

# **Combining Safety Science with a compassionate approach to learn from a recurrent serious incident**

Austin Smithies MBBS FRCEM

Catherine Fowler MBA BCAh



**33%**

of those suffering from  
an aortic dissection are  
misdiagnosed

**2000**

people per year lose  
their lives from aortic  
dissection in the UK

**10**

lives could be saved per  
week with the correct  
diagnosis



STOP  
RAISING AWARENESS  
ALREADY

Christiano, A., & Neimand, A. (2017). Stop Raising Awareness Already. *Stanford Social Innovation Review*, 15(2), 34–41. <https://doi.org/10.48558/7MA6-J918>

# **The stories of those with lived experience will communicate your vision**

# Taking a Human Factors approach when learning from serious incidents – a personal reflection



**Catherine Fowler MBA BCAh**

**Trustee The Aortic Dissection Charitable Trust**

**NHS PPV Cardiac CRG TRANSFORM**

**NHS PPV Cardiac Clinical Policy Unit**

# THE IRISH TIMES

FLEMING, Tim. Suddenly at St. James's Hospital, Dublin, (Isleworth, London and late of Crohane, Fossa, Killarney, Co. Kerry, son of the late Jerry and Grace Fleming, husband of Caitlin (née McGrath), Kilgalligan, Carrowteige, Ballina, Co. Mayo, father of Caroline, Aisling, Catherine and Jeremiah, grandfather of Tadgh, Oscar, Clodagh, Paddy and Leah. Deeply and sadly missed by his loving wife, daughters, son, grandchildren sons-in-law Dave and Keith, sisters Maura, Esther, Eileen, Anna and late brother Dermot, sisters and brothers-in-law, nieces, nephews, cousins, relatives and friends. Reposing at the McGrath Family home in Kilgalligan today (Wednesday) from 3.00 o'clock until 6.00 o'clock, with Removal to The Church of the Immaculate Conception, Carrowteige, arriving at 8.00 o'clock. Funeral Mass tomorrow (Thursday) at 12.00 noon with Burial afterwards in Kilgalligan Cemetery.

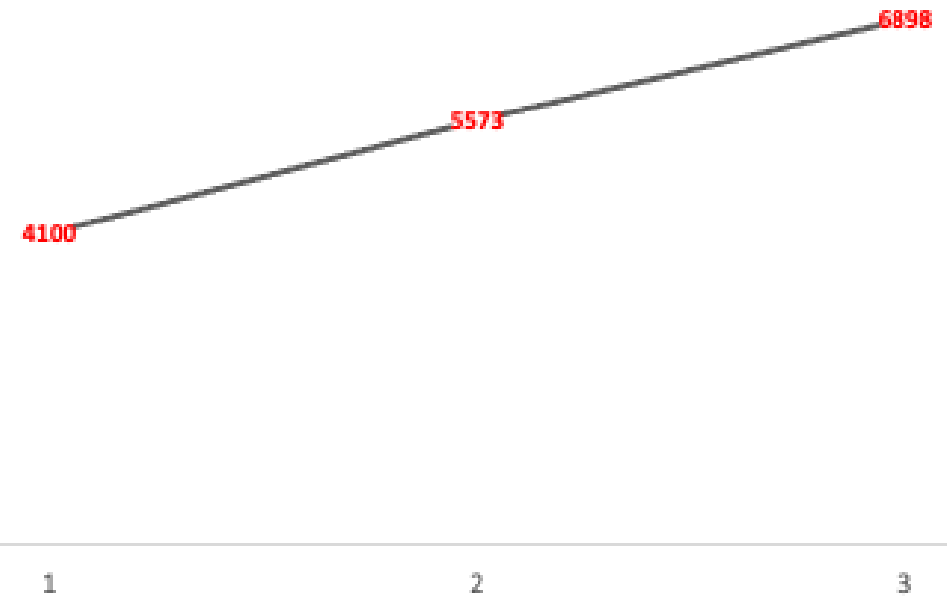


# AORTIC DISSECTION CASES ARE SET TO RISE

## WE NEED TO SHAPE A SAFER FUTURE



INCREASING POPULATION IMPACTED BY AD 2020 TO 2050



Source: Oxford Vascular Study:  
Circulation 2013;127:2031-2037

@AorticDissectCT   

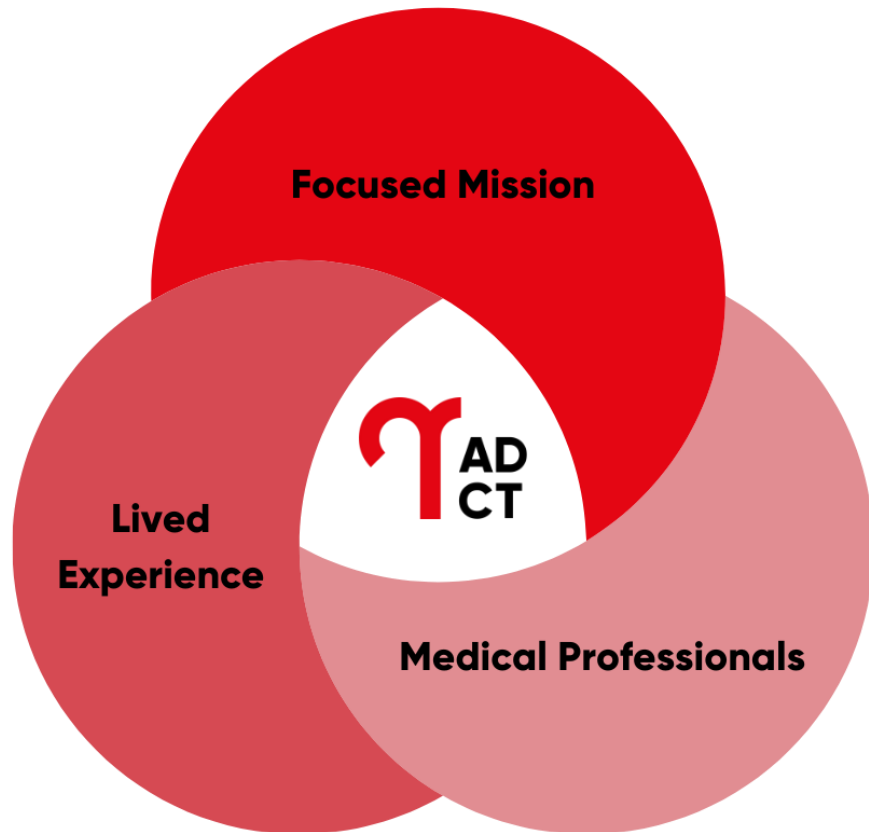
[www.tadct.org](http://www.tadct.org)

# MISDIAGNOSIS **IMPACTS** PHYSICIANS TOO





# FORMING A CHARITY WITH A CULTURE OF FOCUS & INCLUSIVE COLLABORATION



- ❖ Establishing a diverse leadership team with passion, broad networks & talents
- ❖ Create a clear vision & strategy
- ❖ Creating a clear, simple, recognisable brand
- ❖ Developing a strong digital & social media presence
- ❖ Building a community of advocates
- ❖ Creating expert teams for every workstream unifying lived experience & medics
- ❖ Passion, focus & professionalism at the heart of our culture

# TADCT TEAM:

## AD HAS **CHANGED** OUR LIVES **FOREVER**



**Catherine Fowler**  
BCAh  
Trustee

Catherine lost her father to aortic dissection, he was discharged from an Emergency Department without the diagnosis being made.



**Pauline Latham OBE**  
MP  
Trustee

Pauline lost her son to aortic dissection, he was discharged from an Emergency Department without the diagnosis being made.



**Graham Cooper**  
Trustee

Graham is a consultant cardiac surgeon specialising in the treatment of patients with thoracic aortic disease. He is a past President of the Society for Cardiothoracic Surgery.



**Bob Harris OBE**  
Ambassador &  
Broadcasting legend

In 2019 Bob suffered an aortic dissection whilst out walking. Bob describes the experience as an incredibly scary moment but continues to live life to the full.



**Steve Perryman MBE**  
Ambassador & Former  
professional footballer

In 2012 Steve suffered a dissection while watching Exeter's final game of the season. He owes his life to the swift actions of the first responders at the game.



**Sharon Sewell**  
Ambassador

A former magistrate and Derby City Council worker who spent her time helping people and giving to others, had her life changed forever after suffering a type A aortic dissection in 2021.

# Uniting **patients, families** and the **medical community** in a shared goal of **improving diagnosis, increasing survival** and **reducing disability** due to aortic dissection



Increasing access to **education** for medical professionals and patients



Working with those responsible for healthcare policy to ensure that there is **consistency** in the provision of diagnosis for acute aortic dissection, **specialised follow-up** for survivors and access to **clinical genetics** for relatives



Promote and fund **medical research** into the detection, prevention, treatment and cure of aortic dissection

# TADCT LEARNING RESOURCES

## SHIFTING FROM AWARENESS TO EDUCATION

### Get ready to master **aortic dissection**

This online educational platform is the go-to resource for healthcare professionals interested in expanding their knowledge and skills in aortic dissection.

#### Subject matter experts include:



Dr Luke Flower

Honorary Clinical Research Fellow



Dr Stephen Shepherd

Consultant in Anaesthesia



Prof Lars Nölke

Cardiothoracic Clinical Director



Conor McClelland

Paramedic Training Officer



Dr Bejal Pandya

Cardiology Clinical Director



Dr Jacob F. de Wolff

Consultant Acute Physician



Prakash Madhavan

Consultant Vascular Surgeon



Alex Nicolson

Paramedic Operations Officer



Dr Victoria McKay

Cardiovascular Clinical Geneticist



Prof James Meaney

Consultant Radiologist



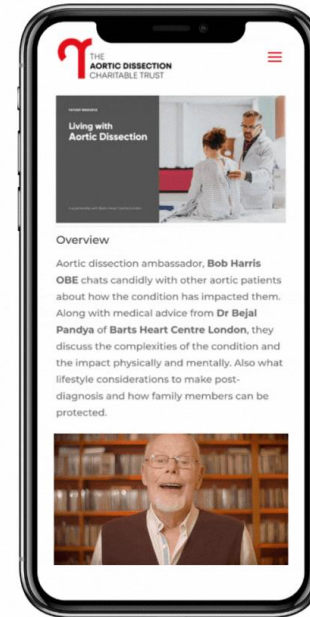
Graham Cooper

Consultant Cardiac Surgeon



Laura Morris

Advanced Clinical Practitioner



Supporting the **aortic dissection** journey

# 22,700

Visits since April 2022

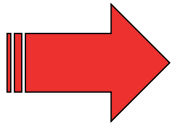
@AorticDissectCT   

www.tadct.org

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# AMPLIFYING PEOPLE'S VOICES

## EXTENDING TADCT SUPPORT FOR NHSE AAD TOOLKIT

 Aortic Dissection Charitable Trust  
@AorticDissectCT

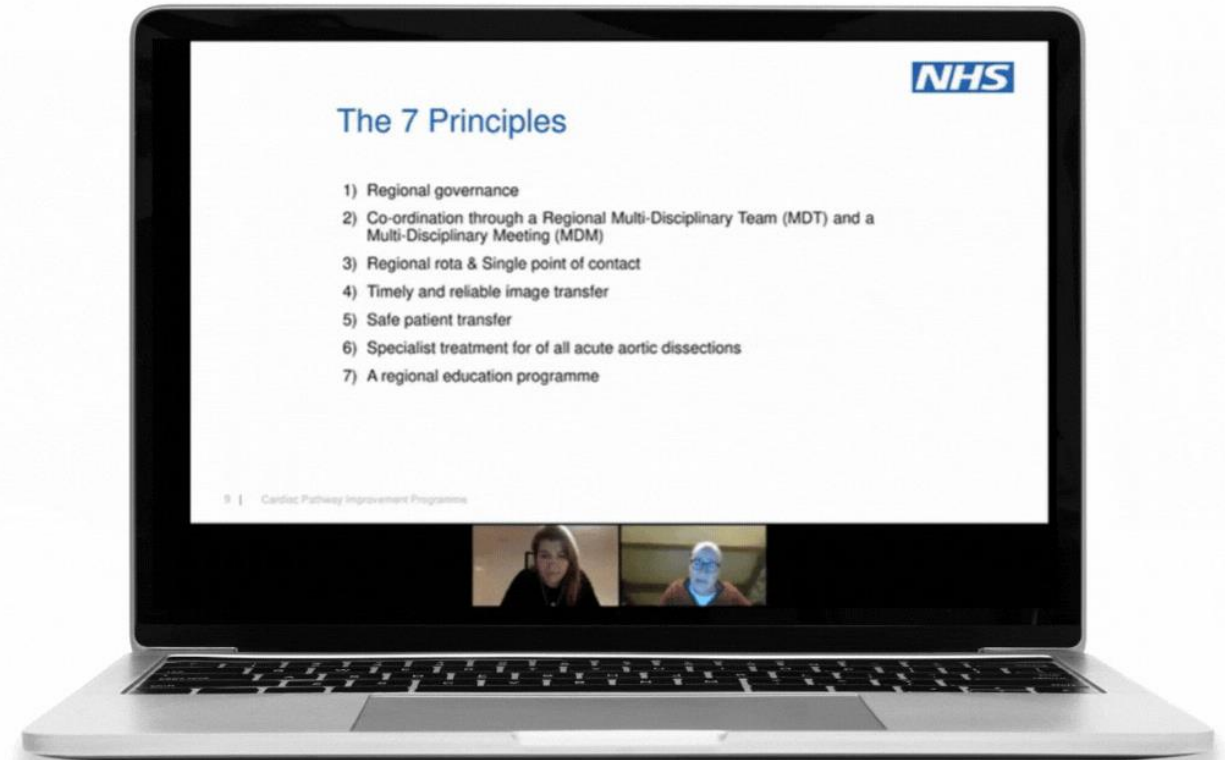
Thrilled to see the new Acute [#AorticDissection](#) Pathway Toolkit has been released by [@NHSEngland](#).

Thank you to all of those of you who gave feedback to help develop it. These principles support the basis of improving regional variation & saving **500 lives** per yr in the UK



8:02 am · 16 Mar 2022 · Twitter Web App

21 Retweets 5 Quote Tweets 44 Likes



@AorticDissectCT   

[www.tadct.org](http://www.tadct.org)

# DRIVING ENGAGEMENT

# PLACING THE TOOLKIT INTO THE SPOTLIGHT: NHS England NATIONAL DIRECTORS AWAYDAY



TADCT SUPPORTING NHSE AD PATHWAY TOOLKIT				
Nov '21	Nov '21	Nov '21	Jan '22	Ongoing
<b>Tool Kit Design</b> Full suite developed from service specification design.	<b>Patient Public Survey</b> 770 people with experience in AD invited to answer the NHSE tool kit survey. Data reported to NHSE for consultation.	<b>Patient Public Dialogue</b> NHSE and TADCT team worked to explore tool kit, answer questions and share feedback.	<b>Implementation Offer</b> Full package of support offered to NHS including all reports, regional education and run through sessions.	<b>Implementation Support</b> Active provision of regional support as more regions engage with implementation phase.
Feedback from NHSE on the TADCT approach to engagement and quality of response was the highest quality received to date on any NHSE public involvement initiative.				



**DRIVING ENGAGEMENT :**  
**PLACING AORTIC DISSECTION INTO THE SPOTLIGHT**  
**THE LABOUR & CONSERVATIVE PARTY CONFERENCE 2023**



# DRIVING CHANGE: PLACING AORTIC DISSECTION INTO THE PARLIAMENTARY AGENDA



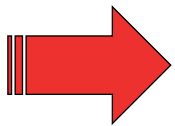
# Uniting **patients, families** and the **medical community** in a shared goal of **improving diagnosis, increasing survival** and **reducing disability** due to aortic dissection



Increasing access to **education** for medical professionals and patients



Working with those responsible for **healthcare policy** to ensure that there is consistency in the provision of diagnosis for acute aortic dissection, specialised follow-up for survivors and access to clinical genetics for relatives



Promote and fund **medical research** into the detection, prevention, treatment and cure of aortic dissection

# LIVED EXPERTISE DRIVING TADCT RESEARCH



**The ASES study: Aortic Syndrome Evidence Synthesis**

**EARNEST: Early Aortic Repair in patients Needing Endovascular Surgery for Type B Aortic Dissection**

## CAASP

Collaborative Acute Aortic Syndrome Project

**An observational cohort study of people undergoing a CT in ED for possible Acute Aortic syndrome**

## DASHED

**An observational cohort study of people attending the ED with symptoms consistent of Acute Aortic syndrome**

# TADCT STARTED LOCAL GOING GLOBAL



International collaborations :

- ❖ Irish Association of Emergency Medicine
- ❖ European Society of Emergency Medicine
- ❖ European Society of Perfusionists
- ❖ Cleveland Clinic
- ❖ John Ritter Foundation
- ❖ Yale University

**THE BRITISH CITIZEN AWARD  
Medal of Honour  
for voluntary contribution  
to Health in Great Britain**





UNDERGROUND  
SUBWAY

dysnaps

J SHAFFERY  
7483

SOPHIE  
1060

# Driving change to **shape a safer future** for people impacted by Aortic Dissection



@AorticDissectCT   

[www.tadct.org](http://www.tadct.org)

# A Human Factors Informed Approach



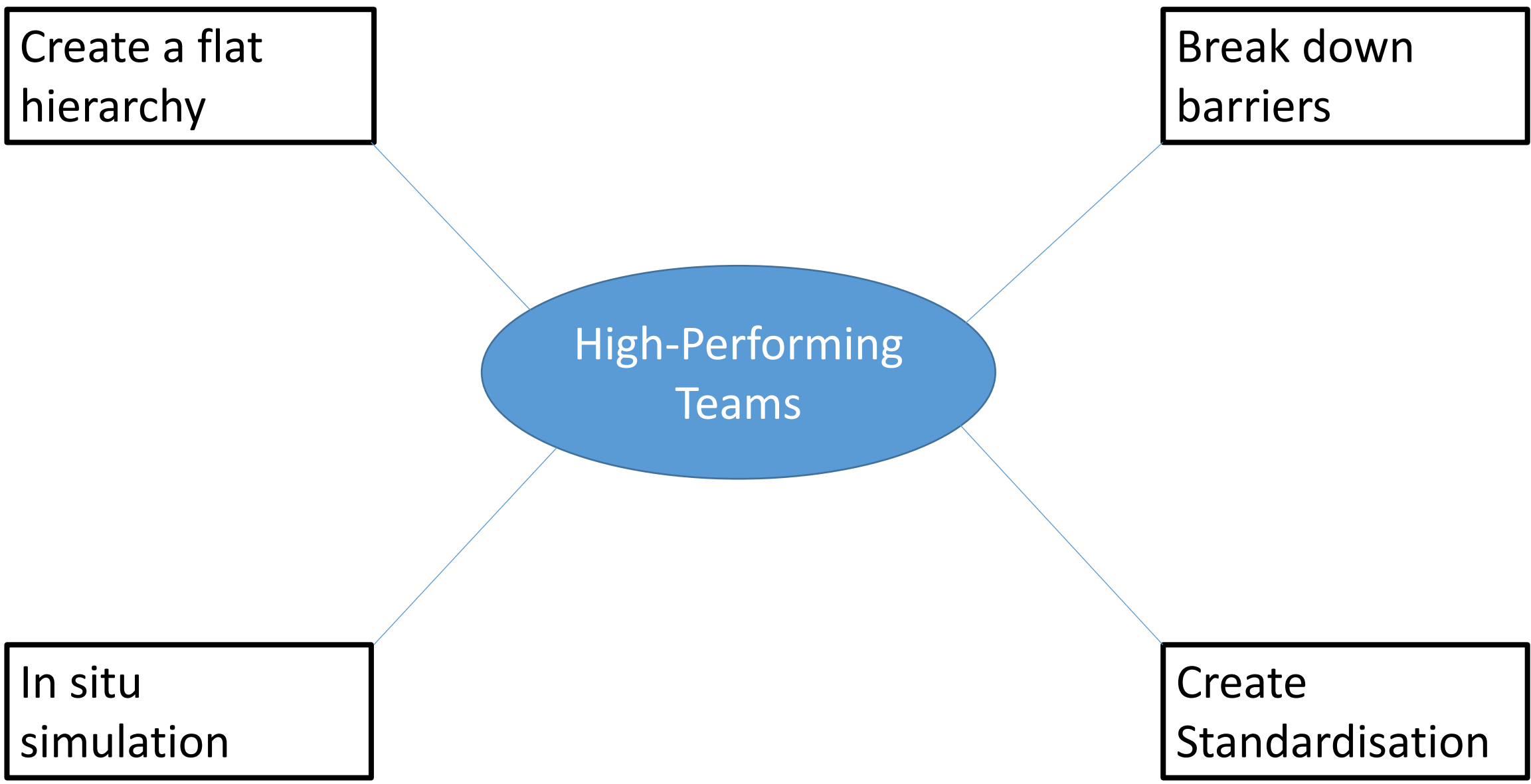
# DELAYED RECOGNITION OF ACUTE AORTIC DISSECTION

Healthcare Safety Investigation I2017/002b

January 2020 Edition

<https://www.england.nhs.uk/north-west/wp-content/uploads/sites/48/2020/02/hsib-report-delayed-recognition-acute-aortic-dissection.pdf>

# Understanding complexity and team performance



Create a flat hierarchy

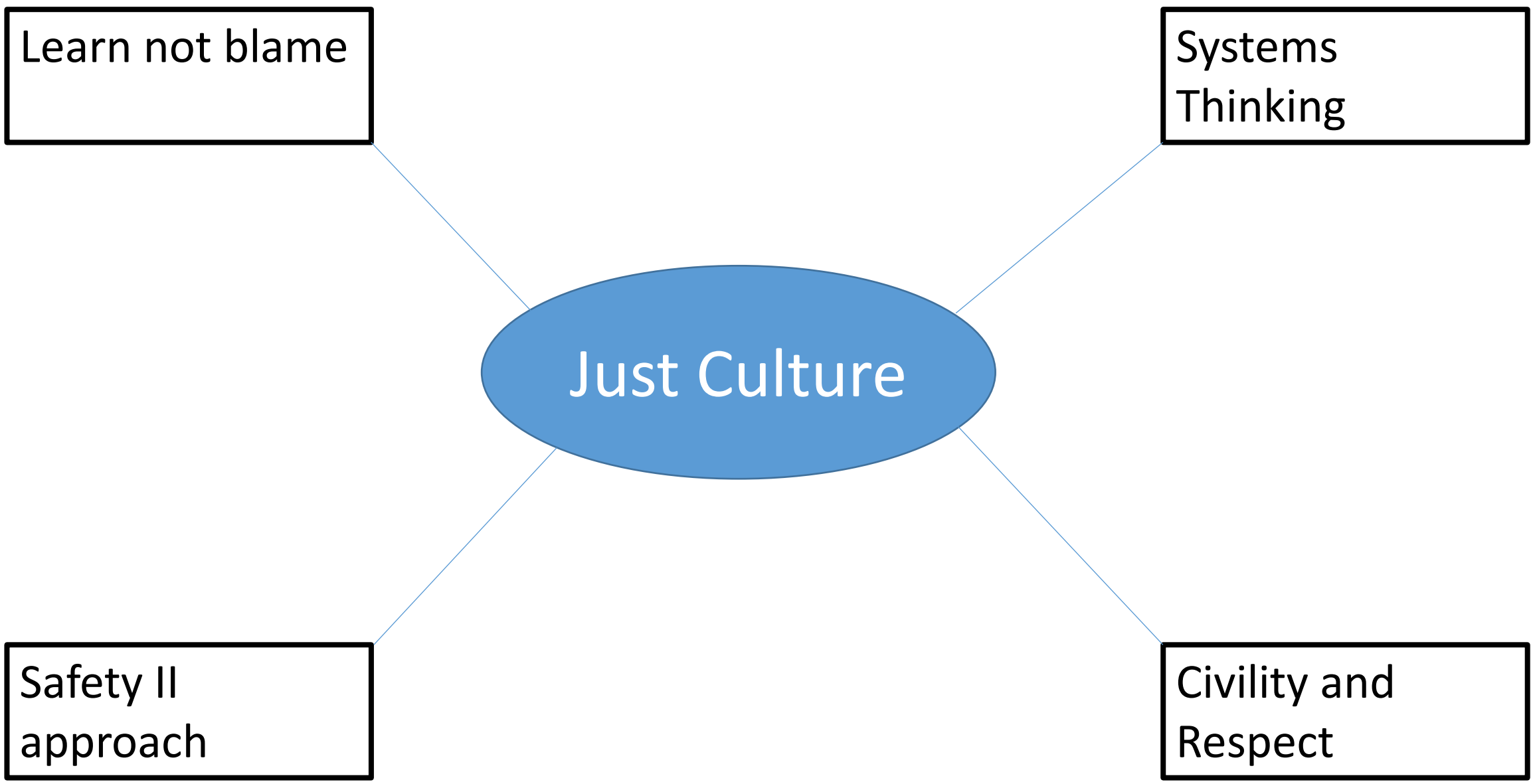
Break down barriers

High-Performing Teams

In situ simulation

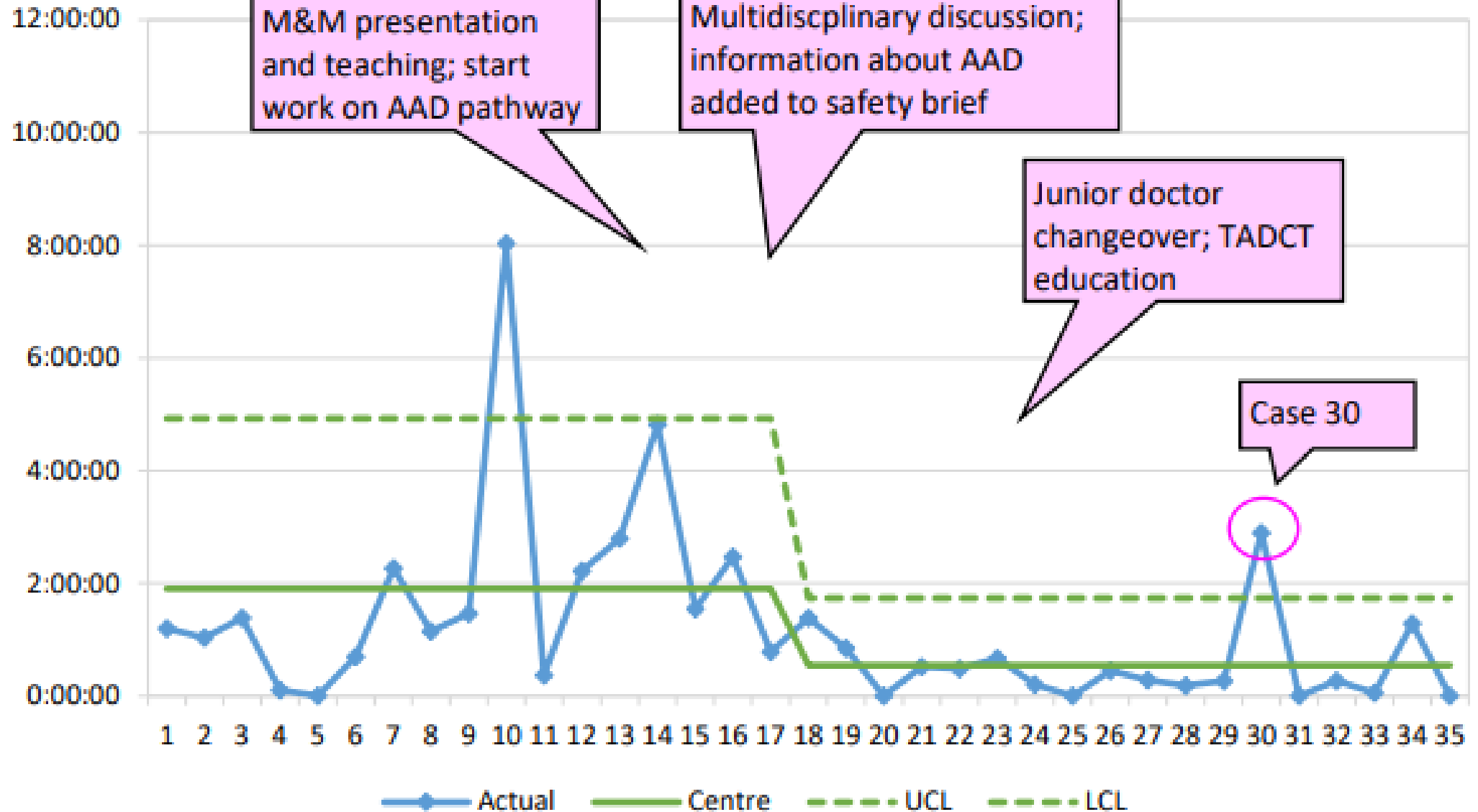
Create Standardisation





X CHART

### Seen to CT Requested

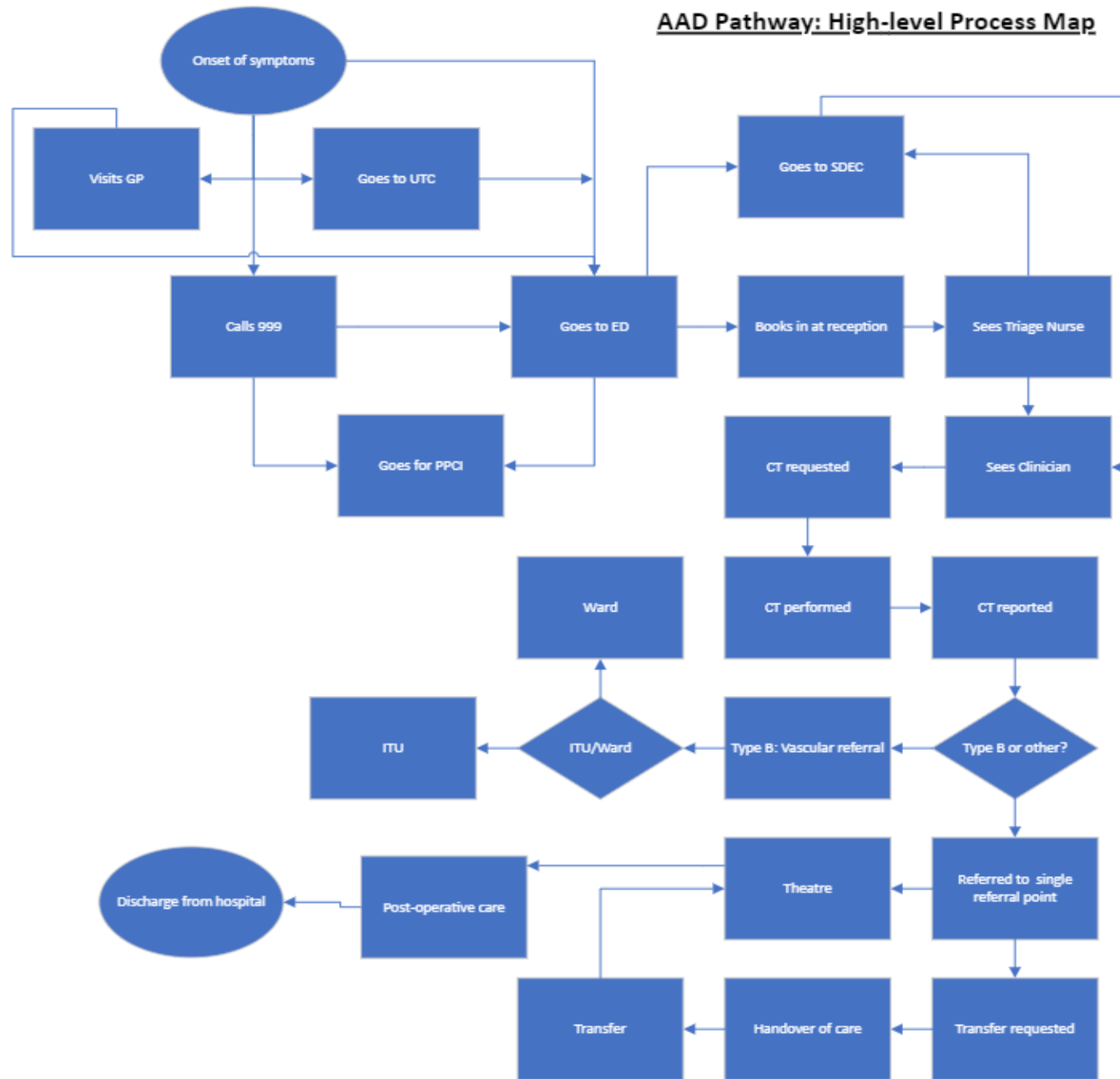




# Next Steps

Working in partnership:  
Hull University Teaching Hospitals NHS Trust  
Northern Lincolnshire and Goole NHS Foundation Trust

### AAD Pathway: High-level Process Map





# References

- Stretton, P. (2022). *Quantum Safety: The New Approach to Risk Management for the Complex Workplace* (1st ed.). Productivity Press.  
<https://doi.org/10.4324/9781003175742>
- Christiano, A., & Neimand, A. (2017). Stop Raising Awareness Already. *Stanford Social Innovation Review*, 15(2), 34–41.  
<https://doi.org/10.48558/7MA6-J918>
- HSIB. Investigation into delayed recognition of acute aortic dissection. 23 January 2020. HSIB. [www.hsib.org.uk/investigations-cases/delayed-recognition-acute-aorticdissection/final-report](http://www.hsib.org.uk/investigations-cases/delayed-recognition-acute-aorticdissection/final-report).
- NHS England and NHS Improvement: Acute Aortic Dissection Pathway Toolkit. Version 1.0. March 2022.  
[https://www.vascularsociety.org.uk/\\_userfiles/pages/files/News%20resources/Acute %20Aortic%20Dissection%20Toolkit%20Final%2020220314.pdf](https://www.vascularsociety.org.uk/_userfiles/pages/files/News%20resources/Acute%20Aortic%20Dissection%20Toolkit%20Final%2020220314.pdf)



# Thank You: Any Questions?

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Hull University Teaching Hospitals NHS Trust  
Northern Lincolnshire and Goole NHS Foundation Trust