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of Great Britain and Ireland

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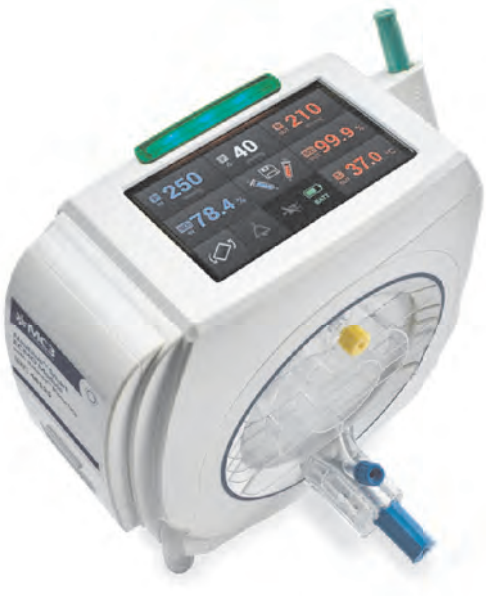

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Perfusionist

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CONTENTS

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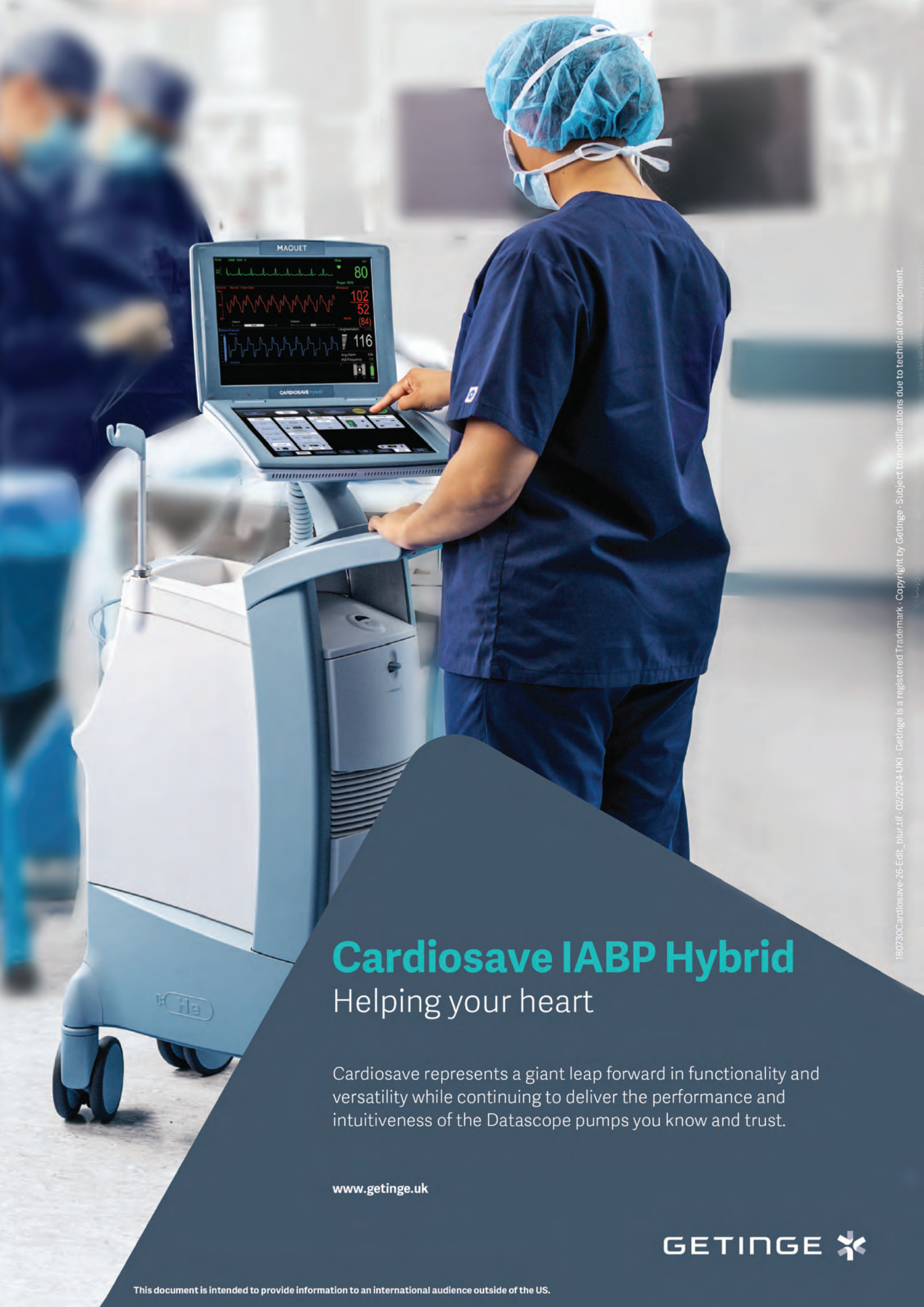

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Editorial

Jessica Tiplady, *Editor*

Dear Reader,

A warm welcome to the final editorial of 2025. At this year's UK Perfusion Congress, I put myself forward for editor of the magazine. A special thank you to our previous editor, Andrew Nichols, for all your hard work in creating the past four years worth of content, I have some big boots to fill.

I would like to take a moment to introduce myself. I qualified in Perfusion at Basildon Hospital in 2015 following a doctorate at Cardiff University. After a few years, I moved up to the midlands to join Glenfield Hospital where I gained training in ECMO and paediatrics. Currently, I work full time for Manchester Perfusion Practice and part-time at Glenfield. I have very much enjoyed the variety of work that locum life brings, as well the new relationships formed with colleagues from around the UK.

The hot topic of this issue is of course our 51st Congress of the Society, held at the East Midlands Conference Centre in Nottingham. Thank you to all of those that contributed with scientific content, I think we can all agree that there was a wide variety of topics covered which made the sessions intellectually stimulating. It was also lovely to see so much positive interaction with our industry colleagues at the stands and in the breakout sessions. Personally, I loved getting to grips with the mixed reality headsets offered at the CBM Lifemotion session, a brilliant immersive tool to use for ECMO training.

Thank you to Nicholas Trafford and Laura Kerr for organising the Friday evening quiz, those who attended had a brilliant night. A big well done to all of the trainees and limited registrants that received their awards on the Saturday evening. I wish you fulfilling and rewarding careers in Perfusion. The Society's AGM concluded with the election of our new Chair, Jacqui Simmons. Congratulations, Jacqui – we wish you every success in your new role. A heartfelt thank you to her predecessor, Noel Kelleher, who served as Chair since 2019 and has been deeply involved with the Society since 2011. Noel, your dedication has made a lasting impact and you've been an inspiration and role model for our junior colleagues.

This summer, I was deeply saddened by the passing of one of my mentors, Helen Durant, after her courageous battle with cancer. Helen was an extraordinary woman, so full of warmth and energy, working with her was always a joy. I will forever cherish the wonderful memories she leaves behind. Please take a moment to read her obituary, thoughtfully written by Ben Middleton and John Campbell.

In this issue, I've attempted to give *Perfusionist* a more family feel – I hope many of you will get your little ones involved in the fun drawing competition! As always, the magazine welcomes new content, novel research, case studies or experiences that you would like to share with colleagues. I look forward to receiving more articles for subsequent issues in 2026.

With the festive season upon us, I hope you manage to find time to rest, recharge and spend some quality time with your loved ones.

Merry Christmas and a happy 2026,

Jess

Opportunity for Commercial Companies

The Editor would welcome submissions from the commercial sector on interesting subjects and commercial news of relevance to the membership of the Society.

Professional Biography – Jacqui Simmons

Jacqui Simmons, *Chair,* SCPS of Great Britain and Northern Ireland

Abstract

This biographical article outlines the professional journey, leadership philosophy, and organisational influence of Jacqui Simmons, Chair of the Society of Clinical Perfusion Scientists of Great Britain & Ireland (SCPS). It explores her strategic impact on national governance, safety, accreditation, and global engagement across more than two decades of clinical and leadership practice.

Introduction

Jacqui Simmons is the Chair of the Society of Clinical Perfusion Scientists of Great Britain & Ireland (SCPS), a senior NHS governance leader, and an influential voice shaping the strategic development of perfusion both nationally and internationally. With over two decades of clinical and organisational leadership experience, she has witnessed and helped steer perfusion practice over 25 years.

Academic and Professional Development

Jacqui completed her undergraduate studies in nursing science and perfusion science before progressing to postgraduate qualifications in governance, leadership, and clinical education. She has also undertaken advanced leadership and educator training, strengthening her ability to influence organisational strategy, professional development, and interdisciplinary practice across the NHS and the ` perfusion community.

Leadership in Safety and Governance

Her tenure as SCPS Safety Chair reshaped the national approach to incident learning, human factors science, and system-based risk reduction. Jacqui repositioned safety at the centre of the SCPS Annual Conference, developing high-impact panel sessions and interdisciplinary learning formats. Her work gained international recognition, including invitations to present at AMSECT.

Organisational Strategy and Professional Influence

Jacqui works closely with the Executive Committee of the SCPS and the CCPS, supporting the alignment of accreditation, education, workforce planning, and national policy. She contributes actively to strategic responses to regulatory change and national reviews, ensuring that perfusion remains a professionally led, future-focused discipline.

Educational Leadership and Examination Roles

As an accreditor and examiner for the CCPS, Jacqui plays a pivotal role in maintaining high standards of professional competence. She has helped develop and evolve the national examination preparation course, modernising its structure, incorporating human factors principles, and ensuring alignment with current clinical expectations.

International and Cross-Organisational Collaboration

Her collaborations with global perfusion bodies have deepened her insight into international workforce pressures, equipment variability, and training disparities. Jacqui continues to champion a globally connected UK profession committed to shared learning and innovation.

Leadership Philosophy

As a female leader in a technical and historically male-dominated field, Jacqui advocates for representation, visibility, and inclusive leadership. Her leadership is underpinned by the principle that high-performing teams are those where people feel safe to speak, supported to grow, and empowered to improve the system around them.

Future Vision

Jacqui's vision embraces modernisation, data-driven governance, improvements in training, and culture change. She is committed to ensuring that every perfusionist feels empowered to contribute to the profession's future, recognising that collective effort, not individual leadership, defines the success of the SCPS.

Leading with Purpose: Reflections on Becoming Chair of the Society of Clinical Perfusion Scientists

Jacqui Simmons, *Chair,* SCPS of Great Britain and Northern Ireland

Introduction

As I step into the role of Chair of the Society of Clinical Perfusion Scientists of Great Britain & Ireland (SCPS), I do so with profound gratitude and a deep sense of responsibility.

From Safety Chair to Society Chair

My transition from SCPS Safety Chair to Society Chair felt like a natural evolution. Safety leadership teaches you to look beyond the immediate, to examine systems, human factors, communication structures, and the realities of practice under pressure. Working with national and global partners illuminated the shared challenges facing our profession: equipment variability, supply chain fragility, workforce pressures, ECMO expansion and the need for an open, learning-focused safety culture.

A Female Leader in a Technical Field

Stepping into leadership as a woman in a traditionally male-led, highly technical profession is significant. Representation matters. The visibility of women leading at the highest level shapes the aspirations of early-career perfusionists and helps redefine assumptions about who belongs in leadership. As the philosopher Hannah Arendt wrote, "Power is actualised only where word and deed have not parted company." My commitment is to lead with integrity, courage and consistency, ensuring our Society reflects the diversity and strength of its membership.

Global Engagement and Professional Identity

My international work has shown that while perfusion practices differ globally, our challenges are shared. Workforce shortages, variability in training and accreditation, regulatory uncertainty and the complexities of modern mechanical support unite us in purpose. I intend to ensure that SCPS remains outward-facing, collaborative and influential on the global stage.

Values That Shape My Leadership

My priorities as Chair are deeply rooted in the values formed throughout my clinical and leadership journey:

- Multidisciplinary respect – Great perfusion practice is inseparable from the strength of the MDT.
- Humility – Listening first, learning always.
- Civility and psychological safety– A culture where all voices hold value.
- Human factors awareness – Designing systems around people, not assuming perfection.
- Open reporting and learning – Moving away from blame toward insight and improvement.

The principles of 'Civility Saves Lives' resonate strongly with me: respectful interactions directly impact patient outcomes, team communication and workplace wellbeing.

Looking Forward

I envision a Society that is modern, inclusive and accountable; one that supports its members through strong governance, international collaboration, robust education and a national safety structure shaped by human factors science. Our profession is ready for that next step, and I am honoured to help lead it.

Meeting the Challenges Ahead

The profession stands at a pivotal moment. Perfusionists across the UK are experiencing unprecedented pressures: increasing case complexity, rising ECMO demand, erratic supply chains, variable access to training, and workforce shortages. Members want clarity, stability, and a strong professional voice advocating for evidence-based decisions. These pressures are not signs of weakness, but of a profession carrying immense responsibility during rapid healthcare evolution.

Innovation and the Future of Perfusion

Innovation, technology, education, and culture is accelerating and changing. AI-assisted perfusion analytics, smarter monitoring, digital safety platforms, simulation-based training, and global collaboration will redefine how we work. True innovation, however, requires psychological safety and civility.

How We Are Going to Make Things Better

Improvement will be driven by five core commitments:

- Strengthening workforce wellbeing and sustainable staffing.
- Leading national conversations on training, accreditation and regulation.
- Building a modern, data-driven, human-factors-based safety infrastructure.
- Expanding global partnerships and shared learning.
- Increasing visibility and advocacy for our profession.

My success as Chair is inseparable from the strength, support and engagement of our membership. The Society does not move forward because of any single leader, it progresses because its members bring their voices, expertise, and lived experience to the table.

I want the membership to feel empowered to tell me what is needed, what is not working, and what ambitions they want this Society to pursue. Our direction must always be shaped by those who deliver perfusion every day across the UK and Ireland.

Equally, our professional community thrives because so many colleagues volunteer their time as accreditors, examiners, educators, mentors, researchers, and contributors to this journal. These acts of service form the backbone of our professional identity; they strengthen governance, support trainees, drive safety and quality, and raise the visibility of perfusion.

As Chair, I am committed to listening, engaging, and ensuring that every member feels ownership of our shared future. Your involvement is not only welcome it is essential to the continued success and evolution of the SCPS.

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The BIG ED & I Quiz

Aswani Parmar, *Equality, Diversity and Inclusion Chair,* Barts Health NHS Trust

INTRODUCTION

This year at the 2025 UK Perfusion Congress in Nottingham, delegates were invited to take part in an Equality, Diversity and Inclusion (EDI) quiz through Slido. What began as a closing session on a Sunday in 2022 became the first session of the congress. Rather than a lecture or workshop, I wanted it to be a space for reflection and conversation – a chance to talk with people you might not usually mingle with, and to look a little closer at the real stories behind the statistics.

The one-hour interactive quiz drew on evidence-based studies exploring how diversity and inclusion shape both the healthcare experience, our workplaces, through the various facets of our professional lives.

What emerged through the discussion was that EDI isn't about policy, procedure, or SOPs – it is, and always has been, about people. When individuals feel seen, heard, and valued, it shapes morale, strengthens and wellbeing, improves performance, and builds upon the sense of belonging that holds teams together.

The analytics told one part of the story – high engagement across eight themed rounds – but the conversations in the room told another. Managers and frontline staff shared candid reflections on how inclusion connects to patient outcomes, leadership challenges, and everyday working life. I was deeply moved by the many colleagues who trusted me enough to share their personal experiences of inequality, resilience, and hope. That trust was a privilege, and I see that, above all else, all of us, seek to feel understood, respected, and valued at work.

For those who took part, thank you – for answering questions through the app, adding your voices to the discussion, and taking the time to share your experiences with me throughout the congress. I've seen the feedback about the question speed and promise to slow things down next time!

And for those who couldn't attend, the full quiz is included (following) – perhaps something to try within your own department. I did have time to put in some brainteasers too! As ever, feedback is encouraged. What would you like to see next year at the congress? What do you think is missing from this quiz that deserves to be part of the conversation?

The Big EDI Quiz

ROUND 1

Source NHS Confederation (2023):

As many continue to believe that EDI is a tick-box exercise, it felt important to begin with the facts as well as the economics.

1. Roughly how much does the NHS spend each year on Equality, Diversity & Inclusion (EDI) roles?

A) £10 million B) £20 million
C) £40 million D) £100 million

2. How much does bullying and harassment cost the NHS each year through staff sickness, turnover, and reduced productivity?

A) £200 million B) £800 million
C) £1 billion D) £2 billion

There was a small prize for the perfusionist who had served the longest in their workplace. It went to Noel Lynch, Chief Perfusionist at the Mater, who had been at his centre for 37 years. When asked what had made him stay so long, and he spoke about the *people from all different backgrounds who make it a great place to work.*

ROUND 2

Performance Round: The Business Case for Diversity

Questions 3 to 7 scrutinised diversity in leadership and impact on organisational success, from the third instalment in McKinsey & Company's long-running research series, *Diversity Wins: How Inclusion Matters.*

3. In 2014, female representation within executive leadership was 15%. What about in 2019?

A) It increased B) It decreased C) It stayed the same D) No one knows

4. How much more profitable were companies with the most gender-diverse leadership teams?

A) 10% B) 15% C) 20% D) 25%

5. By what margin did companies with the most ethnically diverse leadership teams outperform lesser diverse counterparts?

A) 10% B) 25% C) 36% D) 50%

ROUND 3

How Effective Is EDI Intervention in Healthcare?

Source: UKRI (2020) – Equality, Diversity and Inclusion in Research & Innovation Review

Next, we explored the efficaciousness of UK based EDI interventions within the UK. Data from the UK Research and Innovation review in 2020, looked at how interventions were designed, implemented and measured for impact, cross-industry including higher education, business and healthcare.

6. According to UKRI, what percentage of EDI initiatives (formally ratified) took place in NHS settings?
A) 3% B) 6% C) 12% D) 20%

7. Why is healthcare under-represented in evaluated EDI work?
A) Too new B) Healthcare EDI work isn't often published or evaluated
C) Confidential data D) Low engagement

ROUND 4

Diversity and Retention

Source: Press Ganey (2021)

Next, we travelled across the pond and to examine a large-scale survey of 410,000 US healthcare workers across 118 health systems between January and September 2021, conducted in the immediate aftermath of the pandemic and the racial flashpoint of George Floyd's murder.

8. How much more likely were US healthcare workers to stay with their employer if they believed their organisation valued diversity and equality?
A) 2×more likely B) 2.5×more likely
C) 3×more likely D) 4×more likely

9. Employees who felt their organisation didn't value diversity were how many times more likely to leave?
A) 2×more likely B) 3×more likely
C) 4×more likely D) 5×more likely

10. If given another offer, how likely was an employee to leave for an organisation that genuinely valued diversity?
A) 2.5× as likely B) 3.5×as likely
C) 4.5×as likely D) 5.5×as likely

While this study focused on the American healthcare individuals, its findings offer a broader reflection on how social climates shape workplace culture. Across contexts, shifts in public discourse around identity, belonging, and ideology can subtly infl uence how safe or valued people feel at work. As these conversations become more polarised, it's worth pausing to ask what this means inside our own teams. Do our colleagues feel safe to show up fully as themselves? Are we creating environments where our differences feel respected rather than debated and how many this impart in our care towards our patients?

Belonging isn't a fixed state; it can be strengthened, or eroded, depending on how teams navigate difference, change, and uncertainty. It's something we all help to build, through how we listen, speak, and respond to one another. The lesson from this study isn't about politics; it's about people. And perhaps the more useful question is not about policy, but perception: how does it feel to work here, and what might we do, in small, everyday ways, to make that experience better for everyone?

Then we turned our attention back home:

ROUND 5

Representation in the NHS

Source: WRES (2023)

11. In 2023, what proportion of the NHS workforce came from a global majority (BME) background?
A) 18% B) 26% C) 33% D) 40%

12. At Very Senior Manager (VSM) level, what percentage of leaders were from BME backgrounds?
A) 11% B) 18% C) 22% D) 30%

13. In 2023, BME NHS staff were how much more likely to face formal disciplinary action than white staff?
A) 5% B) 10% C) 14% D) 20%

And lastly, rounds 6, 7 and 8 looked at stats designed for deeper reflection:

ROUND 6

Accent Bias & Identity

Source: (QMUL, 2022)

14. According to a 2006 UK survey, what percentage of employers admitted discriminating against candidates because of their accent?
A) 30% B) 45% C) 76% D) 90%

15. Out of 1000 listeners, which accent type was still most associated with professional expertise (authority, intelligence, and leadership suitability)?
A) Northern B) Scottish C) Received Pronunciation D) Irish

ROUND 7

Patient Experience

20. What is "Mrs Begum" syndrome?
A) A cardiac risk factor in South Asian women B) A language barrier tool
C) A mentoring programme for women
D) A derogatory term used to justify the under-treatment or dismissal of South Asian women's pain or symptoms, especially older women with limited English.

21. Once diagnosed with aortic stenosis, which group are less likely to be offered surgical or transcatheter AVR?
A) Women B) Black patients C) South Asian patients D) Those from a deprived area/lower socioeconomic class

(The answer reveal got an audible gasp from the crowd.)

ROUND 8

Fostering Culture

22. Organisations with 10% more workers aged 50+ are how much more productive on average? (Maclean, 2024)
A) 0.5% B) 1.1% C) 2% D) 5%

23. Staff experiencing "Tall Poppy Syndrome" felt which of the following? (Marques *et al.,* 2022)
A) Their achievements were downplayed
B) Isolated in the workplace
C) Experienced increased stress
D) Decline in mental health
E) All of it

24. According to the BMJ (2023), what percentage of female surgeons reported sexual harassment at work?
A) 25% B) 42% C) 63% D) 80%

25. According to an October 2025 Harvard Business Review study, which group of employees reported feeling the least psychologically safe?
A) Frontline staff B) Middle managers
C) C suite executives

And as promised, a welcome break, your brain teasers:

26. What links these biological terms together, other than being biological? You've got 60 seconds *(Think 1 % Club!)*

Medical Bleeding Mediastinoscopy Hereditary

27. Brain teaser number 2. You have 60 seconds to hit the target 851 with two from the top: 75, 25 and four from the bottom 9, 8, 6, 3

28. Last question, 60 seconds countdown conundrum: UNCLEARGIFT
Clue: drives perfusion!

Answers & Reflections

ROUND 1: C, D

A spend of £40 million is less than 0.03% of the NHS's £168 billion annual budget (NHS Confederation, 2023), yet bullying and harassment cost the NHS more than £2 billion each year through sickness absence, turnover, and legal processes (ACAS and NHS Employers, 2023). For every £1 invested in EDI,

around £50 is lost managing the fall out of poor culture. When framed this way, EDI becomes more about culture and tool for organisational maintenance. The fi nancial drain lies in repairing the damage caused by divisive attitudes. So, if we began to see EDI as a retention strategy rather than an obligation, how differently might we choose to treat one another?

ROUND 2: A, D, C

McKinsey's decade-long analysis of more than 1,000 organisations found a consistent thread that teams that are more diverse at the top outperform those that are not. Diversity strengthens desirable qualities that drive success creativity, adaptability, and collective problem-solving. In healthcare, this isn't hard to relate to. When leadership teams refl ect the diversity of their workforce and patients, decisions tend to be more balanced, empathetic, and effective. It's statically irrefutable that inclusion is an ethical and strategic aspiration which allow organisations to thrive.

ROUND 3: A, B

ROUND 4: C, C

ROUND 5: B, A, C

Representation remains one of the clearest indicators of organisational health. In 2023, data showed that while over a quarter of the NHS workforce

identifi ed as being from a global majority, more commonly known as, Black or Minority Ethnic (BME) background. However, only around one in ten Very Senior Managers (VSMs) did so (NHS England, 2023). During the session, one delegate noted that 11% might seem proportionate to the UK population, and another felt the NHS workforce appeared far more diverse in day-to-day practice. Both viewpoints illustrate how easily perception can differ depending on perspective. A bustling, multicultural ward can feel worlds apart from a quieter, buttoned up management corridor.

Then what should representation in leadership mirror? The national population, the workforce itself, or the communities we serve? The answer is likely a blend of all three. National data provide context, but true equity is refl ected in whether

colleagues experience fair access to progression, recognition, and voice. This leaky pipeline pattern shows how representation can thin gradually at each career stage. It's rarely a matter of intent, but of construct, where systems and networks create invisible barriers and glass ceilings to advancement. Progress in visibility is evident, yet upward mobility remains uneven. So perhaps the next step is less about counting representation, and more about cultivating environments where inclusion imparts into influence.

ROUND 6: C, C

In 2006, openly admitted 76% of UK employers that accent infl uenced their hiring decisions, most often favouring Received Pronunciation – a dialect spoken by fewer than 10% of people. The Accent Bias Britain Project found that one in three feel self-conscious about their accent, yet simply prompting listeners to focus on meaning rather than tone made evaluations fairer. Have you ever felt embarrassed in the workplace to speak up, for whatever the reason? Since learning this, I often refl ect on what we really mean when we say someone "sounds professional."

ROUND 7: D, All listed choices

Pain doesn't always receive the equal clinical attention. Research consistently shows that BME patients, are more likely to have their pain dismissed, underestimated, or attributed to cultural factors rather than investigations. This refl ects well-documented phenomena such as diagnostic overshadowing (when a social characteristic cloud clinical judgement and acumen) and implicit bias (automatic, unconscious associations that affect decision-making). Large scale AVR studies have shown a similar pattern: certain groups are less likely to receive surgery, and the authors could find no plausible explanation beyond unconscious bias within clinical pathways – a pattern consistent with structural inequity.

Another delegate spoke of witnessing "Mrs. Begum" name-calling between clinician and patient of similar ethnic background, a reminder that bias is not only outward facing and serve as an example of intragroup discrimination, where individuals from the same community reproduce the stereotypes imposed upon them. It demonstrates how assimilation pressures and horizontal hostility can persist in high-stress environments and impact patient welfare, especially where clinician psychological safety is low.

These dynamics are especially relevant in teams working under fatigue and throughput pressure – conditions that amplify cognitive shortcuts (heuristics) and reduce reflective capacity. Evidence shows that when organisations intentionally create reflective practice spaces, incorporate bias-interruption strategies, and prioritise psychological safety, disparities begin closing.

ROUND 8: B, E, C, B

Across the NHS, data show that patterns of inequity are rarely isolated – they run through age, gender, race, disability, and hierarchy alike. Women in surgery continue to report unacceptably high rates of sexual harassment, while men often don't report at all. Organisations, like the NHS with 10% or more older staff are 1.1 % more productive on average. And evidence suggests that upskilling our most experienced cohort would equate to 14,000 additional full-time employees, without hiring anyone new, yet they remain the least likely to access training. Disabled colleagues are nearly twice as likely to face formal capability procedures, report feeling less valued, and often feel pressure to work while unwell. The data reveals patterns of under-engagement, lower psychological safety, and reduced voice or agency – experiences that can be profoundly isolating. And layered within this, our middle managers report the lowest levels of psychological safety, squeezed from above, below, and the sides – a textbook example of role strain in complex systems.

Each statistic tells a different side to the story. The behaviours we overlook are as defi ning as the ones we challenge. This is the quiet work of inclusivity, the daily practice of curiosity, empathy, and accountability.

We leave our families at home and spend most of our day with colleagues giving life-changing, high-stakes care to people we've never met before. Yet how often do we pause to understand one another with the same psychological insight and compassion we give our patients? To value our differences, to listen without defence, and to recognise that perhaps we share more in common than what divides us. How much more might we gain if we poured into each other with the same commitment and compassion that we bring to our surgeries?

The days are long, but the years are short. And what will defi ne them is not only the lives we save, but the culture we build and leave behind.

CLOSING REFLECTION

At its heart, this quiz was never about right or wrong answers – it was about awareness. Awareness being the first interruption: the moment we notice what has quietly gone unchecked ourselves or our teams. It's the awareness of how we show up for one another, and how much stronger we become when differences are respected, not feared. The data give us insight, and it isn't about one group showing up for another. It's about all of us showing up. Inclusion isn't a programme; it's a practice – one we build, conversation by conversation, as we continue to keep these discussions alive.

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The College of Clinical Perfusion Scientists of Great Britain and Ireland (CCPS) Update Report

Bryce Pate, *CCPS,* Wythenshawe Hospital, Manchester Foundation Trust

I open this edition of the College report in the wake of the highly successful SCPS Congress. It takes an incredible amount of time, commitment, planning and passion to see this through to fruition. With that in mind, I'd like to extend a "thank you and well done" to our respected SCPS colleagues, who remained committed, throughout. I'm sure that the planning has already been initiated for next year, with the same exuberance. From the Congress, it is now widely known that there has been a change to the Chairperson at the SCPS, with Jaqui Simmons succeeding Noel Kelleher. Noel has shown his devotion and commitment for a significant number of years. Whilst there are many rewards and achievements for holding such a position, it's also inevitable that it comes with some weight on the individual, their department and their family. We extend our thanks to Noel and offer our support to Jacqui as she becomes the new custodian of the SCPS.

Moving on from this, there has also been a marked passing of the baton at the College. Paul Fricker has now vacated his position as President, to be succeeded by Aisling Brennan. Paul served on the College Council since 2012 and has been present through a period of significant development and change, in terms of how the College operates and functions. His role within this has been imperative. We thank him profusely for his endeavours and wish him luck as he moves forward. It's testament to his character that he has expressed his continued support for the College and will continue to engage in the Unit Accreditations. As they say, "if you're standing still, you're going backwards", therefore, we're confident that the role of President will be strong as Aisling Brennan takes her position. We look forward to continuing the development to meet the needs of the current and future membership and profession.

There have been other notable additions to the College Council from Perfusion and Anaesthesia, which will hopefully encourage new ideas and continued enthusiasm. Therefore, in order to have full transparency and engagement, where possible, the new and existing Council members, who make up CCPS are shown (Table 1):

Table 1

CCPS COUNCIL MEMBERS		
POSITION	**MEMBER**	**HOSPITAL**
• President • Registration and Education Sub-Committee	Aisling Brennan	Royal Victoria Hospital, Belfast
• Vice-President • Safety Sub-Committee (Joint Committee with SCPS)	Bryce Pate	Wythenshawe Hospital, Manchester Foundation Trust, Manchester
• Secretary	John O'Neill	Barts Health NHS Trust, London
• Treasurer • Registration and Education Sub-Committee	Angela Beatson	Leeds General Infirmary, Leeds
• Council Member • Safety Sub-Committee (Joint Committee with SCPS)	Anne-Marie Murton	Royal Papworth Hospital, Cambridge
• Council Member • EDI Sub-Committee (Joint Committee with SCPS)	James Tyrrell	NHS Grampian, Aberdeen
• IT (Joint Committee with SCPS)		
• Council Member • Registration and Education Sub-Committee	Jemma Youdle	Southampton General Hospital, Southampton
• Council Member	Robert Crowley	Cleveland Clinic, London
• SCPS Representative	Laura Kerr	Barts Health NHS Trust, London
• SCTS Representative	Mr Gianlucca Lucchese	Guy's and St Thomas' NHS Foundation Trust, London
• SCTS Representative	Ms Betsy Evans	Leeds General Infirmary, Leeds
• ACTACC Representative	Dr Ibrahim Ibrahim	St George's University Hospitals, London
• ACTACC Representative	Dr Jonathan Barnes	University Hospitals Bristol, Bristol
• Academic Representative	Dr Fiona Holmes	University of Bristol, Bristol

Now that we've introduced the College Council members, we can explore the purpose of the College, to remove any existing uncertainty. What is it? What does it do? How does it differ from the Society? Indeed, the College and the Society are often referred to in an interchangeable fashion, even amongst experienced Perfusionists. So, hopefully, we can put the purpose of each into context, to provide some clarity.

SCPS was formed in its initial creation of "The Society of Perfusionists" in 1974. They are elected by the membership of accredited Clinical Perfusionists from across Great Britain and Ireland, with the objective to promote and advance perfusion technology and to represent the thoughts and interests of the profession. As part of this process, they hold the responsibility to develop and implement the documentation for minimum standards for monitoring and standards of practice. The focus of these areas include:

- Code of Practice
- Code of Ethical Conduct
- Bylaws
- Resolution
- Standards of Practice
- The Recommendations for Standards of Monitoring and Safety During Cardiopulmonary Bypass

Their focus also includes the training of Perfusionists and the educational program for trainee Perfusionists, in conjunction with the University of Bristol.

In comparison, the College of Clinical Perfusion Scientists (CCPS) Council members are appointed through expressions of interest to the SCPS. The College holds the registration of each Perfusionist. It is mandatory for all practising Perfusionists within Great Britain and Ireland to be registered with the College. As a non-regulated body, within a profession that is still pursuing statutory regulation, it is the remit of the College to monitor and check the professional standards of practice being implemented in each Unit, and to ensure that the Standards, set out by the SCPS, are adhered to. A major component to ensure that the safety and standards are adhered to is the reviewing and accreditation of Perfusion departments, against these minimum standards. This process takes place over a timeframe up to a maximum of 5 years, or more frequently if warranted. As discussed in a previous CCPS Report, these accreditation visits would be either Category 1 or Category 2, as required.

Additionally, the College may also be required to discuss issues with registration or even disciplinary reviews, if the Code of Practice or Code of Ethical Conduct have been breached. All Council meetings and discussions take place in conjunction with representatives from SCTS, ACTACC, SCPS and an Academic representative, as noted in table 1.

From these designated areas, there are links between the two groups, SCPS and CCPS, with a shared administration team of Valerie Campbell and Zenia Simone, working tirelessly in the background. Additionally, each group has a representative sitting on the other's meetings, providing shared information and a feedback loop. Furthermore, they form shared sub-committees, which are joint committees between the two groups. These include the Safety Committee, ECMO, EDI and IT.

Therefore, both SCPS and CCPS have clear and defined areas of designation and requirement but also have shared interests and purposes.

Hospital Accreditations

As noted by John O'Neill (College Secretary), at the CCPS Annual General Meeting, we have taken great strides with hospital accreditations. The newer methodology for booking much further ahead and securing the dates, early, is paying dividends. Not only has this shown improved productivity, but it has also afforded increased availability and participation of assessors. The number of assessors has also been augmented by hosting a well-attended session at the recent congress. We are hopeful that those attendees will have the opportunity to integrate themselves into the system. Unfortunately, we are still seeing the impact of the COVID period, which caused a backlog of departments who required accreditation visits, stretching beyond the 5-year window. We are working to address this issue and restore a stable throughput. Again, the aim is to maintain a balance, over the course of the 5-year cycle, rather than having peaks and troughs, from year to year. Therefore, we are working to remedy the situation, steadily, with a "big picture" mindset, over time.

Following on from this, it is noteworthy for any department that has or will be going through the accreditation process, that it is very much a collaborative process, in order to achieve and sustain staffing, governance and safety, or a well-structured training program. Hopefully, it provides a supportive process. There are plans for a feedback process to be implemented, following the accreditations, where departments can raise concerns or issues, whilst also offering areas of positivity.

Represented in Tables 2 and 3 are the most recently completed Accreditation visits and those that are planned over the course of 2026.

Table 2

CCPS HOSPITAL ASSESSMENT			
DATE	**HOSPITAL**	**STATUS REQUIRED**	**ASSESSORS**
18/ 03/ 25	Bons Secours (New Hospital), Cork	Accreditation	Jill Bell (Lead) Noel Kelleher
10/ 04/ 25	Oxford John Radcliffe, Oxford	Accreditation, with Training	Andy Nichols (Lead) Kazem Abyazi
20/ 05/ 25	The Wellington, London	Accreditation	Aisling Brennan (Lead) Tracey Hornsby
09/ 09/ 25	Galway University Hospital, Galway	Accreditation, with Training	Paul Fricker (Lead) Aisling Brennan
15/ 09/ 25	Aberdeen Royal Infirmary, Aberdeen	Accreditation, with Training	Jacqui Simmons (Lead) John O'Neill
02/ 10/ 25	Mater Private, Cork	Accreditation	Bryce Pate (Lead) Angela Beatson
25/ 11/ 25	Harborne (New Hospital), Birmingham	Accreditation	Anne-Marie Murton (Lead) Brad Pates
01/ 12/ 25	Portland Paediatric, London	Accreditation	Nicola Agnew (Lead) John O'Neill

Table 3

PLANNED CCPS HOSPITAL ACCREDITATION	
HOSPITAL	**STATUS REQUIRED**
Kingsbridge	Accreditation
Spire Manchester,Manchester	Accreditation
Leeds Nuffield, Leeds	Accreditation
Harley Street, London	Accreditation
Morriston, Swansea	Accreditation, with Training
North Staffs, Royal Infirmary, Stoke	Accreditation, with Training
Harefield, London	Accreditation, with Training
Blackrock Clinic, Dublin	Accreditation
Mater Misericordae, Dublin	Accreditation, with Training
QE Birmingham, Birmingham	Accreditation, with Training
Our Lady's Children's Hospital, Dublin	Accreditation, with Training
Northern General, Sheffield	Accreditation, with Training
Cromwell, London	Accreditation

FINANCES

The College accounts have continued to demonstrate consistency, growth and stability. The increased accreditation fees have been an important factor within this picture. Additionally, the improved efficiency of the hospital accreditations has also been paramount, as we seek to continue in our ability to meet our KPI's. As of 4th November, the balance within our accounts was just under £132,900. A £10,000 donation to the Education fund will also be made, which we committed to in 2022. Whilst it is clear that the finances have shown considerable improvement, from previous years, there are also increased costs year on year towards legal cover and advice. This theme will continue as the College seek to improve their systems and processes, more in-keeping with current and future requirements. Furthermore, the new payment system for re-accreditations, utilising the supplied QR code, seems to have improved the ability and efficiency of payments, which will continue, moving forward.

COLLEGE STRATEGY

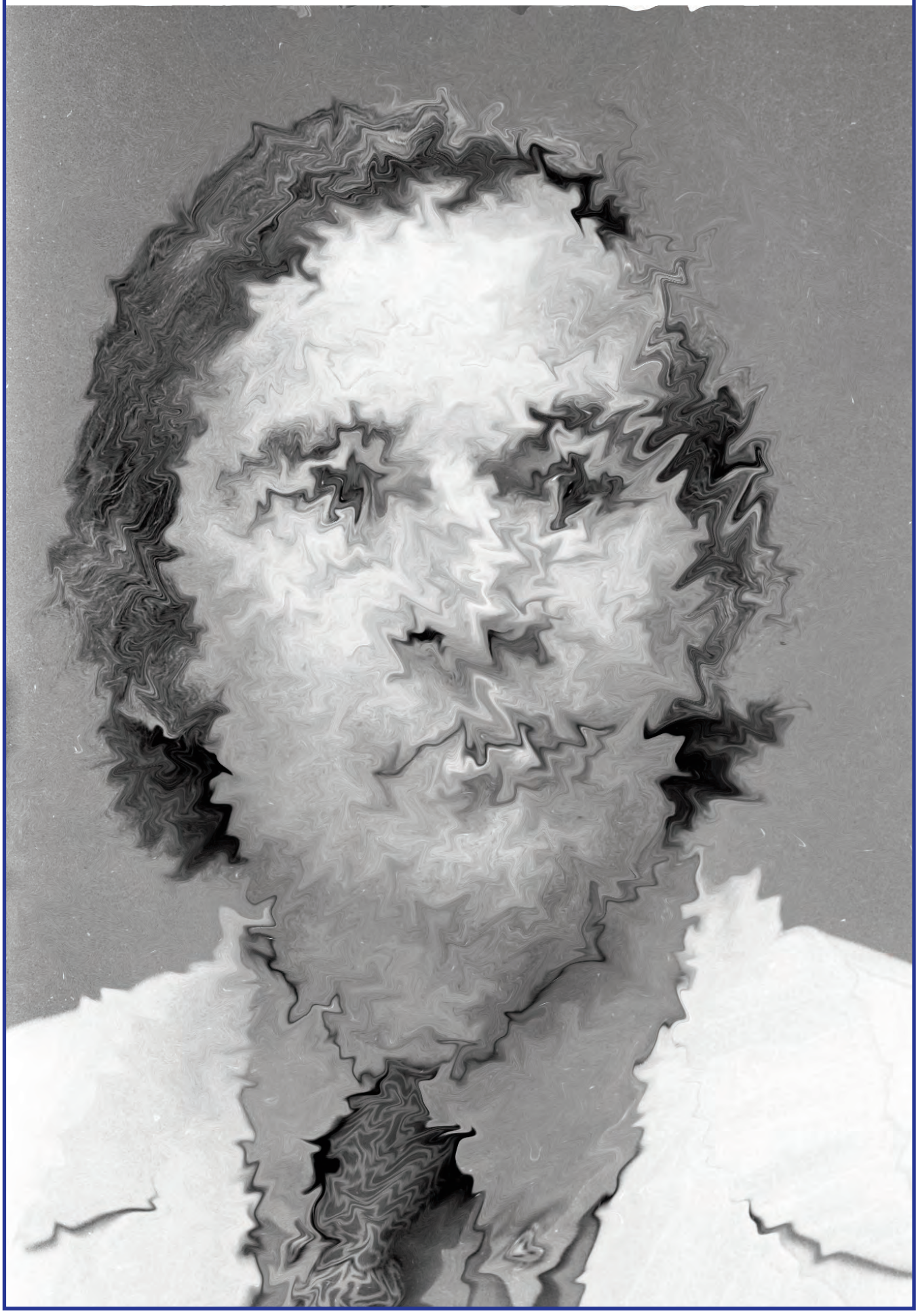
Discussions have taken place, within College meetings, regarding the development and improvement of our goals. The aims of this are to bring our systems up to speed with current requirements and to provide a platform and readiness, which will prepare us for future data processing. For instance, large amounts of data acquisition can take place during accreditation visits. However, this may only take place over the course of a five-year cycle. Therefore, it may only offer a snapshot, from department to department, and will lack a live and active overview. Potentially, if data can be acquired, from each department, on a yearly basis, this could offer a fully comprehensive, dynamic picture, of not only each department, but a nationwide overview of the profession and an accurate picture of its requirements. This may offer greater development of resilience, planning and succession. These developments are still in their infancy, but updates will be offered, when available.

If you are a member of the perfusion community and would like to reach out to the College, on a particular matter, please note that we are here on your behalf and will endeavour to support and engage, wherever possible.

Finally, I'd like to offer best wishes to Jessica Tiplady, as she takes over as Editor of *Perfusionist*. We look forward to engaging with her in the future and offer her our full support, where possible.

If you are involved with a charity providing assistance to patients and would like the opportunity to publicise their activities then please contact the Editor: editor@scps.org

Who Am I?



Congress Reflections: A Weekend of Learning, Laughter, and Inspiration

David McGauran, Royal Brompton Hospital

The annual Perfusion Congress kicked off bright and early on Friday, welcoming delegates from across the UK and Ireland for a weekend of education, collaboration, and a fair share of laughs. The programme offered an impressive range of talks, from the seasoned wisdom of experienced perfusionists to the fresh perspectives of the newly qualified.

One of the standout sessions on the Friday came from Ashley Felton, who showcased the innovative use of the AngioVac system, a percutaneous extracorporeal technique used to aspirate an infective endocarditic lesion from the tricuspid valve of a cancer patient. This was a fascinating example of how new perfusion technologies are being rolled out and adapted in real-world clinical practice across the UK and Ireland.

Another highlight was Shirin Sheibani's excellent talk from Harefield Hospital on civility and how it can save lives. Her insightful presentation shone a light on just how crucial respectful communication is within the operating theatre, and how small moments of kindness (or lack thereof) can have a huge impact on patient outcomes. She reminded us that perfusionists often work in high-stress environments where tensions can run high and adrenaline even higher. Shirin's message was clear: creating a culture of civility is not about being overly polite, but about fostering teamwork, safety, and trust when it matters most. By the end of the talk, there was a strong consensus in the room that this course should be mandatory for everyone. In fact, several of us quietly wondered whether we might start by getting a few of our surgeons signed up. One can dream!

The afternoon saw major manufacturers take the stage to present their latest innovations in ECMO, blood management, and cardiopulmonary bypass systems. The advancement in our field is remarkable, although it does occasionally leave one wondering whether our machines will soon start running our cases for us.

Friday evening wrapped up with the SpeedQuizz, which brought out everyone's competitive streak. The Irish contingent were off to a weak start after round one, but somehow managed to claw their way back and take the win. A great night of entertainment to close out day one.

Andrew Nichols provided a short summary of this year's annual wellness run which took place within the beautiful grounds of Nottingham University early on Saturday morning. Five delegates laced up and took part, a slightly smaller turnout than usual and notably the first year without any industry representation. Perhaps the earlier start to the scientific sessions scared off a few would-be runners. It was a lovely 6 km jog filled with easy chat, fresh air, and the usual mix of newcomers and returning "athletes."

Saturday morning was all about blood, from optimising surgical care for Jehovah's Witness patients to examining the role of cardiotomy suckers and haemolysis. The talks were both technically rich and clinically relevant, sparking great discussions and possibly a few mental notes for Monday morning's pump run to turn down my suckers.

The afternoon featured a round-robin exhibition, giving attendees five minutes per manufacturer to hear concise product pitches. The format worked brilliantly: fast-paced, informative, and a great way to see just how much innovation is currently flowing into our industry.

Several case studies throughout the weekend shed light on rare and complex scenarios. A personal highlight was a presentation on congenital spherocytosis in the paediatric setting, which showcased the adaptability and creative problem-solving ability often attributed to perfusionists. Drawing on techniques previously used for ABO-incompatible heart transplants at GOSH, it was a masterclass in thinking on your feet and reconfiguring setups to meet unique clinical challenges.

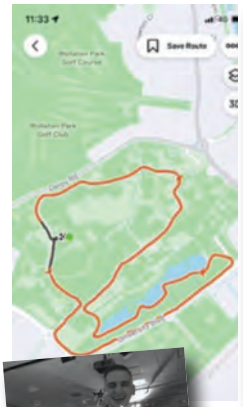
A Personal Milestone

As my first time speaking at the Congress, I'll admit that the nerves definitely made an appearance before I got up to speak. However, seeing so many supportive faces in the audience made all the difference. A huge congratulations goes to all the weekend's speakers, especially my fellow newly qualified perfusionists who delivered fantastic, engaging talks. The level of enthusiasm and curiosity from attendees afterwards really showed how bright the future of perfusion is.

Both the College and Society AGMs took place over the weekend, where the annual reports were presented and discussed. It was encouraging to see the continued commitment to advancing our profession and supporting ongoing education.

Saturday evening brought the perfect close to the event, an evening of celebration and entertainment where we acknowledged and congratulated all the newly qualified perfusionists. Each of us received our accreditation, along with some light-hearted "class awards," ranging from Most Likely to Be Chief to Biggest Nerd and Class Clown. To my surprise, I somehow managed to collect a few awards of my own, including Best Trainee Presentation, Best Master's Thesis, and, rather fittingly, Class Clown. A combination that, I hope, perfectly sums up the balance of academic dedication and questionable humour that has carried me through training.

The celebrations that followed were a perfect reminder that while we might be fantastic perfusionists, a few of us clearly missed our calling as dancers. It was a brilliant night filled with laughter, pride, and reflection on the incredible journey we have all shared.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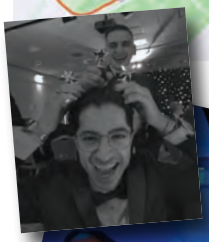
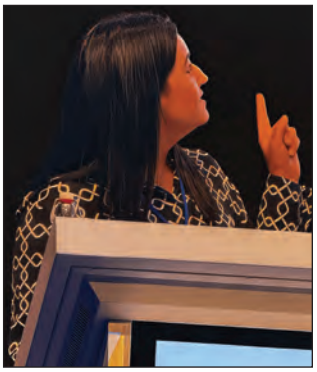
Save Route
Rotation Park Golf Course
Rotation Park Golf Club





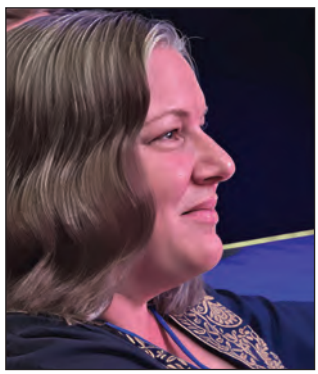




CCPS
THE
COLLEGE
AGM

Diagnosis and
Management of Heparin
Induced
Thrombocytopenia in
Paediatric Congenital
Heart Disease
Populations






SCPS
SOCIETY OF CLINICAL PERFUSION SCIENTISTS - ANNUAL CONGRESS
07-09 NOV
2025
51

Medtronic
VitalFlow
ECMO System



TERUMO
Benchmark
Monitoring of up
to 22 vital patient
parameters


Discover the power of IMPACT

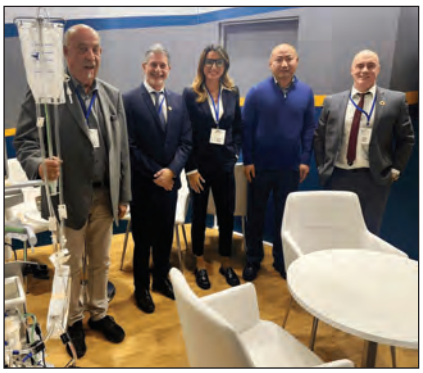

EUROSETS
EVERY LIFE MATTERS

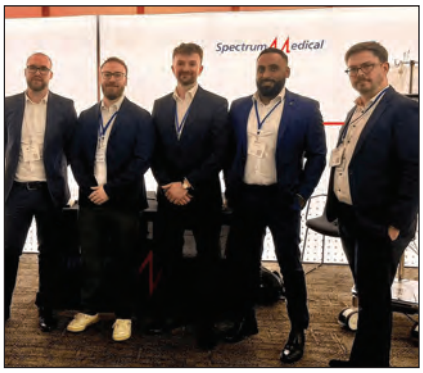

Medtronic
unstoppable


Spectrum Medical


GETINGE
For every life saved


WHEN EVERY
MINUTE MAT




Spectrum Medical


Essenz


Medtronic
ECMObile
High fidelity simulation center
unstoppable


Speedquiz

Effect of Suboptimal Handling of Saph
Function and Subsequent Restenosis Dur

Aimee.Fotheringham@gjnh.scot.nhs.uk

A Project Proposal

Introduction

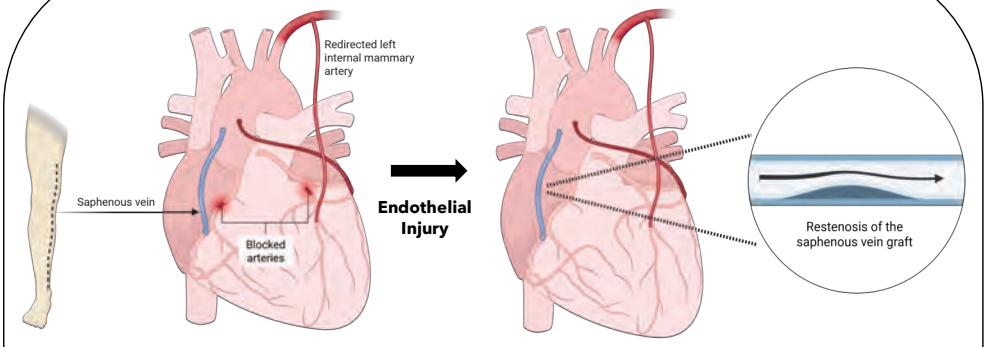


Figure 1 – Endothelial injury in SVGs leads to restenosis and lower long-term patency rates

Coronary Artery Bypass Grafting (CABG) remains a cornerstone treatment for Coronary Artery Disease (CAD)

Saphenous Vein Grafts (SVGs) are prone to endothelial dysfunction (ED), leading to restenosis and vein graft failure (VGF)

10-15% of SVGs fail within the first-year, rising to ~50% by 5 years

Study aim: To assess the impact of surgical handling techniques on graft integrity and patency

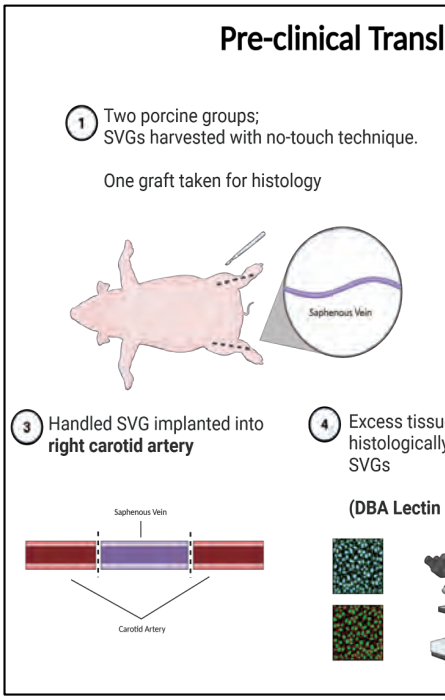


Figure 2 – Porcine study: MH vs

Expected Outcomes

Coronary Angiogram Follow-up **(Hypothetical Data)**

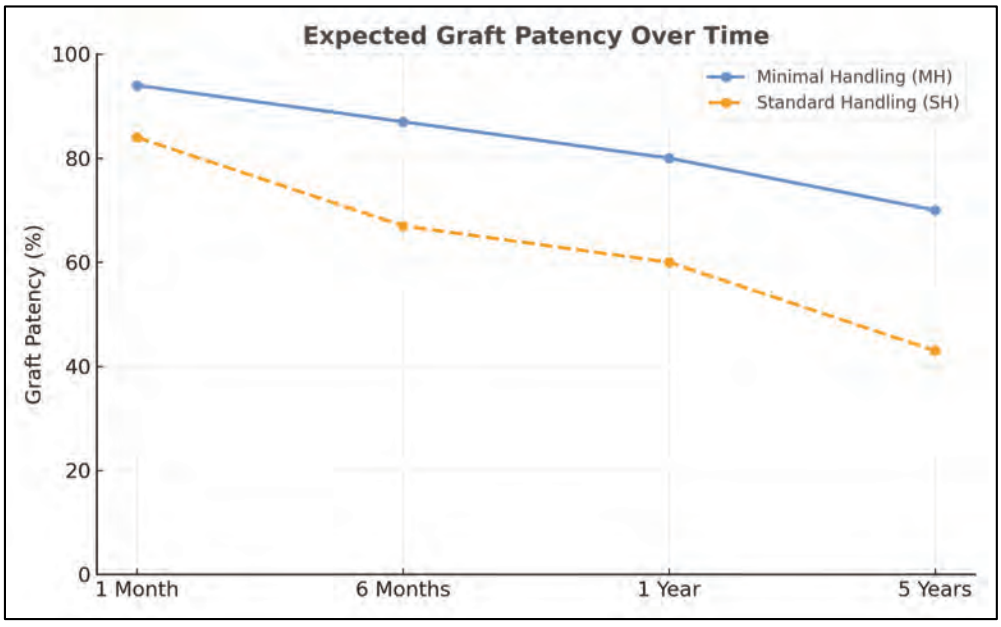
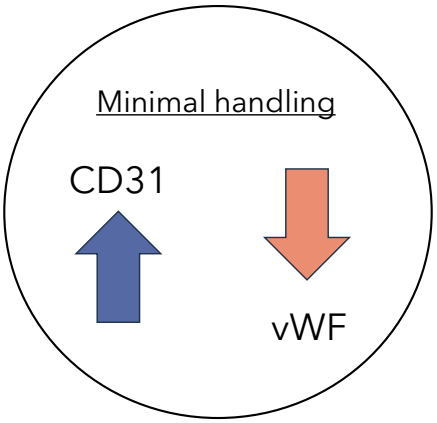


Figure 4 – Across all timepoints, it is expected that minimal handling will show higher patency rates and lower occlusion rates compared to standard handling.



Better EC integrity

Fewer signs of early restenosis / VGF

Overall greater long-term patency

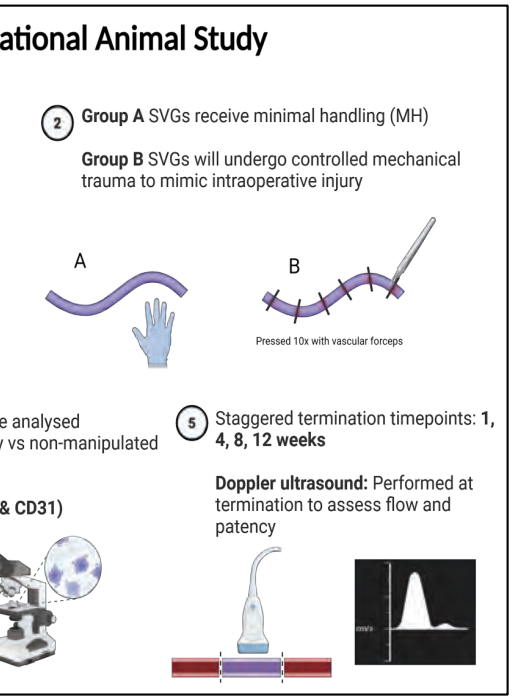
Standard Handling Anticipated Drawbacks

henous Vein Grafts on Endothelial Cell ing Coronary Artery Bypass Graft Surgery

NHS Golden Jubilee

by Aimee Fotheringham

Methods



trauma effects on endothelial integrity

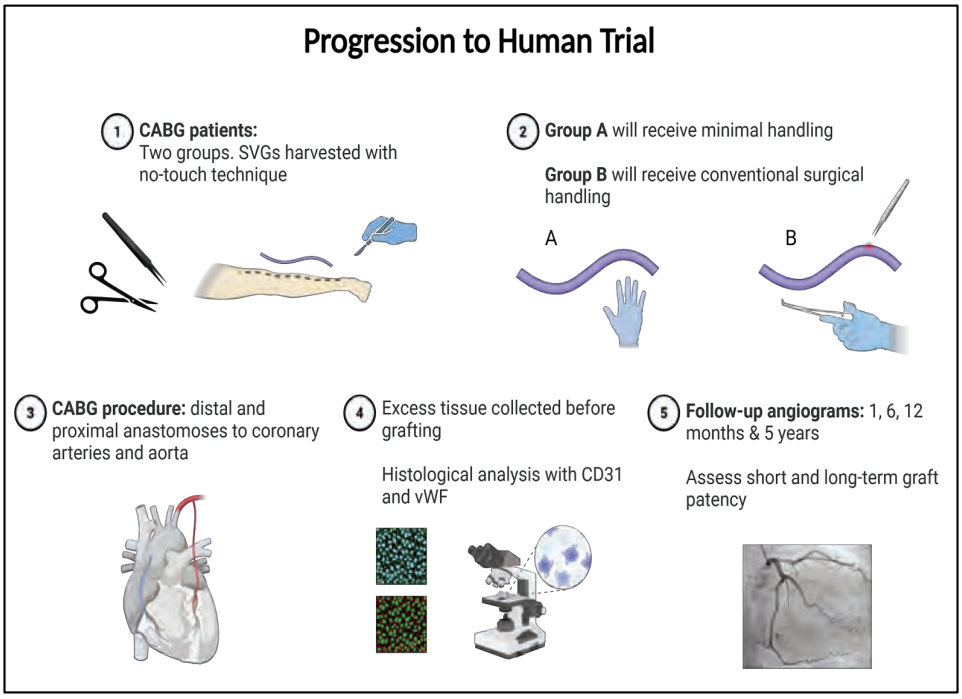
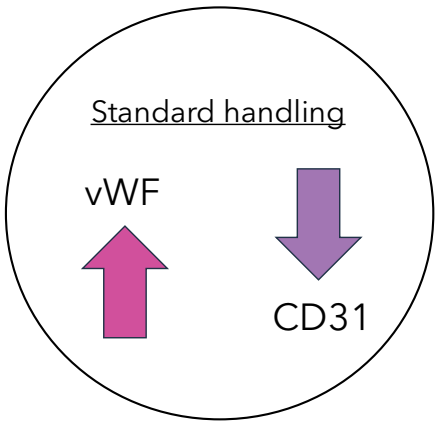


Figure 3 – Progression to the human study: MH vs SH effects on graft outcomes



Compromised EC health

Higher rate of early restenosis / VGF

Overall lower patency with recurrent ischemic symptoms and reintervention requirement

Conclusion

Minimal-touch harvesting shows benefits, but intraoperative handling effects remain unclear

This study will combine histology, angiography and doppler ultrasound to assess whether conventional handling causes:

- **Reduced graft patency**
- **Late VGF**

Hypothesis: Conventional handling leads to greater endothelial disruption and higher restenosis rates than minimal-touch care

Small changes in surgical technique may lead to big improvements in SVG outcomes

References

World Health Organisation. Cardiovascular Diseases [Internet]. World Health Organisation. 2025

Caliskan E, de Souza DR, Boning A, Liakopoulos OJ, Choi YH, Pepper J, et al. Saphenous vein grafts in contemporary coronary artery bypass graft surgery

Obituary: Helen Durant (née Burrows)

Ben Middleton and **John Campbell**

It is with profound sadness that we share news of the passing of our dear colleague and friend Helen Durant (née Burrows), who died on 29 June 2025. Her loss will be felt deeply across the perfusion community, particularly by those who had the privilege of working alongside her throughout her distinguished career.

Early Years and Training

John first met Helen more than three and a half decades ago, when both arrived outside the Board Room at King's College Hospital for their perfusion training interviews. They began their careers side-by-side under the formidable and inspiring leadership of Andreas Pastelopoulos. The Kings programme forged a bond of friendship that endured for over 30 years, strengthened further by their shared roots in the North West.

Helen's intelligence and quick wit carried her and her colleagues through the demanding early years of training—years that are now remembered with great fondness. She also brought glamour and style into the department, with a flair for fashion and an eye for quality that became part of her unmistakable presence.

A Career of Excellence

When Helen later joined the perfusion team at Essex Cardiothoracic Centre shortly after it opened in 2008, she quickly became one of its strongest and most respected practitioners. For us, she was simply our best perfusionist.

To borrow a footballing analogy, Helen was our Glenn Hoddle—a performer who always seemed to have more time on the ball than anyone else. She made the craft of perfusion look effortless, not because it was easy, but because she possessed a rare combination of deep knowledge, technical mastery, calmness under pressure, and absolute professionalism.

Helen was steely when needed, never afraid to speak truthfully about the challenges she had faced, including the prejudices and outdated attitudes she had encountered earlier in her career. She did not suffer fools gladly, but she was fiercely loyal, deeply supportive, and unwaveringly protective

of those who depended on her. Her integrity was demonstrated with great courage during the major fraud case that shook the perfusion community. Helen was placed in the unenviable position of giving evidence against former colleagues, and her testimony – delivered with dignity, strength of character, and honesty – was instrumental in revealing the truth.

A Mentor, Colleague and Friend

Helen's love for her family—her husband, her boys, and her beloved dog—was woven through her working life. Many trainees benefited from her skill, generosity, and high standards. For those of us fortunate enough to work closely with her, persuading Helen to join the Essex team full-time remains one of our happiest achievements.

Even after career paths diverged, long friendships remained strong. As John recalls, on the thirtieth anniversary of their starting perfusion together, he received a card from Helen celebrating the milestone with warm recollections of their early days at Kings—a gesture typical of her thoughtfulness.

Final Illness

Helen faced her terminal diagnosis with the same dignity, humility, and inner strength that characterised her entire career. At brief moments there appeared to be hope, but tragically these were not realised. Her passing has robbed us of a beautiful colleague and friend far too soon.

A Lasting Legacy

Helen was a one-off. Stylish, cultured, witty, with a love of art and an unshakeable commitment to her craft. She could diffuse a tense atmosphere with a perfectly timed remark or a display of quiet confidence. She was a true professional—capable, dependable, admired—and her loss leaves a space that cannot be filled.

To her colleagues in Basildon, to all who trained with her, and to those across the UK and Ireland who worked with her, Helen will be missed dearly. We wish her family strength and comfort during this painful time.

Rest in peace, Helen. You will be remembered with love, gratitude, and enormous respect.

Perfusion Wordsearch

Q K U W E C P B H I B H V E N T R I C L E T D
P X D Z M L C T R I C U S P I D G L O K D T G
P R S I O A E P F P U M P Y I I Z N P E K Y F
W N H J L I R C O E N I S U F O L E G X Y X N
L C W C C U P R T N H C E N T R I F U G A L A
E E Q A H O T R H R J A E D O Z S L P M H R I
A N N N L P A I E Y O F C L D M Y O Y I P P G
F T I N A E R G O S T L Z O O L R N R T E M E
L R R U I C T E U N S H Y V Z R I O A R R V L
E A A L D A A Y S L P U M T G A N I N A F S P
T L P A O L T F B S A U R I E I G T O L U V O
G D E T T C R F L T U T C E A S E C R Y S A I
M R H I S I I B T O U R I U D D C E O V I L D
G J M O U U U K I A W Y E O K F X J C X O V R
S F J N C M M A J H M U M V N Y Y E X Y N E A
X V A P J Q E N O N I R L I M X Q G D X I Y C

Find the following words in the puzzle.
Words are hidden ↑, ↓, →, ←, and ↘.

ELECTROLYTES
CARDIOPLEGIA
CANNULATION
COAGULATION
CENTRIFUGAL
ARRHYTHMIA
GELOFUSINE
PERFUSION
TRICUSPID
MILRINONE
VENTRICLE
CUSTODIAL
CORONARY
PRESSURE
DILUTION
EJECTION
HEPARIN
CENTRAL
LEAFLET
CALCIUM
SYRINGE
ATRIUM
MITRAL
VALVE
PUMP
FLOW

Solve the Riddle...

I whisper first steps, then shout when you stand still,
A mile might slow my guest - then stop them on the hill.
My roads grow narrowed, rough and stiff with time,
I steal warmth, thin the hair and make wounds slow to climb.
Pulses fade like footprints in the sand,
Look low and pale where once was pink and tanned.

What am I?

Answers to jessica.tiplady@nhs.net by 23rd December 2025

First to answer correctly published in the next edition.

EBCP EUROPerfusion Athens, 24th-25th October 2025

Elisabetta Giacomini

At the end of October when the sun was still pleasantly warm, in the beautiful surroundings of the ancient Greek culture, I had the opportunity to participate to the European Board of Cardiovascular Perfusion Conference in Athens.

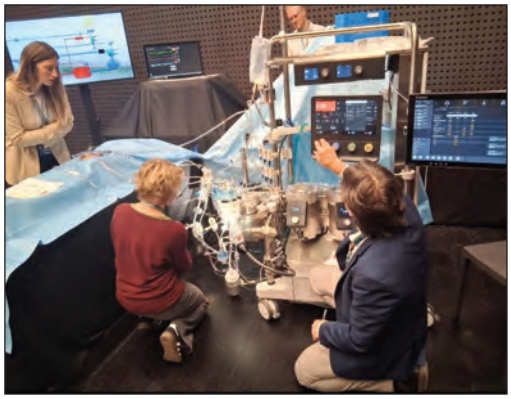
The theme was "Legacy Inspiring Future Comes Alive" where they aimed to celebrate the progress and dedication that has shaped our profession of Clinical Perfusionists, while embracing the ideas and technologies that will drive it forward.

To stick with the theme, the opening lectures focused on the evolution of the perfusion practice from the point of view of a Greek perfusionist that developed his career between Canada and the US followed by a very inspiring lecture about artificial placenta… the future is very near!

In the second part of the morning, there was a SIM-Lab training experience, five different rooms, each of them sponsored by a manufacturing company, giving the opportunity to trial their equipment:

- CPB – "MiECC & Quality Indicators"
- CPB – "Perfusion Escape Room – Unlocking Emergency Protocols"
- ECMO – "eCPR, Let´s go on pump"
- ECMO – "Spot the issue: circuit or patient?"
- ECMO – "Desaturation Maze: There is more to oxygen than delivery"

To challenge myself, since I am a pediatric perfusionist and have ZERO experience in minimally invasive cardiac surgery, I opted for the "MiECC & Quality Indicators" option. I have to say it was quite fun to learn the "messy" set up and some cool tricks regarding MiECC!



Day one carried on with a pediatric session where different topics were touched including how to safely design a pediatric ECMO circuit, the effect on clinical outcomes using hemodialysers during CPB, a limited experience on MiECC in pediatric cardiac surgery and how this technique could be applied in some super selected pediatric cases and to finish on an experimental note a guest speaker talked about the potential use of hydrogen mixed in the gas blend as an anti-oxidant / anti-inflammatory agent on ECMO.

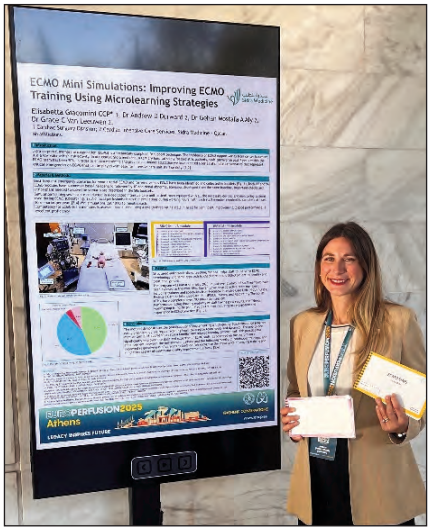
The afternoon concluded with the moderated poster session, where I had the chance to present an ECMO training method that myself and colleagues in Sidra Medicine (Qatar) have created to improve and enhance knowledge among the ECMO team:

ECMO Mini Simulations: Improving ECMO Training Using Microlearning Strategies

The method allows the ECMO Specialists to participate in a mini simulation session during working hours. The goal is not to test team members' interactions during an emergency scenario, but we focus on the candidate to meticulously check the ECMO circuit and the patient's status/hemodynamics in order to recognise the scenario. Once the issues on the ECMO and/or the patient have been identified, the ECMO specialist should explain what action plan to take to reestablish a stable situation.

This exercise has become mandatory for all our ECMO team members; this has significantly improved skills, expertise, and responsiveness of care at the bedside.

To close the first day of the conference we were entertained by folkloristic Greek dances



followed by a cocktail dinner sponsored by the industries where each company had the opportunity to introduce their most novel products and technologies.

Day 2

Second day of conference opens with an interesting talk about the Ridler Syndrome, also called East – West Syndrome, that may present in adult awake patients on peripheral ECMO where there is a substantial difference between patient native pCO_2 and post oxygenator pCO_2, this manifests as

patient respiratory distress and tachypnea.

Followed by normothermic regional perfusion post neurological death, and a single center study that evaluated the cerebral oximetry variance at the initial stage of cardiopulmonary bypass using a rapid vs slow (reaching full flow in 90 seconds) initiation of CPB.

To conclude the first morning session an Italian group has shown that low threshold of DO_2i during cardiopulmonary bypass is an independent predictor of post operative SIRS (Systemic Inflammatory Response Syndrome) and adverse patient outcome post cardiac surgery. Identified DO_2i threshold 293 ml/min/m2.

The morning continued with a session to shape the perfusionists of tomorrow where colleague Richard Issit and Marloes Van Hoeven presented the need and project for unifying a European Perfusion Database where data from participating centers could flow into the same data center. This will have a huge impact on data collection that could be used to increase research and clinical trials.

Adrian Bauer then presented the Consensus Paper where he highlighted the needs of standardization of perfusion education and competences across Europe. EBCP members are working to implement this goal in the next 5-10 years.

After the lunch break we flowed into the last conference session: Signals in experimental perfusion.

The group of H Athursson presented a study that shows how adequate DO_2i levels during cardiopulmonary bypass prevent impacts on cerebral autoregulation, demonstrating that adequate oxygen delivery index does not have only a positive impact in preventing acute kidney injuries.

Then M Navez presented a study in a pig model with the aim to improve kidney quality pretransplantation using mesenchymal stromal cell therapy under normothermic machine perfusion.

Finally colleague Judit Gómez Mateo nicely showed her work about aortic root venting strategies to minimize the incidence of post operative cognitive dysfunction. With her set up lab model she demonstrated that the magic recipe is Trendelenburg position and vent flow rate of 10% of the patient's systemic flow.

With her work Judit won the award for best abstract presentation, congratulations on your achievement!

Best poster presentation prize also goes to a Liverpool colleague James Bennett with his systemic review on kidney protection during surgery of the thoracoabdominal aorta. Well done!

I feel grateful to take part in this international event, it was a pleasure meeting old and new faces, sparkling discussions and confrontation in beautiful Athens. Next year EUROPerfusion 2026 will be in Belgrade!

Access the full program and abstract book by scanning QR code:

ABSTRACT BOOK

EUROPerfusion Athens, 2025

ECMO Mini Simulations: Improving ECMO Training Using Microlearning Strategies

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No affiliations.

1 Introduction:

Extra corporeal membrane oxygenation (ECMO) is a technically complex life support technique. The incidence of ECMO support varies from center to center, it is a low volume high risk activity. In our center, Sidra medicine, a tertiary hospital solely for pediatric patients, staff turnover in past 7 years within the ECMO team has been 50%. In order to enhance training and provide continuous education we have created a series of simulation scenarios that represent critical emergencies on ECMO that can be played with ease for intensive care unit staff on duty. [1,2]

2 Material & Methods:

Most frequent emergency scenarios for veno-arterial ECMO and for veno-venous ECMO have been identified and collected in booklets (Fig. 1), Both VV and VA ECMO modules have a common base-line scenario followed by 10 additional abnormal scenarios developed from the same baseline, important checks and action plans needed to solve the scenario are described in the SIM booklets.

Simulation training sessions are conducted in a dedicated intensive care unit patient room equipped with all the necessary devices and monitoring systems used during ECMO support (Fig. 2). A clinical perfusionist leads the simulations during working hours, with each staff member required to complete at least 10 scenarios per year. [3,4] Mini simulations last 10 to 15 minutes each.

Competency for ECMO team members is assessed in real time using a one to three rating scale: 1 need for significant improvement, 2 good performance, 3 excellent proficiency.

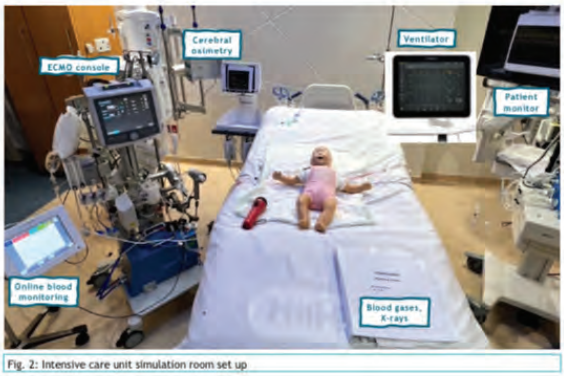

Fig. 2: Intensive care unit simulation room set up

SIMS list - VA module

1. Scenario 1 – HYPOVOLEMIA
2. Scenario 2 – KINK/CLOT IN RETURN LINE or CANNULA
3. Scenario 3 – TAMPONADE
4. Scenario 4 – HIGH SVR / PATIENT BLOOD PRESSURE
5. Scenario 5 – ACCESS COMPLICATIONS
6. Scenario 6 – OXYGENATOR BLOCKED
7. Scenario 7 – GAS LINE DISCONNECTED
8. Scenario 8 – MASSIVE AIR EMBOLISM
9. Scenario 9 – PUMP HEAD ISSUE / CLOT
10. Scenario 10 – RETROGRADE FLOW

SIMS list - VV module

1. Scenario 1 – ACCESS COMPLICATIONS
2. Scenario 2 – OXYGENATOR BLOCKED
3. Scenario 3 – GAS DELIVERY TO OXYGENATOR FAILURE
4. Scenario 4 – RECIRCULATION
5. Scenario 5 – ACUTE RIGHT HEART FAILURE / PULMONARY HYPERTENSION
6. Scenario 6 – PNEUMOTHORAX
7. Scenario 7 – TACHICARDIA AND HYPERCARBIA
8. Scenario 8 – WORSENING OF NATIVE LUNG FUNCTION
9. Scenario 9 – SEPSIS / HYPOVOLEMIA
10. Scenario 10 – PUMP HEAD ISSUES

Fig. 1: VA ECMO scenarios and VV ECMO scenarios lists.

3 Results:

Structured and standardized teaching method, helps staff to use same ECMO terminology and same approach to check circuit and ECMO patient to identify and treat emergencies.

The program was initiated in May 2023. In just over 2 years, 46 staff members have been exposed to the mini-SIMs. Currently we have 30 active team members, including trainees and specialists from Neonatal Intensive Care Unit (NICU) nurses, Pediatric Cardiac Intensive Care Unit (PCICU) nurses, and Respiratory Therapists (RTs), have completed over 700 simulation sessions.

Performance rating showing majority of staff having good results, the "Needs work" group is mostly populated by trainees requiring more exposure and experience in ECMO practice (Fig. 3).

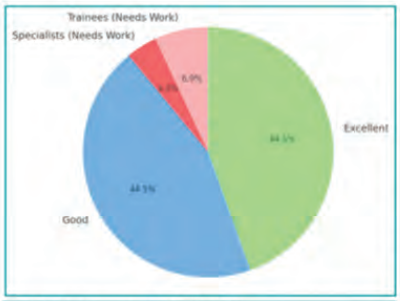

Fig. 3: Staff performance rating for 720 mini-SIMs.

4 Conclusions:

The method demonstrates the practicability of implementing a high-quality ECMO simulation program easily organized during regular working hours tailored to team needs and dynamics. The one-to-one mentor-specialist approach creates a familiar and relaxed learning environment. This practice has significantly improved the skills and expertise of ECMO staff, as observed on the performance enhancement between the initial training phase and the following months of continuous trainings, and improved responsiveness of care at the bedside. We recognize the importance of ongoing training and simulation as part of continuous quality improvement efforts. [5,6]

Scan to contact the author:

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References:
1. Custodiol Solution for cardioplegia / organ preservation. Summary of Product Characteristics, 2024;
2. Hummel B. et al. Innovations 2016;11: 420-424

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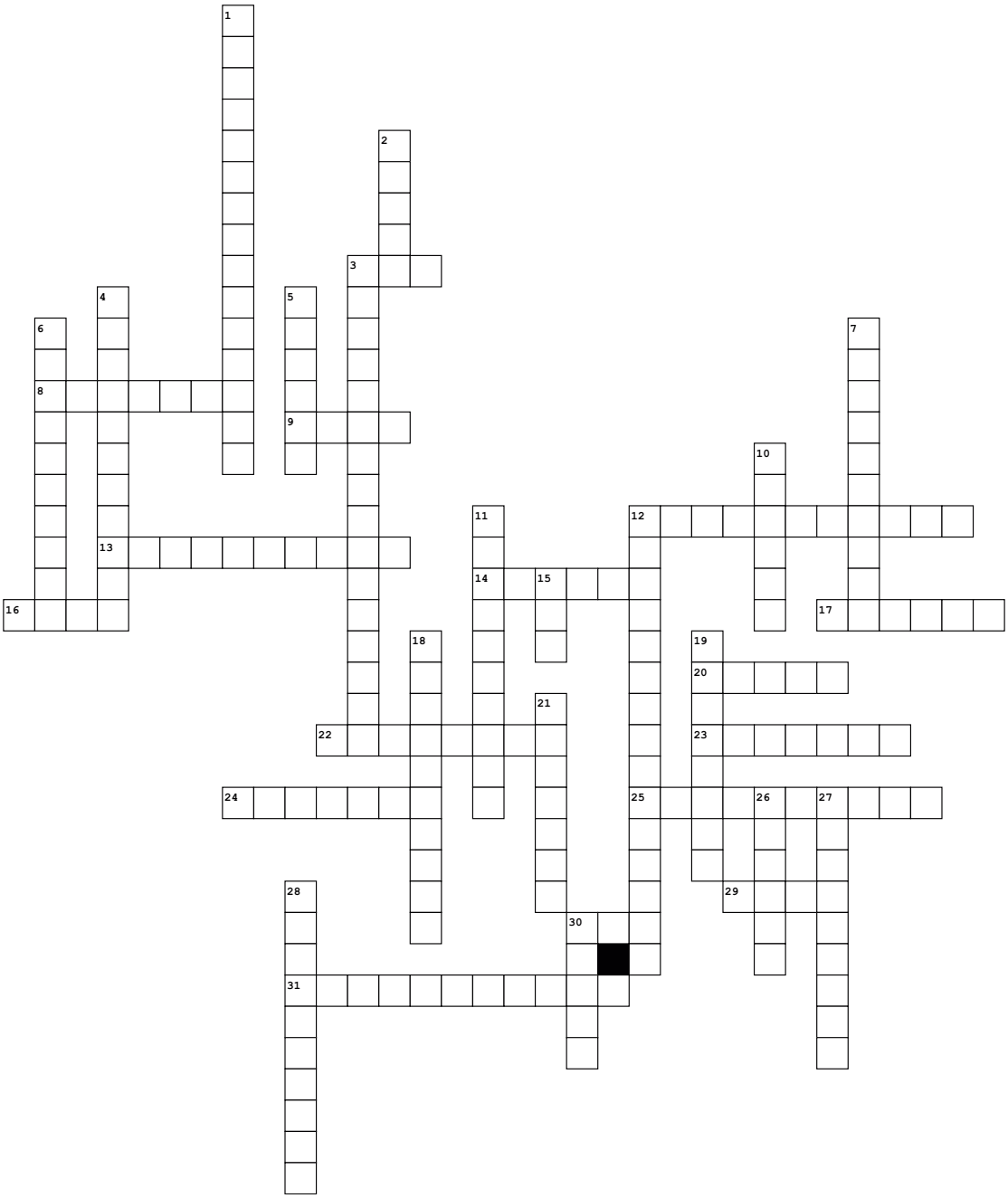


Across

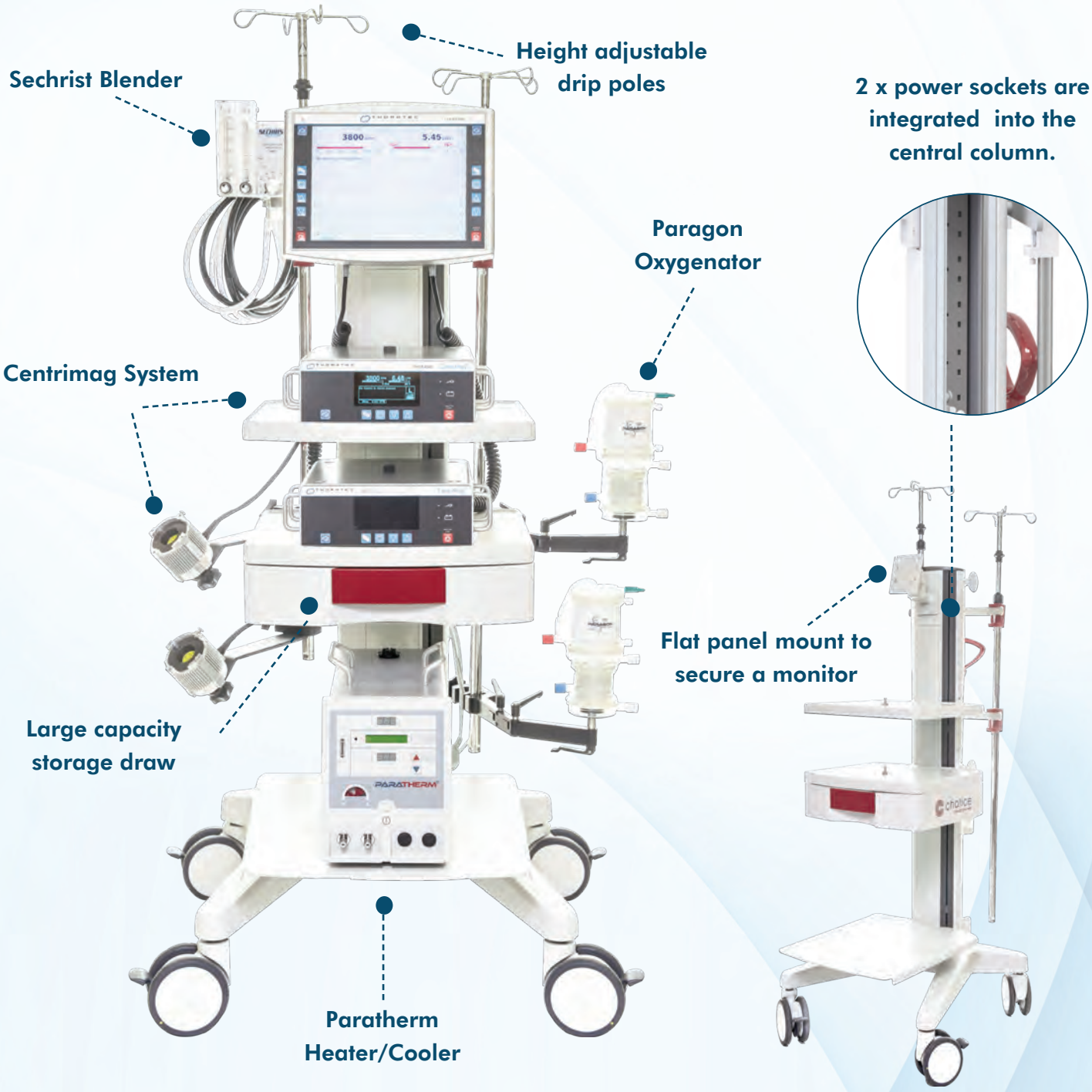
3. echocardiographic hallmark of obstructive cardiomyopathy (1,1,1)
8. ring shaped (7)
9. extracorporeal support (1,1,1,1)
12. underdeveloped (11)
13. regularly used to decrease pressure on pump (10)
14. used for stitching (6)
16. come off pump (4)
17. heart defect (1,1,1,1,1,1)
20. to occlude (5)
22. anaesthetic constituent in cardioplegia (9)
23. connective tissue disease (7)
24. pay attention to (7)
25. opposite (10)
29. get lost in (4)
30. a communication (1,1,1)
31. anticoagulant (11)

Down

1. fat build up in vessels (15)
2. large vessel delivering blood to the body (5)
3. measures pressure (16)
4. administration of products (11)
5. pressure independent pump (6)
6. common priming fluid (11)
7. unit of pressure (10)
10. divert (6)
11. false lumen (10)
12. concentrate (15)
15. patients with this can be blue or pink (1,1,1)
18. heart muscle (10)
19. syndrome defined by abnormal pulmonary venousdrainage (8)
21. vessel used peripheral cannulation (7)
26. available out of hours (2,4)
27. store for fluid (9)
28. abnormal flow pattern (10)
30. de-air (5)

chalice
operate your way

ECLS TROLLEY
SYSTEM V2



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