# ASSOCIATION OF MEDICAL RESEARCH CHARITIES

# **Researchfish use by AMRC Members**

Suzanne Rix Research Manager - AMRC

15/11/2018

# Who are AMRC



Established in 1987, the Association of Medical Research Charities (AMRC) is the UK's national membership organisation for health and medical research charities.

We have over 140 member charities based across the UK

### **Our vision**

The AMRC will be the leading voice of the health and medical research charity sector, supporting charities to deliver high-quality research and champion impact for patient and public benefit.

# Who are our members?



# What do they fund

Medical research is

the top cause to which

the UK public donates

17,000

researchers' salaries were

funded by AMRC charities,

including 1.700 PhD students

#### Research investment in 2017 –

Every £1 spent on

medical research returns

25p on investment annually

£13br

Over the past 10 years

AMRC charities have spent

£13bn on research in the UK



AMRC charities fund nearly half of publicly funded medical research nationally



of all AMRC charity funded research in the UK takes place in universities and hospitals

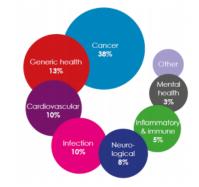


1 in 8 arants awarded by AMRC members were funded in collaboration with other organisations

Overseas 7%

AMRC charities fund medical research throughout the UK and overseas

#### Making a difference for patients



AMRC members fund essential research in all areas of health and disease

31%

of non-commercial research

supported by the

NIHR Clinical Research Network

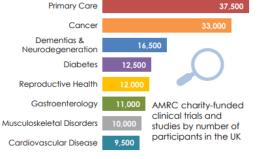
was funded by AMRC charities

of charities fund research

into the cause of disease



people in the UK were recruited into over 1,300 clinical studies or trials funded by AMRC charities



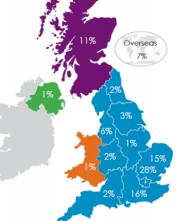
#### At all stages of the research process





of charities fund research into the development of new diagnostics and treatments

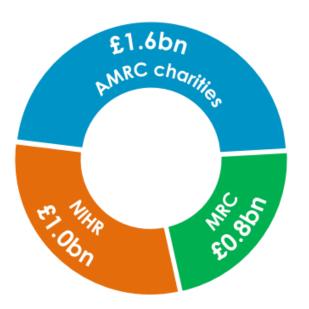
of charities fund research into disease prevention and disease management and health services



https://www.amrc.org.uk/2018-infographic

# What do they fund

## Research investment in 2017



AMRC charities fund nearly half of publicly funded medical research nationally

The AMRC members that use Researchfish now cover over 90% of this spend



Every £1 spent on medical research returns 25p on investment annually



Medical research is the top cause to which the UK public donates



Over the past 10 years AMRC charities have spent £13bn on research in the UK



researchers' salaries were funded by AMRC charities, including **1,700 PhD students** 



# Why Monitor Research Outcomes/Impact?

# It's vital for charities to show the money their supporters donate is being spent wisely

### **Collecting impact data allows charities to :**

- Evaluate their research portfolio
- Inform new research strategies and funding calls
- Provide material for fundraising campaigns
- Create new comms content (newsletters, website, social media, etc)
- Report to key stakeholders, trustees, members
- Inspire and engage research community
- Demonstrate difference they are making to patients and families



# Collecting Impact Data

### **Possible collection methods:**

- Standard progress reports or surveys
- Phone or in person interviews of award holders
- Online impact collection platforms
- Mining online data repositories (publications, patents, products)
- Publication metrics
- Online attention and activity (altmetrics)

WEB OF SCIENC

# Methods charities use depends on:

- Size of portfolio
- Breadth of portfolio
- Retrospective or prospective
- Staff resources
- Budget
- What types of impact they expect or want to assess?

Altmetric





Europe PMC



# AMRC and Researchfish

Since 2012 AMRC has worked in collaboration with MRC to support members in their use of Researchfish

For the first 5 years MRC funded the Researchfish costs of AMRC member charities that chose to use the system

We have just started a further four year deal in which costs for smaller charities are being split between the MRC and each eligible charity

As part of these deals AMRC:

- Facilitates an AMRC Researchfish user group
- Provides 1:1 advice and support to members using Researchfish
- Represents members as part of the Researchfish steering board and other governance committees
- Supports members to maximise use of the data
- Enables data sharing between members
- Uses data from all members using Researchfish to evidence the impact of the sector

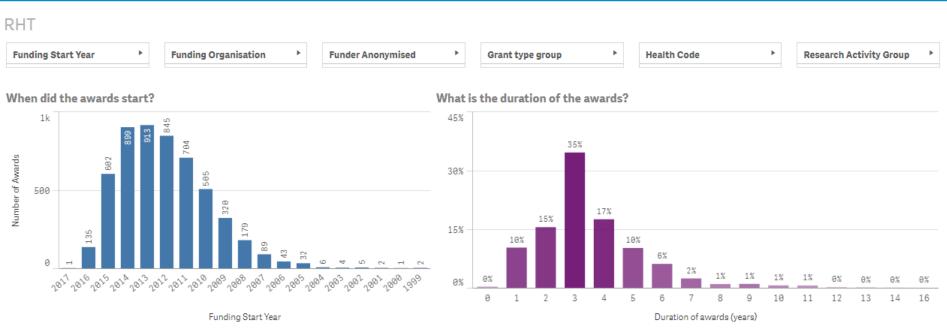


# Exploring AMRC members Researchfish Data

- AMRC is in quite a unique position
- All data and outcomes submitted to AMRC members are also made visible to us (with members consent)
- This allows us to look at across multiple funders and start to investigate the value of comparative analysis, benchmarking and data sharing
- In 2016 we developed an interactive data analysis tool in Qlik
- This was shared with a subset of funders who were willing to make their data available to each other
- A strict data sharing agreement was in place

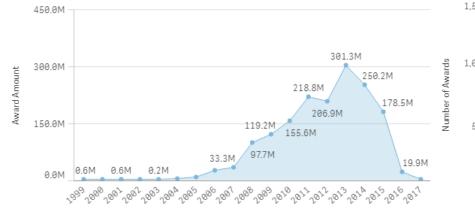


# Interactive analysis

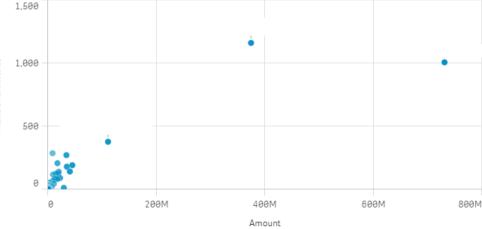




#### Number of awards and value by funder



[Funding Start Year]



# Interactive analysis

#### B. Medical products, interventions and clinical trials Funding Start Year Funding Organisation Grant type group Health Code **Research Activity Group** Grant Type Number of awards with one or more ... \* Total and average number of medical products sinc... Medical product development stage Note. 'Medical products, interventions and clinical trials' may be Sections represent the number of medical products per shortened to 'Medical products' for ease. 200 award Number of medical products 0.5 100 404<sup>369</sup> Unique medical products Dates batter batter batter batter batter batter Awards with a medical product Fartyclink Years Since Start Date (Up to 01/04/2016) 🔻 254<sup>5%</sup> [Development Stage/MedProd] \_\_\_\_\_ \* The data set contains negative or zero values that c... Click arrow on axis title(s) to change measure for analysis Unique number of medical products Medical product type Total, average no. and average cost of products by award type Total, average no. and average cost of products by research activites Therapeutic Intervention - Drug Therapeutic Intervention - Complementary Project 269 Products with applications outside of medi... Caus 105 37.9% Preventative Intervention - Physical/Biolog... Preventative Intervention - Nutrition and... Therapeutic Intervention - Surgery Peopl Preventative Intervention - Behavioural... ant Type ( RAGr Therapeutic Intervention - Vaccines Support Tool - For Medical Intervention 時 Management of Diseases and Conditi... 5 Other/Unknow 時 Therapeutic Intervention - Psychologi... Therapeutic Intervention - Physical Diagnostic Tool - Non-Imaging Support Tool - For Fundamental Research Infrastructure Therapeutic Intervention - Radiotherapy 100 200 300 Therapeutic Intervention - Medical Devices 100 200 300 Therapeutic Intervention - Cellular and gene therapies Diagnostic Tool - Imaging Number of medical products 🔻 Number of medical products 🔻

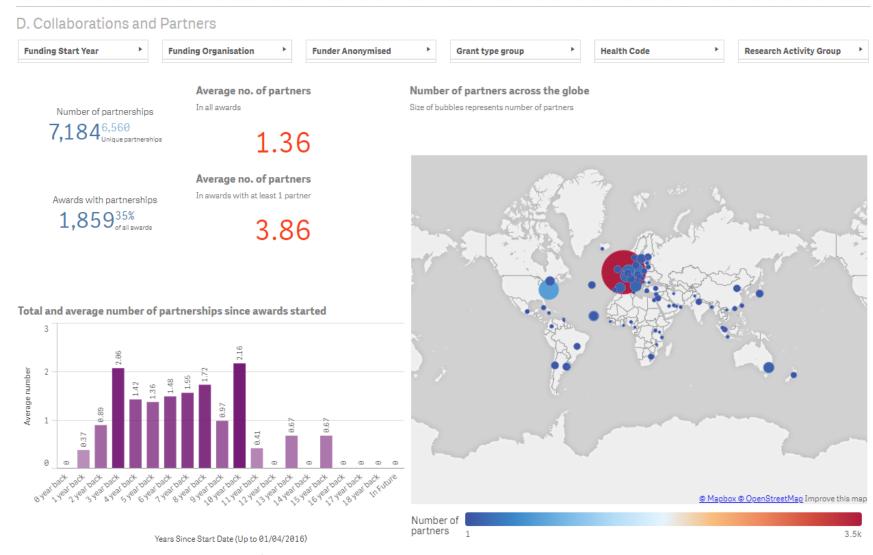
Unique number of medical products

Select specific grant type to see breakdown. Click arrow on axis title(s) to change measure for analysis

Select specific research activity to see breakdown. Click arrow on axis title(s) to change measure for analysis

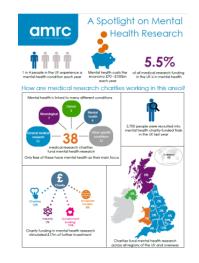


# Interactive analysis

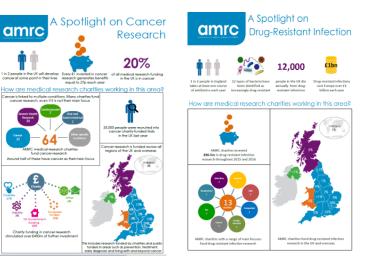


# AMRC use of Researchfish Data





### **Spotlight reports**



### **Impact Animation**





### Infographics



# AMRC Impact Report - Overview



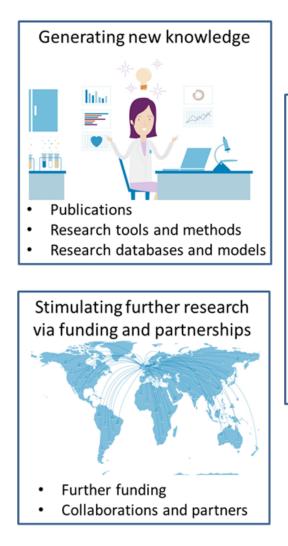




- 40 AMRC charities
- Researchfish data
  - Defines 5 impact areas
- 40 case studies included

http://www.amrc.org.uk/our-work/showing-impact/making-a-difference-impact-report-2017

# AMRC Impact Report – Areas of Impact



### 5 Impact areas



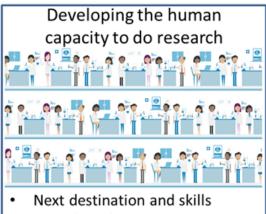
- Medical products, interventions and clinical trials
- Software and technical products
- IP and licensing
- Spin outs

Creating evidence that will influence policy and engage wider audiences





- Influence on policy, practice and the public
- Engagement activities



- Awards and recognitions
- Use of facilities and resources

# Impact Report – Frequency of outcomes

### From a total of 5287 awards:

Section	Outcome	No. of awards with outcome	Total outcomes	Unique outcomes
Generating Knowledge	Publications	3,271	29,151	26,828
	Tools and Methods	853	1,580	1,447
	Databases and models	296	401	371
Translating research ideas	IPs & Licensing	164	250	224
	Spin outs	36	42	39
	Technical products	69	111	102
	Medical products	282	434	397
	Artistic and creative products	48	62	59
Influencing policy and other stakeholders	Influences on Policy	499	1,120	1,016
	Engagements	1,998	9,917	8,446
Stimulating new research	Further funding	1,563	4,832	4,398
	Partnerships	1,859	7,184	6,560
Developing the human capacity	Next destinations	1,075	2,120	2,039
	Awards and recognitions	1,552	7,737	6,409
	Facilities and resources	360	565	492

# AMRC Impact Report - Partnerships

Number of Partners per Award



Chapter Five

Stimulating further research via new funding or partnerships

#### Types of partners:

- The majority (58%) were academic groups
- 14% were researchers in hospitals and public institutions
- 8% were private organisations

Countries where partners were based:

- Charity-funded researchers had collaborations and partnerships with groups across the world
- Most (53%) of the partnerships were with UK-based organisations
- There were also substantial numbers of partnerships across Europe (22%) and with the United States (10%).

### 35% of the awards involved 6,560 partnerships

#### Case study: Ataxia UK

#### Ataxia UK helped establish a collaborative drug development programme funded by Pfizer to develop a treatment for Friedreich's ataxia.

Ataxias are a group of rare neurological disorders that affect balance, coordination, and speech in 10,000 adults and 500 children in the UK. Traditionally developing treatments for such rare diseases has been a significant challenge due to the small, geographically spread patient populations making it harder to collect samples for basic research and increasing the difficulty of running effective clinical trials.

One of Ataxia UK's aims, set out in their 2012 research strategy, is to find a treatment or cure for one or more of the ataxias by 2020. To help achieve this goal the charity sought to increase engagement and collaboration with pharmaceutical companies. From an initial conversation with Pfizer at a rare disease conference Ataxia UK went on to gather and coordinate a group of ataxia academic experts helping them develop and submit a successful funding application to Pfizer's rare disease consortium initiative.

Consequently the Friedreich's ataxia collaborative drug development programme was established, giving world class ataxia academic researchers the funding, resources and expertise from industry scientists. Ataxia UK remains a critical part of



the team due to their wealth of experience about the condition and their ability to bridge the gaps between patients, researchers and industry. This shows how even small research budgets can still play a huge role in driving research forward.

"Working in partnership with researchers, industry partners and patients is essential to drive research forwards at a fast pace."

# AMRC Impact Report – Case studies

### Case study: Sparks

Researchers developed and patented a gas delivery-ventilator system to help protect long term brain function in babies starved of oxygen at birth

### Case study: Tenovus Cancer Care

Following research findings new guidance was issued to all UK radiotherapy departments to improve the safety of cancer patients with implanted cardiac devices.

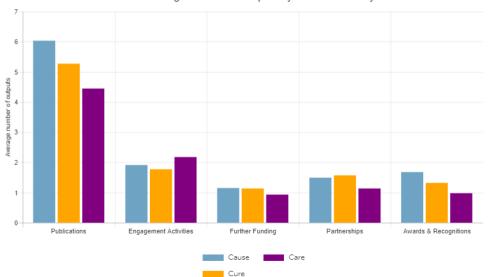
### Case study: Fight for Sight

A diagnostic tool that screens 176 genes at once has improved the accuracy and speed of diagnosis in patients with retinal dystrophy.

### Case study: Stroke Association

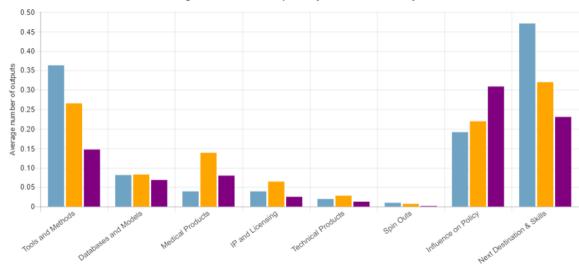
Intervention delivered in an online virtual island designed to help people with aphasia practice everyday speech has been shown to improve functional communication

# AMRC Impact Report – Research Activity



Average Number Of Outputs By Research Activity

#### Average Number Of Outputs By Research Activity



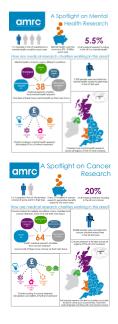
Type of research activity	Total Number of Awards	
Cause	3,118	
Underpinning	725	
Aetiology	2,393	
Cure	2,598	
Detection and Diagnosis	835	
Treatment Development	1,063	
Treatment Evaluation	700	
Care	646	
Prevention	148	
Disease Management	379	
Health Services	119	
Grand Total	6,362	

# Engagement with AMRC reports



- The impact report had great engagement on twitter
  - #charityimpact reached over 1 million people





• The impact animation has 1,500 views on YouTube

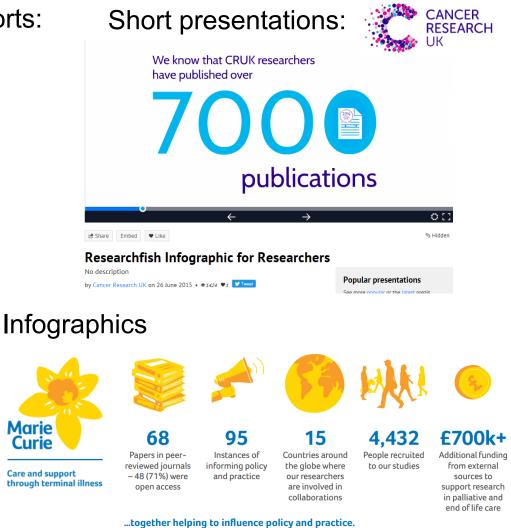
Spotlight on mental health was the most popular AMRC publication in May 2017

• Spotlight on cancer was the second most popular AMRC publication in August 2017



Standalone Research Impact reports:





### **Fundraising Leaflets**

### Ataxia UK Research - Our Success Stories

Ataxia UK's investment has led to major discoveries in the four areas of our research strategy, such as:

· Improving diagnosis: Supporting Our recent research has led the creation of a new genetic test to 19 new research tools and which can pick up 100 different cellular models of ataxia ataxia genes in one go (rather than one test for one gene) - now available as an NHS service.

> · Finding treatments: Funding research into drug screening and repurposing (using drugs which are already used clinically to treat other conditions) which found a treatment for SCA3 in a mouse model, with the potential for future human trials.



Innovation

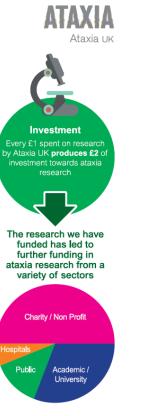
#### · Moving from laboratory studies to human trials:

Discovering a mechanism responsible for turning the Frataxin gene back on which is usually switched off in Friedreich's ataxia - this led to a human trial testing this mechanism, which was found to be successful.



· Alleviating symptoms: Investigating a better way to treat hearing loss in both Friedreich's and cerebellar ataxias and showing that frequency modulation (FM) listening systems can treat hearing loss in people with ataxia whilst other hearing aids can't.

Ataxia UK works across the whole of the UK and is a charity registered in Scotland (no SC040607) and in England and Wales (no 1102391) and a company limited by guarantee (4974832)





amrc

2015

funding wherever possible. An example of this is the Friedreich's

ataxia collaborative drug development programme where we are collaborating with the pharmaceutical company Pfizer and three universities over a

We were pivotal in orchestrating the development of partnerships crucial to this programme and aided the researchers in designing their

# Ataxia UK

At Ataxia UK, we fund studies ourselves but also instigate collaborations between other organisations, and help ataxia researchers to find

Publications

10 recent grants resulted in 30 scientific articles published in high standard research iournals

#### Distribution

The 2015 International Ataxia Research Conference which we co-organised was the biggest gathering of ataxia researchers anywhere in the world to date!

#### Support our research

To donate to Ataxia UK, please visit our website: www.ataxia.org.uk

If you want to find out more about our research strategy, the projects we currently fund and other research activities, please visit the research section of our website: www.ataxia.org.uk/about-research You can contact the research team directly at research@ataxia.org.uk

020 7582 1444

This leaflet is supported by the following Pharmaceutica Company which has contributed with financial or non-financia support Takeda **Development** Centre Europe Ltd

### **Retrospective Portfolio Analysis**

### **IMPACT** REPORT RELEASED AFTER AWARDING £5.2M TO RESEARCH IN LAST 10 YEARS

21 September 2017

# THE POWER OF RESEARCH

### 10 YEARS OF CROHN'S AND COLITIS UK RESEARCH

### 81

We've funded over 80 ground-breaking research projects into IBD.

### 98

The research we've funded has featured in almost 100 peer-reviewed scientific publications.

### 1/3

Almost one third of projects have subsequently won further funding from other grant-making bodies.

### 1 in 10

10% of researchers have reported policy and practice changes as a result of our funded research.

### 76,138

How many page views our Take Part in Research section has received since it launched in April 2016.

### 50%

Almost half of our projects have involved patients in their design or delivery.

### Identification of case studies

### Successes

action medical research for children

With the help of all our supporters we have played a significant role in many medical breakthroughs for 65 years, starting with the development of the first UK polio vaccine. Here are some highlights.

### Developing tests now used worldwide to help children with DCD



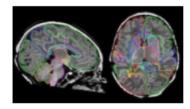
Developmental Coordination Disorder (DCD), also called dyspraxia, can make everyday activities and school work much more difficult. Action funding helped UK researchers to develop tests and guidelines that are now used globally to identify and support affected children and teenagers.

### More successes

- Discovering gene faults that cause itchy skin
- Brain scanner for babies
- Communication aids for people with disabilities
- Finding a gene for cleft lip and palate
- Finding faulty genes and developing tests for rare diseases
- Improving survival from childhood liver disease
- Improving treatment and surgery for epilepsy in children and adults
- Pioneering hip replacements

#### Repairing skull damage

### Mapping babies' brains to predict and prevent future problems



Premature babies are at increased risk of developing disabilities but it is difficult to know which are most likely to be affected. Action funding has helped to develop a computer-aided tool to read MRI brain scans and identify abnormal development in newborn babies.

# What next?

- Second edition of our research impact report due to be published in the new year
- Continuing to represent our members on sub groups and steering boards
- Supporting the development of the Data Communicator tool
- Working to support work around increased data sharing where possible
- Helping new charities get started with Researchfish
- Increasing the use of Researchfish data
- Supporting our members with impact work more broadly through our impact coffee club and other activities



AMRC's impact guidance – includes links to the impact report and animation: <a href="https://www.amrc.org.uk/Pages/Category/impact">https://www.amrc.org.uk/Pages/Category/impact</a>

AMRC contacts:

Dr Suzanne Rix, Research Manger <u>s.rix@amrc.org.uk</u>

Dr Jocelyn LeBlanc, Impact Analyst j.leblanc@amrc.org.uk