IEQAS

Irish External Quality Assessment Scheme

Programme & Book of Abstracts

Annual Participant Conference
Thursday 7th October 2021
Zoom Meeting

Contents

Welcome

Welcome to this year's IEQAS Participants' Conference. Celebrating 40 years, IEQAS is one of the longest-standing quality initiatives in the Irish health service. The IEQAS Annual Conference, is an important event for showcasing commitment to education and improvement in External Quality Assessment (EQA).

We provide EQA schemes for laboratory medicine (including primary care), offering professional advice and guidance as necessary.

The scheme is educational rather than regulatory in nature and provides a means of external audit that operates continuously, thus helping laboratories to achieve their aim of continuous quality improvement.

An increasingly important role for IEQAS is participation in national and international initiatives that have the objective of improving quality of analysis in laboratory medicine.

IEQAS is a non-profit professional association directed by a Steering Committee consisting of nominees from the major professional bodies involved in Irish laboratory medicine:

- **Academy of Clinical Science & Laboratory Medicine**
- **Association of Clinical Biochemists in Ireland**
- **Royal College of Physicians of Ireland, Faculty of Pathology**

On behalf of the IEQAS Steering Committee

ISO 9001:2015 EQA QUALITY ASSURED ORGANISATION

EQALM European Organisation For External Quality Assurance Providers in Laboratory Medicine

IEQAS Committees

Steering Committee

Driscoll, Therese[4]	Chair Senior Medical Scientist, Tallaght UH
McGing, Peadar[4]	Vice-Chair Formerly Principal Biochemist, Mater Misericordiae UH
Brady, Jennifer[2]	Consultant Clinical Biochemist, Children's Health Ireland, Temple St and Crumlin
FitzGerald, Susan[3]	Consultant Microbiologist, St Vincent's UH
Graham, Hazel[4]	Formerly IEQAS Quality Manager
Howley, Patricia[5]	IEQAS Operations and Quality Manager
Kane, Anne[5]	IEQAS Scheme Manager
Kelleher, Patricia[4]	Senior Medical Scientist, Tallaght UH
Murphy, Dympna[4]	Former Chief Medical Scientist, Tallaght UH
Ward, Cara[4]	Senior Medical Scientist, St Vincent's UH

Associated Professional Bodies

[1] Academy of Clinical Science & Laboratory Medicine (ACSLM)
[2] Association of Clinical Biochemists in Ireland (ACBI)
[3] Royal College of Physicians of Ireland, Faculty of Pathology
[4]Co-opted by Steering Committee
[5]IEQAS Operations Management

Additional Specialist Advisors

Barrett, Ned[2]	Formerly Consultant Clinical Biochemist, UH Limerick
Boran, Gerard	Consultant Chemical Pathologist, Tallaght UH
Clarke, Frank	Lecturer, School of Biological Sciences, DIT
Griffin, Damian	Consultant Chemical Pathologist, Galway UH
Jackson, Bernie[1]	POCT Manager, Naas General Hospital
McCafferty, Richard	Chief Medical Scientist, St James's Hospital
MacMahon,Marguerite	Principal Biochemist, Mater Misericordiae UH
O'Kelly, Ruth	Formerly Principal Clinical Biochemist, Coombe Women & Infants UH
O'Sullivan, Niamh	Consultant Microbiologist, Children's Health Ireland, Crumlin/Coombe Women & Infants UH
Perera, Kanthi	Consultant Haematologist, MRH Tullamore
Phelan, Maria	IEQAS Scheme and Quality Administrator

Operations Management

Howley, Patricia (Operations & Quality Manager)
Kane, Anne (Scheme Manager)
Phelan, Maria (Scheme and Quality Administrator)
(UH = University Hospital)

First Plenary Session Chair: Ms Therese Driscoll*, TUH & IEQAS Chair (Kindly sponsored by ACSLM)	
09:30	**IEQAS Chair's address**
09:35	**40 years of IEQAS:** Ms Hazel Graham* & Dr Peadar McGing*, IEQAS
10:05	**Long COVID**: Dr Eoin Feeney, SVUH
10:50 SHORT BREAK	
Second Plenary Session **(Kindly sponsored by Roche)** Chair: Dr Peadar Mc Ging*, IEQAS Vice-Chair	
11:05	**Coagulation and the Covid-19 Pandemic**: Dr Niamh O'Connell, St James's
11:50	**NPT Guidelines 2021 update**: Dr Gerard Boran*, TUH
12:15	**Voyage around the Colon; Current challenges in Bowelscreen**: Prof Pádraic MacMathuna, BowelScreen
12:45 LUNCH	

Chemistry Workshop (Kindly sponsored by ACBI) Chair: Dr Heloise Tarrant, SVUH		Haematology Workshop (Kindly sponsored by Medical Supply Company) Chair: Mr Richard McCafferty*, St James's	
13:45	**Blood spot HbA1c for Paediatrics** Dr Ophelia Blake, UH Limerick	13:45	**Blood Cell Morphology Scheme - Annual Review** Dr Kanthi Perera*, Midland Regional Hospital, Tullamore
14:15	**Natriuretic Peptide Testing; a *new* frontier:** Dr Graham Lee, Mater UH	14:45	**Overseas Haematology Laboratory Experiences**: Ms Mary Byrne, St James's, Ms Nora Kinsella, St James's & Mr Sean Rooney, CHI Crumlin
14:45	**Case Study:** Ms Concepta Kilfeather/Ms Anne Louise Bohan, Sligo UH	15:15	**Haemoglobinopathies:** Dr Emma Tuohy, St James's
15.00	**Case Study:** Mr Mark Neville, St James's		

15.15	**Biochemical Approaches to the Investigation of Vitamin B_{12} Status:** Mr Michele Amoruso, National Orthopaedic Hospital, Cappagh	15:35	**Case Studies (haemoglobinopathies)**: Ms Niamh McCarthy, St James's
Microbiology Workshop Chair: Dr Suzy Fitzgerald*, SVUH		**Transfusion Workshop** Chair: Ms Patsy Kelleher*, TUH	
13:45	**Revised EUCAST guidelines; how we did it**: Ms Orla Donoghue, SVUH	13:45	**Validation of In-House Antibody Screening and Crossmatching of Patients on Daratumumab**: Mr Eamon Clavin, TUH
14:15	**CPE Reference Laboratory, Past, Present and (near) Future**: Dr Niall deLappe, Galway UH	14:25	**Feasibility of Provision of Emergency blood and plasma in extended storage (Golden hour box) for Pre-Hospital Transfusion - A 2year review:** Ms Margaret Ann Connaughton,Blood Transfusion & Tissue Establishment, SVUH
14:45	**Moving to CPE testing on a molecular platform – how we did it**: Ms Nuala Kealy, CHI Crumlin	14:45	**Case Study:** Dr David Menzies, SVUH/Mr Shane Mooney, National Ambulance Service
CLOSE 15:45 -16:15			

IEQAS Annual Report 2020

IEQAS continues to provide and expand a wide-ranging EQA service. Our national schemes include Clinical Chemistry, Full Blood Count, Blood Cell Morphology and HbA1c. We currently have participants in over 90 different schemes, run either by IEQAS directly, or in collaboration with Labquality, the Finnish EQA scheme. We are the partner in Ireland for this international EQA provider, which has 4500 laboratories from more than 50 countries participating in their programme of >150 different schemes. IEQAS has ISO 9001:2015 certification.

We wish to thank all members of the Steering Committee and other IEQAS Specialist Advisors for their continued support and commitment.

Thanks also to the staff in Tallaght UH, SVUH, Mater UH, Children's Health Ireland (CHI) at Crumlin and MRH Tullamore for facilitating IEQAS with sample collection, storage and distribution.

In November 2020, Therese Driscoll, TUH was elected as IEQAS Chair and Peadar McGing (formerly Mater UH) was elected as Vice-Chair.

We would like to thank the following retired members for their assistance over the years:

Ivan Shirley, formerly SVUH - as a Specialist Advisor.

John Brady, formerly CHI, Crumlin – as a Specialist Advisor.

Tom Smith, SVUH – as a Specialist Advisor.

Activities 2020:

- **Fresh material IEQAS schemes:** Such material provides valuable information and will be continued where possible. Fresh material was used in our Clinical Chemistry Scheme (March, July, Sept & Dec 2020); HbA1c (all 5 distributions 2020) & Full Blood Count (Fresh Blood Survey, Oct 2020).
- **IFCC EurAAA1c project for HbA1c**

  IEQAS has been collaborating with this project since it was established in 2016. It was originally set up to as the EurA1c project, in order to achieve a Europe-wide assessment of HbA1c analysis, but the project has expanded to include participants from Asia, America and Africa.

The project is part of the IFCC committee for Education in the Use of Biomarkers in Diabetes (C-EUBD). Its success highlights the importance of EQA in driving analytical quality improvement and follows on from the successful 2011 implementation of International Standardisation of HbA1c in Ireland.

The 2016 data published in The Journal of Clinical Chemistry http://clinchem.aaccjnls.org/content/early/2018/05/22/clinchem.2018.2887955 shows that Irish (IEQAS) participants demonstrated the best performance (bias, CV) of the 10 countries collaborating in the fresh blood element of the survey.

The EurA1c Report for 2017 and 2018 can be found at http://www.ieqas.ie/surveysstudiesandpublications/hba1c/

The report for 2019 can be found at:

https://www.ieqas.ie/resources/pdf/Other/EurAAA1c%20Full%20Report%202019_final_v1.pdf

(The EurA1c 2020 report will be available imminently).

This year's set of two whole blood samples will be sent to participants in two weeks' time. We encourage all participants to analyse their samples before Friday 29th October, so that their anonymised data may be included in the EurAAA1c project.

- **SARS-CoV-2 EQA Schemes**: Labquality introduced new Covid EQA schemes in 2020.
- **EQALM:** IEQAS is a member of the European Organisation for EQA Providers in Laboratory Medicine; IEQAS contributes to many EQALM surveys, which assist in suggesting improvements for EQA schemes across Europe.
- **National POCT Committee:** IEQAS is represented on this committee. (Guidelines for safe and effective Near Patient Testing (NPT) 2021 Update has been approved for soft release by the:

  National Near Patient Testing (NPT) Consultative Group, on April 21, 2021).

  Reference Interval Harmonisation Project Group: IEQAS assist on this National Clinical Programme for Pathology project.

- **ICSH:** Jointly with the ACSLM, IEQAS are affiliated with the International Council for Standardisation in Haematology; Richard McCafferty is the Irish representative.
- **Health Products Regulatory Authority:** IEQAS have regular contact with the HPRA. Individual participant performance is never discussed and remains the responsibility of the participant.
- **Suppliers:** IEQAS maintains good relations with many suppliers and assists with problems and issues as they arise.

Our new online annual re-order forms were available for 2021 (and re-order forms for 2022 will be emailed to all participants shortly). A summary of all schemes offered by IEQAS, and the changes to Labquality Schemes for 2022, are included with this booklet.

A copy of the Labquality Product Catalogue 2022 will be emailed to you as soon as it available and can also be found on IEQAS website. Labquality schemes should be ordered directly from IEQAS and we are delighted to assist you with any queries you may have throughout the year).

Ms Patricia Howley, Operations and Quality Manager, IEQAS

IEQAS Programme 2022

IEQAS provides schemes directly and from Labquality, our Finnish EQA partner

- IEQAS deal with all your orders & queries, incl. Labquality
- Prices in Euro
- Local advice & expertise
- Special Surveys
- Pre-order Conference places 2022

IEQAS National Schemes*

www.ieqas.ie -> Participant Info -> IEQAS Schemes

IEQAS National schemes

Blood Cell Morphology

- One sample, distributed every 2 months
- Educational (not scored)
- Annual review at IEQAS Conference
- Participants are encouraged to supply interesting cases

Clinical Chemistry (general)

- One sample, distributed monthly
- Human – based samples
- Minimally processed patient pools (3/year)
- Reference Values quoted (>1/year)

Full Blood Count

- Two samples, distributed every 2 months (analytes include RDW)
- Annual Fresh Blood Survey

HbA_{1c} (suitable for Laboratory and POCT)

- Two samples, distributed 5 times/year
- Minimally processed patient pools.
- Participation in Eur**A**1c, (Annual survey since 2016 in Europe and now including Asia/Africa and America
- Scored vs Reference Value (ERL)
- Suitable for Laboratory and POCT meters

Anonymised IEQAS participant data may be used for research purposes to assist with improvement in EQA services nationally and/or internationally.

Labquality (Finland)

(Further details in 2022 Labquality Product Catalogue)

https://www.labquality.fi/en/external-quality-assessment/eqa-programme-2022/

New schemes & products

Changes in distribution schedule

Changes in scope, specimens or parameters

Planned pilot schemes

New schemes & products

- 2281 Interleukin-6
- 5851 Francisella tularensis, antibodies
- 5651 CMV and EBV, nucleic acid detection, quantitative
- 2753 Gastric biomarkers
- 2526 Ketones (beta-hydroxybutyrate), POCT
- 5562 Multiple Respiratory Virus nucleic acid detection
- 7807 Preanalytics, Pneumatic Sample Transport

Changes in distribution schedule

- 4480 Column agglutination methods: grading of reactions and patient cases
- 5635 Dengue virus, antibodies and antigen detection

- 5472 Faecal parasites multiplex, nucleic acid detection5679 Hepatitis B virus, nucleic acid detection (DNA)
- 5678 Hepatitis C virus, nucleic acid detection (RNA)
- 5680 HIV-1, nucleic acid detection (RNA)
- 5086 Human papillomavirus, nucleic acid detection
- 5470 Parasites in blood, Giemsa stain, virtual microscopy
- 5471 Parasites in blood, MGG stain, virtual microscopy
- 5473 Trichomonas vaginalis, detection
- 3170 Urine bacterial screening with automated analyzers

Changes in scope, specimens or parameters

- 5300 Respiratory infections multiplex, nucleic acid detection New parameters: SARS-CoV-2 and S. pneumoniae.

Planned pilot schemes

Information about pilot contents and schedules will be announced later. Pilot schemes are EQA schemes under our product development.

Labquality: Kindly sponsoring the 2021 IEQAS Book of Abstracts

LABQUALITY DAYS

International Congress on Quality in Laboratory Medicine

10 - 11 FEBRUARY 2022 | HELSINKI, FINLAND

In February 2022, the inspiring atmosphere of the annual scientific congress gathers medical laboratory and quality management professionals to Helsinki, Finland, to exchange ideas and meet colleagues.

Our keynote speakers from three different continents will lead the discussions on the **Past and Future of EQA and QC**. Please see the entire scientific program on our website!

History of Quality Control
James O. Westgard
President of Westgard QC,
Westgard Quality Control, USA

Improving EQA Through International Cooperation
Sverre Sandberg
Director,
Noklus, Norway

Do We Really Measure the Quality of the Laboratory?
Mario Plebani
Professor,
University of Padova, Italy

Future Visions of EQA and Quality Control - Integrate IQC and EQA?
Tony Badrick
Chief Executive Officer,
RCPAQAP, Australia

REGISTRATION IS OPEN ON OUR WEBSITE!

Please visit www.labqualitydays.com
or contact: info@labquality.fi

TICKETS
Early bird fee (by 30 Nov): **390€** +VAT 24%
Normal fee (1 Dec 2021 – 31 Jan 2022): **490€** +VAT 24%
Late and onsite registration fee: **590€** +VAT 24%

ePoster exhibition
Share your research results in 2022!
Read more on our website.

Plenary: Abstracts & Biographies

IEQAS Celebrates 40 Years!

Ms Hazel Graham and Dr Peadar McGing,
IEQAS Steering Committee

Abstract

The Irish External Quality Assessment Scheme (IEQAS) this year celebrates 40 years of operation since establishment 1981, making it one of the longest-standing quality initiatives in the Irish health service.

This presentation celebrates the success of IEQAS through many difficult and challenging times. This success is largely due to the totally voluntary commitment of Steering Committee, Specialist Advisors and to the dedication of the Operations Management team who carry out the day-to-day operations with (we hope!) the appearance of a smooth sea, despite occasional frantic paddling beneath the surface.

The Steering Committee includes nominees from the associated professional bodies involved in laboratory medicine in Ireland (Academy of Clinical Science and Laboratory Medicine (ACSLM, previously AMLS); Association of Clinical Biochemists in Ireland (ACBI); Faculty of Pathology of the Royal College of Physicians of Ireland (RCPI).

The concept of EQA as we know it today had humble beginnings in a survey undertaken by
F. William Sunderman, in Pennsylvania in 1946. The following three decade saw the very gradual introduction of national EQA schemes, including UKNEQAS in 1969. Irish labs joined that and other schemes but it was clear that a national scheme for Ireland was needed. After discussions involving the Department of Health and the three professional bodies (ACBI, AMLS, RCPI) IEQAS was established in 1981. IEQAS started with just one scheme, Clinical Chemistry, moving into Haematology in the late 90s, and later (through

the partnership with our Finnish colleagues Labquality) to over 150 schemes covering all clinical laboratory disciplines.

IEQAS is a not-for-profit organisation in which participation is voluntary and confidential. The scheme is educational rather than regulatory in nature.

IEQAS has long-established links with other European EQA providers through its membership of EQALM (European Organisation for EQA Providers in Laboratory Medicine). IEQAS also maintains positive communication channels with the HPRA (Health Products Regulatory Board) and the many manufacturers/suppliers when quality issues arise.

An increasingly important role for IEQAS is participation in national and international initiatives that have the objective of improving quality of analysis in laboratory medicine. One important international initiative, the Implementation of International Standardisation of HbA1c in Ireland, is described.

Throughout the 40 years, IEQAS has depended also on a network of hospitals who have kindly provided storage facilities and bench space to allow us to package the samples. In addition, hospital staff routinely facilitate us in providing donor and/or pooled residual samples for use in our EQA schemes. As well as sourcing samples they also ensure that all donated pooled samples are fully anonymised and compliant with all applicable regulations.

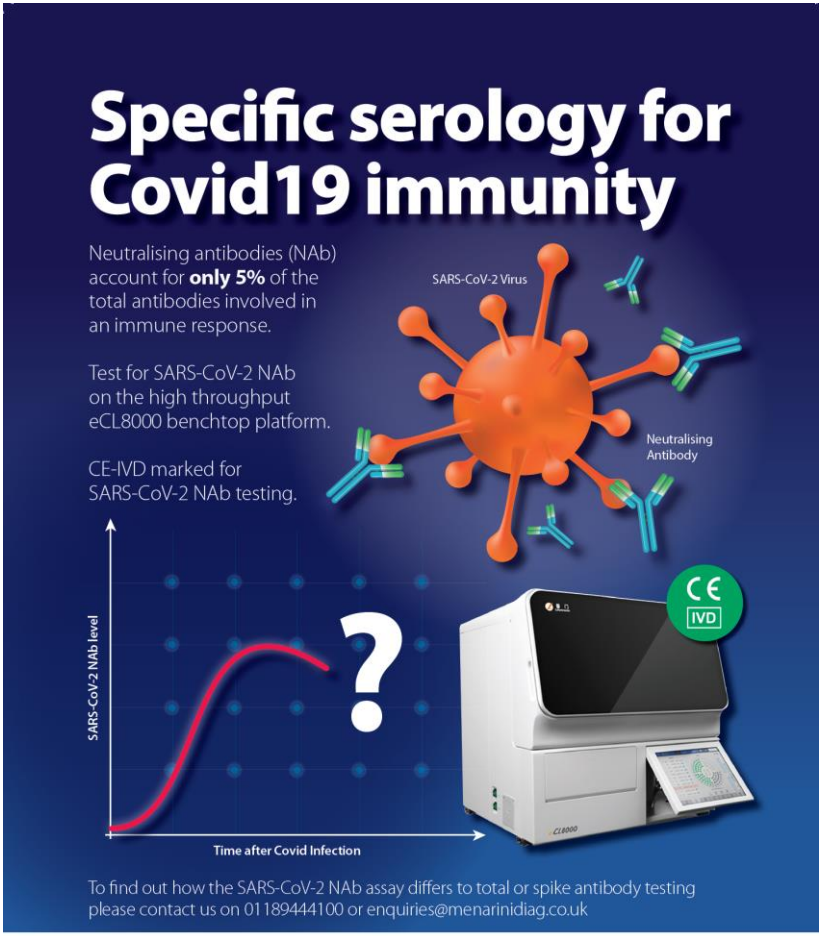
Biographies

Dr Peadar McGing recently retired as a Principal Clinical Biochemist at the Mater Misericordiae University Hospital in Dublin. Peadar has a strong interest in EQA and lectures on that topic to the UCD MSc in Clinical Biochemistry. He is the current vice-chair of IEQAS and has been a Specialist Advisor or Steering Committee member for almost three decades. He

is co-author and co-editor of a number of the ACBI's guideline booklets. Peadar also has a special interest in the history of laboratory science and has published a number of articles on the subject.

Hazel Graham worked with IEQAS from 1992 to 2019, as Operations Manager and later Quality Manager, and remains on the IEQAS Steering Committee. Previous work experience included various laboratory/management roles in clinical and diagnostic/pharmaceutical manufacturing sectors. She has an honours degree in Biochemistry and a post graduate Diploma in Quality Control, both from Trinity College Dublin.

Kindly sponsoring the IEQAS 40th Year Anniversary Booklet



Long COVID

Dr Eoin Feeney, St Vincent's University Hospital

Abstract

"Long COVID". A significant proportion of individuals who recover from SARS-CoV2 infection have prolonged or ongoing symptoms. These can, on occasion, persist for several weeks or months, and can lead to a significant impact on professional and personal life. Symptoms are varied, but include fatigue, shortness of breath, chest pain, and poor concentration among others. No specific cause has been found to explain this condition. Treatment is multidisciplinary and involves input from several medical and allied health professionals. In this review we will examine the prevalence of "Long COVID", potential causes, treatment and prognosis.

Biography

Eoin Feeney is consultant in Infectious Diseases at St. Vincent's University Hospital. He trained in ID through the SpR training program in RCPI, and completed a PhD in the metabolic complications of HIV infection at UCD in 2012. He completed a 2 year Clinical Research Fellowship in Infectious Diseases at Massachusetts General Hospital and Brigham and Women's Hospital in Boston in 2014, and returned to SVUH to establish the department of Infectious Diseases. This department has now grown to include 5 consultants, several trainees, and an active clinical and research programme in ID, OPAT, viral hepatitis, and sexual

health including multiple nurse specialists. The ID service has been at the forefront of the clinical management and follow-up of patients with SARS-CoV2 infection since the start of the pandemic, and runs a dedicated COVID-19 follow-up clinic.

Coagulation and the COVID-19 Pandemic

Dr. Niamh O'Connell, National Haemophilia Director, Consultant Haematologist, The National Coagulation Centre, St James's Hospital, Dublin.

Abstract

The NCC is the lead comprehensive care centre for adults in Ireland with Haemophilia and related bleeding disorders, and also provides specialist diagnostic and treatment services for thrombotic conditions including Obstetric and Cancer associated thrombosis. Clinical research includes a number of high impact papers on COVID19 and coagulation. The NCC is a hub for clinical services, research, training and education in disorders of haemostasis on a national basis.

Biography

Dr. Niamh O'Connell, M.B., Ph.D., F.R.C.P.I., F.R.C.Path.
National Haemophilia Director, Consultant Haematologist, The National Coagulation Centre, St James's Hospital, Dublin**.**

Dr Niamh O'Connell is National Haemophilia Director at the National Coagulation Centre (NCC), St. James's Hospital, Dublin, Ireland. Following specialist training in Haemostasis and Thrombosis in the UK, Dr O'Connell returned to Ireland in 2004 as Consultant Haematologist in Tallaght University Hospital, joined the NCC in 2010 and took on the role of Director of the NCC in 2018.

NPT Guidelines 2021 Update

Dr Gerard Boran, Tallaght University Hospital

Abstract

Near-patient testing (NPT) aims to improve patient outcomes through provision of a laboratory medicine service by healthcare professionals using small analytical devices provided near to the patient rather than from a clinical laboratory. The Irish National Near-Patient Testing (NPT) Consultative Group have been revising the Irish National NPT Guidelines over the past two years. Due to the unique circumstances of the coronavirus pandemic, we released a final beta-Version on April 20, 2020 in the interests of having an updated authoritative guideline available and to provide an opportunity for early feedback. Further updates were released in April, 2021.

Since the first Irish NPT guidelines were published by our Group back in 2007, terminology has moved full-cycle with the term NPT now re-introduced and replacing point-of-care testing (POCT) in the EU's latest IVD Regulation which also excludes patient self-testing.

The presentation will outline the main features of the updated 2021 guidelines and discuss their application in a number of near-patient testing settings. It is emphasised that all hospital-based NPT should be accredited to ISO 15189/22870 standards and meet the requirements as described in this guideline. Also we strongly recommend that community healthcare facilities including primary care centres establish a close link with their local hospital pathology service to ensure testing is provided in a safe and effective manner and to be ultimately accredited to the required ISO 15189/22870 standards. This can only be achieved in conjunction with the local hospital pathology service.

Pharmacies providing NPT services should follow the Guidance on the Provision of Testing Services in Pharmacies from the Pharmaceutical Society of Ireland, and should also

be aiming for ISO 15189/22870 accreditation as an ultimate goal. Given that the commencement date of the new IVDR is May 2022, its importance and role of the HPRA is described in the guidelines as well as the role of the Irish National Accreditation Board (INAB) in relation to accreditation.

Biography

Dr Gerard Boran (FFPath, FRCPI, CCD) is consultant chemical pathologist at Tallaght University Hospital (TUH) since 1997 and is a clinical professor at TCD. He is course director of the TCD MSc course in Clinical Chemistry, and chairs the National Near-Patient Testing Consultative Group. Previous posts held included Dean of the Faculty of Pathology of the RCPI (2006-2009), Clinical Lead of the National Clinical Programme in Pathology (2011-2016), and Clinical Director of Diagnostic Services at TUH (2012-2015). He is lead clinician at the Osteoporosis/Metabolic Bone Disorders clinic at TUH. Dr Boran is PI of the Celtic Ranges Project (supported by the National Childrens Hospital Foundation) and holds an Enterprise Ireland/Disruptive Technologies Innovation Fund project grant for the FerrTest project (2020-2023). He is an associate editor for the Irish Journal of Medical Science, and has over 100 publications.

'Voyage around the Colon'; Current challenges in BowelScreen:**The National Screening Programme for Colorectal Cancer**

Prof. Pádraic MacMathuna, Clinical Director, BowelScreen
Clinical Professor of Medicine, Mater Misericordiae University Hospital

Abstract

Following BreastCheck and Cervical check, (exclusively for women) BowelScreen was introduced in 2012 as a nationwide screening programme for men and women with the aim of reducing mortality from Colorectal cancer. It targets the general population between 60 and 69 using FIT as the screening tool sent to homes with colonoscopy being offered to individuals who are FIT +ve.

Fourteen endoscopy units nationwide participate based in 3rd or 2nd hospitals with a polyp detection rate of approx 50% and cancer detection of 3-5%.

Clinical Advisory (CAG) and QA groups together with an Interval Cancer Audit committee are central to establishing and monitoring QA and designated KPIs. This presentation will give an overview of BowelScreen activity, QA measures, achievements and challenges since 2012 and outline the measures adopted to address these and more recent challenges including the Covid pandemic, HSE cyber attack and the unique medico-legal environment in which healthcare and screening in particular must operate.

Biography

Pádraic Mac Mathuna MD FRCPI is an undergraduate of UCD, graduating in 1981 with basic training in St Vincent's, progressing to research and clinical posts in gastroenterology in Trinity College & St James' Hospital. Pádraic completed his postgraduate fellowship in Kings College Hospital London before returning to Mater Hospital Dublin. He was appointed Assistant Prof of Medicine in Boston University.

In 1995 he was appointed Consultant Gastroenterologist in Mater Hospital (MMUH), with subsequent appointment as Clinical Professor of medicine in UCD (based on research portfolio, postgraduate education development and contributions to European GI societies activities).

Pádraic's research output is > 70 papers and he has published in international peer reviewed journals. He is a supervisor of postgraduate MD and PhD degrees in UCD.

Pádraic joined BowelScreen CAG in 2008 as Endoscopy lead and was subsequently appointed Clinical Director in 2020. He recently retired from MMUH.

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Workshop Abstracts & Biographies Clinical Chemistry:

Use of dry blood spot (DBS) HbA1c to facilitate the virtual paediatric diabetic clinics in UHL

Dr Ophelia Blake, Consultant Clinical Biochemist, University Hospital Limerick

Abstract

Background: The measurement of HbA1c in whole blood is a common clinical Laboratory test, mainly indicated for the diagnosis and monitoring diabetic patients. The covid 19 lockdown resulted in delayed diagnosis and increased DKA presentation due to the cancellation of F2F clinics and phlebotomy appointments. To facilitate the virtual diabetic clinics, the Biochemistry Laboratory was approached to determine the feasibility of using dry blood spot (DBS) for HbA1c analysis.

Methods: Paediatric patients with diabetes were enrolled in this study by the treating Endocrinologist. Venous EDTA blood and capillary finger prick DBS samples were taken simultaneously and sent for HbA1c analysis. A total of 63 diabetes patients and 5 control subjects were recruited. For DBS, capillary blood/ IQC material/EQA samples were each spotted onto 3-4 circles of the DBS card and air dried for 2 hours. HbA1c analyses were performed on two Tosoh G8 HPLC analysers. The Tosoh haemolysis buffer (600µL) was used to extract samples from 6mm punches from the DBS card. The stability of DBS sampling matrix was assessed by (i) measuring HbA1c in 7 DBS samples over 7 days and (ii) sending 22 DBS cards via the post to the Biochemistry.

Results: As part of the DBS verification studies, imprecision was determined at 2 levels of IQC material (mean 39 and 88 mmol/mol) and met the ACB consensus targets of imprecision for whole blood (within lab CV 3% and between lab CV 5%) and the IFCC working group target of <2.5%. A

regression analysis of DBS HbA1c with the current routine EDTA blood HbA1c was performed for the samples collected. The correlation coefficient was r^2=0.97. The average bias between the 2 methods was -3.6 mmol/mol. We found that the DBS sample stability was acceptable for up to 6 days.

Conclusions: The DBS HbA1c sample is a suitable alternative sample type for monitoring our paediatric patients with diabetes. On surveying the patients and their parents, it was found that this sample type was widely accepted and greatly facilitated attendance at the virtual clinics in UHL.

Biography

Dr Blake is a Consultant Clinical Biochemist in ULHG since 2012. She obtained her PhD in 2001 in UCD Faculty of Medicine. Dr Blake has a special interest in Prostate cancer and oncology biomarkers. She has worked in several hospitals in Dublin during her career.

Natriuretic Peptide Testing; a *new* frontier

Dr Graham Lee, Mater UH

Abstract

The title of this talk is "Natriuretic Peptide Testing; a *new* frontier!".

it is timely (if not just a little late) to talk about NT-proBNP testing in the community, particularly given the launch of the GP contract last year and the structured Management of Chronic Disease including Heart Failure. Dr Lee is co-author of the national guideline on Laboratory Testing for Natriuretic Peptides (NP)-BNP / NT- proBNP which was published in September 2019. The second edition is already currently under consultation, ahead of its review date in 2022, with a need for even further consideration to Natriuretic Peptide testing particularly in light of the GP contract. Whilst BNP and NT-proBNP have shared the limelight in terms of heart failure diagnosis and management, NT-proBNP takes centre stage in supporting heart failure management in the community setting. However many post-analytical challenges remain in interpreting NT-proBNP results which will be discussed presently.

Biography

Dr Graham Lee is Consultant Clinical Biochemist at the Mater Hospital Dublin, Midlands Hospital Mullingar and National Orthopaedic Hospital Cappagh. He is Associate Professor at UCD where he is course director of the MSc in Clinical and Diagnostic Biochemistry. He is Past-President of the Association of Clinical Biochemists in Ireland and his work with the European Federation of Laboratory Medicine is ongoing as member of the Task Group for the EFLM's Post-graduate Syllabus Course where he is currently coordinating delivery of the course's Liver module.

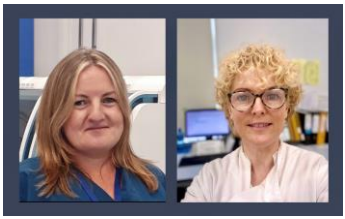
CASE STUDY: Parathyroid Adenoma:When the control is out of control

Ms Connie Kilfeather & Ms Anne Louise Bohan,
Biochemistry Department Sligo UH

Abstract

This is a case study of a presentation of Hypercalcaemia > 5.0 mmol/l to the emergency department of Sligo University Hospital. This case will discuss patient symptoms on admission to ED, patient review and critical intervention to manage a life threatening event.

Biography



CASE STUDY: A case of Acute Compartment Syndrome

Mr Mark Neville,Chief Medical Scientist,Biochemistry Department,St James's Hospital

Biography

Mark Neville is Departmental Chief Medical Scientist in Biochemistry in St James's Hospital, Dublin. He qualified in the old Regional Technical College in Cork in 1987 after training in the then Cork Regional Hospital. After three months in Limerick Regional (in Microbiology), he then worked as a locum medical scientist until 1992 in the Mercy Hospital Cork. In 1992 he started on monthly contracts in St James's and now going on thirty years he is still there. He served for over ten years on the ACSLM council and maintains a lifelong laboratory interest in EQA.

Biochemical Approaches to the Investigation of Vitamin B_{12} Status.

Mr Michele Amoruso, National Orthopaedic Hospital, Cappagh

Biography

Michele Amoruso (Mick), MSc, PGCE, FACLMS
Trained at University Hospital of Wales Cardiff, specialising in Clinical Biochemistry and qualified in 1985.
Mick has gained many years' experience working in busy Medical Laboratories both in the UK and Ireland.
Gained promotion to Senior grade in 1995 and took on role as Training and Education Officer for the laboratory after successfully completing post grad Certificate in Education.
Was instrumental in developing an in-house, training programme for laboratory assistants and undergraduate students.

Took part in various research projects which would prove to be of benefit to the laboratory, namely Troponin-T in 1997 and NT-ProBNP in 2006.

Was involved as part of quality team to prepare for CPA UK accreditation after laboratory centralisation.
Moved to Ireland in 2000 to take on role as Quality Officer/ Senior Medical Scientist, for the dept of pathology and laboratory medicine at a Dublin maternity hospital. Engaged with the cross-Maternity Alliance in preparing for laboratory accreditation.

Joined National Orthopaedic hospital Dublin in 2009 and focussed mainly on preparing the Biochemistry department for ISO 15189 laboratory accreditation.

Took on role as Journal club editor for organising staff CPD. Joined the Clinical Chemistry Advisory Body (CCAB) of the ACSLM and took on the role as chair for 3 years. CCAB team responsible for organising meetings, workshops and inviting guest speakers to present at national conferences. Completed an MSc in Biomedical Science (Clin Chem) with University of Ulster

Continues to work in Multidisciplinary laboratory developing and streamlining the service to meet the needs of users.

Workshop Abstracts & Biographies Haematology:

Blood Cell Morphology Scheme: Annual review

Dr Kanthi Perera, Consultant Haematologist,
Midland Regional Hospital (MRH), Tullamore

Abstract

During 2020-2021 IEQAS circulated 6 morphology cases. The presentation will review some of the morphological abnormalities in each case with a brief review of the diagnosis, to include how one could arrive at the diagnosis.

Biography

Dr Kanthi Perera graduated from the Faculty of Medicine, University of Colombo, Sri Lanka, initiated her post-graduate training in Sri Lanka and completed it at The Royal London Hospital in England. She was appointed as the first Consultant Haematologist in the National Cancer Hospital in Colombo and gave the leadership for the establishment of the first stem cell transplant unit in the country at the National Cancer Hospital. Dr Perera was hugely involved with both undergraduate and postgraduate teaching in the country. She moved to Ireland in 2001 and held a temporary consultant post in Mid-Western Regional Hospital, Limerick for 3 years and in UCH Galway for 9 months and is now Consultant Haematologist at the Midland Regional Hospital in Tullamore. Dr Perera carries out regular morphology teaching for SpRs and is a member of IEQAS Haematology Review Group.

Overseas Haematology Laboratory Experiences

Ms Mary Byrne, Chief Medical Scientist, Coagulation Laboratory, St. James's Hospital, Dublin

Abstract

The World Federation of Haemophilia works globally to achieve treatment for all people with haemophilia and other inherited bleeding disorders. Through the establishment of the WFH twinning programme; partnerships are formed between Haemophilia Treatment Centres and patient organisations in developing and developed countries. The objective of this partnership is to assist emerging centres improve the diagnosis of inherited bleeding disorders and treatment of patients through exchange of knowledge, experience and skills in a mutually beneficial relationship.

A twinning partnership was established between the Haemophilia Treatment Centres and patient organisations in Ireland and Jordan. My first visit to the Al Bashir Hospital in Amman, Jordan was in September 2019 when I travelled with Consultant Haematologist colleagues and a representative from the patient organisation in Ireland as part of our twinning programme.

During this visit I met the laboratory team in the hospital. The laboratory is well established with a test repertoire that includes factor assays and thrombophilia screens. During the initial visit we were able to share our experiences with assays for the diagnosis of inherited bleeding disorders and to discuss any pitfalls and challenges that arise in the provision of a laboratory testing service. Plans were made for future visits where we hoped to collaborate on testing for Coagulation factor inhibitors and Von Willebrand Screens.

However, since our visit in 2019 we have been unable to return to Jordan but have been in regular communication with the team in Al Bashir Hospital. We have organised monthly meetings and webinars with all members of the multi-disciplinary team from the Haemophilia Treatment Centres in

Ireland and Jordan. These webinars allow collaboration and discussion on many aspects of service provision. It is hoped that we will be able to resume our in-person visits in the near future and to continue to develop our partnership in the twinning programme.

Overseas Haematology Laboratory Experiences: Haematology Overseas – Lesotho and Kenya

Ms Nora Kinsella, St James's Hospital

Abstract

The Irish laboratory service has a long history of supporting development and training of medical scientists in hospital laboratories overseas especially Africa.

The Irish government funded an aid program for over 20 years in Lesotho in Southern Africa from the late 70s. The program provided a DIT approved lab training program up to certificate level. Irish medical scientists gave in- class lectures, laboratory practicals and in service training in hospitals spread all over the country. The top students won scholarships to Ireland to complete their studies to degree and masters' levels. Many of these students returned to Lesotho to become laboratory managers or to advisory positions in the department of health. I was fortunate to work in this program from 1983- 1986.

More recently in 2015 I was invited by Joe Vaughan (now retired from DIT) to visit the Mater Hospital in Nairobi, Kenya. This lab is ISO 15189 accredited. Staff were well training but lacked ongoing CPD opportunities. We arranged a lecture program on latest updates in haematology and a full day morphology & parasitology workshop for the lab staff in the Mater and some other city centre hospitals. Training aids and classic teaching slides were provided to the Mater laboratory for future staff training

In 2018, Joe Vaughan moved to a managerial role in a very small mother and baby clinic in a very impoverished area of

Nairobi close to the city dump. On my visit there, the lab staff were interested in CPD opportunities but also had different needs as they were developing their own blood collection on site with very little equipment. The main request here was for blood packs, metal sealer clips and plasma expressors…. the latter long extinct from modern Irish laboratories.

Experience from '2010 to date' working in Dar es Salaam, Tanzania

Mr Sean Rooney, CHI Crumlin

Abstract

I first visited Muhimbili National Hospital Laboratory, Dar es Salaam in 2010. This was at the invitation of a charity (TLM Their Lives Matter) and Irish paediatric consultant oncologist, Dr Trish Scanlan.

Before 2010 there were very limited diagnostic platforms or treatments available in Tanzania for any paediatric Leukaemia, lymphoma or most solid tumours. Blood, BM morphology and basic Histopathology were the only tools at their disposal to classify a disease.

On first visit in 2010 we met with laboratory staff (scientific and medical) to discuss how we might share our experience. MNH hospital in Dar es Salaam is on same campus as Muhimbili university which runs a Biomedical Sciences program. There were well qualified scientists available to take on the work and the methodologies we were proposing to support the new haematology/oncology paediatric program.

What followed for next 2 years had mixed results with a myriad of problems encountered, for example reagent supply, staff availability, institution willingness and no experience with Flow Cytometry (with exception of Lymph subset automated testing).

However, with support of a number of dedicated local Tanzanian biomedical scientists they slowly introduced a Flow Cytometry based paediatric diagnostic service covering all of Tanzania. This is now running very well with continued support from CHI (at Crumlin) cytometry service.

There are still a number of significant challenges facing the service. All reagents, training and instrument maintenance are still paid for by the TLM charity. Reagent and consumable

supply issues continue, with sometimes weeks without a service being available

This presentation will give a very brief summary of past lessons learnt, present status and future plans for the service.

Haemoglobinopathies

Dr Emma Tuohy, St James's Hospital

Biography

Dr Tuohy is a consultant Haematologist in St James Hospital and is the clinical lead for the adult sickle and thalassaemia centre, which was established in 2014. She qualified from UCC in 2001, and completed her specialist training in the UK, which included a fellowship Thrombosis in St Thomas Hospital, London. She worked as a consultant Haematologist in the Royal Free Hospital, London before returning to work as a consultant in Dublin in 2014.

Dr Tuohy established the only adult service for patients with sickle cell disease and thalassemia in Ireland. Her interests also include congenital and acquired red cell disorders, apheresis, TTP and begin Haematology disorders, and the centre in SJH along with the red cell centre in OLHC are the only Irish adult & paediatric centres recognized as centres of excellence by the European network for rare red cell disorders.

Dr Tuohy is the principle investigator in a number of clinical trials for congenital rare red cell disorders, including Pyruvate kinase deficiency and sickle cell disease.

Haemoglobinopathy Case Studies

Ms Niamh McCarthy, St James's Hospital

Abstract

Two Haemoglobinopathy case studies will be presented:
- Pregnancy in Sickle Cell Anaemia
- MDS Acquired Alpha Thalassaemia

Biography

Having commenced her MedLab journey in Cork Institute of Technology in 1997, Niamh graduated with a Bachelor of Science in Biomedical Sciences from Dublin Institute of Technology at Kevin Street/Trinity College Dublin in 2002. She attained her Masters Degree from the University of Ulster in 2011.

Niamh has worked in the Haematology laboratory of St. James's Hospital Dublin since 2004, and in the Haemoglobinopathy laboratory since 2015. After fulfilling an Acting Senior position for over three years, she was promoted to Senior Medical Scientist in the Haemoglobinopathy laboratory 2019.

Workshop Abstracts & Biographies Microbiology:

Revised EUCAST Guidelines; how we did it

Ms Orla Donoghue, SVUH

Abstract

The European Committee on Antimicrobial Susceptibility testing (EUCAST) is responsible for developing and standardising in-vitro antimicrobial susceptibility testing methods used in Europe and determining, reviewing and revising European clinical breakpoints for the surveillance of antimicrobial resistance. In 2020 EUCAST introduced significant changes to their breakpoint tables for interpretation of MIC's and zone diameters. These changes came about as a result of the redefinition of the traditional "Intermediate" category of antimicrobial susceptibility testing to "Susceptible, Increased Exposure". The implementation of these new guidelines presented a challenge for both laboratory staff and the clinical microbiology team. This presentation will outline the approach taken in the Microbiology Department of St. Vincent's University Hospital to introduce the changes, the challenges faced and issues remaining.

EUCAST EUROPEAN COMMITTEE ON ANTIMICROBIAL SUSCEPTIBILITY TESTING
European Society of Clinical Microbiology and Infectious Diseases

Biography

Orla Donoghue is a Senior Medical Scientist in the Microbiology Department of St. Vincent's University Hospital. She has a particular interest in antimicrobial susceptibility testing and has worked predominantly in this section of the laboratory for the last ten years.

CPE Reference Laboratory, Past, Present and (near) Future!!

Dr Niall Delappe, Galway Microbiology Reference Laboratory Services, University Hospital Galway

Abstract

The role of the CPE reference laboratory is to support clinical laboratories by differentiating between CPE's and carbapenem resistance due to other reasons, provide extended antibiotic susceptibility testing on CPE's when requested, help trace pathways of spread of CPE's by assessing the degree of similarity between CPE's and between CPE plasmids from different patients and from different hospitals, provide support in investigation of suspected outbreaks of CPE infection and to provide national data to inform public health policy on the scope of the problem and the effectiveness of responses.

The National CPE Reference laboratory was set up in 2012 in the Medical microbiology dept., UHG. In my talk I will discuss how the technology in the laboratory has changed over the years, the challenges we have faced and how we plan to improve the service we provide in the "near" future.

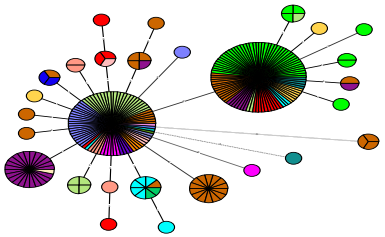


Fig.1 *Minimum Spanning Tree of IncL/M (pOXA-48) gene subset coloured by referring laboratory*

Moving to CPE testing on a molecular platform – how we did it

Ms Nuala Kealy, Senior Medical Scientist, Molecular Microbiology, CHI Crumlin

Biography

Nuala completed her B.Sc. in Biomedical Science with a final year thesis focused on the design and evaluation of multiplexed real-time PCR assays (*V. cholera*, Norovirus). While working in Tallaght hospital she continued her interest in molecular diagnostics, and helped establish and expand the Clinical Microbiology Depts molecular testing service. As part of her MSc, Nuala completed a research project on the introduction of molecular testing during a CPE outbreak. She currently works as Senior Scientist in Molecular Microbiology, CHI Crumlin.

Workshop Abstracts & Biographies Transfusion:

Validation of In-House Antibody Screening and Crossmatching of Patients on Daratumumab

Mr Eamon Clavin, Tallaght UH

Abstract

Daratumumab is an anti-CD38 monoclonal antibody that has enhanced the clinical outcomes of patients with multiple myeloma. This drug causes false positive reactions in indirect antiglobulin testing (IAT), thereby interfering with pre-transfusion testing.

Samples containing Daratumumab have also been suggested to cause carryover when processed using automated blood grouping analysers. In 2019, the indications for use of Daratumumab were updated to include a wider range of eligible patients. The likelihood of an increased number of patients receiving Daratumumab necessitates the validation of methods for the processing of samples from these patients in the blood transfusion laboratory of Tallaght University Hospital (TUH).

A carryover study was performed using the Ortho Vision Max analyser and Daratumumab patient samples. Crossmatches and antibody screens were performed via the IAT method using untreated and Dithiothreitol-treated screening cells and donor unit red cells.

Daratumumab plasma samples were also spiked with weak anti-D, anti-c and anti-Fy^a for IAT investigations to determine the sensitivity of this testing.

Of the 59 samples collected, 53 were sufficient for analysis. No carryover was observed in any of the samples analysed using the Ortho Vision Max analyser, regardless of titre of Daratumumab.

Complete mitigation of Daratumumab interference was achieved in all 53 antibody screens and all seven crossmatches.

Underlying anti-D, anti-c and anti-Fy^a were detected in all screens and crossmatches using spiked Daratumumab plasma.

Pre-transfusion testing using DTT-treated red cells is a cost-effective method of mitigating Daratumumab interference w hile allowing for the detection of underlying antibodies. This technique is therefore suitable for implementation for the in-house processing of Daratumumab patient samples in TUH.

Biography

Eamon Clavin is a Medical Scientist working in the Blood Transfusion Laboratory of Tallaght University Hospital. Eamon completed his MSc in Clinical Laboratory Sciences in Technological University Dublin in 2021.

During this MSc, Eamon validated a method for the mitigation of Daratumumab interference in pre-transfusion testing alongside:
Alison Harper (Chief Medical Scientist),
Prof. Helen Enright (Consultant Haematologist),
Fabian McGrath (TUDublin Lecturer).

Feasibility of Provision of Emergency blood and plasma in extended storage (Golden hour box) for Pre-Hospital Transfusion-A 2year review.

Ms Margaret Ann Connaughton, Senior Medical Scientist, Blood Transfusion & Tissue Establishment, SVUH

Abstract

Feasibility of Provision of Emergency blood and plasma in extended storage (Golden hour box) for Pre-Hospital Transfusion- A 2year review.

Fitzgerald J[1], Neary D,[1] Connaughton MA, [1]Coyne M,[1] Kennedy J,[1] O'Donnell C,[2] Ni Loingsigh S,[1] Mc Morrow S, [1] Menzies D. [2],[3,4]

1. Department of Haematology & Blood Transfusion, St Vincent's University Hospital, Dublin 4
2. National Ambulance Service, Dublin
3. Department of Emergency Medicine, St Vincent's University Hospital, Dublin.
4. Wicklow Rapid Response c/o Department of Emergency Medicine, St Vincent's University Hospital, Dublin

Introduction:

Blood and blood products are being increasingly employed in the pre-hospital setting for trauma patients. [1]A recent study has shown better outcomes for those who received a balanced transfusion pre-hospital than those who received crystalloid alone.[2] In May 2019, St. Vincent's University Hospital (SVUH) commenced a Pre-Hospital transfusion service for trauma patients.

Wicklow Rapid Response (WWRR) is a voluntary Consultant delivered Pre-hospital critical care service. WWRR is tasked by the National Ambulance Service (NAS) with the support of SVUH Emergency Department to cases of serious illness and injury. It is one of a handful of services in Ireland, where doctors are tasked by the NAS to trauma emergencies where the patient may benefit from Pre Hospital critical care treatment. Following a request to the hospital blood bank

(HBB), a system for pre hospital blood product provision to trauma was established whilst complying with national standards**.** [3]

Materials and methods:
An extended storage box (CREDO©) was purchased and validated for storage of blood and products at 2-6C for > 48 hours within the WWRR Rapid Response Vehicle (RRV). Two units of O RhD negative red cells and two units of thawed Group A/AB LG-Octaplas were issued to the WWRR consultant and exchanged every 48 hours. Documentation covering clinical governance and integration of the service into NAS operations were formulated. Criteria for Pre-Hospital transfusion included traumatic cardiac arrest where hypovolaemia is judged to be a contributing factor or 'Code RED' patients where volume resuscitation is deemed necessary prior to arrival at hospital and WWRR consultant in attendance. Blood components are transfused using a Qinflow© blood warmer. Prescription administration record and traceability labels are completed.

Results:
In the two year period that has followed, Dr. Menzies SVUH ED Consultant/WWR Volunteer has been tasked to 12 incidences that have required Pre Hospital Transfusion. Pre Hospital Transfusion Criteria fulfillment includes RTC's, Polytraumas due to fall from a height, UGIB and Penetrating Traumas. 58% of patients were male. A total of 21 O Rh D neg Red Cells and 17 LG plasma were transfused. A further two cases that were not transfused despite fulfilling criteria were due to (1) Resuscitation discontinued prior to Transfusion and (2) Due to proximity to SVUH it was deemed more beneficial to transfer the patient to SVUH rather than commence Pre Hospital Transfusion. A total of 1 RCC and 1 Plasma have been wasted during the time frame.

Conclusions:
Pre-hospital transfusion increases survival in major trauma. This is evident from the cases attended and

outcomes observed in the last two years. Is the first time that blood products have been available for pre hospital transfusion in Ireland. Although feasible to provide, it requires significant HBB resources, the availability of pre-hospital critical care physicians and adherence to agreed protocols to ensure compliance with blood product storage and traceability requirements. The service is ongoing and it is hoped to extend the model to other sites.

References:

1. London's Air Ambulance Blood Transfusion Policy
2. Guyette FX, Sperry J, MD, Peitzman A et al. Prehospital Blood Product and Crystalloid Resuscitation in the Severely Injured Patient: A Secondary Analysis of the Prehospital Air Medical Plasma Trial. Ann Surg. 2019 Apr 13. [Epub ahead of print]
3. AML-BB Minimum Requirements for Blood Transfusion compliance with Articles14 (traceability) and Articles 15 (notification of serious adverse reactions and events) of the EU Directive 2002/98/EC.

Case Study

Dr David Menzies, SVUH/Mr Shane Mooney, National Ambulance Service

Biography

Shane Mooney is the Education and Competency Assurance Officer for the National Ambulance Service in the East, covering Dublin, Wicklow and Kildare. He has over 30 years' experience with the Ambulance Service and was one of the first operational Advanced Paramedics in the state. He recently finished an 8 year term as a council member on the Prehospital Emergency Care Council (PHECC), where he was Chair of the Quality & Safety and the FTP Primary Proceedings Committees and was also a member of the Medical Advisory Committee. Outside of his role in NAS, Shane is the National Player Welfare Coordinator for the Irish Rugby Football Union where he manages all medical training and education.

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ACKNOWLEDGEMENTS.

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