CCSD

Robotic code set development– supporting slides

Robotic code development – Introduction, approach and code set summary

Robotic code development

Background and introduction

Background

Over the preceding 18 months to this development piece, ad hoc requests for robotic surgery codes were received into the CCSD Working Group. Evidence showed an increase in requests being submitted to CCSD for new robotic codes, as well as increased usage/activity against existing codes from Healthcode data, both indicating a need to undertake a review of robotic codes.

Prior to the development of the new robotic assisted surgery (RAS) codes, there were 57 RAS codes in the CCSD schedule. These were spread across 7 CCSD chapters. It was therefore limited in its scope and scale and was not reflective of the procedures being undertaken in the independent sector.

In July 2023 the CCSD Board commissioned a review and development piece for robotic codes. This commenced in August 2023 with a detailed approach project plan being developed along with key milestones identified.

Supporting documentation found in excel spreadsheet

Introduction

This pack contains the approach taken to develop the proposed robotic assisted surgery codes and the outcome of the work. There is detail provided around stages 3-5 which have been undertaken since the last update to Board in October 2023. The detail in this pack provides the evidence and process which has been used to develop the final proposed RAS codes.

Supporting this pack is an excel workbook which details the proposed list of 170 RAS codes. This includes changes made to existing codes within the CCSD schedule to bring them in line with the Technical Guide and the principles agreed as part of this piece of work. In the Appendix to this pack is a guide to understanding the different tabs in the excel workbook.

The pack and supporting codes are being presented to Working Group and Board in December 2023. Subject to approval by the Working Group and ratification by the Board, codes will be adopted as part of the Jan Working Group cycle, this is detailed in the implementation guide in the Appendix.

Robotic code development

The full approach to the development of the robotic codes is summarised below. Stages 3 and 4 and detailed in the remainder of the pack as these have occurred since the last milestone update in October.

Stage 1: Project scoping and desktop review

Outcome: Detailed approach and project plan

- Developed of detailed approach and project plan to support the development of robotic assisted surgery codes within CCSD schedule(s) and reviewed OPCS approach to robotic coding

Stage 2: Stakeholder engagement 1

Outcome: Milestone update detailing robotic sector position and developments

- Meetings undertaken to understand more about robotic assisted surgery (RAS) and the key considerations CCSD needed to be aware of in developing new codes. Milestone report developed following this for CCSD Board consideration.

Stage 3: Stakeholder engagement 2

Outcome: Completed engagement packs containing comments on existing codes and suggestions of new codes

- Stakeholder input on guiding principles underpinning CCSD RAS coding and existing codes. Stakeholders suggested additional codes for consideration.
- Feedback collated by GT team

Stage 4: Code refinement, schedule alignment work and development of proposed list of robotic assisted surgery codes

- GT reviewed all comments and suggested new RAS codes. Areas of high RAS use where subject detailed review to ensure codes suggested by stakeholders aligned to schedule standards. All proposed codes were cross-checked to ensure they aligned to key CCSD principles.
- For areas of high request review of online literature and approaches by other schedules was undertaken with new recommended approaches for these areas developed bringing in line non-robotic code narratives to ensure cohesive sets of codes

Stage 5: Review of the proposed list of robotic assisted surgery codes

Outcome: Final proposed list of CCSD RAS codes alongside alignment updates in non-RAS coding

- Internal review of final proposed code list, supporting documents and rationale for changes. Throughout the project there have been regular (fortnightly) check ins with Board sponsor, Lesley Doyle

Final robotic assisted surgery (RAS) code summary

This is a summary of the final proposed set of codes. Within the main body of the pack there is detail to explain the rationale and activity which supports this development, and which chapters the changes are within.

57
Existing RAS codes

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141
Proposed new RAS codes

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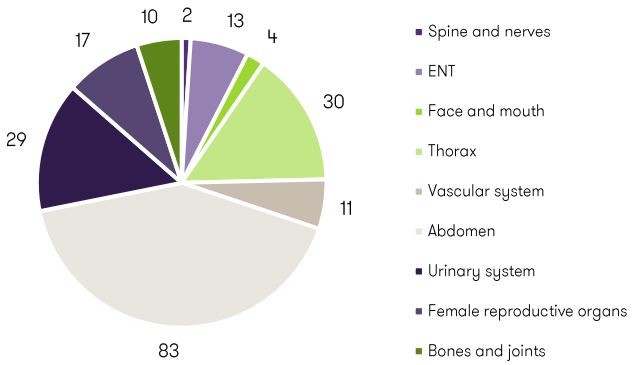
198
RAS codes in the final proposed set

Suggested changes to 42 existing codes to bring them in line with CCSD coding standards and align coding in certain anatomical areas

84 new codes suggested via stakeholder engagement
Narratives aligned with current CCSD and OPCS coding practices, and other schedules. Additional codes developed by GT to ensure cohesive set of codes

GT review of existing and proposed codes underpinned the development of final proposed code set. This included aligning codes to those existing in the CCSD schedule, developing codes in areas of high request and ensuring the creation of a comprehensive and clearly organised set of codes.

Total proposed RAS code set



Robotic code development – Detailed stage descriptions and next steps

Stage 1

This stage covered the creation of a detailed approach and project plan with clear milestone updates and desktop review of other schedule approaches. The detailed project plan is available for review in the Appendix.

The starting position

Prior to the development of the new robotic assisted surgery (RAS) codes, there were 57 RAS codes in the CCSD schedule. These were spread across 7 CCSD chapters. It was therefore limited in its scope and scale and was not reflective of the procedures being undertaken in the independent sector.

A decision was taken to by CCSD Board to undertake a specific robotic code development project to proactively develop a coherent set of CCSD codes.

NHS (OPCS) coding approach to recording RAS

Research was undertaken to understand the approach taken by other schedules to robotic coding.

The OPCS classification uses secondary codes to show additional information about the primary procedure undertaken to reflect endoscopic / minimal access / robotic surgical approaches.

There are also specific (secondary) OPCS codes to be used when the minimal access approach has failed, and the surgery has been converted to open. This information is used to monitor efficacy of the minimal access surgery.

Additional secondary codes allow additional information to be added to the primary code describing the surgery, without the need to create multiple versions of the code to reflect variations in approach when there are developments in surgical technique.

Using a similar approach 'additional information' solution in the CCSD schedule could help reduce volume of potential additional codes required through this piece of work. Current minimal access codes may require a RAS version leading to potentially 100+ additional / updated codes. This could be in the form of an additional code (same as OPCS), or and additional character to existing codes, for example:

J1800R Robotic cholecystectomy

J1800L Laparoscopic cholecystectomy

Example of OPCS coding options for cholecystectomy

Primary procedure code:

J183 Total Cholecystectomy NEC

Examples of additional secondary procedure codes for additional information:

Y714 Failed minimal access approach converted to open

Y721 Failed robotic minimal access approach converted to open

Y752 Laparoscopic approach to abdominal cavity

Y753 Robotic minimal access approach to abdominal cavity

Y755 Laparoscopic ultrasonic approach to abdominal cavity

Stage 2

This stage involved initial engagement with clinical and supplier stakeholders to understand current position of robotic assisted surgery and the potential developments which may impact coding moving forwards. This helped refine the scope of the work. A presentation of key points were made to the CCSD Board in October which Board input on the framework for CCSD RAS code development.

The key comments from stakeholders during the initial period of engagement are summarised below. These were presented to Board in October 2023 as part of the milestone review and the decision as Board set up the framework used for the second stage of engagement. The agreed Board position for each section is stated at the bottom of the column.

Scope of work	Procedural and diagnostic	Assisted vs. automated	Changes to the schedule
•Need for evidence / examples of case studies to support additional codes •Time implications of robotic vs open vs other minimally invasive approach and whether this should be within the scope •Speciality based approach due to differing volumes of RAS per specialty (e.g., high volume in a 1st phase then all others in a 2nd phase) •Potential to expand scope wider than robotics and look to include other innovations	•Initial assumptions that development would be focused on therapeutic procedures •Discussions and research have indicated robotic diagnostics are also being used (e.g., robot-assisted biopsies for the diagnosis of lung cancer) moving forward •This could include the use of micro and nano robots in the near future to support diagnostics with robots becoming smaller and targeted for specific conditions	•Currently described as robotic assisted surgery in existing code narratives •Examples of differing robotic systems between; •master-slave •semi active •active (autonomous) •Clarity and consistency required between surgery which is minimally invasive using a robot compared to non-minimally invasive techniques that use robots	•Original plan to update existing codes and narratives in the schedule based on feedback received •NHS / OPCS approach to develop additional 'Y' codes to cover options for developments in surgical techniques •Agreement sought about how best to address new codes based on volume: 1.additional codes for the schedule in same format 2.different code structure (e.g. additional character to reflect robotic) 3.Secondary procedure code to reflect robotic
Agreed position: Focus on high volume areas in the first phase of work, with input from providers on current RAS procedures to guide this decision	Agreed position: Focus on current activity in this stage of development. Nano and micro robotics not being used currently	Agreed position: Narrative to be 'robotic assisted' to reflect current activity. No expectation of automate robotic procedures in the imminent future	Agreed position: Additional codes to be added to the schedule in the same format as those currently in existence.

Stage 3– stakeholder engagement key findings

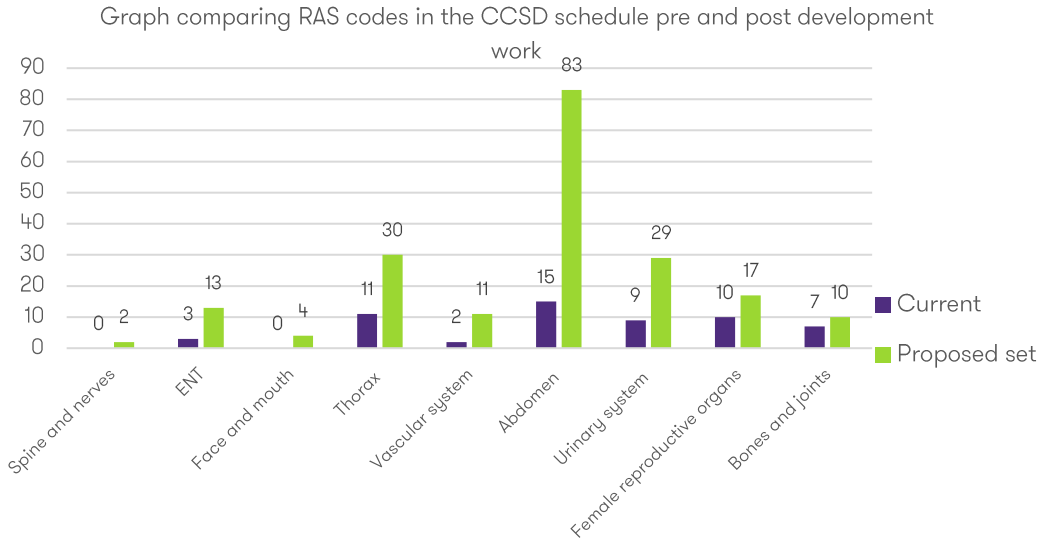
This stage involved engaging with key clinical stakeholders on key issues and principles for the code set development. The key findings from the stakeholder review of the engagement matrix are summarised below, alongside the GT recommended position for each area

Stakeholder feedback summary	GT suggested position for CCSD (based on stakeholder comments, Board position, desktop research and current CCSD guidance)
New codes should sit in existing anatomical chapters rather than a bespoke RAS chapter	• Agreed at October Board meeting, robotic codes will follow the current code system of one code describing an intervention. • Coding narrative will consistently be 'robotic assisted' • Modifier is not practical but may be an approach to consider in the future
Codes should summarise final procedure performed (no need for failed approach options which are available in OPCs using secondary codes)	• Final procedure performed to be coded. is in line with existing CCSD guidance set out in the Technical Guide. • Capturing converted procedures through modifiers if their development was considered in the future.
Split feedback around detail of narrative (e.g., number of port sites)	• Not currently a priority, will be noted and could be considered as part of future robotic development
Limited comment on existing RAS codes, suggesting these are fit for purpose Comments around existing narratives included: • Ensuring codes describe 'robotic assisted' procedures • Where a bilateral code exists, ensure there is also a unilateral code • Need separate codes for procedures with and without mesh (e.g., hernia repair) • Ensuring that pathology is not included in the narrative	• GT team have noted these comments, and these have been cascaded through the final proposed list of codes and the supporting changes.
No feedback received around unacceptable combinations.	• GT developed guiding principles for unacceptable combinations for robotic assisted surgery codes. These have been used to develop the final proposed list of codes. • A RAS code is an unacceptable combination with any laparoscopic or open intervention for the same purpose • Unilateral and bilateral codes will be unacceptable combinations

Stage 3 – new code suggestions

As a result of the engagement undertaken in stage 3, a new set of codes have been developed to cover robotic procedures. The charts below how the Schedule has changed – for example, a significant increase in abdomen codes (light green, from 15 to 74 codes) and new areas such as spine, face and mouth

As part of the engagement process, stakeholders were invited to suggest new RAS codes to be incorporated into the CCSD schedule. The existing RAS codes, the new RAS code suggestions and the final proposed RAS set are summarised below. There were areas where the same code was suggested by multiple stakeholders, these duplicates have been removed. Additionally, GT followed up on the offer made by providers at the October Board meeting and received robotic assisted surgery information from HCA only, this has been incorporated into the final RAS proposed set.



Stage 4 - Code refinement, schedule alignment development of proposed RAS codes

Stage 4 was about the collation of feedback from stage 3 and undertaking detailed refinement of suggested codes to develop the final proposed code set. This was to help make sense of the feedback, ensure alignment to the rest of the Schedule and develop a clear and consistent set of final codes.

Code refinement

- Reviewing packs returned and identifying key themes around requirements and updates
- Removing duplications or narratives which describe the same surgery
- Breaking down of codes into anatomical / body system subchapters to manage more easily
- Understanding of what was currently available within the coding schedule and how it was described in code narratives

Schedule alignment

- Review of codes being suggested as updates / additions and how these may require slight changes to align with schedule rules
- Review of implications on other codes that currently exist in the schedule
- Research into how other schedules record these procedures and what specificity is used in code narratives

Development of final code set

- Consistent approach to narratives to address key themes. Narrative and unacceptable combination changes suggested to bring existing codes into line with newly developed ones
- Inclusion of additional codes to ensure the same options are available for similar types of surgery (e.g., same approach for all hernia repairs regardless of site of hernia)
- Full audit trail of suggested code updates based on initial request, refinement, schedule alignment and rationale for final code

Stage 4 – alignment of suggested codes to CCSD schedule

During the review process GT noted areas where the wording with the Schedule was not consistent either between codes which already existed or between suggested codes and those already in the schedule. To avoid adopting robotic codes which could cause confusion GT have performed some small alignment reviews to ensure new robotic codes are adopted into sections of the Schedule which have a clear structure. The key areas for these are listed opposite.

For each of these areas GT have reviewed the narratives of the codes and suggested a cohesive set of codes which align to each other and the wording currently in the CCSD Schedule. For each of these areas there is a supporting slide which summarised the approach taken and the framework we have worked to. These alignment areas each have a tab on the supporting excel document to enable review of their structure and the proposed changes.

- Hernia codes
- Colon excision (including anastomosis and stoma formation)
- Chest and thorax codes
- Hepatobiliary codes
- Bladder and Gynaecology codes
- Ear, nose and throat (ENT) and lymph node excision codes

Stage 4 – Code refinement and alignment

Outlined below is a summary of alignment and refinement work across different grouped surgery and impact on final code set

	RAS code refinement	Schedule alignment	Development of final code set
Hernia	Feedback outlined requirement for nature of hernia (primary / recurrent) and repair (with / without mesh)	Current schedule codes have open / lap options and some RAS repair but inconsistent depending on site	Consistent codes and narratives across all hernia sites, broken down by approach > primary/recurrent > type of repair > laterality (if needed)
Colon excision (including anastomosis and stoma)	Requirement for colon excision split by site (e.g. right hemicolectomy) including stoma / anastomosis, also eponyms used	Current inconsistent use of narratives to include stoma or anastomosis, with gaps depending on site of excision	Consistent codes and narratives by site of colon excision site split by approach > stoma / anastomosis, also include revision and closure of stoma
Chest and thorax	Requirement for updated and consistent robotic assisted approach for surgery in the thoracic cavity	Updates to ensure consistent use of '+/-' additional procedures from similar narratives depending on approach	Code narratives broken down by type of surgery > site > approach
Hepatobiliary system	Requirement for robotic approach for liver and bile duct laparoscopic procedures	Inconsistent use of terms in code narratives; • tumour / lesion • robotic assisted / robotic lap assisted	Code narratives split by type of surgery (consistent use of 'lesion') > approach (consistent use of robotic assisted)
Urinary tract and Gynaecology	Feedback outlined need for; • RAS approach to bladder / ureter surgery • RAS hysterectomy with +/- procedures and gynae repair codes	Inconsistent use of terms in code narratives; • tumour / lesion • robotic assisted / robotic lap assisted • inconsistent use of '+/-' additional procedures in narratives	Consistent codes and narratives across • Urinary tract / Gynae type of surgery (consistent use of 'lesion') > approach (consistent use of robotic assisted) > +/- narrative code splits
ENT and lymph nodes	Feedback outlined need for; • Robotic approach for trans-oral surgery • Requests for single and block lymph node excisions for specific sites	• Approach / site of ENT surgery has gaps • Codes do to not cover all common lymph node sites consistently	Consistent codes and narratives across • ENT trans-oral sites by approach • Lymph node sites (based on OPCS) by approach > excision type (single / block)

Stage 4 – Example of alignment issues

An example of inconsistent narrative in existing codes and need for alignment between existing codes in the schedule and how final code set required updates to include feedback

Current CCSD RAS codes

Below is an example of current CCSD schedule codes and narratives for colostomy formation. There are inconsistencies in terminology (use of term formation) and laparoscopic version includes revisional procedures.

H1581	Laparoscopic colostomy and stoma formation (including revision)
H1590	Open formation of colostomy

Updated final code set

Through development of a final code set to include robotic assisted surgery we have included consistent narratives, split by approach intention of surgery (formation or revision).

H1590	Open formation of stoma (including revisions)
H1581	Laparoscopic formation of stoma (including revisions)
New	Robotic assisted formation of stoma (including revisions)
H1542	Closure of stoma (not otherwise specified)
New	Laparoscopic closure of stoma (not otherwise specified)
New	Robotic assisted closure of stoma (not otherwise specified)

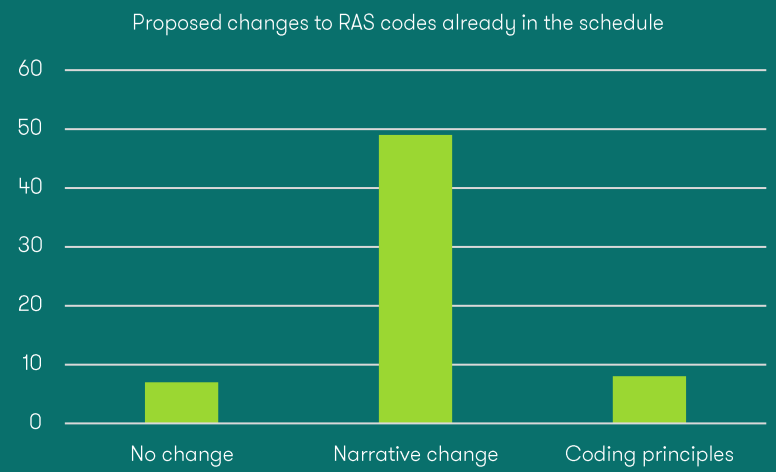
Stage 5 – the proposed RAS code set

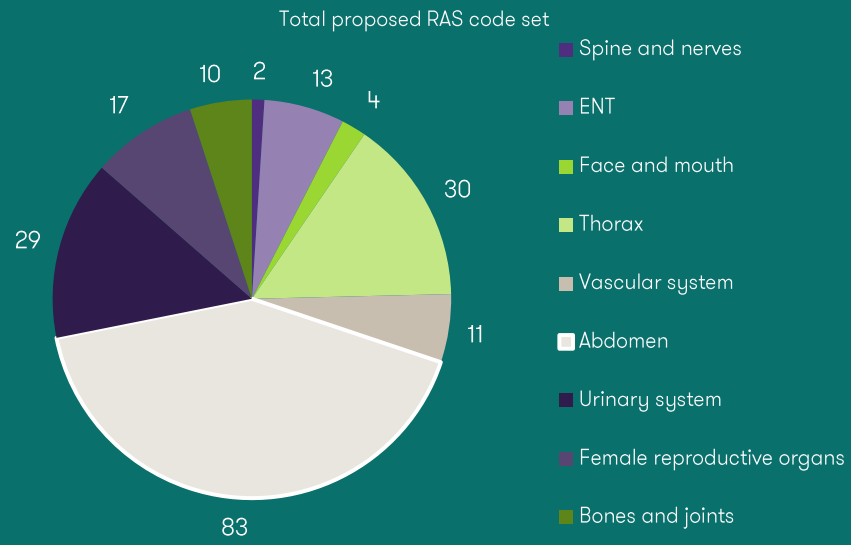
Stage 5 included finalisation and review of the proposed RAS code set. The graphic below summarises the proposed RAS, including both the existing and the new codes, those suggested and those developed by GT during stage 4.

198 robotic assisted surgery codes

57 RAS codes pre-existing in the Schedule

141 new codes proposed





Codes suggested for inactivation, or requests which are not clear are not included in the numbers for the graph above.

Stage 5 – additional updates for colectomy and hernia codes

As part of stage 5, we also reviewed the impact that introducing the new RAS codes could have on the wider Schedule. Below sets out the non-robotic code updates required following RAS code development for two areas/

As part of the work undertaken in stage 4, codes existing in the schedule for hernia and colectomy were reviewed to create coherent a coherent code set across the different approaches. Working Group are asked to agree the sets of codes presented in the alignment tabs within the supporting excel document. Individual code changes will then be put through by GT; Working Group will not be asked to vote individually on these requests. This work is summarised below with examples of changes in the hernia codeset. In order to ensure cohesion across CCSD, this work will need to be done for the other alignment areas too.

5

Code inactivations

Example
G7512 – Revision of ileostomy - local

29

Narrative changes

Example
T2620
Current narrative – Repair of recurrent incisional hernia requiring mesh
Proposed narrative – Open repair of recurrent incisional hernia requiring mesh

63

New codes

Example
T2506 – Laparoscopic repair of recurrent incisional hernia requiring mesh

Next steps – immediate

1. Review	• 1-2-1 meetings between Working Group members and GT to talk through robotic code development project • Working Group voting members will formally log approval votes in the relevant tabs of the spreadsheet which GT will use as the evidence to put codes through as part of the January Working Group cycle.
2. Approve	• Working Group approval of principles for the non-robotic codes which have been reviewed as part of the alignment pieces. Changes to these codes will then be put through by the GT team, with a proposed adoption date in line with that of the RAS codes. • Any comments from Working Group will be reflected into the final code guidelines and proposed codes which are presented to the Board in the extraordinary meeting on December 13th
3. Publish	• RAS codes to be adopted as part of RAS January cycle • Full details of the suggested implementation timetable are in the appendix, this will be discussed at the Working Group call.

Next steps – further development

- GT will develop robotic code support material to be included in the Technical Guide and training material
- Project close-down review meeting to understand lessons learned from the project, summary document to be shared with CCSD Board
- Post implementation review and next stage development. Six months following implementation a review of robotic assisted surgery code usage and identification of areas which may need further development.
- Establish a roadmap for future robotic code development and usage monitoring. including plans to address comments from stakeholders around suggested development areas and any Working Group reflections
- Working Group review of further unacceptable combinations for new RAS codes. Requests to made to the website in the normal way.

Update – Feedback from Working Group

Since sharing the robotics development pack GT have had a development update call with the Working Group and individual members calls with all four voting insurers, feedback from these calls is outlined below

Approach and principles used

- Positive feedback from the Working Group around the pack shared
- Agreement that existing open / minimal access approach codes in the same area of the schedule should be included and updated as well, to ensure that codes and narratives are subject to the same review
- Spreadsheet used for voting discussed and understood with breakdown between new codes, narrative changes and examples of principles for unacceptable combinations

Potential issues raised

- Main concern was around capacity to review all the codes requiring votes by January cycle deadline, with two insurers not having capacity to review anything before Christmas
- It was noted by GT and other Working Group members that some changes are minimal (e.g., changing 'robotic' to robotic assisted' in a code narrative), so may take less time than is initially anticipated once they begin working through the codes and voting
- Wider capacity issues may need to be discussed and addressed in early 2024 to allow support of other planned development work across the next year

Agreed next steps based on feedback

- Working Group will continue to work on the voting spreadsheet, with GT support for collating votes and agreed codes
- Touchpoint to be scheduled in mid-January ahead of January Working Group to review how many codes have been reviewed / agreed and discuss any key challenges
- Cohort of more straightforward codes may be introduced in January cycle, with remaining for adoption in March 2024.

Appendix

Appendix A – supporting document guidance

This pack is supported by an excel spreadsheet which details the final proposed robotic surgery codes. The table below summarised the tabs in the spreadsheet, what is enclosed within them and where decisions are required. Throughout the document *italics* are for the chapters and codes for proposed narratives and codes in **bold** are those which already exist in the schedule.

Tab name	Description	Action
Final proposed RAS codes	This is the combined list of the existing and newly suggested codes for robotic surgery. This is the proposed list following the suggested changes on the voting tabs, so represents what the codes would look like is all changes were accepted	This is for Board and WG to see the proposed final set of codes in one place. No voting is needed on this page.
Narrative changes – for voting	This tab summarises all the narrative changes to current codes which are proposed	This is for WG to formally log their votes against the proposed changes
Unacceptable combinations – for voting	This tab summarises all the unacceptable combination changes to current codes which are proposed	This is for WG to formally log their votes against the proposed changes
New codes – for voting	This tab summarises all the new codes which are proposed including those requested as part of this work, those which had already been requested and those which have been suggested by GT to ensure comprehensive sets of codes in certain areas.	This is for WG to formally log their votes against the proposed changes
Additional alignment changes	This tab contains changes which related to the alignment work detailed in the main body of this pack. This is the codes which required addition or change as part of an alignment review which are not robotic codes.	Once a process is agreed this tab can be used to vote on the changes needed to bring hernia and colectomy codes in line with suggested principles
RAS codes – GT working and evidence	This tab contains all the original codes, the stakeholder feedback and GT review comments which have fed into the proposed changes. This tab is to support understanding the evidence behind the proposed changes.	This tab can be filtered by chapter and proposed change type.

Supporting documentation found in Paper xxx of pack.

Appendix B – Considerations for code set adoption

This table below summarises the caveats which need to be considered when reviewing the proposed codes and considering their adoption

Area	Description
Level of engagement	- Of the five organisations who participates in the first stage of stakeholder engagement, only three returned a completed engagement matrix as part of the second stage of stakeholder engagement. The three who replied were one insurer, one provider and one supplier - Organisations were offered sessions with GT to support completion of the matrix; no organisation took up this offer - Feedback received is less that that for the initial stakeholder engagement. Group need to consider if this feedback is sufficient for creating the framework to build current and future RAS codes. - Of note, some organisations spoke to more than one individual as part of completing the engagement matrix, so their completed matrix represents a wider spread of opinion than one person.
Unacceptable combinations	- No organisation left comments around unacceptable combinations, either those present for existing RAS codes or when suggesting new codes. - GT have suggested some guiding principles which could be rolled out across the proposed RAS set but Working Group would need to consider how narratives unbundle.

Appendix C – Suggested implementation timetable

This table below summarised the proposed implementation timetable for the robotic assisted surgery codes

Date	Event	Purpose
Prior to 7th December 2023	1-2-1 meetings with voting Working Group members	Ensure all have an opportunity to walk through robotic code development work with GT and ask questions ahead of development meeting
7th December 2023	Working Group Development call	Opportunity for Working Group to discuss the proposed code set and identify any areas for further development. Working Group will need to agree the principles underpinning the code set development
13th December 2023	Board extraordinary meeting	Board agreement of the proposed robotic code set
15th December	Final voting matrix shared	Following any updates made at Board, the final voting matrix will be shred to Working Group. This will give a clear audit trail of votes from WG members and will allow GT to then load the codes onto the website as part of the Dec/Jan Working Group cycle.
2nd February	Publication of codes	Publication of codes to the CCSD website (in line with Dec/Jan Working Group cycle)
9th April	Recommended adoption of codes	Recommended date of adoption (in line with Dec/Jan Working Group cycle)

Appendix D – Hernia code review detail

The diagram details the process which has been undertaken for the various alignment reviews. The diagram below provides detail for the hernia codes, with a similar process undertaken for the other areas detailed in the pack.

Code refinement

- Current schedule codes have options for open / laparoscopic and some robotic assisted repairs, but inconsistent depending on site of hernia
- Stakeholder feedback outlined site of hernia and primary or recurrent nature of hernia being useful in suggested code narratives

Schedule alignment

- Review of other classifications outlined best approach would be by hernia site, with different narratives to include:
  - Approach
  - Primary / recurrent
  - Type of repair (mesh or non-mesh)
  - Laterality (if anatomically relevant)

Development of final code set

- Consistent approach to narratives to describe all hernia surgery, with only site of hernia changing between options
- Creating codes for hernia that had not been covered to ensure full hernia repair section of the existing schedule was consistent and clear moving forward

Appendix D – Example: Hernia code alignment

The proposed structure for the hernia codes is summarised in the table below along with an example of how the suggested codes would be broken down by anatomical site. The full breakdown can be seen on the 'hernia alignment' tab of the supporting excel.

Domain	Code descriptions
Anatomic site	Umbilical/paraumbilical Incisional Inguinal (unilateral or bilateral) Femoral (unilateral and bilateral) Ventral (not otherwise specified) for use in hernias not named in the above anatomical sites
Approach	Open (related to any code without reference to laparoscopic or robotic assisted) Laparoscopic Robotic assisted
Purpose	Primary (primary is not used the narrative, the rule here will be that if 'recurrent' is not stated then the repair is primary) Recurrent
Additional information	Requiring mesh (this includes the removal of existing mesh in a recurrent hernia repair) Not requiring mesh
Unacceptable combination principles	Unilateral and bilateral codes will be unacceptable against each other Requiring mesh and not requiring mesh will be unacceptable against each other

Incisional hernia	
Code	Code narrative
T2501	Open repair of incisional hernia requiring mesh
T2500	Open repair of incisional hernia not requiring mesh
T2620	Open repair of recurrent incisional hernia requiring mesh
T2600	Open repair of recurrent incisional hernia not requiring mesh
T2720	Laparoscopic repair of incisional hernia requiring mesh
T2503	Laparoscopic repair of incisional hernia not requiring mesh
T2505	Laparoscopic repair of recurrent incisional hernia requiring mesh
T2506	Laparoscopic repair of recurrent incisional hernia not requiring mesh
T2721	Robotic assisted repair of incisional hernia requiring mesh
T2504	Robotic assisted repair of incisional hernia not requiring mesh
T2621	Robotic assisted repair of recurrent incisional hernia requiring mesh
T2601	Robotic assisted repair of recurrent incisional hernia not requiring mesh

Appendix D– colectomy code alignment

The proposed structure for the colectomy codes is summarised in the table below. The full breakdown can be seen on the 'colectomy alignment' tab of the supporting excel.

Domain	Code descriptions
Approach	Open (related to any code without reference to laparoscopic or robotic assisted) Laparoscopic Robotic assisted
Anatomic site	Colectomy Right hemicolectomy Left hemicolectomy Panproctocolectomy Proctectomy Rectosigmoidectomy Abdominoperineal resection
Additional information	Stoma formation (refers to any stoma formation) Anastomosis
Unacceptable combination principles	Stoma and Anastomosis codes will be unacceptable against each other

Appendix E – Detailed project plan

		21/08/2023	28/08/2023	04/09/2023	11/09/2023	18/09/2023	25/09/2023	02/10/2023	09/10/2023	16/10/2023	23/10/2023	30/10/2023	06/11/2023	13/11/2023	20/11/2023	27/11/2023	04/12/2023	11/12/2023	18/12/2023
Supplier engagement	Develop list of suppliers																		
	Contact suppliers																		
	Arrange and undertake supplier engagement																		
	Produce summary document of supplier engagement																		
Engagement with specialist clinicians	Develop list of specialist clinicians																		
	Contact clinicians																		
	Arrange and undertake clinician engagement																		
	Produce summary document of clinical engagement																		
Milestone 1	Share feedback from clinicians and suppliers with WG																		
	Update Board on engagement with clinicians and suppliers																		
Development of robotic code chapter	Review of current codes In the CCSD schedule base on engagement feedback																		
	Develop outline document to share with WG demonstrating changes to currently held robotic codes																		
	Develop a list of new codes to be added to the schedule, based on engagement feedback																		
Milestone 2	Share summary of updated and new codes with suppliers/clinicians for comment																		
	Share summary of updated and new codes, following supplier/clinician review, with WG for review and comment																		
Develop guidance for RAS chapter	Develop technical guide sub chapter which covers processes for managing RAS code requests to the WG and ensuring future consistency of RAS codes																		
	Develop supporting external guidance including training chapter																		
	Share guidance document with WG for comment																		
Milestone 3	CCSD Board approval																		
Final adoption	Agreed codes published and circulated in updated version of the schedule, in line with next WG update																		
	Guidance and training published on CCSD website																		
	Sector communication