CA2 Nationally standardised Dose banding for Adult Intravenous Anticancer Therapy (SACT)

Scheme Name	***CA2: Nationally Standardised Dose Banding for Adult Intravenous Systemic Anticancer Therapy (SACT)***
Section A. SUMMARY of SCHEME	
QIPP Reference	*[QIPP reference if any : Add Locally]*
Duration	One or Two Years from April 2016 or from April 2017

Problem to be addressed

Chemotherapy is the single biggest service area within NHS England's specialised commissioning spend. It is estimated that NHS England spends approximately £1.5 billion on the routine commissioning of chemotherapy, with drug costs (which are paid by NHS England as pass through payments) being 80% of this. There is a very high rate of annual cost growth of approximately 8%.

Standardisation of chemotherapy doses offers one avenue for achieving improved value in this area – with clear system wide benefits.

Traditionally, chemotherapy doses have been unique to individual patients based on a per kg calculation. Such specific dosing does not provide additional clinical or patient benefit and significantly increases time and costs of preparation and costs of drug wastage. Additionally, standardised dosing will allow standardisation of the chemotherapy products available by diluent, volume and labelling which will allow access to ready to administer chemotherapy from generic and NHS manufacturers.

Dose Standardisation is achieved through a standardised approach to dose banding across England. The approach is in line with the Efficiency and Productivity review undertaken by Lord Carter, which recommends the elimination of waste through a consistent approach to patient care. The Model Hospital team have been closely involved with this initiative.

Dose banding can be described as a "system whereby doses of intravenous cytotoxic drugs are calculated on an individualised basis that are within defined ranges, or bands, and are rounded up or down to pre-determined standard doses".

Change sought

Implementation of nationally standardised doses of SACT across England using the dose-banding principles and dosage tables published by NHS England (developed through the Medicines Optimisation Clinical Reference Group).

It is intended that all NHS England commissioned providers of adult chemotherapy move to prescribing a range of SACT drugs in accordance with a nationally approved set of dose tables and to use a defined set of products using national product specifications in relation to those tables or licensed ready to use products where available.

Providers will be expected to:

1. Have the principles of dose banding accepted by their local oncology and haematology teams (new CQUIN adopters in 18/19).
2. Have the drugs and doses approved by their local formulary / Drug and Therapeutics

committees or equivalent Trust process.

3. Have SACT prescribed in accordance with the doses of drugs listed in the national dose-banding tables (New products will be included in the tables as part of their launch process). SACT that have reached agreed targets should be removed from the quarterly data extraction.
4. Have the standardised product specifications approved by their local oncology and haematology teams and / or their Drug and Therapeutics Committee.
5. Use licensed ready to use products where available or where not available standardised product specifications for procurement or local preparation of all parenteral chemotherapy for adults.

This approach should expand on the 19 SACT agents with standardised dosing tables developed for 2016-17 – implementing standard doses for a new range of SACT agents.

Original List of 19 SACT Agents for Dose Standardisation in 2016-17 and onwards

Bendamustine
Bortezomib SC
Carboplatin
Cisplatin
Cyclophosphamide (Pick and Mix)
Docetaxel
Doxorubicin (Pick and Mix)
Epirubicin (Pick and Mix)
Fluorouracil (Pick and Mix)
Fluorouracil (single unit)
Gemcitabine (100mg/mL)
Gemcitabine (38mg/mL)
Irinotecan
Oxaliplatin
Paclitaxel
Pemetrexed
Rituximab (Infusion)
Vinblastine
Vincristine

Additional SACT Agents for Dose Standardisation in 2017-18 and 2018-19 and onwards

Amsacrine
Arsenic Trioxide
Avelumab
Azacitidine
Bevacizumab
Brentuximab vedotin
Cabazitaxel
Carfilzomib
Cetuximab
Cladribine (Leustat)
Cladribine (LITAK)
Clofarbine
Cytarabine High Dose
Cytarabine Low Dose

Dacarbazine Daunorubicin Doxorubicin Lipsomal (Caelyx) Eribulin Etoposide Fludarabine (IV) Idarubicin Ifosfamide Mesna Methotrexate Mitomycin Mitoxantrone Nab-Paclitaxel Nivolumab Panitumumab Pembrolizumab Pentostatin Streptozocin Thiotepa Topotecan (IV) Trastuzumab (IV) Trastuzumab emtansine Vinflunine Vinorelbine (IV) **<u>Additional Drugs will be added as new drugs and dose bandings become available.</u>**

Section B. CONTRACT SPECIFIC INFORMATION *(for guidance on completion, see corresponding boxes in sections C below)*	
<u>B1.Provider</u> (see Section C1 for applicability rules)	*[Insert name of provider]*
<u>B2. Provider Specific Parameters.</u> What was or will be the first Year of Scheme for this provider, and how many years are covered by this contract? (See Section C2 for other provider-specific parameters that need to be set out for this scheme.)	2016/17[1], 2017/18, 2018/19 *[Adjust locally]* One/two years *(Adjust locally)* *[Other – as specified in C2.]*
<u>B3.Scheme Target Payment</u> (see Section C3 for rules to determine target payment)	Full compliance with this CQUIN scheme should achieve payment of: *[set sum £s following the Setting Target Payment guide in section C3 for setting target payment according to the scale of service and the stretch set for the specific provider.]* Target Value: *[Add locally ££s]*

[1] I.e. scheme was contracted for first implementation in 2016/17, and this template is setting out requirements for 2nd (and perhaps 3rd) year of scheme.

B4. Payment Triggers.

The Triggers, and the proportion of the target payment that each trigger determines, and any partial payment rules, for each year of the scheme are set out in Section C4.

Relevant provider-specific information is set out in this table.

[Adjust table as required for this scheme – or delete if no provider-specific information is required.]

Provider specific triggers	2018/2019 (new adopters)	2018/19 (existing providers)
Trigger 1: Baseline		
Trigger 1: Stretch level		
Trigger 2: Baseline		
Trigger 2 stretch		
Trigger 3		
	[Add rows to match C4 requirements.]	

B5. Information Requirements

Obligations under the scheme to report against achievement of the Triggers, to enable benchmarking, and to facilitate evaluation, are as set out in Section C5.

Final indicator reporting date for each year.	Month 12 Contract Flex reporting date as per contract. *[Vary if necessary.]*

B6. In Year Payment Phasing & Profiling

Default arrangement: half payment of target CQUIN payment each month, reconciliation end of each year depending upon achievement.

[Specify variation of this approach if required]

Section C. SCHEME SPECIFICATION GUIDE

C1. Applicable Providers

Universal Uptake Scheme

All providers of Chemotherapy services that prescribe any of drugs on the listed drugs above.

C2. Provider Specific Parameters

The scheme requires the following parameters to be set for each provider in advance of contract, in order to determine precisely what is required of each provider, and/or to determine appropriate target payment (as per C3.)	SACT Agents prescribed by provider from the above list Number of Doses administered Number of Doses administered in accordance with national dose banded tables Number of SACT agents to be standardised in year two Number of SACT agents provided as standard readymade product

C3. Calculating the Target Payment for a Provider

The target overall payment for this scheme (the payment if the requirements of the scheme are fully met, to be set in Section B3 above) should be calculated for each provider, according to the following algorithm:

<½% of the annual value of chemotherapy drug spend that is to be standardised by the end of Q4, for year 2 (or locally agreed value)>.

To set the CQUIN payment amount on this basis, as is required, necessitates a judgement in advance of contract signing and thus in advance of formal baseline assessment of the intended scope and approximate value of the intended scope of dose standardisation in the financial year.

See Section D3 for the justification of the targeted payment, including justification of the costing of the scheme, which will underpin the payment.

C4. Payment Triggers and Partial Achievement Rules

Payment Triggers

The interventions or achievements required for payment under this CQUIN scheme are as follows:

Descriptions	First Year of scheme	Second Year and Third year (where applicable)
Trigger 1:	Collection of baseline-data for the range of drug doses that are to be standardised as agreed with the commissioner	Collection of data for the range of drug doses that are to be standardised as agreed with the commissioner
Trigger 2	Local Drugs and Therapeutics committee have agreed and approved principles of dose standardisation and dose	Local Drugs and Therapeutics committee have agreed and approved dose adjustments required for new drugs added.

	adjustments required.	
Trigger 3	Trust agreement and adoption of standard product descriptions (where these are available) for individual chemotherapy drugs whether procured externally or prepared within the provider.	Trust agreement and adoption of standard product descriptions (where these are available) for individual chemotherapy drugs whether procured externally or prepared within the provider.
Trigger 4	Targets to be agreed for end of year achievement in relation to the % of doses standardised per drug. (Number of SACT doses given of selected drugs that match to the standardised doses / number of SACT doses given of selected drug).	Targets to be agreed for end of year achievement in relation to the % of doses standardised per drug. (Number of SACT doses given of selected drugs that match to the standardised doses / number of SACT doses given of selected drug).

Percentages of Target Payment per Payment Trigger

The following table sets out the proportion of the Target payment that is payable on achievement of each of the Payment Triggers.

Percentages of Target Payment per Trigger	All Years
Trigger 1	10%
Trigger 2	10%
Trigger 3	60%
Trigger 4	20%
TOTAL	100%

Partial achievement rules

Triggers 1,2,: All or Nothing.

For Trigger 3 or 4 partial achievement:
The Commissioner will be able to review the data submitted and, where exceptions apply, will be able to agree the full CQUIN payment. In particular where participation in a trial precludes the use of dose-banded SACT or where there are local challenges to adopt all elements of

national standard presentation specifications.

Definitions

For Trigger 3:

Numerator: number of SACT doses given of selected drugs that match to the standard product specification

Denominator: number of SACT doses given of selected drug

For Trigger 4:

Numerator: number of SACT doses given of selected drugs that match to the standardised doses

Denominator: number of SACT doses given of selected drug

C5. Information Flows: for benchmarking, for evaluation, and for reporting against the triggers.

Reporting of Achievement against Triggers

Baseline Data on drug doses that are to be standardises as agreed with the commissioner

Quarterly reporting on achievement in relation to the % of doses standardised per drug.

Reporting Template requirement

A standard reporting template has been developed for the 18-19 CQUIN. This standard template must be used to report achievement against the CQUIN triggers,

C6. Supporting Guidance and References

The Dose Standardisation Tables and further guidance are published here:
https://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-b/b02/

Section D. SCHEME JUSTIFICATION

D1. Evidence and Rationale for Inclusion

The Efficiency and Productivity review undertaken by Lord Carter recommends elimination of waste through a consistent approach to patient care. The standardisation of chemotherapy dosing is supported by NHS England, through the Medicines Optimisation CRG, having considered the efficiencies to be achieved on a national scale by adopting a single approach.

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. There is still significant potential for the adoption of a single standardised set of doses for a range of SACT drugs across England.

Alongside standardised doses, the next step is also to standardise the chemotherapy products by diluent, volume and labelling. This is the precursor to accessing ready to administer chemotherapy from the generic and NHS manufacturers.

This approach will simplify the process for any Trusts who wish to outsource readymade chemotherapy syringes and bags. Outsourcing has the potential to further reduce costs to the NHS. Having a single set of national dose tables will allow NHS and commercial providers of outsourced chemotherapy to produce the same doses leading to economies of scale and efficiency.

Intended Benefits:

For Patient	For Commissioner	For Provider
Fewer dose calculation errors Reduced patient waiting times – chemo is ready to give Facilitation of Administration of chemotherapy on any chosen day Supports treatment of patients closer to home	Same doses used across every provider in England Reduced cost through: Reduced Wastage (by re-use of cancelled doses and avoidance of incomplete vial usage during production) Allows outsourcing of standardised chemotherapy products.	Reduced bespoke pharmacy preparation workload. Maximises opportunities for financial efficiency through outsourcing of standardised chemotherapy product. Fewer dose calculation errors. Reduction in prescription alterations. Quicker dispensing through use of pre-prepared doses.

Rationale of Use of CQUIN incentive

Incentivise the adoption, at pace, of standardised chemotherapy doses and products across England. The incentive payment will support providers with agreements that need to be reached with local oncology and haematology teams, approval of standardised doses at local formulary committees, agreement and implementation of standard product specification and monitoring and reporting of progress in achieving dose standardisation.

D2. Setting Scheme Duration and Exit Route

It is anticipated that by the end of 2018/19 dose standardisation will be part of mainstream NHS delivery of chemotherapy and further incentivisation will not be required.

D3. Justification of Size of Target Payment

This is an estimated proportional payment to incentivise at pace and at scale adoption of dose standardisation

D4. Evaluation

Data collected through the scheme using the data-collection tool will be used to undertake a central evaluation of the scheme at the end of each financial year.