National Certification Programme for Cardiac Rehabilitation (NCP_CR) Report 2024

Executive summary

Welcome to the 2024 National Certification Programme for Cardiac Rehabilitation (NCP_CR) service quality report. This report covers England, Northern Ireland and Wales detailing the extent to which cardiac rehabilitation (CR) services meet the seven key performance indicators (KPIs) that underpin certification.

This year's report has shown that for the first time the proportion of Green certified programmes, across the three nations, is greater than the proportion of non-certified programmes. The UK wide improvement in certified programmes is 12% higher than last year which means more patients are being seen by higher quality programmes. One of the most fundamental and encouraging changes seen this year has been the big improvement of programmes that have moved out of the Fail category (i.e. not meeting any of the seven KPIs); over 50% are now meeting some of the minimum standards. This success is even more impressive as it was achieved during a time of considerable workforce pressures. This is fabulous news and something clinical teams should celebrate.

This year's report also investigated which of the KPIs appear harder to achieve than others which we believe will help CR teams and commissioners to focus their efforts on staying certified or achieving certification for the first time. The most frequently missed KPIs were wait times and the proportion of patients with an assessment 2 (post-CR). In the reporting period, 10 services that were previously Green certified reduced to Amber. The primary reason for these reductions were services experiencing an increase in wait times and lower assessment completion at the end of rehab.

Throughout the next year, the NCP_CR will continue to work with each of the nations and clinical teams to optimise data quality so that service quality can be accurately reported. Thank you to all clinical teams for your ongoing support in data entry to the National Audit of Cardiac Rehabilitation (NACR) and for your desire to share data for the benefit of patient services.

Introduction

Cardiac rehabilitation (CR) is an evidence based intervention recommended by both NICE and Cochrane reviews that has long been part of best practice cardiovascular care. [1-6] The NHS has set CR as a priority with an aim to increase uptake to high quality rehab programmes, as defined by published evidence and clinical standards. [7-8] The NCP_CR is one of the many roles carried out by the National Audit of Cardiac Rehabilitation (NACR) where we work closely with clinical teams and our professional association, the British Association of Cardiovascular Prevention and Rehabilitation (BACPR), to report on the quality of CR.

NHS England funds NACR to report on uptake and quality of CR with an aim to utilise routine data to improve services. In 2017 NACR first reported on the quality of CR showing that 30% of programmes met clinical minimum standards leading to the formation of the NCP_CR.[9] NCP_CR is a joint endeavour between NACR and the BACPR. In recent years the integration of NACR data and NCP_CR analysis into NHS data systems has helped inform NHS funding for CR and facilitated service improvement. Our ability to drive service improvement is aided by an extensive Steering Group

including patient and public involvement, most notably through the Cardiovascular Care Partnership (UK) which represents a wide range of patient groups.

Method

The NCP_CR analysis is carried out each year and certification status is only valid the year it is awarded. This process is repeated each year as we know that service quality can change quickly due to commissioning/provider changes or the loss of/change in key staff.

Our approach utilises routine practice data validated through NHS England, NHS Arden and Gem Commissioning Support Unit and NACR data governance procedures plus an annual staffing survey of CR programmes. Individual services are rated on the extent to which they meet published clinical minimum standards defined through seven KPIs (Table 1).

Table 1. Key performance indicators (KPIs)

NCP_CR key performance indicators	
1	Multidisciplinary team
2	Patients starting Core CR from all priority groups
3	Duration of CR
4	Assessment 1 (pre-CR)
5	Wait time (Referral to start of Core) (CABG)
6	Wait time (Referral to start of Core) (post MI/PCI)
7	Assessment 2 (post-CR)
The full list and breakdown of indicator thresholds can be found on Appendix 1	

Results

UK wide certification profile 2024

A total of 205 programmes were eligible for certification which is four fewer programmes than reported in 2023 (Table 2). The small reduction in programme numbers, primarily in England, does not equate to less patients being seen rather it is due to existing clinical teams merging under one wider integrated Trust model which reports into NACR as one service.

The trend, across all three nations, is towards more programmes achieving Green certified status and fewer programmes failing to meet any of the seven KPIs. As shown in Table 2, 106 programmes (52%) met all seven standards and had complete data input to be Green certified for the 2024/25 period (based on Jan-Dec 2023 data).

In addition to the 52% Green certified programmes, seven programmes met all standards but did not have complete patient data entered for the period. This is a positive insight into these programmes as they would have achieved Green certified status if they had entered all data for the patients seen that year.

Almost a third (n=61) of programmes attained Amber status which is less than last year, however, many of those services moved into Green certified this year. There was a large drop in the number of programmes in the Fail category resulting in only 3% (n=6) of the 205 programmes in the UK failing to meet any of the KPIs.

For teams to meet the seven KPIs and achieve Green certified status each programme needs to enter all patient data for the reporting year into the audit whilst also meeting the individual KPIs. Despite the notable success of increased Green certified status and reduction in the number of programmes in the Fail category two factors continue to hinder data entry to NACR. Firstly, workforce shortages and role diversification are impacting many services and secondly, the streamlining of data entry via new system wide software platforms which can impact input into NACR for programmes developing file upload processes.

Table 2. NCP_CR certification status for CR programmes across England, Northern Ireland and Wales

	England Total programmes =184	Northern Ireland Total programmes =9	Wales Total programmes =12	UK Total programmes =205
Green certified	93 (51%)	4 (44%)	9 (75%)	106 (52%)
Amber	55 (30%)	4 (44%)	2 (17%)	61 (30%)
Red	30 (16%)	1 (11%)	1 (8%)	32 (16%)
Fail	6 (3%)	0 (0%)	0 (0%)	6 (3%)

Green certified (7 standards met), Amber (4 to 6 standards met and Amber with seven), Red (1 to 3 standards met) and Fail (0 standards met). Due to rounding, percentages may not add up to 100%

The extent of change in certification status since last year is highlighted in Table 3 showing 67% of programmes maintain their status which is an important outcome given that service pressures remain high. Ten percent of programmes improved by one or two certification status levels whereas 7% failed to maintain their status. Of concern is that 11 programmes lost their Green certified status in the last year. There are no guarantees that once a programme has achieved certification it will remain so year-on-year, instead CR teams and commissioners need to be vigilant to service pressures and mitigate their impact on service quality. Reporting and open publication of CR certification status ensures that commissioners, providers and patients have access to current quality assurance data about services in their region.

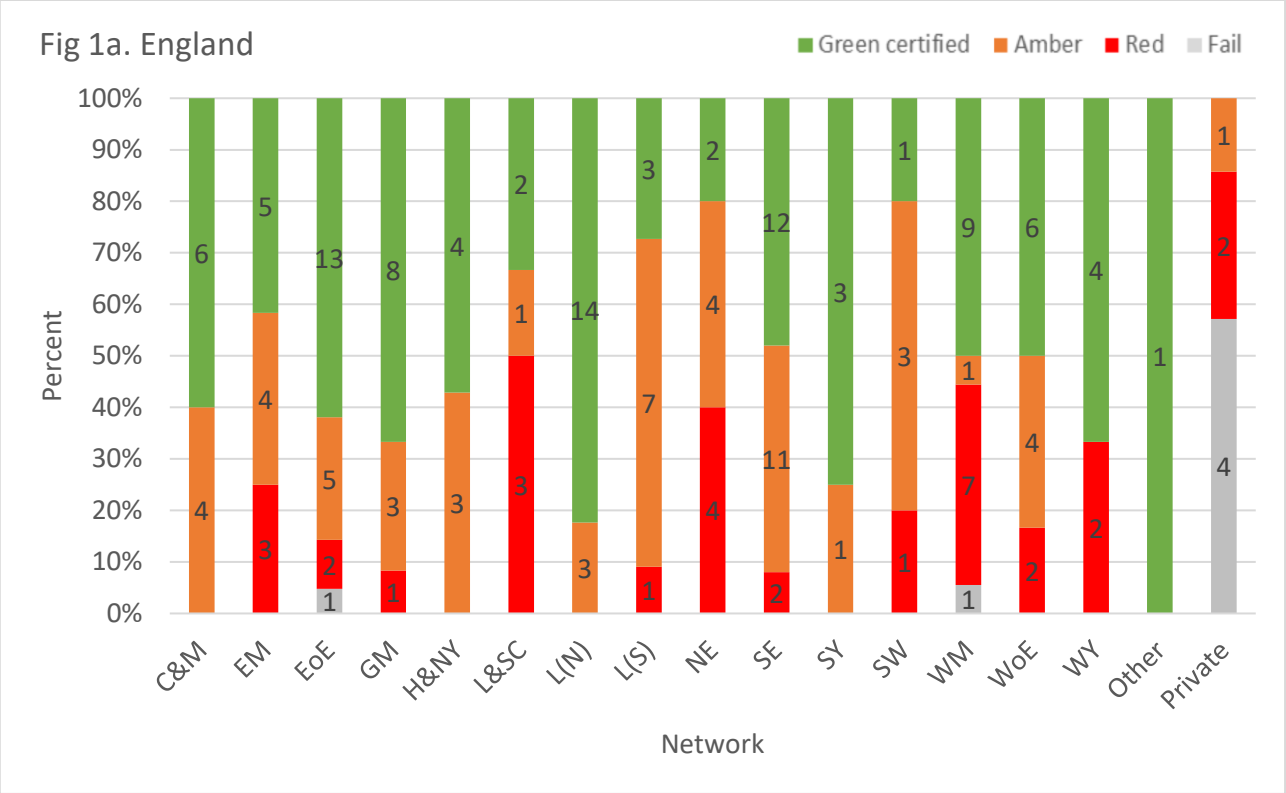
Table 3. Summary of change in certification status

Status in 2024	Count of programmes	Percent of programmes
Improved (1 Level)	13	6%
Improved (2 Levels)	8	4%
Improved (newly Green certified)	32	16%
Maintained	137	67%
Reduced (1 Level)	4	2%
Reduced (lost Green certified status)	11	5%
Total	**205**	**100%**

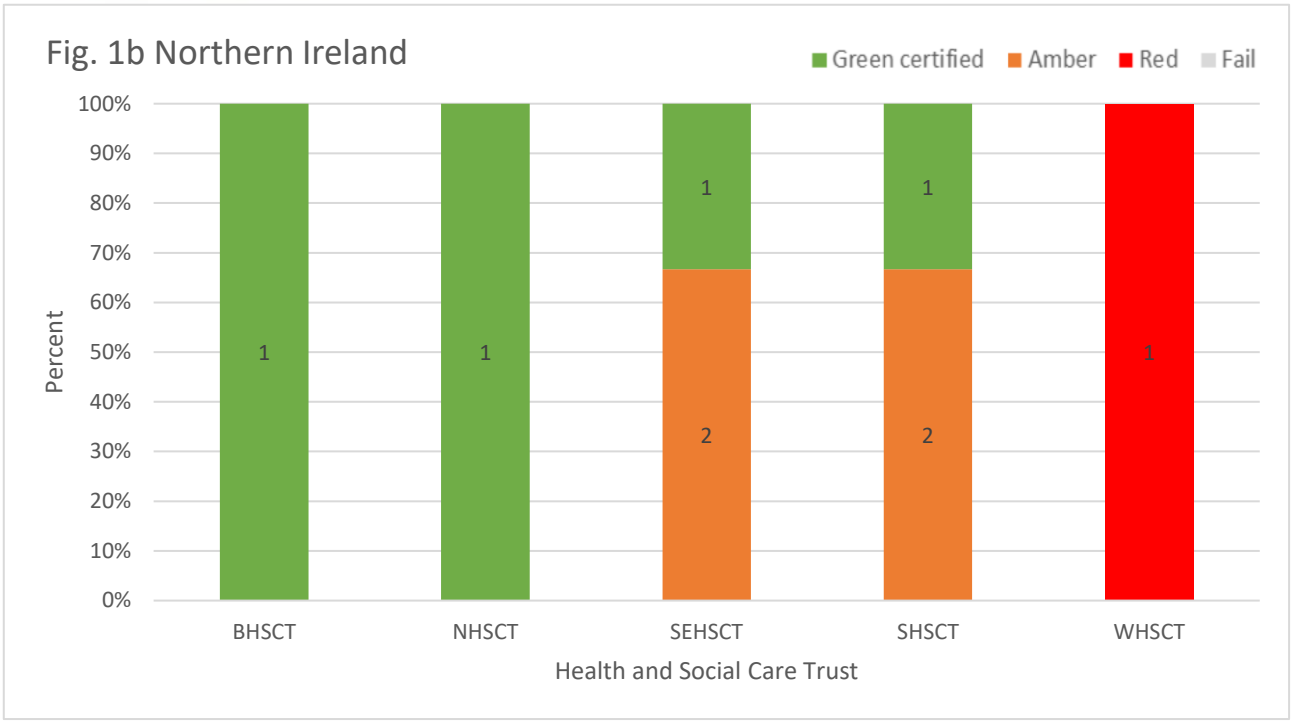
Nation and region specific certification outcomes

Regional breakdown of certification status has become a routine part of service quality reporting as it enables resources within these areas to align with identified gaps in service provision. For all three nations there are large variations in CR service delivery influenced by differences in population densities. High population volumes (around nine million) in a small but highly urban geographical area (e.g. London North/South) compared to relatively small populations (<300 thousand) spread across huge rural geographical areas (e.g. Powys in Wales or Western Trust in Northern Ireland) result in variation in regional service quality across all three nations. (Figure 1a-c).

Figure 1a-c - Regional breakdown of certification status



Green certified (7 standards met), Amber (4 to 6 standards met and Amber with seven), Red (1 to 3 standards met) and Fail (0 standards met). Due to rounding, percentages may not add up to 100%. Region Abbreviations as shown in full in Appendix 2



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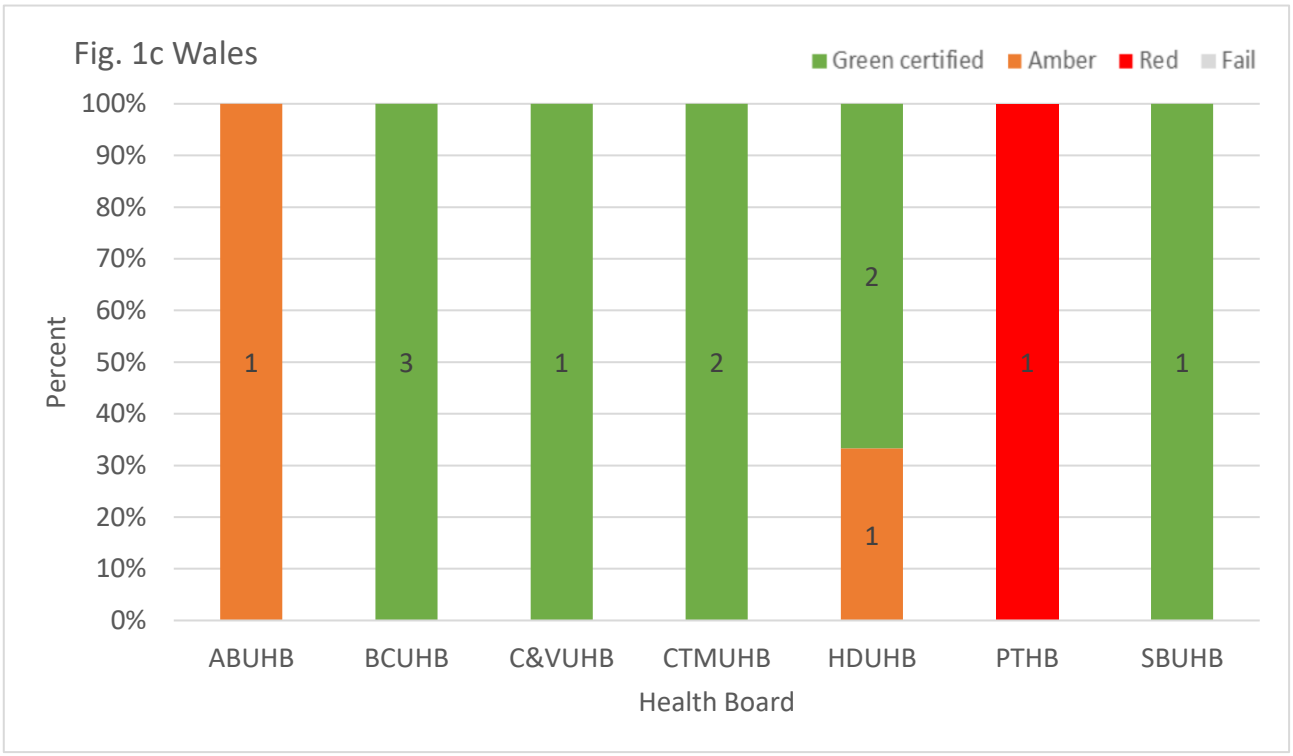


Green certified (7 standards met), Amber (4 to 6 standards met and Amber with seven), Red (1 to 3 standards met) and Fail (0 standards met). Due to rounding, percentages may not add up to 100%
Region Abbreviations as shown in full in Appendix 2

Further breakdown of NCP_CR findings are available via the NCP_CR Supplement online

England

Overall England has 184 programmes with 93 of them (51%) securing Green certified status representing an increase of 19 programmes. In addition, a further six met all KPIs but fell short of obtaining Green certified status due to incomplete patient data being entered or uploaded into NACR and are therefore Amber with seven. There was also a large positive shift from 18 to six programmes (60% reduction) of services in the Fail category.

For the 15 health regions In England (Figure 1a), made up of 184 programmes, four of the 15 regions have achieved a combination of Green certified and Amber status which represents quality assured service provision for these patients. Furthermore, there are only two Cardiac Network regions with programmes in the Fail category. This is encouraging as it shows widespread adoption of NACR and meeting at least one of the KPIs, a big increase from last year. For the first time we have reported on the status of private CR providers as a separate group, which will act as a baseline for future years. Some of these programmes have been running for many years and have started to submit data to the national audit as per BACPR standards.

Northern Ireland

Northern Ireland, with nine programmes, has four Green certified programmes which is an increase of one compared to last year. Unfortunately, this year one service moved down from Amber into Red status due to incomplete data which impacted eligible patient groups and waiting times. There were no Failed status services operating in Northern Ireland in the period.

For the five Health and Social Care Trusts in Northern Ireland (Figure 1b) two regions have achieved Green certified status and a further two have both Green certified and Amber status. Collectively this means that patients in these regions are being seen by programmes meeting most clinical standards.

Wales

Wales, with 12 programmes, now has nine achieving Green certified status, an increase of two programmes compared to last year. Furthermore, the one programme in the Fail category last year has moved up one level to the Red status category. There were no Failed status services operating in Wales in the period.

For the seven Health Boards in Wales (Figure 1c) four achieved Green certified status which is good news as this is two more than last year. However, three regions still have programmes in Amber or Red and therefore should be the focus for Health Boards and the All Wales Group.

Breakdown by key performance indicators

As can be seen from Table 4 considerable variation still exists with regards to meeting each of the KPIs both within and between nations. For example, Wales and Northern Ireland both fully meet the KPI for multidisciplinary team whereas in England 16 services struggle to meet this.

Table 4. NCP_CR analysis of the number of cardiac rehabilitation programmes meeting minimum standards for each of the three nations

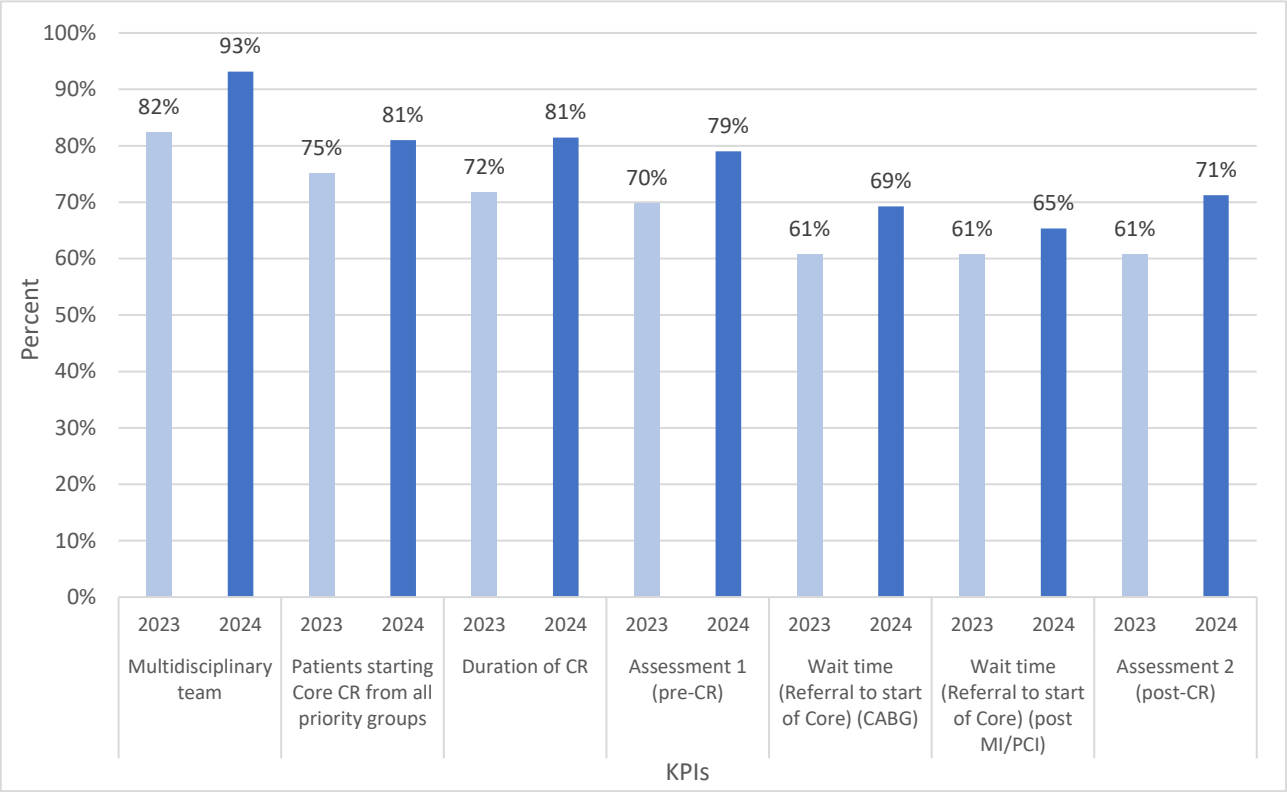
NCP CR KPIs	Standard Agreed minimum standards	England (Total number =186)	Northern Ireland (Total number =9)	Wales (Total number =12)
Multidisciplinary team	>=3 different staff types	170	9	12
Patients starting Core CR from all priority groups	Each Group >0	149	7	10
Duration of CR	>=56 days (8 weeks)	148	8	11
Standards Based on 2016 national averages				
Assessment 1 (pre-CR)	England 80% Northern Ireland 88% Wales 68%	143	8	11
Wait time (Referral to start of Core) (CABG)	England 46 days Northern Ireland 52 days Wales 42 days	123	7	11
Wait time (Referral to start of Core) (MI/PCI)	England 33 days Northern Ireland 40 days Wales 26 days	116	8	10
Assessment 2 (post-CR)	England 57% Northern Ireland 61% Wales 43%	129	6	11

Figure 2 shows the comparison of service quality for 2023 and 2024 with relatively large gains in all seven KPIs, most notably for the proportion of programmes with three or more multidisciplinary team members and assessment 2 (post-CR).

Looking at each KPI separately, there has been an increase in programmes meeting the thresholds this year, with an average improvement of eight percent. The most frequently achieved KPI was the multidisciplinary team which was met by 93% of all programmes. Last year this was 82% which shows a positive increase of 11%. The next three KPIs, priority groups, duration of CR and percentage of patients with an Assessment 1 (pre-CR) were met by 81%, 81% and 79% respectively.

Despite the success in the first four KPIs, three remain harder to achieve. Assessment 2 (post-CR) was met by 71%. There was an increase in this KPI from last year with 10% more services meeting the national specific threshold. Assessment 2 (post-CR) is vital for assessing patient benefit and service evaluation following CR and thereafter for helping the patient set longer term goals to aid sustained health behaviour change. A concerning finding is that assessment 2 (post-CR) is less well completed for home-based modes of delivery, which is more important than ever as, since 2020, more patients receive this mode of delivery.[10] As stated in the BACPR Standards every effort should be made to ensure all patients are assessed upon completion and discharge of core CR and that this information is used to inform long term maintenance.

Figure 2 – Percentage of programmes meeting each of the seven KPIs in the 2023 and 2024 NCP_CR reports



The final two KPIs, CABG and MI/PCI wait times, were met by 69% and 65% respectively (Figure 2) representing an increase in services meeting these standards of between five and nine percent. This is encouraging however, around 60 programmes failed to meet the wait time minimum standard. Although some services continue to grapple with waiting lists and a backlog of patients many programmes have moved beyond the challenges of the post Covid period and deliver timely CR. Longer waiting times are associated with lower annual uptake and emerging evidence from our data shows that reducing wait times has a positive association with the likelihood of starting and completing rehab and improvement in patient outcomes following CR. [11-12]

NCP_CR recommendations and actions

Recommendations

Each year the NCP_CR summarises the findings and conclusions of the report by producing recommendations for the next year. Despite the success of many services this year, the report shows three areas on which services should focus. These three general recommendations are shared across all three nations:

1. Meeting wait time (Referral to start of Core) continues to be a challenge for services, and as such teams should focus on reducing waiting times for patients to start Core CR, this includes both CABG and MI/PCI patients.
2. Services struggle to meet the Assessment 2 (post-CR) standard which is holding them back from certification. Teams should endeavour to collect and enter assessment data.
3. Ensure entry of all patient data for the reporting period. Without full and complete data for all patients starting Core CR, across all 12 months of the reported year, programmes cannot become Green certified.

Actions

This year's report suggests actions on how services may overcome aspects highlighted in the recommendations above that may be barriers to services meeting Amber and Green certified. These actions are:

1. Strategies to reduce wait times could include:
    - Identify the specific waiting time challenges for your service using NACR data
    - Offering a hybrid mode of delivery
    - Not delaying the start of other core CR components until a place on an exercise class is available
    - Learn from programmes/regions that have successfully met waiting time KPIs.
2. Assessment 2 (post-CR) could include:
    - Identify the specific assessment 2 (post-CR) challenges for your service using NACR data
    - Flexible/tailored options for patients to attend/complete comprehensive assessment 2 (post-CR)
    - Utilising emailable questionnaires to complement the wider comprehensive assessment
3. Full and complete data:
    - Work with the NACR team to help identify barriers in collection of data (local importing system issues, training and business cases to overcome workforce issues) in order to enter complete patient data in a timelier manner and therefore ensure that services are fully acknowledged for the quality of provision to patients.

Next steps for NACR:

- Work with NHS England, Cardiac Networks and Integrated Care Boards, Welsh Health Boards and the All Wales Group, and Health and Social Care Trusts in Northern Ireland to support CR teams in achieving the highest level of certification.
- Continue to survey CR programmes regarding staffing and changes to working practice.

- Continue to support teams finding data entry a barrier in achieving certification, these include incomplete data and no data (Fail), through support with local importing system issues, training and business cases.

Acknowledgements

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Appendix 1

Table NCP_CR key performance indicators (KPIs) and minimum standards

NCP CR KPIs	Agreed Minimum Standard *
Multidisciplinary team	>=3 different staff types
Patients starting Core CR from all priority groups	Each Group >0
Duration	>=56 days (8 weeks)
Standards based on 2016 national averages	
Assessment 1 (pre-CR)	England 80%
	Norther Ireland 88%
	Wales 68%
Wait time (Referral to start of Core) (CABG)	England 46 days
	Northern Ireland 52 days
	Wales 42 days
Wait time (Referral to start of Core) (MI/PCI)	England 33 days
	Northern Ireland 40 days
	Wales 26 days
Assessment 2 (post-CR)	England 57%
	Northern Ireland 61%
	Wales 43%
* minimum standards based on national averages for each nation	

Appendix 2

Table showing the abbreviations for Regions, Health and Social Care Trusts and Health Boards

Country	Region	Abbreviation
England	Cheshire & Merseyside	C&M
	East Midlands	EM
	East of England	EoE
	Greater Manchester	GM
	Humber and North Yorkshire	H&NY
	Lancashire & South Cumbria	L&SC
	London (North)	L(N)
	London (South)	L(S)
	North East	NE
	South East	SE
	South Yorkshire	SY
	SW (Peninsula)	SW
	West Midlands	WM
	West of England	WoE
	West Yorkshire	WY
	Other	Other
	Private	Private
Northern Ireland	Belfast Health and Social Care Trust	BHSCT
	Northern Health and Social Care Trust	NHSCT
	South Eastern Health and Social Care Trust	SEHSCT
	Southern Health and Social Care Trust	SHSCT
	Western Health and Social Care Trust	WHSCT
Wales	Aneurin Bevan University Health Board	ABUHB
	Betsi Cadwaladr University Health Board	BCUHB
	Cardiff & Vale University Health Board	C&VUHB
	Cwm Taf Morgannwg University Health Board	CTMUHB
	Hywel Dda University Health Board	HDUHB
	Powys Teaching Health Board	PTHB
	Swansea Bay University Health Board	SBUHB