (on which payment is based) & Value	The number of patients above baseline proportion receiving screening to be reported by provider.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract.
CQUIN Exit Route *How will the change be sustained once the CQUIN indicator has been retired?*	As the savings will be long term and recurring (and the cost savings will be primarily with the acute provider) the scheme should be self-sustaining.

Supporting Guidance and References

The 2015 NHS England survey demonstrated variable provision of CAMHS/ Psychiatry to paediatric departments across England. All paediatric inpatients are suitable, with particular benefit for those with chronic/severely disabling health conditions.

The following is an extract from *Future in mind: Promoting, protecting and improving our children and young people's mental health and wellbeing (DH 2015):*

- 12% of young people live with a long-term condition (LTC) (Sawyer et al 2007)
- The presence of a chronic condition increases the risk of mental health problems from two-six times (Central Nervous System disorders such as epilepsy increase risk up to six- fold) (Parry-Langdon, 2008; Taylor, Heyman & Goodman 2003).
- 12.5% of children and young people have medically unexplained symptoms, one third of whom have anxiety or depression (Campo 2012). There is a significant overlap between children with LTC and medically unexplained symptoms, many children with long term conditions have symptoms that cannot be fully explained by physical disease.
- Having a mental health problem increases the risk of physical ill health. Depression increases the risk of mortality by 50% and doubles the risk of coronary heart disease in adults.
- People with mental health problems such as schizophrenia or bipolar disorder die on average 16–25 years sooner than the general population.
- The Birmingham RAID study demonstrated a 4:1 cost benefit for investing in Adult Psychiatric Liaison services (in this study an investment of £1.5m resulted in a savings of £6m).

8 Mental Health

8.1 MH1 Patient Ward Communities, Implementing "Sense of Community" in High Secure Wards

Scheme Name	**MH1 Patient Ward Communities, Implementing "Sense of Community" in High Secure Wards**
Eligible Providers	The Three Providers of High secure MH services
Duration	April 2016 to March 2018 or beyond depending upon research protocol developed.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] should achieve payment of £250,000 + B*£2,500 + C*£7,500, (B, C are patients respectively in partial and in full intervention arms, as in Payment Trigger section, below): Target Value: Add locally CQUIN %: Add locally
Scheme Description	
The aim is to implement an intervention across selected wards focused on developing a psychological *Sense of Community* (SoC). SoC is described as a sense of belonging, that individual members matter to a community and to each other, and that individual needs can be met through a shared community commitment (McMillan & Chavis, 1986). The aim is to implement the SoC in full on three wards, partially on three wards and not at all on three wards (i.e. community as usual group). This will allow for comparison across the wards to determine the impact of the intervention. The actual intervention will be recorded according to a taxonomy devised within the evaluation protocol. Interventions in the full and partial intervention arms of the trial should be costed respectively at £2,000 and £6,000 per patient (assuming a minimum of six months). This would be justified by staff assignment to roles supportive of the SoC intervention. The intervention would be assessed using a standard pre, during and post follow-up design where records of incidents, Security Information Reports, Suspected Bullying reports and ward atmosphere ratings are collected, with clinical records reviewed. It would also include use of the Psychological Sense of Community Index (SCI). The intervention will then be implemented and review of progress determined at eight weeks (during), and at two further time points of eight weeks (post 1 and post 2). The 25% premium for CQUIN incentives translates this scheme into a CQUIN payment of £250,000 + B*£2,500 + C*£7,500, (B, C as in Payment Trigger). Hence for a 180 patient provider, with 60 patients in partial and 60 in full intervention arms (for a minimum of six months), the CQUIN Payment would be £250,000+£150,000+£450,000) = £850,000. This figure as a proportion of the estimated contract value becomes the CQUIN payment proportion.	

Measures & Payment Triggers	
A. Commissioning by the three providers of an academically sound research trial to explore the effectiveness and cost-effectiveness of different interventions in creating ward communities and achieving better outcomes for patients. B. The number of patients in wards included in the in the partial intervention arms of the trial C. The number of patients in wards included in the in the full intervention arm of the trial	
Partial achievement rules	
Payment is contingent upon setting up a research trial as indicated. Payment is proportional to the number of patients receiving the interventions and the months during which they receive them, weighted by 3:1 for intervention vs partial intervention arm, as a proportion of planned numbers (similarly weighted) – capped at 100%.	
In Year Payment Phasing & Profiling	
Local determination. However, the costs of intervention should include some upfront set up costs, followed by more intensive involvement with the intervention wards to implement the scheme. Hence, costs will be incurred fairly evenly across the intervention period.	
Rationale for inclusion	
The change expected is an improvement in patient well-being through the development of being part of a positive community. It would do this by decreasing the risk for intra-group aggression. Any intervention that can develop a positive sense of community and enhance belonging and well-being would be expected similarly to improvement ward running, atmosphere and patient perceptions of safety.	
Data Sources, Frequency and responsibility for collection and reporting	
Reports to commissioners will be required detailing: - the commissioning of the research oversight of the trial - the staff assigned to support the full and partial intervention ars of the trial - the interventions undertaken in the course of the Trial, specifying the numbers of patients and duration of their involvement in each arm of the trial - the Trial evaluation	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	For review following conclusion of evaluation – regarding whether the intervention is cost-increasing or otherwise

Supporting Guidance and References

SoC is described as a sense of belonging, that individual members matter to a community and to each other, and that individual needs can be met through a shared community commitment (McMillan & Chavis, 1986). It comprises four key elements, all of which will be addressed by the intervention:

1.) Membership: This includes creating emotional safety [security], a sense of belonging and identification [community acceptance], personal investment in the ward community, a common symbol [e.g. logo development] and boundaries.

2.) Influence: Increasing a sense of empowerment among the patient community which involves raising shared decision-making [e.g. teaching patients how to express views at community meetings, the importance of acknowledging the needs and values of others].

3.) Integration and fulfilment of needs: Building in rewards for participation in group aims; Identifying group similarities and building on these as shared group values.

4.) Shared emotional connection: Developing a shared history/community story through art; increasing opportunities for personal positive interaction; Ensuring no negative events are left without closure; increasing individual investment in a community; raising the potential for public community rewards and removing the risk of public humiliation.

The aim of such an intervention is focused on the development of a positive community as a means of enhancing feelings of safety and reducing incidents of aggression. It is becoming increasingly applied in non-secure settings, being utilised for example with gang related work.

Research suggests, for example, that intra-group aggression (e.g. patient bullying) is driven substantially by the environment and the community that is developed from this. Managing the community more effectively and developing a 'Healthy Community Approach' in the form of intervention and strategy is thought a primary means of enhancing safe living spaces. The more a community invests in each another, the less likely they are to display uncontrolled and manipulative aggression.
Each element of the SoC will be designed to capture what is possible and appropriate at ward level. For example, the element of membership could comprise a ward activity focusing on developing a logo for their community [common symbol] and shared group activities [sense of belonging though group activities such as games].Boundaries would focus on input with patients on their expectations of behaviours towards one another and what as a shared community they consider acceptable.

Any intervention that can develop a positive sense of community and enhance belonging and well-being would be expected to similarly improvement ward running, atmosphere and patient perceptions of safety.

8.2 MH2 Recovery Colleges for Medium and Low Secure Patients

Scheme Name	**MH2 Recovery Colleges for Medium and Low Secure Patients**
Eligible Providers	All providers of medium and low secure mental health services
Duration	April 2016 to March 2018.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £10,000 per provider plus £2,000 per eligible patient (as per snapshot end December 2015): Target Value: Add locally CQUIN %: Add locally
Scheme Description	
The establishment of co-developed and co-delivered programmes of education and training to complement other treatment approaches in adult secure services. This approach supports transformation and is central to driving recovery focused change across these services. Recovery Colleges deliver peer-led education & training programmes within mental health services. Courses are co-devised and co-delivered by people with lived experience of mental illness and by mental health professionals, and are based on recovery principles. In mental health the term recovery is used to describe the personal lived experiences and journeys of people as they work towards living a meaningful and satisfying life. Recovery does not only equate to cure or to *clinical* recovery, which is defined by the absence of symptoms. Recovery principles focus on the whole person in the context of their life, considering what makes that person thrive. Positive relationships, a sense of achievement and control over one's life, feeling valued, and having hope for the future are some of the factors we know contribute to personal wellbeing. Most secure services will have access to an appropriate base from which the college will run. Staffing costs are incurred as re-profiling roles and job plans of individuals displaces other activity. Service user involvement is crucial but voluntary. There are some costs associated with printing and publicity. It is expected that after one year of this CQUIN, a needs analysis and patient engagement programme would have produced a prospectus, and the means to deliver the programme identified, and by quarter four course will have commenced. In year two, the college will have begun to establish itself and begin delivering courses and the expected outcomes in terms of patient engagement and satisfaction. The CQUIN payment is scaled to cover the greater costs incurred by larger providers, though recognising an overhead element. Target payment is £2000 per eligible patient. (defined below), plus £10,000 per provider for administration overhead. A provider with 95 eligible patients as at 31st December 2015 attracts a target CQUIN payment of £10,000 overhead plus £2,000*95 = £200,000.	

Measures & Payment Triggers

Year 1
Trigger 1:

- Evidence of engagement of staff and patients in developing the Recovery College.
- Minutes of planning groups
- Course Prospectus
- Outcome Measures
- Agree standardise measures of intervention to allow evaluation of impact.
- Agree groups of patients to be targeted for courses by Q4, with exclusions justified.
- Q1: agree plan of milestones for process measures for rest of year.

Trigger 2:

- Proportion of target patient group enrolled and participating in courses in Q4.

Note that the purpose of linking payment to enrolment and participation is to ensure courses are designed in such a way that patients find them valuable; that aim would of course be subverted were engagement with patients to encourage participation coercive.

Year Two scheme to be developed in course of 2016, but to include:
Evidence of implementation of Recovery College strategy and description of evaluation and assessment tools:

- Quarterly Report
- Course Prospectus
- % of patients participating in courses

Development Plan:
% of patients who understand their condition and how to manage it
% of patients reporting positive outcome measures

Definitions

Patient eligibility:

- Excluded, patients expected to stay less than three months
- Other restrictions of scope (if any) as agreed at contract between provider

In both cases, groups of patients who are excluded from the scope of the CQUIN scheme are not being judged ineligible for the Recovery College *per se*, or unable to benefit. Eligibility for the scheme is rather determined on the basis of prioritisation:

- nationally priority is given to patients with expected length of stay > 3 months;
- locally priority may be given to particular groups of patients according to the commissioner's and provider's judgment of the best value roll-out of the Recovery College service.

Partial achievement rules

Year 1 payment: 80% process (Trigger 1) and 20% outcome (Trigger 2)

Payment trigger 2: % targeted population enrolled and participating in courses in Q4 determines payment: Enrolment percentage plus one ninth i.e. 100% payment at 90%+ enrolment and participation, 50% payment at 45% enrolment and participation. Proportionately lower payment for lower achievement.

"Participation" is to be defined locally and reasonably – the intention is to count those patients who are likely to be deriving benefit from the College.

In Year Payment Phasing & Profiling	
Local determination. However, the costs of intervention should include some upfront set up costs, followed by more intensive involvement to implement the scheme. Hence, costs will be incurred fairly evenly across the intervention period.	
Rationale for inclusion	
The Government's Mental Health Strategy 'No Health without Mental Health' sets an objective for more people with mental health problems to achieve recovery. This builds upon the objectives in the Health and Social Care Act to allow service users to be partners in their care, to have clear involvement in planning at both individual and service level and have genuine treatment choices made available to them. Embedding a recovery-based approach will play a central role in achieving positive patient reported outcomes and improving patient experience. This in turn leads to improved clinical outcomes, reduced lengths of stay and fewer readmissions.	
Data Sources, Frequency and responsibility for collection and reporting	
Reports of achievement of payment triggers should be made available to commissioners on a standard report form.	
Baseline period/date & Value	N/A
Final indicator period/date (on which payment is based)	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	The start-up costs of a Recovery College relate to the initial scoping, identification of need, developing courses and securing an appropriate base to operate from. A temporary financial incentive will allow providers to prioritise the development of a recovery college which will yield longer term benefits. Once established, it is expected that the running of Recovery College should be met within the general operating costs of a service.

Supporting Guidance and References

"Service user experience in adult mental health: improving the experience of care for people using adult NHS mental health services, NICE clinical guideline 136" National Institute for Health and Clinical Excellence (2011)
www.nice.org.uk/cg136

'No Health Without Mental Health' DH (2011)
'Recovery Colleges briefing', Centre for Mental Health (2012)

This scheme is relevant to all adult medium and low secure providers nationally. Benefits from this CQUIN scheme are service-user focused and include:

- Improved Patient Experience
- Improvement in recovery related outcomes
- Improvement in self-awareness and self-management
- Reduced length of stay
- Fewer readmissions

Secure services represent high cost low volume services, with lengths of stay running into many years and an annual bed price of between £150,000 and £200,000. Costs of establishing and running a Recovery College centre are estimated to be modest in relation to the outcome gains expected.

8.3 MH3 Reducing Restrictive Practices within Adult Low and Medium Secure Services

Scheme Name	**MH3 Reducing Restrictive Practices within Adult Low and Medium Secure Services**
Eligible Providers	All providers of medium and low secure mental health services
Duration	April 2016 to March 2018.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £20,000 per provider plus £1,200 per patient: Target Value: Add locally CQUIN %: Add locally

Scheme Description

The development, implementation and evaluation of a framework for the reduction of restrictive practices within adult secure services, in order to improve service user experience whilst maintaining safe services.

For providers that have already implemented an effective Restrictive Practice Framework, this CQUIN scheme should be adapted to fund their partnership with other providers who have not yet done so. In what follows these providers are referred to as Framework Champions.

Adult secure services are committed to ensuring that least restrictive practice is observed at all times. A number of important national documents have recommendations associated with this issue: e.g. the MIND Report 'Restraint in Crisis' (2013); Department of Health guidance: *Positive and Proactive Care: reducing the need for physical interventions (2014),* the revised Mental Health Act Code of Practice (2015) and recent NICE guidance (NG10) Violence and Aggression: Short Term Management in mental health, health and community settings (2015) have highlighted the need for services to review and reduce restrictive practices in services.

The overall aim is to develop an ethos in which people with mental health problems are able fully to participate in formulating plans for their well-being, risk management and care in a collaborative manner. As a consequence more positive and collaborative service cultures develop reducing the need for restrictive interventions.

This CQUIN scheme proposes to support secure services in meeting this national guidance in an innovative and systematic way by producing and implementing a framework to reduce restrictive interventions, restrictive practices and blanket restrictions in a number of domains (as set out in item 2 of the Payment Triggers section).

The impact of these changes would be to improve service user and staff experience and safety indicators on the wards. It is expected that the use of restrictive practices would reduce in the domains identified.

Findings indicate that where this is achieved, there are often financial benefits in terms of reduced cost pressures such as staff sickness and mitigation claims. Furthermore, there are organisational benefits in terms of improved service ethos and environment by the development of a positive and compassionate culture.

Year 1 – Costs will be incurred in Identification of current restrictive practices, and in developing and implementing the framework with service user engagement.

Year 2 – Costs incurred in implementation and evaluation, through reporting and dissemination, and in realising the potential to share across geographical footprints through network sharing

The CQUIN payment for this scheme, based upon a realistic covering of costs in the first year, should be approximately £1200 per patient (i.e. per occupied bed), including the CQUIN premium. This needs to be complemented by an administration cost for setting up the programme. £20,000 per provider is allowed.

So a provider with 95 patients would warrant a target CQUIN payment of £20,000 overhead plus £1,200*95 = £134,000. This as a proportion of contract value would determine the CQUIN payment amount.

For simplicity, it is suggested that the number of patients in beds as of 31st December 2015 be used as the scaling factor to determine the CQUIN target payment and hence the CQUIN payment proportion.

Commissioners should identify which providers they wish to identify as Framework Champions. Payment amount would be calculated on the same basis, but payment triggers differ (as set out below).

For Framework Champions, a partner organisation of similar scale should be identified in advance of contract signature who will benefit from the support of the Champion in implementing this CQUIN scheme.

Measures & Payment Triggers

YEAR 1

Quarter 1

- Develop a working group which includes service user representation which will be responsible for developing the framework.The Framework should be designed to allow future consideration of additional restrictive practice issues as they arise. It should identify how service users and staff will identify new areas/issues that need to be considered and reviewed and the process by which this may take place.
- Identify restrictive interventions, practices and blanket restrictions in service and gather baseline policy information including with respect of to the following eight areas, in the expectation that introduction of the framework will:
    1) Reduce episodes of physical restraint by the employment of a restraint reduction strategy e.g No Force First, safe words, restrain yourself.
    2)Reduce episodes of supportive observations by developing an appropriate framework e.g. care zoning.
    3) Reduce seclusion and Long term segregation by utilizing best practice guidance in this area.

4) Reduce episodes of medication-led restraint.
5) Increase positive ward culture by developing conflict reduction practice based initiatives e.g. positive handovers, 'saying No Audits' (safewards); developing a psychologically- informed Sense of Community.
6) Increase the involvement of service users, carers and their advocates in these initiatives and including them in the development of training for staff to deliver these objectives.
7) Ensure robust evaluation of outcomes and governance is in place to monitor the progress of the improvement strategies.
8) Ensure the application of blanket restrictions which are no more than proportionate, measured and justified responses to individuals' identified risks, and which restrict patients' liberty and other rights as little as possible. These will include reference to:

- Courtyard/grounds access
- Kitchen/Laundry facilities access
- Access to telephones including mobile phones
- Supervised visits/visiting hours
- Access to money
- Access to the internet
- Incoming or outgoing mail
- Access to certificate 18 media
- Bedroom/personal searches

- Produce an action plan outlining the development of the framework which will outline: a process for staff/patient engagement; staff/patient training; piloting of new policies; implementation and evaluation process.
- Monitoring Information: collecting monitoring data flows covering the eight areas identified in Trigger 1.
- Monitoring outcomes: Design and implementation plan for collecting the following monitoring data flows, with input from CRG to ensure a standard approach taken across the service:
  - % of service users that show positive outcomes in outcome-focussed CPA plans, in particular focused on improved mental health, reducing problem behaviour and developing insight.
  - % service users involved in discussions around individualised least restrictive practice and managing individual risk
  - % of service users in particular focused on improved mental health, reducing problem behaviour and developing insight.
  - Service user feedback in respect of positive outcome of in-patient experience - % of service users who believe they have been listened too in respect of their needs being met where restrictions are necessary.

Quarter 2

- Implementation of action plan, including: engagement, training of staff, adoption of policies, evaluation plan.
- Provision of training in accordance with Positive and Proactive Workforce (2015) to ensure staff are committed to and have the necessary skills and competencies to deliver change.
- Progress report on action plan.
- Evaluation report of staff/patient engagement process

Quarter 3

- Implementation (as Q2)
- Develop a draft framework including an implementation plan to address issues arising across service providers.
- Pilot framework within the service
- Monitoring data (as per items 4 and 5 in Q1) arising from the pilot.

Quarter 4

- Implementation continued (as Q2)
- Provide detailed report to evaluate pilot and showing what changes in practices have occurred. This should include a description of any good practice initiatives that have occurred from the introduction of the framework, and monitoring data (as per items 4 and 5 in Q1)

YEAR 2

Quarter 1

- Develop robust governance and evaluation to ensure long term sustainability.
- Roll out training across whole service
- Review monitoring information data collection and insights gained; modify collection as appropriate in coordination with CRG.

Quarter 2

- Progress report on implementation plan.
- Evaluate framework implementation and consider further improvements

Quarter 3

- Progress report on implementation plan.
- Evaluate framework implementation and consider further improvements, taking account of monitoring information.

Quarter 4

Write up and disseminate the success as a joint report with service users, through national forum/s. Provide evidence of the report and success of the scheme including initiatives that have changed the way the service has been delivered.

For Framework Champions, payment is dependent upon supporting providers of similar aggregate scale in each of these Trigger activities, as well as sustaining their own good practice, and collecting and providing monitoring information on their own performance (as per items 4 and 5 in Q1).

Partial achievement rules

A judgment is reached each quarter by the commissioner regarding whether progress should be rated Good (Green), Partial (Amber), or Unacceptable (Red), with payments as follow:

- GREEN merits 100% of payment;
- AMBER merits 50% of payment.
- No payment for RED.

Establishment of a monitoring system (items 4 and 5 in payment triggers) is a requirement for any payment. Each quarter, progress is assessed relative to what has actually been achieved by start of that quarter. (Hence if nothing is achieved by end Q2, for example, Q3 is judged as if it were Q1.)
In Year Payment Phasing & Profiling
25% each quarter for meeting process targets as set out above
Rationale for inclusion
Evidence indicates restraint reduction approaches can have a beneficial financial effect by reducing cost pressures on services e.g. reducing levels of sickness, bank staff usage and improving staff morale. The development and evaluation of a framework that adult secure services can implement to reduce restrictive practice that is consistent with the security requirements at each service level will improve service user experience and safety outcomes for service users and staff, leading to beneficial mental health recovery outcomes and increased opportunities for progression through the secure pathway. The absence of a framework creates a risk of overuse of restrictive practice without adequate risk assessment, affecting the rights and recovery of individuals. Services may be unable to meet guidance requirements in a comprehensive manner and fail to meet the appropriate criteria for regulated activity e.g. CQC.
Data Sources, Frequency and responsibility for collection and reporting
Reports to commissioners will need to provide evidence as set out in the patient triggers. Further context information is required as follows: Evidence of staff and service user engagement in developing a restrictive practice framework and the piloting of this. Monitoring information as per payment trigger 4 (in year 1, Q1). Reports of achievement of payment triggers should be made available to commissioners on a standard report form.

Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change be sustained once the CQUIN indicator has been retired*	Service changes will be integrated within service structures, governance and practice and will be monitored via quality schedule in contract from the conclusion of the CQUIN.

Supporting Guidance and References

Positive & Proactive Care: reducing the need for physical interventions (2014) – DH.
The Mental Health Act Code of Practice revised (2015) NICE guidance (NG10)
Violence and Aggression: Short Term Management in mental health, health and community settings (2015).
This guidance applies to all adult secure providers nationally and is consistent with current DH strategy.

8.4 MH4 Improving CAMHS Care Pathway Journeys by Enhancing the Experience of Family/Carer

'Scheme Name	**MH4 Improving CAMHS Care Pathway Journeys by Enhancing the Experience of Family/Carer**
Eligible Providers	All providers of CAMHS secure and T4 mental health services
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £25,000 per provider plus £1,000 per occupied bed: Target Value: Add locally CQUIN %: Add locally

Scheme Description

Implementation of good practice regarding the involvement of family and carers through a CAMHS journey, to improve longer term outcomes.

The scheme will help to achieve the following quality markers:

- Clinicians will consciously think about how to increase meaningful engagement of the family in the care and treatment of their young person.
- When a young person moves between services within the network, families should nonetheless experience consistent engagement.
- Every effort will be made to make families part of decision making process.

By including a focus on the family / carer experience, this CQUIN scheme seeks to build on the themes identified for improvement arising from Improving Care Pathway Journeys CQUIN of 2015/16 and the Enhancing Family Support CQUIN of 2014/15.

Data generated by this CQUIN will allow services to strengthen admission and discharge elements of the pathway, and inform system wide improvements including family and carers' experience of consistency across the Network.

Payment of £25,000 overhead plus £1,000 per patient (average number of occupied beds) – is appropriate. Hence CQUIN Payment for a unit with average occupancy of 20 patients would be £45,000. (This can be estimated based upon actual occupancy on 31st December 2015.) The contractual CQUIN payment proportion would be this amount as a proportion of expected contract value.

Measures & Payment Triggers

1. **Trigger 1. Identify The Needs and Develop Action Plan.** Conduct of Audit in Quarter 1, specifying shortcomings relative to **standards defined below** (see also references below); develop a plan to address shortcomings, with quarterly milestones.
2. **Trigger 2. Delivery of processes agreed against the plan of improved outcomes for Q2.**
3. **Trigger 3. Establishment of a validated survey of families or carers against which to assess satisfaction.** (This might be based upon MH Friends and Family Test.) Developed in Q1, implemented in Q2, Q4 target agreed start Q3, progress measured in Q4.

4. **Trigger 4. Deliver Q3 Progress and Progress Report Against Action Plan**
5. **Trigger 5. Produce Exception Report Identifying Any Barriers / Difficulties arising in Q3 and Plans to Address**
6. **Trigger 6. Produce Summary Report and Describe How Improvements Will Be Embedded In Practise Going Forward**
7. **Trigger 7. Number of families reporting satisfaction regarding levels of engagement upon Childs discharge as a proportion of Discharges,** relative to target set as in Trigger 3.

Definitions

The following are the standards to be achieved as part of this CQUIN:

1. Each provider must have a communication plan for engaging with each individual young person's family/carers, focussing on the following two areas.
   - Sharing of clinical information about young person with family/carers (For consistency and parity, where the clinical teams need to manage communication with family or carers, a detailed communication plan should be available. This plan should include details of the young person's competence to make decisions about sharing information with family/carers and record their consent to share such information, and details of how (E.g. by telephone/email/visits), how frequently and who will share information with the family/carer, what level of information will be shared and in what circumstances . It will also include details of what will be done if the young person does not have capacity to make the decision to share information with family/carers, or if consent is withheld or subsequently withdrawn.)
   - Communication between team and family/carers even if clinical information is not to be shared.
2. Each provider must have a system for supporting each young person's family/carers with transport and accommodation.
3. Each provider must provide family-friendly visiting areas within the unit.
4. Each provider must arrange a welcome meeting within the first week of admission.
5. Services to have processes in place to support families/carers to receive help with transport costs and accommodation.
6. Each provider must have in place web-based communication systems such as Skype for aiding communication between young people and families/friends.
7. Each provider must have provision for activities for the family and younger siblings during visits e.g. games/DVD.
8. Each provider must ensure that families are offered hospitality (hot drinks etc) during visits.
9. Each provider must have systems in place for ascertaining the views of family/carers prior to each CPA/other review.

Partial achievement rules

See In Year Payment & Profiling

In Year Payment Phasing & Profiling

	Rules for in year payment and partial payment	
Q1	10% of whole-year CQUIN value awarded if the audit is established and results that can serve as a baseline for improvement, i.e. for delivery of • **Trigger 1. Identify The Needs and Develop Action Plan**	
Q2	20% of whole-year CQUIN value awarded for Triggers 2 and 3*:* • **Trigger 2. Deliver Q2 Progress and Progress Report Against Action Plan** Q2 target must be set as soon as possible after Q1 ends using data from Q1. • **Trigger 3. Establishment of a validated survey of families or carers against which to assess satisfaction.** (This might be based upon MH Friends and Family Test.) Developed in Q1, implemented in Q2, Q4 target agreed start Q3, progress measured in Q4.	
Q3	20% of whole-year CQUIN value awarded for Triggers 4 and 5:. • **Trigger 4. Deliver Q3 Progress and Progress Report Against Action Plan** • **Trigger 5. Produce Exception Report Identifying Any Barriers / Difficulties and Plans to Address**	
Q4	Maximum of 30% of whole-year CQUIN value available for Trigger 6 • **Trigger 6. Produce Summary Report and Describe How Improvements Will Be Embedded In Practise Going Forward** Maximum 20% of whole year CQUIN value awarded for Trigger 7: • **Trigger 7. Number of families reporting satisfaction** regarding levels of engagement upon Childs discharge as a proportion of Discharges, relative to target set as in Trigger 3.	
FOR ALL TRIGGERS	*49.9% or less of required key items included Red*	*No payment*
	50.0% to 79.9% of required key items included Amber	*35% of whole-year CQUIN value*
	79.9% to 100.0% of required key items included Green	*50% of whole-year CQUIN value*

Rationale for inclusion

Meaningful engagement with family / carers should inform and support the transition/discharge planning process.

Enhanced communication and engagement between family and professionals will improve longer term outcomes and strengthen professional networks.

The experience of family / carers with individual secure services currently varies unacceptably in these respects

Data Sources, Frequency and responsibility for collection and reporting

Each provider will be undertaking a review of its own arrangements for Q1 and will inform the action plan during the year.

The findings of this initial audit will be shared across the other CAMHS Units.

Data sets from each of the units that can be shared. Reports to commissioners will need to provide evidence as set out in the patient triggers.	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired*	Clinical benefits achieved will ensure continuation and those changes will be embedded in practice. Consideration can be given to including in contract quality schedules and service specifications where appropriate.

Supporting Guidance and References

- Young Minds Report
- Themes from Enhancing Family Support CQUIN 2014/15:-
    - Welcome Meeting To Be Held Within First Week of Admission
    - Services to have processes in place to support families/carers to receive help with transport costs and accommodation
    - Use of Web Based Communication Systems eg. Skype
    - Activities for the family during visits and younger siblings eg. games / DVD
    - Hospitality during visits
    - Family views should be ascertained before each CPA/other review
- Themes from Improving Care Pathway Journeys 2015/16
- Network Service Data
- Network Referral Data

8.5 MH5 Benchmarking Deaf CA & Adult MH Services and Developing Outcome Performance Plans and Standards

Scheme Name	**MH5 Benchmarking Deaf CA & Adult MH Services and Developing Outcome Performance Plans and Standards**
Eligible Providers	All providers of Deaf CAMHS Services
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £40,000 per provider: Target Value: Add locally CQUIN %: Add locally
Scheme Description	
Developing outcome benchmarking processes across all providers, followed by performance planning and standard setting. As appropriate, the networked implementation of this scheme should be separate for deaf Child and Adolescent mental health services and for deaf Adult mental health services. This CQUIN scheme is intended to cover the four community arms of the Child and Adolescent service, consisting of ten teams and Corner House, the inpatient unit. This CQUIN is likewise intended to cover the Adult community services, consisting of six teams, three Adult inpatient acute admission services and three secure services. The service is founded on equity of access, in terms of language and culture as well as geographical location. The following factors lend urgency to this initiative for the child and adolescent population: •greater vulnerability and incidence of mental health issues for deaf children and young people (CYP) •greater complexity, compounded by a higher incidence of co-morbidity •greater likelihood of abuse •different development trajectories and pace •heightened risk of misdiagnosis and diagnostic over-shadowing •a general failure on the part of service providers with respect to understanding deaf children and family communication needs and preferences •a lack of understanding among professionals re the deaf experience, culture and preferences. These factors feed through into the adult population as well. Currently, there is no agreed national data set to capture, compare and contrast practice across the service. Implementation: Services will need to invest time and resources into the planning of systems and processes to deliver consistent outcome measures for using directly for commissioning purposes.	

Q1 Technology
Q1-2 training investment
Q1-4 team leadership.

A co-ordinator will need to be identified in each of the teams. One session per week will be dedicated to this work. All team members will be expected to participate in this area of work and prioritise it. Two ipads will be required per centre to capture data.

Payment of £40,000 per unit is appropriate.

The contractual CQUIN payment proportion would be this amount as a proportion of expected contract value.

Measures & Payment Triggers

Q1.

1. Benchmarking and service discussion across participating services, all community teams and inpatient services commissioned by specialised commissioning teams, NHS England. The aim will be to establish an agreed proposed set of Benchmarking indicators, by means of the following Activities:
    a. Audit Day (to include commissioners)
    b. Review of current commissioner expectations and data collection.
    c. Agree draft core set of indicators and additional set.
    d. Agree on process for development
    e. Scope and itemise requirements of comprehensive data collection
    f. Agree specific goal based outcome measures and agree rating mechanism
    g. Identify fully representative national working group
    h. Explore the potential for service user involvement
    i. Explore IT and IG issues
    j. Identify training needs and develop training programme in using rating tools and training for goal based outcome measures
    k. National working group will agree rationale and methodology for collecting data
    l. Establish outcome tool pilot centres
    m. Develop Performance Activity Data Recording sheet
    n. National/regional training days

    PRODUCT:
    o. Produce a draft set of indicators
    p. Update CRG

Q2.

2. Analysis of indicators, aiming to finalise data collection and to conduct Pilot data collection, involving the following activities:
    a. Liaison and feedback from external partners (e.g. Trust IT/IG, commissioners)
    b. Localised testing of data set
    c. Service user Workshop
    d. Collate information

    PRODUCT
    e. Refined draft set of indicators with evidence of external partner involvement,
    f. Update CRG

g. Collected outcome tool data
h. Trialling and collation of goal based outcome measures

Q3.

3. Analyse data from Performance Activity Data Recording sheet, involving the following activities:
   a. Working group to finalise first working data set
   b. Feedback to external partners
   c. Localised testing of data set
   d. Evaluate effectiveness

   PRODUCT
   e. Tested working data set
   f. Update CRG

Q4.

4. Development of performance data and finalisation of standards(levels of aspiration for the indicators), involving the following activities:
   a. Pilot second working data set
   b. Propose set of standards
   c. Write report and send to contracting organisations, CRG

   PRODUCT
   d. Agreed set of national standards

Report to CRG at each meeting

Partial achievement rules

None. If process and product objectives unmet, payment is deferred until met.

In Year Payment Phasing & Profiling

25% each quarter for meeting process targets for setting up the framework as set out above.

Rationale for inclusion

The national Deaf CAMH Service is held by four different Trusts and monitored locally through local area commissioning teams. The Deaf Adult Service is held by three different Trusts and monitored locally through sub regional specialised commissioning teams. Currently, there is no agreed national data set to capture, compare and contrast practice across the service.
To enable commissioners and partners to gain a full understanding of these Services there needs to be a more robust, consistent, national approach to data collection. The service specification identifies the principles which underpin the creation and initial development of the service and these key features need to be reflected in the final outcome performance plans and standards.

Data Sources, Frequency and responsibility for collection and reporting

Providers to report to CRG as indicated in Payment Triggers section, with copies sent to commissioner. A reporting template will be provided to support providers.

Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract

CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Standards developed under the CQUIN to be incorporated into service specification.

Supporting Guidance and References

There is currently no reference to deaf children nor to deaf adults in any NICE MH guidelines. There is a need to develop an evidence base. To enable commissioners and partners to gain a full understanding of the Deaf Child and Adolescent and Adult Services, there needs to be a more robust, consistent, national approach to data collection. The service specification identifies the principles which underpin the creation and initial development of the service and these key features need to be reflected in the final outcome performance plans and standards. Patients will benefit from more consistently available, robust clinically useful outcomes information. Cost savings will accrue over time by identifying interventions that are successful in this client group. There will be improved efficiency by accurate assessment, diagnosis and targeted treatment which is culturally appropriate. Patients will benefit from a consistently available, robust and clinically useful outcome measure and information

8.6 MH6 Adherence to Standards for Gender Identity Clinics

Scheme Name	**MH6 Adherence to Standards for Gender Identity Clinics**
Eligible Providers	All providers of Gender Identity Services
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £40,000 per provider: Target Value: Add locally CQUIN %: Add locally
Scheme Description	
A set of standards have been proposed through the Gender Identity Task and Finish Group against which Gender Identity Clinics can be measured for compliance. The standards will be implemented across all GICs and will start the process of improving equity of expectation across all Clinics. For a typical provider, approximately 400 -500 patients could benefit each year. Through the ten providers across England there will be benefit to between 3000 and 4500 patients per year. There is currently variance across the range of delivery by providers as a result of independent development of provision in isolation of other similar Clinics. All Clinics have their own innovations. The standards take account of these and bring them into one set of standards. Each Clinic will currently, differentially be strong on some and weak on others. The CQUIN scheme aims to incentivise consistent strength across all the specified standards. The Gender Identity Services Task and Finish Group commissioned a review of all GICs in England. The set of standards has been identified as a result of that work. It is envisaged that if quality and outcomes are similar at all clinics, patients will need to travel less to seek a perceived better quality service. Much of the improvement should be made with through service/process redesign and additional administrative resource, both staff and systemic. The benefit to patients, the NHS and the general population will be equitable access, expectations and outcomes at all points of delivery. The standard set should be achievable within one financial year	
Measures & Payment Triggers	
Q1 Service/process redesign and recruitment (costs incurred) Q2 Process implementation (costs incurred) Q3 Early evaluation of improved outcomes Benefits realised Q4 Realisation of better outcomes and equity of provision (significant benefits realised)	
Partial achievement rules	
None	
In Year Payment Phasing & Profiling	
25% each quarter for meeting process targets as set out above.	

Rationale for inclusion	
• Adherence to a measurable standard set • Better standardisation of delivery and expectation of services by patients • A baseline upon which to build further equity of delivery and outcomes. If the CQUIN is not adopted, there is a risk of continued disparate development and additional diversity.	
Data Sources, Frequency and responsibility for collection and reporting	
Reports of achievement to be supplied to commissioners on an agreed basis	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired*	Service specification will be adjusted.

Supporting Guidance and References

A copy of the standards will be published separately to support providers in meeting this CQUIN.

8.7 MH7 Perinatal Involvement and Support for Partner/Significant Other

Scheme Name	**MH7 Perinatal Involvement and Support for Partner/Significant Other**
Eligible Providers	All providers of Perinatal MH Services
Duration	April 2016 to March 2017.
Scheme Payment (% of CQUIN-applicable contract value available for this scheme)	CQUIN payment proportion [Locally Determined] for first year should achieve payment of £40,000 per provider: Target Value: Add locally CQUIN %: Add locally
Scheme Description	
This CQUIN scheme requires providers to develop care plans to ensure that appropriate emotional, informational and practical support is offered to partners and significant others to robustly encourage their understanding and participation in the mother's treatment, care and recovery and to promote their bond with the infant. Postnatal psychiatric illness can be devastating, not only for the woman but also for her partner and family. Effective involvement of partner/family can be vital to a rapid recovery. This scheme aims to address this latter aspect of patients' care. Marital and family conflict and lack of spousal support have been implicated in the onset and maintenance of maternal mood disorders. Maternal postnatal depression has also been linked to increased levels of depression in men.	
Measures & Payment Triggers	
Q 1 Services will have developed systems to record and evidence: 1) The emotional, practical and informational support offered to all partners and significant others with the mothers consent. 2) The types of interventions offered from the following: Group I – All partners & significant others should be: • Seen within 1 week of admission by a senior clinician to discuss the mother's condition • Offered the opportunity to attend ward reviews and significant meetings • Informed that requests for additional discussions are welcomed • Informed of the joint activities that are available • Directed to the range of written and electronic information available. Group II – Partners/significant others should be offered at least one of the following documented in care plan • Partner support sessions • Family sessions • Couple sessions Group III – at least one of the following: • Parent-infant activities e.g. massage, rhyme time, music sessions etc • Practical parenting advice/support with nursery nurse, health visitor etc Group IV – Offered access to at least one of the following: • Written/video narratives of experience and recovery of perinatal patients • Meeting recovered patients (e.g. service/family days, charities)	

Q2 Record numbers of partners/significant others offered all of the interventions in Group I and 1 or more in Group II Q3 Record: ■ numbers of partners/significant others offered all of the interventions in Group I and ■ numbers accepting and ■ numbers offered one or more in each of Group II & Group III and ■ numbers accepting in each group. Q4 Record - numbers of partners/significant others offered all of interventions in Group I and one from each of Group II, III & IV together with - numbers accepting in each group.	
Partial achievement rules	
None. If process objectives unmet, payment is deferred until met.	
In Year Payment Phasing & Profiling	
25% each quarter for meeting process targets as set out above.	
Rationale for inclusion	
The evidence supports the provision of support for partners and significant others as such support will likely have positive benefits for the partner, the couple and their relationship with the infant. The scheme should therefore have a positive impact upon effectiveness of therapeutic interventions, improved outcomes for the mother and child and reduced LOS.	
Data Sources, Frequency and responsibility for collection and reporting	
Reports of achievement to be supplied to commissioners on an agreed basis. Quarterly reporting tool currently in development.	
Baseline period/ date & Value	N/A
Final indicator period/date (on which payment is based) & Value	As above.
Final indicator reporting date	Month 12 Contract Flex reporting date as per contract
CQUIN Exit Route *How will the change including any performance requirements be sustained once the CQUIN indicator has been retired?*	Service specification will be adjusted.

Supporting Guidance and References
None**.**

ANNEX GE1 – A: Categorisation of Reason Codes in CUR Reports

As part of NHS England and CCG CUR CQUINs (2016/17), Providers will be required to produce regular reports for commissioners:

- (Monthly) Pre mobilisation – reports detailing progress against the agreed project plan for implementation
- Following the Go-Live Date and establishment of baselines – a mandatory (Quarterly) CUR CQUIN Report[13] (see Annex B, Spreadsheet **G.i CUR Minimum Reporting Data Set**).

Regardless as to the CUR software used, all providers will be required to categorise and report the reasons (reason codes[14]) for assessments 'Not Meeting' CUR Criteria[15] under the following headings:

- (A) Internal Provider Operational based Reasons
- (B) External Reasons: NHS Funded Alternative Level of Care (ALoC) Unavailable
- (C) External Reasons: Non NHS Funded ALoC Unavailable
- (D) External Reasons: ALoC does Not Exist
- (E) External Reasons: Other.

The software solutions provided by the suppliers are customisable so that `reason codes' can reflect local requirements – this is important to support local adoption by clinicians and key stakeholders. As part of the implementation of CUR software and agreeing the benefits to be realised Providers will be required to agree with Commissioners how local CUR Reason Codes fall into each of the above categories. Whilst local design is fully supported, to allow consistent analysis by NHS England and local CCG commissioners, providers are required to use a set of guiding principles (see below) when agreeing which Reason Codes are allocated to which categories.

The four suppliers on the national framework have agreed to support the production of reports that enable the reporting of reason codes under the above high level categories with immediate effect – post implementation of the CUR software.
It is recognised that Providers cannot be held exclusively responsible for reducing the number of patient bed day assessments/ admissions where the CUR criteria are not met for external based reasons. In many cases this will require joint action across the whole system including by CCG commissioners and community/ social/ primary care providers. As well enabling the production of the CUR CQUIN Report suppliers of CUR software will also support the production of CUR Commissioning reports which will be separately incentivised in the CUR CQUIN. The reports using CUR data should focus on where their patients' needs are not being met due to:

- Restricted/ poor access to existing community, primary care and social services
- Gaps in service provision.

[13] This report will also need to be submitted to the CUR National Programme Team.
[14] The fields available to CUR software users which describe why CUR criteria may not be met.
[15] Or where the level of care is class as 'Non-Qualified' using CUR Criteria

A. Internal Provider Operational based Reasons

The following reasons (or similar descriptions) should be included under this category.

- Discharge process incomplete – CUR software systems will be able to define in further detail
- Insufficient discharge documentation
- Treatment/ procedure not completed e.g. PEG insertion/ fitting, inhalation/ respiratory related, medication treatment, anticoagulation therapy
- Test not completed e.g. Diagnostic radiology not completed
- Test/ procedure results not available
- Awaiting discharge assessment
- Discharged ordered - awaiting medicines
- Discharge ordered - awaiting equipment
- Alternate level of care not available (where provided by Trust)
- Physiotherapy not completed.
- Speech Therapy not completed.
- Occupational Therapy not completed.
- Consultant or other Physician orders continued stay when an alternative lower Level of Care provided by the Trust was available (i.e. sub-acute, rehabilitation, medical or rehab intermediate care, hospital at home, etc. Consultant or other Physician orders continued stay when an alternative lower Level of Care provided by the Trust was available (i.e. sub-acute, rehabilitation, medical or rehab intermediate care, hospital at home, etc.
- Consultant or other Physician orders/ ordered admission when an alternative lower Level of Care provided by the Trust was available (i.e. sub-acute, rehabilitation, medical or rehab intermediate care, hospital at home, etc.
- Consultant or other Physician orders continued stay when routine follow-up care required or where care could be provided as an outpatient
- Consultant or other Physician orders/ ordered admission when routine follow-up care required or care could have been provided as an outpatient
- No Consultant or Physician provided orders for supporting clinical staff (continued stay or at point of admission) so that decisions on provision of care based on orders for similar situations or best judgement
- No notation on why admission/ continued stay was required
- Required Specialty assessment not undertaken
- Incomplete or no physician discharge plan.

B. External Reasons (NHS Funded Alternative Level of Care (ALoC) Unavailable)

The following reasons (or similar descriptions) should be included under this category.

- Appropriate NHS Funded Alternate Level of Care not available.
  Note: Usually this is because the service/ beds are unavailable, there is a lack of service capacity to accept patients or the service is not available in a timely way. However, it could also include services not accepting this type of patient, services not able to accept patient during evenings or at weekends or no nearby service availability.
  CUR software systems can be customised to identify the (local) externally provided Alternative Levels of Care, including the following non acute services which may apply to Categories A and or B depending on funding arrangements:
    - Medical Intermediate Care
    - Rehab Intermediate Care
    - Home with Support Services e.g. domestic support
    - Home with Clinical Community services e.g. nursing-IV, physiotherapy, occupational therapy, nursing nebulisation, nursing monitoring, nursing-wound care, IV fluid admin/ IV diuretics, nursing glucose monitoring
    - Home with Consultant Follow-up
    - Home with Primary Care/ GP Follow-up
    - Nursing Home
    - Residential Care
    - Social Care
    - Domiciliary Care
    - Other.

C. External Reasons: Non-NHS Funded Alternative Level of Care (ALoC) Unavailable

The following reasons (or similar descriptions) should be included under this category.

- Appropriate Non-NHS Funded Alternate Level of Care not available.
  Note: Usually this is because the service/ beds are unavailable, there is a lack of service capacity to accept patients or the service is not available in a timely way. However, it could also include services not accepting this type of patient, services not able to accept patient during evenings or at weekends or no nearby service availability.

  A list of potential non acute Alternative Levels of Care regularly used by suppliers is provided in (B) above.

D. External Reasons: ALoC Does Not Exist

The following reasons (or similar descriptions) should be included under this category.

- Appropriate Alternative Level of Care (service) does not exist.

E. External Reasons: Other

The following reasons (or similar descriptions) should be included under this category.

- Patient or carer refuses treatment or discharge options or is unable to cope.
- Awaiting family decision.
- Funding for Alternative Level of Care not agreed e.g. CHC for nursing home, residential care or non-medical domiciliary support.
- Required assessment for transfer to Alternative Level of Care not undertaken.
- Waiting for Social Service package of care to be agreed.
- Home assessment not undertaken.
- Home equipment not available.
- Equipment to support discharge not available.

ANNEX GE1 – B: Notes on CUR CQUIN Spreadsheets

1. Introduction

The "G.i CUR" CQUIN word document guide should be read in conjunction with the following supporting XL workbooks. These notes are replicated on the introduction sheet of the first workbook.

"GE1 CUR CQUIN Baseline Calculator" with three tabs (in addition to this introduction).

TAB 1 "Joint Baseline Calculator"
This spreadsheet is a tool which should be used as a guide to determine the value of CQUIN payment to be offered based on the scale and timing of implementation, and the scale of ambition to reduce criteria-not-met bed days and admissions. It has been broken down into three elements:

- CUR 1 - Planning & Implementation
- CUR 2 - Benefits Realisation – Impact
- CUR 3 - Reporting

The spreadsheet has a "Total CQUIN value" column as well as columns to split a joint scheme, where applicable, between NHS England and CCGs.
The spreadsheet calculates a CQUIN value for a **single provider** based on a number of input values (highlighted in YELLOW):

- Provider Eligible CQUIN Income
- Number of beds for which CUR will be implemented across [THIS IS FOR NEGOTIATION]
- A&E admissions per annum
- Estimated % of staff to be Trained in CUR [THIS IS PROVIDER JUDGMENT SUBJECT TO COMMISSIONER ASSESSMENT OF REASONABLENESS]
- % of days CUR is used and records provided per annum [THIS IS FOR NEGOTIATION, STRETCHING BUT REALISTIC]
- Average occupancy rate
- LQ Bed Days adjustor. This adjustor must be copied from the next tab (see below), and allows a provider-specific ex ante estimate of the likely number of bed days that do not meet the CUR Criteria.
- Expected percentage reduction in the number of bed days "criteria not met". The calculation is set at a third recognising the typical percentage within direct control of the provider. However, where a there is agreement to apply greater effort, including through working with partners there is an opportunity to set a stretch target (or conversely a more modest target – down to a minimum of six percentage points).

There is also a “Details” column within the spreadsheet to help guide further.

The other cells within the spreadsheet **not** highlighted in yellow are not locked, but should not in general be adjusted.
For those who wish to look at the sensitivity when the number of beds or emergency admissions are varied, see item 3, below (GE1 CUR Baseline Sensitivity Analysis).

TAB 2 “NHSE Only Baseline Calculator”
The “NHSE Only Baseline Calculator” follows the same principles as TAB 1 to calculate an NHSE only CQUIN.

The only difference is the ADDITIONAL line: "Percentage of above beds which are Specialised". This then drives the bed-day value in cell C27 and has been used to maximise the number of specialised beds within the overall CUR CQUIN.

TAB 3. “LQ Bed Days Adjustor”
Column F of the Excess of LQ Bed Days tab, which gives for each provider the ratio to average of the percentage of days over the HRG-lower quartile points, is used to adjust the estimated proportion of bed days that fail the CUR criteria. This adjustor is based on the assumption that no days up to the lower quartile will be criteria-not-met, so those providers with more days over the LQ will likely have more criteria-not-met bed days.

2. **GE1 CUR Baseline Sensitivity Analysis” (FOUR TABS)**

This spreadsheet works very similarly to the Baseline Calculator but shows the impact of implementation across increasing number of beds for a given Provider.
The first TAB “Summary” has a section for all the criteria to be input (highlighted in YELLOW) these are the same as the Calculator.
The other three TABS are included to show the calculations behind the sensitivity analysis on the first “Summary“TAB.

3. **GE1 CUR Minimum Reporting Data Set.**

This spreadsheet provides template within which implementation of the CQUIN can be implemented.

ANNEX GE2 – A: Activation System for LTC Patients: Evidence and PAM FAQs

8.7.1.1 Evidence regarding Patient Activation

a) Better health

The review of Hibbard et al into patient activation and health-related outcomes looked into the health records of 25,047 individuals, and found compelling evidence that patients with greater levels of activation experienced better health. This correlation was found between activation and key health risk factors (obesity and smoking) as well as episodes of ill health – measured in number of emergency care episodes.[16]
There were also a number of studies which looked into the correlation between patient activation or health literacy and health related outcomes in specific conditions. For example, Remmers et al found that the blood test results of 1180 diabetics where better, on average, for the individuals who were more highly activated[17]. Similarly, Marshall et al found that amongst 433 patients being treated for HIV, higher patient activation was associated with more favorable HIV outcomes.[18] These findings were matched by those of Apter et al, who found in a study of 284 patients that numeric and print literacy were associated with better asthma control and quality of life.[19]

b) Better outcomes from treatment and self-management

There is also strong evidence that people with higher health literacy or activation are not only healthier, but also benefit more from the care that they receive as they are more engaged in determining the care plan, adhere better to medication / treatment that is prescribed and self-manage more effectively. Chen et al, found that while health literacy influenced levels of knowledge about heart failure, it did not directly increase self-care adherence. Instead, the study of 81 participants found that self-efficacy influence self-care adherence.[20]

Williams et al's study into 232 patients with diabetes found that an intervention designed to increase patient increased the active involvement of patients in visits with practitioners, and active involvement led to improved glycemic control (rather than the activation intervention directly improving glycemic control).[21] Hibbard et al replicated these findings across a number of different chronic conditions in a study of 479 patients which found that increased activation led to a variety of improved self-management behaviors.[22]

[16] Greene, J et al. Why Does Patient Activation Matter An Examination of the Relationships Between Patient Activation and Health-Related Outcomes, Journal of General Internal Medicine, May 2012
[17] Remmers, C et al. Is patient activation associated with future health outcomes and healthcare utilization among patients with diabetes?, J Ambul Care Manage. 2009 Oct-Dec
[18] Marshal R, et al. Patient activation and improved outcomes in HIV-infected patients, J Gen Intern Med. 2013 May
[19] Apter, AJ et al, The association of health literacy with adherence and outcomes in moderate-severe asthma, J Allergy Clin Immunol. 2013 Aug
[20] Chen, AMH, Relationships between health literacy and heart failure knowledge, self-efficacy, and self-care adherence, Research in Social and Administrative Pharmacy, Aug 2013
[21] Williams, GC et al. Promoting glycemic control through diabetes self-management: evaluating a patient activation intervention, Patient Educ Couns. 2005 Jan
[22] Hibbard JH, et al. Do increases in patient activation result in improved self-management behaviors?, Health Serv Res. 2007 Aug

c) Better experiences and quality of life

As well as experiencing better health and better care, a number of studies also show that there is a link between patient activation / health literacy and patients' positive experiences of care. Greene et al's study of data from 5002 patients found that patients at higher levels of activation had more positive experiences than patients at lower levels seeing the same clinician.[23]

Other studies have replicated this finding, for example, Mosen et al's study into patient activation and outcomes of care for adults with chronic conditions also found that patients with high PAM scores were ten times more likely to report high patient satisfaction scores.[24] The contention of these studies is that the care experience is transactional and shaved by both providers and patients.

Several studies have also found a link between patient reported quality of life, and the level of patient activation – Mosen's study (above) found patients with high PAM scores were five times more likely to report high quality of life scores. Likewise, Stepleman et al's study of 199 patients at an MS clinic found that patient activation was associated with depression and quality of life.[25]

However, it is unclear whether high levels of activation directly improve the patient's quality of life (this could be the case as high activation levels are associated with better health and care) or whether a person is more likely to be highly activated if they have a positive experience of life. Hibbard and Mahoney's article "Toward a theory of patient and consumer activation"[26] finds that "activation is linked with the experience of positive and negative emotion in daily life." They propose that one of the ways to increase activation is to "break this cycle of negative self-perception and emotions" to improve a person's self-efficacy.
See further: http://www.ncbi.nlm.nih.gov/pubmed/20188505
Patient Educ Couns. 2010 Mar;78(3):377-81. doi: 10.1016/j.pec.2009.12.015. Epub 2010 Feb 25. "Toward a theory of patient and consumer activation." Hibbard JH1, Mahoney E.

d) Less costly

In addition to the significant benefits to the individual discussed above, patient activation can also have wider benefits for the health system in the form of reduced costs. Several research studies find that lower levels of patient activation and health literacy are associated with less preventative healthcare and more (costly) visits to emergency care and potentially preventable hospital admissions (see, for example,

[23] Greene, J et al, When Seeing The Same Physician, Highly Activated Patients Have Better Care Experiences Than Less Activated Patients, Health Aff July 2013
[24] Mossen, DM, et al, Is patient activation associated with outcomes of care for adults with chronic conditions?, J Ambul Care Manage. 2007 Jan-Mar
[25] Stepleman, L et al. Validation of the patient activation measure in a multiple sclerosis clinic sample and implications for care, Disabil Rehabil. 2010;32(19):1558-67
[26] Hibbard J, Mahoney, E, Toward a theory of patient and consumer activation, Patient Educ Couns. 2010 Mar;78(3):377-81.

Schumacher et al's study "Potentially Preventable Use of Emergency Services: The Role of Low Health Literacy"[27]).

Likewise, Hibbard et al's analysis of the care records of 33,163 patients in Minnesota found that "patients with the lowest activation levels had predicted average costs that were 8 % higher in the base year and 21 % higher in the first half of the next year than patients with the highest activation levels."[28]

8.7.1.2 Background and Evidence re the Patient Activation Measure

CFA fact sheet
Validation study: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361049/
Judith H Hibbard, Jean Stockard, Eldon R Mahoney, and Martin Tusler, "Development of the Patient Activation Measure (PAM): Conceptualizing and Measuring Activation in Patients and Consumers", Health Serv Res. 2004 Aug; 39(4 Pt 1): 1005–1026.

Article in Healthcare Informatics: At HIMMs (top Health IT conference in the US) a few weeks back Dominique Morgan-Solomon, COO of Steward Heath Care in Massachusetts gave two great examples of how PAM was used to help low-activated patients, as reported by *Healthcare Informatics*. Steward was one of the most successful accountable care organisations in the US (one of the top Pioneer ACOs in year one, and the #2 performing ACO in year two).

Video from 2015 NHS Expo: Dr. Karen Eastman, Clinical Director for Long Term Conditions, Health and Well-being and Planned Care at Horsham and Mid Sussex CCG gave a 3:20 minute panel presentation at NHS Expo in Sept on how PAM has been integrated into their programd to better identify and effectively coach low-activated patients. The clip featuring Dr. Eastman is from a longer video of the Expo session: Towards a New Deal for People with Long-Term Conditions.

PAM position paper from FUNCAS: FUNCAS is a highly regarded think-tank and policy group based in Madrid. They have created an engaging overview on PAM.

FUNCAS position paper (FUNCAS PAM Paper)promoting PAMas a tool to help achieve the triple aim of better health and better care at lower cost.

[27] Schumacher, JR, et al, Potentially preventable use of emergency services: the role of low health literacy, Med Care. 2013 Aug;51(8):654-8.
[28] Hibbard, J et al, Patients with lower activation associated with higher costs; delivery systems should know their patients' 'scores', Health Aff (Millwood). 2013 Feb;32(2):216-22

8.7.1.3 III- FAQs from Insignia regarding the PAM

a. Patient groups most likely to benefit.

"**Which groups are most likely to benefit from Patient Activation Measurement interventions? Presumably those those are applicable to costly exacerbation if compliance with self-care regime is inadequate?"**

- This is a good area of focus— CHF, COPD, CAD, Diabetes, Asthma, severe depression, that have a high rate of unwarranted/preventable A&E visits and hospital admits. These are conditions where self-management is quite important and requires patient involvement in many areas—self-monitoring, medications, nutrition, physical activity, managing stress.

"Should one focus upon groups where there is evidence (statistical or anecdotal) of poor self-care?"

- Yes. Though I would caution as to the predictive power of past behaviour and utilisation. We have found that predictive models that utilize retrospective clinical data, demographics, and healthcare utilisation miss more than half of patients in the lower two levels of activation. Consider layers for a predictive model: 1. Low activation, key LTCs and poor past markers (self care, biometrics, and utilisation), 2. Low activation and key LTCs, and 3. High risk identified, but patients are higher in activation.

"What about focusing on conditions where the gap between poor self-care and exacerbation is distal in time and may therefore not be evident to patients."

- "Diabetes is a good example here. Average age of onset is around 52/53, but the impact of poor self-care is seen 10 years or more later.

"Have you a list of such criteria?"

- We have no set criteria. A majority of our clients do focus on patients with long term conditions as noted above. We also have clients focusing on at risk/disparate populations to prevent the onset of disease, including work with individuals who are significantly overweight and/or managing high blood pressure. PAM levels also predict risk for forgoing preventive care— annual exam, mammogram, flu shot, pneumonia vaccinate, colonoscopy (US). The preventive measures present significant risk for ACOs in the US if rates are below standards.

b. The Mechanism by which Outcomes are improved

"**What is the mechanism by which improved outcomes are secured for patients in general and/or according to their condition(s)? Simply having the information about activation that the PAM provides is clearly not an end in itself. So is there a portfolio of care responses that you have developed, and are they costed?"**

- You are correct. PAM as a performance measure is just one of the three ways our clients utilise PAM. We also encourage the use of PAM to guide resource allocation (targeting), and to tailor support to a level of activation (vs. pushing all patients to achieve the same guideline behaviours). We license guidance for coaches (clinically or non-clinically trained).This guidance is focused on

behavioural activation for the patient based upon his/her level of activation and condition.Below you'll find a link to an overview of this resource and some client studies from different settings (telehealth, in clinic, in home).

Improving the Outcomes of Disease Management by Tailoring Care to the Patient's Level of Activation(Telehealth for individuals with LTCs)
Meals on Wheels Use of PAM & CFA(In home support post discharge. Support provided by volunteers)
Marshfield Clinic Complex Case & Readmission Program (conference presentation)PAM and Coaching for Activation integrated into outpatient clinics
PeaceHealth Medical Home Program (published case study) Primary care redesign
Partnership Health Plan Complex Care Management Program (conference presentation)PAM and Coaching for Activation integrated into clinics supporting a disadvantage population (Medicaid in the US).
South Denver Care Transition Program Presentation(PAM and CFA used in skilled nursing facility to prevent readmissions)

c. Reaching Hard-to-reach Groups with the PAM

"**Some hospitals have said that they are concerned that it would be precisely the people who were least engaged who would refuse to complete the questionnaire, and hence there would be no gain from the process. Can you comment on the socio-economic gradient and health engagement of non-respondents for different health conditions?"**

- The hospital/clinic setting is typically the environment where we see the least selection bias. We consistently find that patients in clinic or a hospital setting will complete PAM at a very high rate — 90%+, as they wait for an appointment (complete on paper, iPad, computer) or if the questions are asked by a healthcare provider (or a non-clinical person who has been trained to administer PAM). You see more selection risk when surveys are mailed in home or when calls are placed in home. Ideally, multiple methods are used to get PAM on record for a patient — in-home mailing, administer in a clinic/hospital setting, email request to complete online, etc. But as noted, completion rates are highest in a healthcare delivery setting where we typically see expected segmentation — 40% to 45% are in the lower two PAM levels.

- Which patients complete PAM can be significantly influenced by communication and outreach strategies. One size fits all' health related communications often push both too much information, and goals and action steps that are not realistic and achievable for a patient lower in activation. So at the outset, and with one version communication/outreach, it's important that these communication efforts do not overwhelm a patient low in activation.

- How the survey is positioned is quite important. Its purpose is to better understand a person's 'health style' to help the healthcare professional provide the patient with more personalised (patient centred in provider language) support.

- The relationship between demographics/socioeconomics and PAM score is statistically significant, but accounts for only 5% to 6% of variation in PAM scores. This is a consistent and good finding— activation is not dependent on characteristics that are not malleable. Extreme poverty and advanced age 75+ contribute the most among demographics to variation in PAM scores/lower PAM scores.

d. Validation of the PAM Survey Instrument

"What happens if the process of engaging with patients raises their understanding of what managing their health condition involved; the PAM may then show a declining score for the same underlying level of activation?"

- The process of completing PAM can have a slight impact (one point on average) on one's score given the nature of the questions — asking a patient to reflect on these declarative statements. Test-retest findings are very good (first published look at this is attached, see page 10).
- How the survey is administered can have a significant effect on scoring if done in a manner that may bias results. Some examples of how survey administration may impact results (we train on best practice survey administration).
  - It's tempting to start coaching when a patient is telling their story/asking questions during PAM administration. This may increase the level of agreement with the ensuing PAM questions. We ask that the full survey be completed and only then come back to where the patient had questions/comments related to PAM statements
  - A coach explains/interprets PAM statements which may increase the level of agreement
  - It's not uncommon to hear a fair amount about the few interactions where a patient may have over answered. Coaches/clinicians that are wedded to their existing models/tools and/or believe I know my patients' are those that are mostly likely to focus on these atypical results. Like any survey or PROM, PAM is dependent on good survey administration and a patient being true to what he or she believes. Typically 90% or more of patients fully participate in the survey/provide reliable results. The design of PAM (Guttman-like scale with a known difficulty structure with each question) allow us to spot poor surveys. Scores of 0 or 100 or not reliable. We are also cautious with results where a patient chooses all 'agrees'. The report below shows one way that we can quickly assess the accuracy of PAM results. Notice how the statements show less agreement as the survey progresses — this is our expected and typical pattern.

ANNEX IM2 – A: CF Health Hub Future Intentions and NIHR Evaluation Details

September 2017 to October 2019

Note: the RCT methodology is under development, and adjustments may be made in advance of finalising the CQUIN scheme for '17/18.

The 17 centre cluster trial will aim to recruit 800 patients.

July 2019 onwards
The adherence intervention will be integrated into routine care so no additional staff costs will be required at unit level over and above the standard tariff; but CF units will need to alter how the MDT are used to support CFHealthHub intervention delivery. From September 2019 there will be ongoing data transfer costs and also modest system costs across the whole CFHealthHub platform. We currently estimate that the costs to maintain the system will be less than 10,000 across the whole of adult CF, i.e. less than £20 per adult patient per year.

For the RCT stage, from 2017/18, within the NIHR programme grant there are costs associated with the delivery of the intervention which would not be expected once the evaluation is complete.

Thereafter there are modest costs associated with supporting the CFHealthHub platform and data transfer (£120 per patient per year data transfer costs which may well fall) and IT system support and report production. Costs still to be defined but likely to be in the region of 5,000 per annum.

Cost effectiveness.

Health economic modelling suggests that if an adherence intervention of modest effectiveness were to be implemented across the 6000 adults in the UK with CF savings of more than £100 million might be expected over a 5 year time scale. CFHealthHub can be introduced within the framework of evaluation provided by the £2 million NIHR programme grant which involves the following staged evaluation.

CFHealthHub is to be introduced within the framework of evaluation provided by the £2 million NIHR programme grant which involves the following staged evaluation.

The RCT is an efficacy trial powered to understand the effect size of the intervention delivered per protocol and to establish the relationship between the intervention and the outcome of reduced exacerbations with a key objective of providing evidence that the process measure of adherence is associated with the outcome measure of reduced exacerbations.

The **Patient Activation Measure** is an outcome measure in the evaluation programme. (This will allow this CQUIN to act as a trailblazer for the general CQUIN being developed for activation of patients with long term conditions, 2016/17 PSS CQUIN GE2.)

There is a mixed methods process evaluation at all stages of the programme to understand what works and what doesn't work to allow iteration and co-production by patients and clinicians at all stages of the programme. For example there is funded software development resource to allow data presentation to be iterated in response to patient and clinician feedback.

The NIHR programme currently involves these stages:

Stage 1 March 2015 to April 2016: Intervention development and co-production

Currently Sheffield are co-producing CFHealthHub with people with CF and clinicians. The intervention is being delivered via CFHealthHub to small groups of people with CF and clinicians. There is:

- Co-production of data presentation format with patients and clinicians
- Co-production and testing of interventions to increase knowledge, skills, and self-efficacy.

Iteration is linked to software sprints where the platform and intervention is refined in the light of qualitative research with patients and clinicians.

Stage 2. May 2016- April 2017: Pilot Trial in 2 additional centres.

During the pilot trial the intervention is tested in two new centres (Notts and Southampton with Poole) with the recruitment of 64 patients to test the intervention in two distinct settings with process evaluation, whilst piloting continues in Sheffield. This allows more patients to experience the platform and the intervention to allow further feedback and another round of co-production.

CQUIN is attached to the pilot within the Specialised Contracts for these three trusts.

Stage 3 July 2017 to October 2019. Fully Powered Trial.

The number of patients recruited in each centre increases from 55 to 70. Two approaches enable additional recruitment: (1) the band 6 commitment is increased from 0.8 WTE to 1.0 WTE and (2) the duration of the study is increased from 22 months to 24 months. (Increasing the recruitment target from 55 to 70 is not simply an addition of 15 easy to recruit patients. As the number recruited increases getting extra patients becomes harder and the additional study duration and additional staff time reflects these considerations.

This 17 centre RCT will evaluate CFHealthHub with the primary endpoint of reducing pulmonary exacerbations. The trial will also have the potential to provide rigorous evidence of the relationship between the process measure of adherence and the outcome of exacerbations. This evidence is important as it then allows adherence which is a process measure to be used as an evidence based quality indicator once the robust relationship between process change (adherence improvement) and outcome change (decrease in exacerbations) has been established in the RCT.

In addition the 17 centre RCT will have a parallel health economic analysis. This RCT will also have qualitative work (process evaluation) carried out in parallel to see if further iteration of the intervention is required. The qualitative work within the

process evaluation builds on qualitative work already carried out by the NIHR team to understand barriers and facilitators of patient activation. This qualitative work has informed the interventions delivered. The process evaluation allows learning about what works and what doesn't work in delivering patient activation and sustaining that activation over time. This learning will be a crucial output of the CQUIN investment.

The gap between the end of the pilot trial in April 2017 and the start of the full trial in July is to ensure that training packages and software are modified to take account of the learning from the three centre pilot and to allow contracting and set up to occur so that the centres that take part in the full evaluation are enabled to start. This CQUIN has been informed by the Clinical trials research Unit at Scharr in terms of set up etc.

During this period the three pilot sites will pilot the role of Patient Observatories, collecting and feeding back data.

Stage 4 September 2019 onwards (RCT will complete 24 months at end of August 2019)

CFHealthHub will be rolled out across all adults with CF in the UK. Any remaining centres will be trained in the use of CFHealthHub. All centres will then start to receive regular data about adherence rates across all adults in the UK with CF. this will establish CFHealthHub as a data ecosystem that will allow

- **Quality improvement**. Comparisons of adherence rate between individual CF centres for benchmarking and quality improvement.
- **Commissioning.** Unit adherence rates can be used for QOF and CQUINS
- **Pragmatic trials.** With adherence data collected across all CF units pragmatic trials will be possible using CFHealthHub across all the centres within UK.

Payment triggers for Pilot – set out above; for the RCT (from '17/18) as follows:
'17/18 First leg of RCT

The following payment triggers will be used:

1. Initiation payment to support data reporting .An element of funding will need to be made available directly to the NIHR team to fund the Manchester Farr Institute to deliver the additional programming to support data reports on CFHealthHub use, centre level adherence reporting etc.
2. Employment of interventionist. Centres will need to commit to employing the interventionist for the duration of the study and commit that the interventionist will deliver the standard operating procedures mandated within the intervention protocol.
3. Patient recruitment. Additional funding on the basis of patients recruited as long as the patient activation measure and other measures are recorded. In addition the funding for the chipped nebulisers and data transfer will only be required as patients are recruited.

4. Adherence bonus. A rolling bonus is payable on the basis of increased adherence. This can include a bonus that relates to the other metrics that CFHealthHub can deliver i.e. metrics around (a) agreed adherence, (b) normative adherence, (c) Unit level adherence benchmarked against the community norms and (d) CFHealthHub engagement measures by clinicians (that ensure that consultations are not conducted under the lamp post) and (e) CFHealthHub engagement measures by patients (that ensure patients are being supported to engage with interventions that support patient activation). The bonus would be triggered by achievement of a 10 %point increase in normative adherence for at least half of patients; the metric for the other elements of the bonus is subject to development.

NOTE on outcome metrics:

2) Patient level metrics

There are two important ways to measure adherence at the patient level:

1a) Agreed adherence weekly %

The denominator is the number of therapies that the patient and the clinical team have agreed that the patient should take per 24 hour period. E.g. if patient agrees to take 3 nebulisers per day the denominator is 3. If the patient agrees to take 1 the denominator is 1. (This differs from normative adherence because many units will decrease the number of treatments a patient is on if they are coping poorly with the burden. This could elevate the adherence e.g. a patient on DNase and nebulised antibiotics would be on 3 nebulisers per day. If the patient was only managing 1 inhaler most days the adherence would be 30%. If the team agreed to drop the nebulised antibiotic the denominator would move from 3 to 1 and 30% adherence would become 100%. Hence the need ALSO to measure normative adherence, see below.)

1b) Normative adherence weekly %.

Number of inhaled therapies given the patient's clinical status per 24 hour period. If a patient is not pseudomonas colonised the patient would probably just be on 1 nebuliser per day. If the patient has chronic pseudomonas the patient would be on DNase and an antibiotic so the denominator would be three. (Normative adherence is related to the number of nebulisers the patient SHOULD be on in order that the effective treatment regimen that SHOULD reduce exacerbations is prescribed. E.g. A patient without pseudomonas will probably just be on DNase, whereas a patient with chronic pseudomonas colonisation SHOULD be on DNase and a nebulised antibiotic.)

In both cases the numerator is the number of doses taken and the denominator is the number of doses intended i.e. Number of inhaled therapies per 24 hour period (5am to 0459[29]) (capped at 100% in 24 hours) aggregated over the week.

(2) Unit level metrics

Unit level adherence gives insight into the processes of care within the CF unit using anonymised data from all patients in the CF centre. This is crucial data for quality

[29] The reason for the 5am day-start is as follows. If 24 hours runs from 12 midnight patients often take the days treatment slightly after midnight with some doses in 24hr period A going into 24 hour period B so that period A has less than 100%, period B has more than 100% but is capped and patient appears to loose doses.

improvement across the 28 adult CF units that deliver care to the 6000 adults with CF in the UK. The adherence metrics (2a and 2b) are simply the patient level metrics across all the patients in a centre.

2a) Unit agreed adherence weekly %.
This metric is simply the average of all the individual patient level data using the "agreed adherence" for all patients in the centre.
2b) Unit Normative adherence weekly %
This metric is simply the average of all the individual patient level data using the "normative adherence" for all the patients in the centre.
2c) Unit data sharing.
Proportion of patients on inhaled therapies who are willing to share patient level data with clinical team. This is a quality metric. The ability of the clinical team to increase patient activation and engagement is indicative of the quality of the relationship between the clinical care team and the patient: if the relationship is good the patients will be willing to share data.

The numerator is the number of patients who have chipped devices **and** allow the clinicians to see the data. (The denominator is the total number of patients in the unit with chipped devices).

The numerator for 2a and 2b is the number of doses taken per 24 hour period summed across all patients in the clinic.
The numerator for 2c is the number of patients on inhaled therapies who are willing to share data with the clinical team

3) **CFHealthHub use**
CFHealthHub is the platform used to support patient activation, habit formation and self-management. Metrics around the use of this platform are routinely available and are an important process measure
3a) **CFHealthHub Clinical team use.**
3ai) Number of times that CFHealthHub is accessed per patient per 3 month time window by the clinical team
3aii) Number of minutes that CFHealthHub is accessed per patient per 3 month time window
3b) **CFHealthHub Patient use.**
3bi) Number of times that CFHealthHub is accessed per patient per 3 month time window.
3bii) Number of minutes that CFHealthHub is accessed per patient per 3 month time window