



# **HSE Clinical Strategy and Programmes Division**

## **National Clinical Programme for Rare Diseases**

**Workshop on Clinical Research in Rare Diseases**  
**23 February 2018**

**Workshop report**



**National Clinical  
& Integrated Care Programmes**  
*Person-centred, co-ordinated care*



**ROYAL  
COLLEGE OF  
PHYSICIANS  
OF IRELAND**

**Building a  
Better Health  
Service**

**Seirbhís Sláinte  
Níos Fearr  
á Forbairt**

This report was compiled by Claire O'Connell PhD on behalf of the National Clinical Programme for Rare Diseases.

April 2018

The National Clinical Programme for Rare Diseases is a joint initiative between the Health Service and the Royal College of Physicians of Ireland.

The National Clinical Programme for Rare Diseases  
Clinical Strategy and Programmes Division

Dr Steevens' Hospital

Steevens' Lane

Dublin 8

D08W2A8

[www.hse.ie/eng/about/who/cspd/ncps/rare-diseases](http://www.hse.ie/eng/about/who/cspd/ncps/rare-diseases)



## CONTENTS

1. Introduction .....	2
2. Key Take-Home Messages from Speakers & Panels .....	3
Prof Eileen Treacy, Clinical Lead, National Clinical Programme for Rare Diseases .....	3
Anne Cody PhD, Head of Pre-Award, Health Research Board .....	5
Dr Iiro Eerola, Scientific Project Officer, Unit for Personalised Medicine Directorate, Health Directorate-General for Research & Innovation, European Commission .....	6
Dr Sally Ann Lynch, Consultant Geneticist, National Rare Diseases Office.....	7
Dr Gail Graham, Chief, Division of Genetics, University of Ottawa, Canada .....	8
Prof Jill Clayton-Smith, Consultant Clinical Geneticist, North Western Regional Genetic Service, NHS England .....	9
Panel Discussion Chaired by Dr Derick Mitchell, Chief Executive, IPPOSI .....	10
Prof Andrew Green, Chair, Clinical Advisory Group for the National Clinical Programme for Rare Diseases .....	12
Ms Avril Daly, Chair, Rare Diseases Ireland and VP, Board of directors, EURORDIS (Rare Disease Europe) .....	13
Dr Avril Kennan, CEO, The Medical Research Charities Group .....	14
Dr Ana Terres, Head of Research & Development, HSE .....	15
Parallel Presentations .....	16
Prof Mark Little, Professor of Nephrology, Trinity Health Kidney Centre .....	16
Prof Owen Smith, CBE, Chief Academic Lead to the Children’s Hospital Group.....	16
Mr David Keegan, Consultant Vitreo-Retinal Surgeon, Mater Misericordiae University Hospital and Temple Street Children’s university Hospital .....	16
Prof Peter Doran, Director of the UCD Clinical Research Centre .....	17
Panel Discussion Chaired By Ms Eibhlín Mulroe, CEO, Cancer Trials Ireland .....	18
3. Summary of Key Issues Discussed .....	20
4. Reflections on the Workshop .....	21
Appendix 1: Summary of National Clinical Programme for Rare Diseases Survey .....	22
Appendix 2: Workshop Agenda .....	25

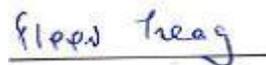
## 1. INTRODUCTION

The National Clinical Programme was established in December 2013. It is an initiative of the HSE, in partnership with the Royal College of Physicians.

A key objective of the Clinical Programme for Rare Diseases is to improve access for rare diseases patients and families to quality information and support, to enable accurate and timely diagnosis and access to appropriate specialist care. Huge challenges remain with unmet need for many rare diseases. Currently <10% of all rare diseases have a specific treatment. Research in rare diseases is a priority at European level in line with development of European Reference Networks which will have a substantial clinical research focus.

One of the objectives of the National Clinical Programme's is to support the development of research in rare diseases at our national centres of expertise. The key objectives of the workshop were aimed to promote and share information about the new European Commission Horizon 2020 Joint Research Programme for Rare Diseases, to highlight European and international good examples of clinical research infrastructure and to consider the infrastructure requirements for enhancing clinical research at our Centres of expertise in the context of our Irish centres collaborating with and joining the European Reference Networks. On behalf of the National Clinical Programme for Rare Disease I would like to thank our workshop partners The Medical Research Charities Group and The Health Research Board who supported this workshop.

Presentations from this workshop area available to download from [www.hse.ie/eng/about/who/cspd/ncps/rare-diseases](http://www.hse.ie/eng/about/who/cspd/ncps/rare-diseases)



Professor Eileen Treacy  
Clinical Lead, National Clinical Programme for Rare Diseases

## 2. KEY TAKE-HOME MESSAGES FROM SPEAKERS AND PANELS

### PROF EILEEN TREACY, CLINICAL LEAD, NATIONAL CLINICAL PROGRAMME FOR RARE DISEASES

Welcoming delegates to the workshop, Prof Eileen Treacy, Clinical Lead, National Clinical Programme for Rare Diseases and a Consultant Metabolic Physician at Children's University Hospital and the Mater Misericordiae University Hospital, mapped out the current landscape of rare diseases, which are not rare when combined and which frequently require highly specialised care and resources. There are at least 7,000 recognised rare diseases and the challenges in diagnosing and accessing the appropriate specialised care needed can be accentuated in smaller countries like Ireland, she noted. However, the barriers to access are similar across the EU member states and include a lack of knowledge of basic pathophysiology and biomarkers, and knowing where the rare disease patients are.

Key points made by Prof Treacy included:

- Ireland's National Rare Disease plan (2014-2018) made 48 recommendations but not all have been implemented.
- Two key recommendations in the plan were to facilitate greater international collaboration with relevant registries and research consortia including the International Rare Diseases Research Consortium (IRDiRC) and that the role of the designated Rare Diseases Centres of Expertise in Ireland should include research relevant to rare diseases, in particular with regard to registries, health services and translational research.
- 24 European Reference Networks (ERNs) spanning numerous thematic areas were approved in March 2017. These ERNs will offer opportunities for the coordination of rare disease research across member states, they will increase the access to diagnosis and treatment, document the natural history of the conditions, increase patient enrollment into clinical trials and create and manage disease specific registries.
- Markers of success in tackling rare disease research include the support of patient organisations, the existence of registries and the presence of international networks of expertise.
- The new emerging European Reference Networks will be central for enhancing translational research in rare diseases.
- The new vision for the International Rare Diseases Research Consortium (IRDiRC) is that in 10 years all patients with suspected rare disease will be diagnosed within 1 year if the disorder is known in the medical literature, and 1000 new therapies for rare diseases will have been approved.

- Translating into real world settings to allow patient access to new therapies and clinical trials will require infrastructures to be put in place to provide the continuum from bench research to the clinic.

Prof Treacy outlined that the aims of the workshop were to enhance education and research in rare diseases, to share information about new European programmes in rare diseases and to highlight good examples of clinical infrastructure.



*Workshop speakers and chairs*

*Backrow: Derick Mitchell, PhD & Prof Andrew Green*

*Front row: Kay Duggan, Dr Sally Ann Lynch, Prof Jill Clayton Smith, Prof Eileen Treacy, Ann Cody PhD, Dr Iiro Eerola & Dr Gail Graham*

## ANNE CODY PHD, HEAD OF PRE-AWARD, HEALTH RESEARCH BOARD

Anne Cody gave a perspective from the Irish funding agency, which funds research into rare diseases directly and in partnership with the Medical Research Charities Group.

Key points made by Dr Cody included:

- There are pockets of activity in rare disease research in Ireland, but the overall volume is not high - since 2010, the HRB has provided 7.5 million Euro in funding for rare disease research, mostly for cystic fibrosis and alpha-1-anti-trypsin deficiency.
- Around two-thirds of HRB-funded projects in Rare Disease research are for applied biomedical research. One-third of the projects are for clinical research. There is virtually nothing for health services and population health. This reflects the applications submitted.
- Ireland's strengths in rare disease research include the existence of the MCRG, which brings many charities together, and the potential for longitudinal studies and cohorts
- Ireland's weaknesses in rare disease research include the lack of an overall strategic approach, the lack of patient registries and the lack of protected time for research among rare disease clinicians in the HSE
- Ireland needs to start planning for the next national plan for rare diseases
- Positive expected developments include the European Joint Programme in Rare Diseases (which will offer more opportunities for research in Ireland; the HRB will fund successful applicants under EJP Rare calls, so researchers should apply), progress on Irish membership of ECRIN and an upcoming HRB call for a national biobanking node.

*“There is so little research in Ireland about how you live with a rare disease - for example the impact on education, working, social services, disability and end of life care. This is quite stark and something we would like to shift over time.”*

DR IIRO EEROLA, SCIENTIFIC PROJECT OFFICER, UNIT FOR PERSONALISED MEDICINE DIRECTORATE, HEALTH DIRECTORATE-GENERAL FOR RESEARCH & INNOVATION, EUROPEAN COMMISSION

Dr Eerola, gave an overview of EU RD research priorities and outlined many programmes that could potentially provide support for rare disease research and co-ordination in Ireland. He said that RDs have been a priority area for EU funding for two decades and are increasing steadily throughout EU framework programmes.

Key points made by Dr Eerola included:

- The launch last year of 24 ERNs focused on rare disease areas was a major achievement, involving more than 300 healthcare providers across the EU. The main focus of their activities is in the provision of healthcare but they also have major research potential
- The bulk of EU funding for rare diseases is through collaborative health research, but there are also other areas which support individuals in health and rare disease research, such as European Research Council grants and Marie Curie ITN/ETN grants
- Co-ordination is important, and the ERA-NET structures and the IRDIRC are examples of international groupings
- The RD European Joint Programme Cofund will provide opportunities for transnational rare disease projects, translating from bench to bedside
- Don't overlook the SME instrument, which takes a bottom-up approach
- Irish SMEs have been very successful in the past at securing research funding under European programmes, especially using the SME instrument
- The Innovative Medicines Initiative has also supported some networks on rare diseases
- In diagnostics, SOLVE-RD is focusing on undiagnosed rare diseases and through the ERNs has access to 19,000 undiagnosed RD cases
- For a good overview of EU funding on rare disease projects, see the Projects for Policy (P4P) report on RDs, [https://ec.europa.eu/info/sites/info/files/rarediseases\\_p4p-report\\_2017.pdf](https://ec.europa.eu/info/sites/info/files/rarediseases_p4p-report_2017.pdf) which describes the current policy challenges, presents a portfolio analysis of projects, highlights the main results and impacts and makes recommendations

*“There is a clear added value of bringing together limited research and expertise that is scattered in different countries - we need to use the limited resources very smartly.”*

DR SALLY ANN LYNCH, CONSULTANT GENETICIST, NATIONAL RARE DISEASES OFFICE

Dr Lynch spoke about the value of doing research in Ireland and urged researchers to make the most of opportunities in Europe.

Key points made by Dr Lynch included:

- Patients in Ireland benefit from research into rare diseases here – as an example, Dr Lynch and colleagues identified LARS, the gene behind rare infantile liver failure in a family in Ireland, resulting in a vast reduction in time and cost of missed diagnoses.
- The lack of protected time to be able to do research has been identified as a major barrier among trainee doctors to doing research in rare diseases
- All Irish hospitals need to be visible on international research engines
- The European Commission wants to stop the fragmentation of RD research and expertise, it wants to build up infrastructure, train up for experts, facilitate research and establish patient registries so patients can get access to treatments
- The European Commission deadline for a consortium proposal on rare diseases is 18th April 2018 – if Ireland is not a member of this consortium, we will lose our influence on the nature of the grant calls

*“It is up to each country to engage, and it is very important that Ireland does.”*

DR GAIL GRAHAM, CHIEF, DIVISION OF GENETICS, UNIVERSITY OF OTTAWA, CANADA

Dr Gail Graham spoke about Canada's RD Clinical Research Programme along with particular reference to the work of her colleagues Dr Kym Boycott and Taila Hartley at the Children's Hospital of Eastern Ontario, where Dr Graham is Chief of the Department of Genetics.

Key points made by Dr Graham included:

- About 500,000 children in Canada have a genetic rare disease, but the population is spread out over 10 million square kilometres (mostly along the Canada-US border), magnifying the problem of bringing patients and clinicians together.
- Approximately 150 genetics colleagues are working in rare disease gene discovery in Canada. Funding models for clinical geneticists vary from center to center, but most work in academic hospital environments, sometimes within alternate funding plans. Clinical research is typically an expectation with some allocated time in the weekly schedule. In the Canadian Care for Rare collaboration, clinicians sharing their patient data are cited as co-authors on the resulting academic publications, which encourages collaboration.
- Using 'matchmaker exchange' software to link research and cases has reduced the time taken to find rare disease genes. The Care for Rare consortium in Canada achieves on average one new rare diseases diagnosis per week and finds a novel rare disease gene every three weeks.
- The Canadian Health Institutes for Research (CIHR) funds basic scientists and an initiative to link clinicians with researchers across Canada who have or can develop model organisms for the study of rare diseases. This is open to international applicants <http://www.rare-diseases-catalyst-network.ca>

*"It is critically important that clinicians are given protected time for research, that it is considered an equally important part of what they do."*

PROF JILL CLAYTON-SMITH, CONSULTANT CLINICAL GENETICIST, NORTH WESTERN REGIONAL GENETIC SERVICE, NHS ENGLAND

Prof Clayton Smith is also the Coordinator of the European Reference Network for Rare Congenital Malformations and Intellectual Disability (ITHACA), spoke about enhancing and supporting rare diseases clinical research.

Key points made by Prof Clayton-Smith included:

- Collectively, rare diseases have big economic and health implications, including financial and psychological burden on the family, and loss of time at school and work. Very little research exists about these issues.
- European cross-border initiatives on rare disease are raising awareness, and buying in at national level gives access to expertise, but for researchers getting European funding for rare diseases is complicated and needs administrative resources.
- There is a real need for IT infrastructure to facilitate collaborative working. This will help greatly, for example, with setting up patient registers.
- European networks are working creatively to share research and training and clinical resources, everyone is expected to join in.
- Teams need a range of experts whose work is recognised, and clinicians need support to help with tasks such as keeping databases up to date.
- Patients/families are now recognised as research partners and are highly motivated, they can sometimes benefit from training, and patient stories are very powerful for funders.
- Brexit creates uncertainty, but all European Reference Network coordinators have drafted a vision statement expressing strong support for UK coordinators in remaining involved.

*“I am a clinician by choice and a researcher by necessity. The patient poses question to me about why something is happening and most clinicians will want to work on that and answer their questions.”*

PANEL DISCUSSION CHAIRED BY DR DERICK MITCHELL, CHIEF EXECUTIVE, IPPOSI

The panelists were Dr Gail Graham, Dr Anne Cody, Prof Jill Clayton-Smith, Dr Iiro Eerola and Kay Duggan-Walls, EU Programmes Officer with the Health Research Board. Opening the discussion, Dr Mitchell highlighted the role of patients in driving rare disease research activity forward in Ireland, and he expressed a hope that the next national plan for rare diseases in Ireland would feature more specific recommendations for rare disease communities.



*Panelists: Anne Cody PhD, Dr Gail Graham, Dr Iiro Eerola, Prof Jill Clayton Smith*

Key points raised by the panel discussion included:

- The importance of researchers collaborating and applying for EU-funded initiatives though applying for EU projects involves administration/bureaucracy.
- The importance of the Irish funding agencies increasing their role in facilitating greater access to EU-funded initiatives.
- Small-to-medium enterprises from Ireland have had success in securing EU funding, this is a strength, and Irish SMEs may also be useful for 'pump priming' research activity.

- Having research ingrained in training of healthcare professionals and a mandate for clinicians to provide research has enabled rare diseases research in Canada.
- Consent for patient involvement in research needs to be clear.
- Rare diseases are not rare collectively and can include rare presentations of more common diseases such as cancer.
- Patients can make matches with clinicians and communities themselves, they are highly motivated and well versed in social media, but the quality of matches may not always be as good as those made by specialised software.

**PROF ANDREW GREEN, CHAIR, CLINICAL ADVISORY GROUP FOR THE NATIONAL CLINICAL PROGRAMME FOR RARE DISEASES**

Prof Green introduced the afternoon session. He commented that the term 'rare disease' is a paradox that gives the impression there is not much to deal with, but the reality is that rare diseases are collectively common and need the appropriate commissioning of services. He also stressed the importance of European reference networks and patient and parent networks.

*"As clinicians, we should try and work with patient groups so we share information."*



*Back row: Prof Eileen Treacy, Dr David Keegan, Prof Patrick Murray, Dr Sally Ann Lynch, Prof Peter Doran, Avril Daly, Dr Ana Terres  
Front row: Prof Owen Smith, Dr Avril Kennan, Prof Mark Little*

MS AVRIL DALY, CHAIR, RARE DISEASES IRELAND AND VP, BOARD OF DIRECTORS, EURORDIS (RARE DISEASE EUROPE)

Ms Daly spoke about the importance of patient advocacy in rare diseases, and how European Reference Networks (ERNs) can enable patients to contribute to research and development.

Key points that Ms Daly made included:

- Structured collaboration between patients, researchers and clinicians through existing EU networks including European Reference networks provide opportunities for Irish health research and development.
- EURORDIS has developed a European Patient Advocacy Group (ePAG) for each ERN disease grouping.
- It is critically important for patient advocates to be active in decision making within ERN to ensure patient-centred approach in the development of new models of care.
- Patients are not currently funded to take part in ePAGs as part of the 24 ERNs, but this is an important topic for discussion.

*“We believe European Reference Networks are a game changer, they provide a critical mass of patients and data. We will magnetise patient needs to the right experts and generate new knowledge.”*

## DR AVRIL KENNAN, CEO, THE MEDICAL RESEARCH CHARITIES GROUP

Ms Kennan spoke about the need for patient involvement in research and the need for more resources in research and services for rare diseases in Ireland.

Key points made by Dr Kennan included:

- Approximately a quarter of charities in the Medical Research Charities Group (MRCG) focus on rare diseases and the organisation facilitates funding for rare disease research through a scheme with the HRB. Many of rare disease groups were established by parents or people with disease
- Patients want hope for better care, treatments and cures for conditions, and symptom relief for the day-to-day of life with a rare disease
- We are getting better in Ireland at supporting patient involvement in research, the HRB PPI Ignite awards are to be welcomed
- As an English-speaking country, Ireland is an attractive site for clinical trials in rare diseases, but translating potential into actual trials is a challenge
- Ireland needs better resourced genetic services
- The lack of protected time for clinicians to carry out research is a huge issue, as is the need for consistent research support staff

*“Research is not a luxury add on to care, it is part of care.”*

## DR ANA TERRES, HEAD OF RESEARCH & DEVELOPMENT, HSE

Dr Terres in her first public talk as Head of Research & Development at the HSE, spoke about building the scaffolding for rare diseases research in Ireland.

Key points made by Dr Terres included:

- There is a gap between health research actors who are ready to research and the scaffolds we have been able to put in place for them within the healthcare system.
- We need legislation, including the upcoming Health Info and Patient safety bill, to clarify the rules, and we need to interpret GDPR.
- Always have patient at centre of the equation.
- The HSE is currently gathering information about ongoing research activity in health service.
- The aim is to have a sustainable governance and support framework in five years to enable and promote health research activity within the healthcare system.

*“Networks are very important for research, they bring together expertise that wouldn’t otherwise get together and in the context of rare diseases that is even more important.”*

## PARALLEL PRESENTATIONS

Four clinician researchers gave short presentations about their work and perspectives on rare diseases. The session was titled 'A vision for the future of rare diseases clinical research in Ireland'

---

### PROF MARK LITTLE, PROFESSOR OF NEPHROLOGY, TRINITY HEALTH KIDNEY CENTRE

Prof Mark Little, Professor of Nephrology at the Trinity Health Kidney Centre, spoke about how linking patient registries in vasculitis research has opened up access to patients across Europe, and he stressed the need to ensure that smaller registries and networks can link in with each other. *"If Ireland is serious, we need to mainstream smaller individual registries into a co-ordinated e-health vision. This is not building super-registries, but focusing on accessibility, interoperability and usability. We need to focus our efforts on networks that can talk to each other."*

---

### PROF OWEN SMITH, CBE, CHIEF ACADEMIC LEAD TO THE CHILDREN'S HOSPITAL GROUP

Prof Owen Smith, CBE, Chief Academic Lead to the Children's Hospital Group, painted the picture of how the next five to 10 years in paediatric medicine (which is the context for many rare diseases) will be very different to the last 50. Acute illnesses are giving way to chronic conditions, which will represent the majority of costs. He stressed the need for electronic health records to have natural language processing to enable deep phenotyping of patients so the data can be linked to omics and more personalised healthcare can be provided. *"We need to move from reactive and costly into proactive and predictive."*

---

### MR DAVID KEEGAN, CONSULTANT VITREO-RETINAL SURGEON, MATER MISERICORDIAE UNIVERSITY HOSPITAL AND TEMPLE STREET CHILDREN'S UNIVERSITY HOSPITAL

Mr David Keegan, Consultant Vitreo-Retinal Surgeon at the Mater Misericordiae University Hospital and Temple Street Children's Hospital (Fighting Blindness Target 5000 sites), spoke about the experience of building registries for patients with retinal disease. Some of these patients have rare conditions. Having the registry information has allowed better phenotyping and management of rare eye disease patients. We are now in position to be able to identify patients (via genotyping) who can qualify for clinical trials. *"It's not rocket science, once you get the strategy and resources right you will know where the patients are, they can be accurately characterised and then you can do something impactful for them."*

---

## PROF PETER DORAN, DIRECTOR OF THE UCD CLINICAL RESEARCH CENTRE

Prof Peter Doran, Director of the UCD Clinical Research Centre, described the successes of rare disease research in Ireland, including studies on rare genetic diseases in families in Ireland and on metabolic diseases. He spoke of the importance of collaboration and investment into fundamental research, as well as patient education, and he stressed the need for protected time for clinicians to carry out research and the need to focus on training future researchers in rare diseases. *“The overarching research ambitions will only be maximised if we have protected time, and it is not an idea of freeing up time but creating a true culture of scholarship.”*



*Presenters photographed with Prof Patrick Murray (centre):  
L-R Prof Owen Smith, Mr David Keegan, Prof Peter Doran, Prof Mark Little*

## PANEL DISCUSSION CHAIRED BY MS EIBHLÍN MULROE, CEO, CANCER TRIALS IRELAND

The panelists were Prof Mark Little, Prof Owen Smith, Mr David Keegan, Prof Doran and Dr Teresa Maguire, Principal Officer, Research Services at the Department of Health.

Opening the discussion, Ms Mulroe spoke about progress in the clinical research landscape in Ireland, and how clinical research and trials are part of the care pathway in rare diseases.

Points made during the discussion included:

- With the right resources, structures and networks, Ireland can ‘grow into’ the space of phase 1 clinical trials, we have built up experience in larger trials.
- Don’t be afraid to be involved with trials elsewhere in Europe.
- To facilitate research of all types, we have to start getting it right within our health and social care services.
- The legacy of underfunding is fragmented resources in Ireland, work is ongoing now on integrating the data and information that is in HSE and related agencies.
- Two key legislative developments that will have a potential impact on research in the year/s ahead, namely the EU-GDPR (which will need to be read alongside the Data Protection Bill being published by Dept Justice and a Regulation on health research in Ireland) and the HIPS Bill, which is likely to be progressed as a separate research ethics bill for delivery of a national, harmonised system for research ethics approval for health research in Ireland.
- If we do not ensure that we have a legal basis for collecting information, sharing, processing and storage and consent issues then we are storing a big problem for our ambitions and visions.
- The national Rare Disease plan picked up and highlighted many cross-cutting barriers to health research, not just rare disease research. So, where progress is made across the board on these issues, then there won't be a need for them to be necessarily included (or to such detail) in subsequent rare disease plans.
- The research ethics approval process needs urgent attention. Currently this is too slow, boards should meet more frequently.
- A platform is needed to identify obstacles to clinical research – example given was an investigator not being eligible for SFI funding due to not reaching a threshold of first-author papers.

- Research should be driven by good people with good ideas, not prioritised in areas to create jobs as happened in economic downturn, otherwise potential leaders are cut off.
- Regulatory roadblocks can cut Ireland out of international trials.
- In Ireland, we need to embed reasonable resources for clinical exome sequencing and increase the number of clinical geneticists and genetic counsellors.
- The Department of Health will work with the HRB and the Rare Disease Office for Ireland to join the European co-fund initiative.

*“We need to get rid of roadblocks and research should be led by the right people. We have to be advocates for these children.”*

### 3. SUMMARY OF KEY ISSUES DISCUSSED

Several themes and talking points came up repeatedly during the day including:

- The lack of protected time for clinicians to do research
- The emergence and easier access of genomic and data analysis
- European Reference Networks as a means to unify research and clinical efforts
- Potential challenges of GDPR for patient registries and consent
- Lack of infrastructure/'scaffolding' for rare diseases in Ireland
- Delays and lack of joining together of Ethics Committees
- Need for Patient involvement, patients as collaborators
- The need to focus more research on day-to-day quality of life of patients as well as diagnosing and developing therapies for diseases



*Prof Jill Clayton Smith addresses workshop attendees*

#### 4. REFLECTIONS ON THE WORKSHOP

*Prof Eileen Treacy, Clinical Lead, National Clinical Programme for Rare Diseases*

This Workshop was successful in bringing together potential collaborators across paediatric and adult disciplines with direct involvement from the funding bodies (Health Research Board and Department of Health).

This workshop clearly illustrated the collective ambition of Irish investigators, funders and patient representatives to join together and collaborate within Irish networks, expanding to European Reference Networks, to enhance the enormous potential for rare disease clinical research within our health service. This will enhance the patient experience and access, and will improve the overall quality of our services and teaching and training capacity.

On behalf of the National Clinical Programme for Rare Diseases and our workshop partners The Medical Research Charities Group and The Health Research Board I would like to sincerely thank the workshop organising committee, presenters, panel chairs and contributors as well as Claire O'Connell PhD who compiled this report. I also wish to thank the clinicians, researchers and healthcare professionals who attended the workshop and contributed to the rich discussion.

## APPENDIX 1: SUMMARY OF NATIONAL CLINICAL PROGRAMME FOR RARE DISEASES SURVEY

One of the aims of the research workshop was to highlight the importance of research in general but especially in the field of Rare Diseases. Ireland, has had a poor culture of health research, although the appointment of Ana Terres as Head of Research and Development in the HSE is a welcome development.

Traditionally, we have borrowed research results from elsewhere and implemented the results at a later date. However, that results in delayed access for patients to novel therapies in the setting of clinical trials.

In preparation for this workshop, The National Clinical Programme for Rare Diseases invited the ten hospitals in Ireland with Centres of Expertise (n=47) in Rare Diseases to participate in a short questionnaire about clinical research in late 2017. Centres of Expertise are defined as national healthcare providers that are validated using Orphanet criteria. See [www.orpha.net/national/IE-EN/index/homepage](http://www.orpha.net/national/IE-EN/index/homepage) for further information and a listing of Irish and international Centres of Expertise in Rare Diseases.

The survey questions included cataloging the reasons why, and the importance of, research in their field. Some common themes emerged as a reminder to us all, including health care managers, why it is crucial that a research culture is developed in each hospital in Ireland.

### **Survey summary on the benefits of conducting research**

The survey highlighted several important aspects and effects of clinical research:

- Encourages adoption of latest techniques and technologies in patient care
- Ensures that a centre adheres to international best practice
- Makes a hospital attractive to highest quality researchers in training, doctors in training and consultants. Enhances ability to recruit and retain excellent staff
- Allows Clinical services to become trial ready for new orphan drugs
- Motivates staff
- Promotes confidence in patients in their medical team
- Increases local expertise in specific conditions
- Provides training and career development for staff
- Provides employment for research staff

- Academically, active centres have better patient outcomes (numerous publications support this)
- Fosters innovation among clinicians at the patient interface
- Serves as a source of additional income and resources through clinical trial-related cost reimbursement, access to novel therapies and co-funding of specialised personnel and equipment.
- Improved recognition of the hospital as an academic centre
- Prompt transition from Research to Clinical Service
- Improved personalised patient care. Necessary for outcome analysis for rare and highly specialised conditions to inform and deliver best practice.
- Imperative for translational research applicable to new therapies for rare disease patients and to address cost-effective use of high technology drugs.
- Some RDs are common only in Ireland and we have to lead research if patient benefit in these disorders is to be realised
- Allows services to become trial ready for new orphan drugs
- Patients want access to research to be available close to home

### **Survey summary on the barriers to research in Ireland**

The survey also asked about reasons for our poor hospital research culture, the major barriers cited by respondents are listed below:

- Poor tradition of research culture within our hospitals
- Lack of protected time for clinicians, NCHDs and research nurses specified in basic consultant, trainee & nurse contracts
- Limited funding streams
- Lack of infrastructural support in terms of a) access to grant writers and b) project managers to support on-going administrative tasks associated with being a Principal investigator
- Short term contracts preclude research where results will inevitably take time (adversely affects Natural history studies, clinical trials etc.)
- Short NCHD rotations preclude meaningful studies

- Lack of designated support staff (research nurses, data managers, administrative support)
- Inadequate structure to support clinical trials
- In this highly specialised area, a major crisis exists for availability of front line staff and trainee retention.
- Lack of administrative staff for front line clinical services. Related virtually no assistance available for administration of research grants (if at hospital level) and applications making the research environment unattractive with major barriers to delivery.
- Protracted delay of ethics committee reviews; absence of centralised process.
- Clinic space access
- Statistical support

One respondent summed the problems up eloquently:

*“We need a culture of clinical research in our hospitals. This means more funding for research personnel and consumables. Specifically, we need to induce more MDs to come into research in order to develop a translational research profile and strength and we need to support them with scientific colleagues to get a symbiosis that will translate into better patient care. We need better patient records and better access to those records. We need registries, which capture data and may be relatable to tissue banks. We need to promote nurses in the research arena. That means funded nursing positions for specialist clinics, which have slots specifically allocated to them for testing and nurses funded by the hospital who are trained in clinical trials.”*

APPENDIX 2: WORKSHOP AGENDA 23 FEB 2018

09.30-9.45	Opening remarks	<b>Prof Eileen Treacy</b> , Clinical Lead, National Clinical Programme for Rare Diseases
09.45-10.00	Welcoming address	<b>Anne Cody, PhD</b> , Head of Pre-Award, Health Research Board of Ireland
10.00-10.25	European rare diseases research priorities	<b>Dr Iiro Eerola</b> , Scientific Project Officer, Unit for Personalised Medicine Directorate, Health Directorate-General for Research & Innovation, European Commission
10.25-10:40	European Joint Programme for Rare Diseases; opportunities for Ireland	<b>Dr Sally Ann Lynch</b> , Consultant Clinical Geneticist, National Rare Diseases Office
10.40-11.00	Coffee break	
11.00-12.20	<i>Case studies</i> Enhancing & supporting rare diseases & genetics clinical research	<b>Dr Gail Graham</b> , Chief, Division of Genetics, University of Ottawa, Canada  <b>Prof Jill Clayton Smith</b> Consultant Clinical Geneticist, North Western Regional Genetic Service, NHS England.
12.20-13.00	Panel discussion with speakers	Panel moderator: <b>Derick Mitchell, PhD</b> , Chief Executive, IPPOSI The panel will include <b>Kay Duggan-Walls, MSc</b> , EU Programmes Officer, National Contact Point for Health, Horizon 2020, Health Research Board of Ireland
13.00-13.45	Lunch (included)	
13.45-13.55	Welcome back & introductions	<b>Prof Andrew Green</b> , Chair of the Clinical Advisory Group for the National Clinical Programme for Rare Diseases
13:55-14.10	The Role of European Patient Advocacy Groups (ePAGs)	<b>Ms Avril Daly</b> , Chair, Rare Diseases Ireland and Vice-President, Board of Directors, EURORDIS-Rare Diseases Europe
14.10-14.25	Rare diseases within the clinical research landscape in Ireland	<b>Dr Avril Kennan</b> , CEO, Medical Research Charities Group
14.25-14.45	Overview of the new HSE research & development function	<b>Dr Ana Terres</b> , Head of Research & Development, Assistant National Director, HSE
14.45-15.15	A vision for the future of rare diseases clinical research in Ireland	<b>Prof Mark Little</b> , Professor of Nephrology, Trinity Health Kidney Centre <b>Prof Owen Patrick Smith, CBE</b> , Chief Academic Lead to the Children's Hospital Group <b>Mr David Keegan</b> , Consultant Vitreo-retinal Surgeon at the Mater Misericordiae University Hospital & Temple Street Children Hospital. <b>Prof Peter Doran</b> , Director, UCD Clinical Research Centre
15.15-15.45	Panel discussion with speakers	Panel moderator: <b>Eibhlín Mulroe</b> , CEO, Cancer Trials Ireland The panel will include <b>Teresa Maguire</b> , Principal Officer, Research Services, Department of Health
15.45-16.00	Closing remarks	<b>Claire O'Connell, PhD</b> , Irish Science Writer of the Year 2016

National Clinical Programme for Rare Diseases

2018



National Clinical  
& Integrated Care Programmes  
*Person-centred, co-ordinated care*