RESEARCH IMPACT ASSESSMENT

BLOCK 1, 2 & 3

BLOCK 1
Understand the context
— p. 75

BLOCK 2
Identify the assessment purpose
— p. 113

BLOCK 3
Define indicators of success
— p. 161
CONTENTS

Welcome from the Directors ......................................................................................................................53
Gert V. Balling, Novo Nordisk Fonden
Rikke Nørding Christensen, Novo Nordisk Fonden

The 6 Blocks in Research Impact Assessment ..........................................................................................65
Overview of the 6 Blocks in Research Impact Assessment ..........................................................................66
RIA Guidelines and templates .......................................................................................................................73

 BLOCK 1: What is Research Impact ...........................................................................................................75

SPEAKER
What is research impact and why assess it? ..............................................................................................81
Jonathan Grant, The Policy Institute at King’s College

SPEAKER
Conceptualising research impact ...............................................................................................................91
Jonathan Grant, The Policy Institute at King’s College

Welcome from the Directors ......................................................................................................................11
ISRIA 2017 School Program .........................................................................................................................13
Favrholm ........................................................................................................................................................20
Faculty, Extern speakers, Organizers & Support personnel .........................................................................25
List of participants .........................................................................................................................................46
Speakers at ISRIA Favrholm, Denmark 2017 .............................................................................................49
The three-dimensional puzzle .......................................................................................................................50
The bloks at ISRIA .........................................................................................................................................51

Blocks at ISRIA

1 2 3 4 5 6
Welcome from the Directors

Welcome to the 2017 International School on Research Impact Assessment (ISRIA), at Favrholm, Denmark. On behalf of the Novo Nordisk Fonden and the Founding partners, we hope that your week with us is full of learning, network building and sharing of knowledge and stories.

ISRIA was created in response to a growing demand for skilled people who can demonstrate the impact of research investments and activities, so the aim of course is:

- to empower you to assess, measure and optimise research impact with a focus on bio-medical and health sciences;
- to share the breadth of existing frameworks, tools, approaches with you; and knowledge about research impact assessments; and
- to increase collaborative capacity, networks and team building among a generation of research and development decision-makers.

The 'science of science' is a growing discipline that is interested in science and innovation, research ecosystems and the effective management and administration of research funding. Understanding 'what works' in research funding is fundamental to the successful construction of knowledge-based societies and economies. This requires practitioners to have the ability to measure the impact of research.

The importance of research impact assessment is growing as organisations are required to be accountable for public and donor money invested in research, to analyse and learn how to fund research effectively, to advocate for optimising future R&D investments, to allocate research funds for optimising returns, and to maximise the value for the money invested.

The incorporation of RIA into the day-to-day operations of funders and researchers is still scarce, so we look forward to you joining our growing network of ISRIA Alumni and together building the desire, capacity, quality and demand for RIA internationally.

DR. GERT V BALLING
2017 ISRIA Director
Senior Scientific Officer
Impact Assessment
Novo Nordisk Fonden

DR. RIKKE NØRDING CHRISTENSEN
2017 ISRIA Director
Scientific Officer
Impact Assessment
Novo Nordisk Fonden
**SUNDAY OCT. 8**

**TIME**

- 13.00 - 14.00: Registration
- 14.15 - 15.30: Meet the School and Connection Café
- 15.30 - 17.15: Get to know Favrholm
- 17.15 - 18.00: Break
- 18.00 - 22.00: Welcome dinner at Favrholm
  - Dinner speech and Reception

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**MONDAY OCT. 9**

**TIME**

- 07.00 - 07.45: 4 km trail jogging/walk and YOGA
- 07.30 - 08.30: Breakfast
- 08.30 - 08.45: Welcome and Orientation
- 08.45 - 09.30: BUILDING BLOCK 1
  - WHAT IS RESEARCH IMPACT - UNDERSTAND THE CONTEXT
  - What is research impact and why assess it?
    - Jonathan Grant
  - Conceptualising research impact
    - Jonathan Grant
- 09.30 - 10.30: Refreshment Break
- 10.30 - 11.00: BUILD YOUR EXPERTISE 1:
- 11.00 - 12.30: Lunch
- 12.30 - 13.30: BUILDING BLOCK 2
  - IDENTIFY THE ASSESSMENT PURPOSE
  - Engaging Stakeholders to understand their needs
    - Saba Hinrichs-Krapels, Paula Adam
- 13.30 - 15.30: Refreshment Break
- 15.30 - 16.00: Assessment Questions
  - Deanne Langlois-Klassen
- 16.00 - 16.30: BUILD YOUR EXPERTISE 2:
- 16.30 - 17.30: Break
- 17.30 - 18.30: Dinner at Favrholm
- 18.30 - 20.30: Chill-out
**TUESDAY OCT. 10**

**TIME**

- **07.00 - 07.45**
  - Circuit program (outdoor)

- **07.30 - 08.30**
  - Breakfast

- **08.30 - 08.40**
  - Contextual setup RIA – BLOCK 1 2 3 4

- **08.40 - 10.00**
  - BUILDING BLOCK 3
  - MEASURE: DEFINE INDICATORS OF SUCCESS
  - Indicators of Success
  - Anne-Maree Dowd, Kathryn Graham

- **10.10 - 10.25**
  - Group Photo

- **10.25 - 10.45**
  - Refreshment Break

- **10.45 - 12.00**
  - BUILD YOUR EXPERTISE 3:
  - Lunch

- **12.00 - 13.00**
  - BUILDING BLOCK 4
  - DEVELOP THE DESIGN, METHODS AND DATA COLLECTION
  - Methods
  - Alexandra Pollitt, Anne-Maree Dowd, Rasmus Heltberg
  - Saba Hinrichs-Krapels, Maite Solans Domenech

- **13.00 - 15.15**
  - Refreshment Break

- **15.15 - 15.30**
  - Bus from Favrholm

- **15.30 - 17.30**
  - Visit to Frederiksborg Castle

- **17.30 - 19.00**
  - Break

- **19.00 - 20.30**
  - Dinner at Favrholm

- **20.30 - 22.00**
  - Bibliometrics and Cocktails
  - Jesper W. Schneider

**WEDNESDAY OCT. 11**

**TIME**

- **07.00 - 07.45**
  - Spinning (indoor)

- **07.30 - 08.30**
  - Breakfast

- **08.30 - 08.45**
  - Contextual setup RIA – BLOCK 1 2 3 4

- **08.45 - 09.45**
  - BUILD YOUR EXPERTISE 4:
  - Lunch

- **09.45 - 10.45**
  - BUILDING BLOCK 5
  - COMMUNICATE AND USE FINDINGS
  - Communicating with decision-makers:
  - Developing an effective impact narrative
  - Alexandra Pollitt, Saba Hinrichs-Krapels

- **10.45 - 11.15**
  - Refreshment Break

- **11.15 - 12.30**
  - Bus to Copenhagen

- **12.30 - 13.30**
  - Visit to the Royal Theater (dress code: casual)

- **13.30 - 15.30**
  - Dinner at Gl. Strand

- **15.30 - 15.45**
  - Break

- **15.45 - 16.45**
  - Bus to Copenhagen

- **16.45 - 18.00**
  - Dinner at Gl. Strand

- **18.00 - 20.00**
  - Visit to the Royal Theater (dress code: casual)

- **20.00 - 22.30**
  - Home
THURSDAY OCT. 12

07.30 - 08.00  Strength and Stability (indoor)
08.00 - 09.00  Breakfast and Check Out
09.00 - 09.15  Contextual setup RIA – BLOCK 1 2 3 4 5 6

09.15 - 10.15  Embedding your assessment
                Paula Adam, Anne-Maree Dowd
10.15 - 10.30  Refreshment Break

10.30 - 11.00  RIA Best Practice
                The gender equity pathway to maximise research impact
                Pavel Ovseiko

11.00 - 12.00  Panel: Opportunities and Challenges for Impact Assessment

12.00 - 12.45  Closing Ceremony
12.45 - 13.45  Lunch
FACULTY,
EXTERNAL SPEAKERS,
ORGANIZERS &
SUPPORT PERSONNEL
Dr. Paula Adam is responsible for Research Assessment at the Agency for Health Quality and Assessment of Catalonia (AQuAS), Spain. She leads the ISOR Group which carries out studies on the impact of health sciences research in Spain. Paula also coordinates a commission of accreditation and assessment of the Spanish health research institutes associated with hospitals. Paula holds a PhD in Economics from the European University Institute in Florence, Italy.

Research key projects include:

- Assessment of the impact of the Spanish and Catalan health sciences research institutes for accountability and allocation purposes.
- Assessment of the impact of different research programmes - the Charity Foundation research fund and Clinical and Health Services Research Call in Catalonia.
- Creation of a registry database which collects detailed information on research inputs and throughputs (e.g. clinical trials) for all Catalan biomedical research institutes and centres.

Dr. Omar Boukhris joined the Qatar National Research Fund (QNRF) in 2007 where he has been instrumental in developing policies and managing grants. He currently holds the position of Director of Post Award at QNRF where his responsibilities include the management of more than a billion USD worth of research projects in the technical, legal, compliance and financial sides as well as the assessment of research impact.

Omar was also the Program Manager for Civil & Environmental Engineering related research projects, where he focused on alignment with the national priorities with various industries. He is a frequent speaker in international conferences and events and has published various papers in Civil and Environmental Engineering topics.

Dr. Boukhris holds Masters and PhD degrees in Civil and Environmental Engineering, where the latest was dedicated to investigating the impact of climate change. Through his studies and work he has held several research positions in North American and European renowned institutions, including the Swiss Federal Institute of Technology at Zurich and the European Commission.
DR. KATHRYN GRAHAM
Co-Chair and Co-Founder

Dr. Kathryn Graham is a co-founder of the International School on Research Impact Assessment and was Director of the School when it was hosted in Banff in 2014. She is the Executive Director of Performance Management and Evaluation at Alberta Innovates which is a Canadian-based, publicly-funded provincial research and innovation organization.

She has over 20 years of strategic evaluation experience in health care and health research and innovation.

Her expertise is in both developing performance management, evaluation and impact assessment strategies as well as implementing measurement frameworks for various systems, organizations and programs. She and her team customized the implementation of the Canadian Academy of Health Sciences (2009) research impact assessment framework.

Kathryn is an adviser on numerous national and international committees that focus on the evaluation of research and innovation and invited to present nationally and internationally.

KATHRYN GRAHAM
Executive Director of Performance Management and Evaluation at Alberta Innovates, CA

Speaker at ISRIA
BLOCK 3: INDICATORS OF SUCCESS
BLOCK 4: METHODS
BLOCK 6: EMBEDDING YOUR ASSESSMENT

ANNE-MAREE DOWD
Executive Manager, Planning, Performance and Evaluation, CSIRO, AU

Dr. Anne-Maree Dowd is the Executive Manager for the Planning, Performance and Evaluation Team at CSIRO. She provides both internal and external stakeholders with all required performance reporting, is responsible for all interval science prioritisation, investment and review processes for CSIRO as well as implementing the organization’s Impact Framework.

Anne-Maree holds a PhD in Organisational Psychology from the University of Queensland and has 16 years of experience in scientific research with expertise in project and capability management, social network analysis, community engagement, public awareness and acceptance of energy technologies (at the international level), behaviour change and transformational adaptation decision-making in Australian Primary Industries.

Recent key projects include:

- Project Leader of CSIRO’s Impact Case Studies and “value” report.
- Global knowledge and awareness of Carbon Dioxide Capture Storage - Manager of the Heads of Agreement contract, Lead of all international sub-contractors, and Project Leader of all Australian research projects and Lead Research Communicator.
- Project Leader for the Transformational Adaptation of Primary Industries project.

Speaker at ISRIA
BLOCK 3: INDICATORS OF SUCCESS
Jonathan Grant is Assistant Principal for Strategic Initiatives & Public Policy, and Professor of Public Policy at King’s College London. He was previously Assistant Principal for Strategy, overseeing the development of King’s new Strategic Vision 2029. He was also founder Director of the Policy Institute at King’s which aims to help secure, maximise and accelerate the translation of academic research to the benefit of policy and practice. His main research interests are on R&D policy and the use of research and evidence in policy and decision making.

Jonathan has significant experience providing analytical support on the formulation and implementation of R&D strategies internationally, including in the UK, Greece, Norway, Qatar, Oman, Australia, Canada and the USA. He was President of RAND Europe between 2006 and 2012 and before that Head of Policy at the Wellcome Trust. Jonathan received his Ph.D from the Faculty of Medicine, University of London and his B.Sc. (Econ) from the London School of Economics.

Recent key projects include:

- Involvement in a series of studies measuring the economic returns from biomedical and health research.
- Led ground breaking study synthesising the c7000 impact case studies submitted to the UK 2014 Research Excellence Framework (REF) using text mining analysis.
DEANNE LANGLOIS-KLASSEN
Associate Director, Performance Management & Evaluation at Alberta Innovates, CA

Deanne Langlois-Klassen, Ph.D., Associate Director, Alberta Innovates. Deanne brings broad public and population health experience to the development of systems approaches for the assessment of research and innovation impacts. She also provides research expertise to ensure scientific rigor and appropriate methodological approaches in the assessment of Alberta Innovates cross-sectoral research and innovation investments.

Deanne has a M.Sc. in Medical Sciences (Population Health) and a Ph.D. in Epidemiology from the University of Alberta, Canada in addition to her experience as a physiotherapist and health program manager.

DR. PAVEL OVSEIKO
Senior Research Fellow in Health Policy and Management, University of Oxford, and NIHR Oxford Biomedical Research Centre, UK

Pavel leads health policy and management research at the interface between universities and teaching hospitals. He investigates governance, organisational culture, and diversity to maximise social, economic, and scientific impact of health research, education, and patient care.

Pavel completed a DPhil in Social Policy at Jesus College, Oxford, an MSc in Social Work and Social Administration at the Moscow School of Social and Economic Sciences, a postgraduate diploma in Diplomacy at the University of Malta, and a first degree in Economics at the Belarus State Economic University in his native Minsk. He held visiting research fellowships at the Centre for Policy Studies in Budapest and Max Planck Institute for the Study of Societies in Cologne.

Pavel’s RIA experience includes both established and emerging research impact assessment methods. He has conducted assessments of bibliometric research outputs, research funding, and collaboration with industry; led a study to establish pilot indicators of economic and societal impact at the University of Oxford Medical Sciences Division; and participated in the preparation, selection, and analysis of impact case studies for the 2014 UK Research Excellence Framework assessment exercise.

Pavel’s current RIA projects focus on maximising value from Biomedical Research Centres and assessing gender equity as a means of accelerating innovation and increasing returns on investment in science.
Alexandra Pollitt is a Research Fellow at the Policy Institute at King’s College London, where her work focuses primarily on research evaluation and R&D policy. Prior to joining King’s, Alex spent six years at RAND Europe, working across a range of policy issues and teaching research methods, communication and project management internationally, including as ISRIA faculty since its launch in 2013. She previously worked in impact assessment, monitoring and evaluation of education programmes for an international NGO; in education assessment in the UK; and in developmental psychiatry research at the University of Cambridge. She holds a MA in Experimental Psychology from Oxford University.

Recent key projects include:

- Co-led an international study mapping the global mental health research funding landscape
- Led a scientometric evaluation of the European Research Council’s funded projects
- Involved in a series of studies measuring the economic returns from biomedical and health research
- Compared the relative value researchers and the general public place on different kinds of research impact

Maite Solans-Domènech is currently a research leader at the Agència de Qualitat i Avaluació Sanitàries de Catalunya (AQuAS), where she participates in the monitoring, evaluation and assessment of the impact of biomedical research. She is currently working on the assessment of the impact of the about 100 million Euros that the citizens of Catalonia donated to the TV3 Telethon in the course of its first 20 editions. She is also leading the research characterisation and assessment of the scientific activities performed in the top-quality Health Research Institutes of Spain according to an accredited ranking.

She has conducted several studies tracing the outcomes of the research funded by AQuAS (accountability in relation to public investment) that have allowed her to use different methodological approaches ranging from the development and application of questionnaires till qualitative methodologies.

She also has worked with different projects related to the elaboration of evidence base reports such as health technology assessments, development of indicators to measure the effectiveness of medical practice, prioritisation of interventions, and the development, implementation and evaluation of metric properties of perceived health questionnaires.
Jonathan Haughton is a development economist by training and inclination, his recent work has included impact evaluations of microcredit in Thailand and Vietnam, a study of the Egyptian Social Fund, and estimates of the economic and distributional effects of the tax proposals made by Donald Trump and Hillary Clinton during the 2016 presidential campaign.

His *Handbook on Poverty and Inequality* (with Shahidur Khandker) and book on *Living Standards Analytics* (with Dominique Haughton) have reached a wider audience.

Current projects include helping the National Institute of Statistics of Rwanda with the measurement and analysis of poverty, and a study of the effects of local inequality on entrepreneurship in India. His teaching and research has brought him to about thirty countries.

Jonathan received his PhD in economics from Harvard University, and his B.A. (Mod.) from Trinity College Dublin. He has been a Chartered Financial Analyst since 2002.

Rasmus Heltberg is a team leader for large complex evaluations and coordinator of IEG’s work on partnerships and trust funds. His recent work is focused on the role of self-evaluation and M&E, and on evaluating the World Bank’s work on data for development and citizen engagement. He helped oversee external evaluations of the Climate Investment Funds and the Global Partnership for Education.

In his 15 years with the World Bank he has also worked on social protection, social development, adaptation to climate change, and disaster response. He was a member of the core team for the 2014 World Development Report on Risk and Opportunity: Managing Risk for Development. His research has been published in a variety of interdisciplinary development journals, including *World Development*, *Journal of Development Studies*, *Environment and Development Economics*, and *Global Environmental Change*.

Rasmus holds a Ph.D. and M.Sc. in Development Economics from the University of Copenhagen and a M.Sc. in Quantitative Development Economics from the University of Warwick.
Professor Jesper W. Schneider is international expert in scientometrics, research evaluation, statistics and research integrity. For more than a decade he has done primary research within these areas and at the same time contributed to numerous national and international research evaluations, as well as done advisory work for public science policy authorities and private funders.

He has led or participated in a number of national and international evaluation projects including evaluations of the Norwegian performance-based research funding model, the Danish National Research Foundation’s Centres of Excellence, the Danish Research Council for Independent Research, and Danish research performance in the EU framework programs 6 and 7. He is a permanent advisor to the Danish Ministry of Education and Research on issues related to scientometrics and research evaluation.

Jesper W. Schneider holds a PhD in Information Science and has a solid international research profile within Scientometrics and Research Evaluation, publishing in all major international outlets and is editorial board member of two core journals: Journal of Informetrics and Research Evaluation.

Recent key projects include:

- Currently PI of large research project funded by the Danish government entitled: “Practices, Perceptions, and Patterns of Research Integrity” (PRINT). The focus of the project is to study the prevalence, varieties and potential causes of questionable research practices.
- Mapped the performance of Danish neuroscience research.

Dr. Mark Taylor is Head of Impact at the UK’s National Institute for Health Research Central Commissioning Facility (NIHR CCF), which is currently developing a new impact evaluation strategy. Mark has a background in Intellectual Property (IP), innovations and health research management; in the past he has been an IP advisor to NIHR and previously the Managing Director of the Oxford University Hospitals NHS Trust’s Biomedical Research Centre. He has sat on the boards of Asthma UK and the Multiple Sclerosis Society.

Mark currently sits on the British Medical Journal’s Patient Panel. Mark holds a PhD from the University of Manchester (Faculty of Medicine), PGDip (University of Oxford, Said Business School), and PGCert (University of Sheffield, School of Health and Related Research).

Recent key projects include:

- Invention for Innovation (i4i) Evaluation, impact assessment of this key NIHR funding programme, RAND Europe (2015).
- Impact Training, ensuring key staff members at NIHR CCF understood the basic techniques in assessment, King’s Policy Institute (ongoing).
- Impact Referencing, ensuring NIHR impact requirements synchronise with other funders and institutions (ongoing).
Dr. Volker Then has been the Executive Director (and founding director) of the Centre for Social Investment at Heidelberg University since July 2006. As of 1994 he served at the Bertelsmann Foundation as their Director Philanthropy and Foundations, building the philanthropy programme of the foundation. Volker Then was, among others, a member of the Governing Council of the European Foundation Centre, Brussels, the International Committee of the Council on Foundations, Washington D.C., and has been a member of the editorial board of the international journal „Alliance“. He is also a board member of several German foundations, e.g. the Manfred-Laetenschiäger-Stiftung, and since 2014 has been a member of the German National Advisory Board of the G7-Social Impact Investment Task Force.

The research interests of Volker Then currently focus on social impact measurement, social investment and social innovation, as well as philanthropic strategy development. He has regularly published on these issues. The most recent project is a handbook publication (with co-authors) on “Social Return on Investment - Measuring the Impact of Social Investment” in an English edition, the German edition was 2015.

Currently he teaches at the University of Heidelberg, the University of Basel (CH), the European Business School, Oestrich-Winkel (Germany) and the North Caucasus Federal University, Stavropol (Russia).

Dr. Volker Then
Managing Director of the Centre for Social Investment at Heidelberg University

Dr. Thomas Alslev Christensen works as Head of Operations at the Novo Nordisk Fonden as from August 2014. He acts as international STI policy advisor and evaluation expert in international research programmes and policy advisory committees in Germany, Norway, Ireland, the European Commission and Singapore. He is also the chairman of RegLab a national STI-network organisation. He has worked as Head of Department for Innovation Policy at the Ministry for Science, Innovation and Higher Education 2005-2014 and as Head of Department for analyses on science and innovation 2013-2014. He was the Head of Secretariat at the Danish Council for Technology and Innovation 2006-2014. He has previously worked in the Nordic Council of Ministers, The Ministry of Economic Affairs and the Prime Minister’s Office where he was an advisor to the prime minister in European economic and monetary integration and international economic affairs.

Dr. Thomas Alslev Christensen
Head of Operations, Novo Nordisk Fonden
DR. RIKKE CHRISTENSEN  
School Director 2017

Rikke is Scientific Officer, Impact Assessment, at the Novo Nordisk Fonden. Her main responsibility is managing the Foundations evaluation work, which involves providing evidence to assess the progress, productivity and impact of the NNF’s research, reporting, funding, and commissioning research into impact methodology. Rikke has been in this role for several years, helping to set up the impact assessment team at the Foundation. She has played a key role in implementing Researchfish at the Foundation. In addition, she is coordinating NNF’s Social Science Research Programme, focusing on the socioeconomic impact of research in Denmark.

She is also part of several networks in Denmark, which have attention on impact assessment and foundations. Prior to joining NNF, she has worked extensively with program evaluation both nationally and internationally.

She spent 7 years in the World Bank working with development policy and program evaluations and more recently she worked at the Ministry of Science, Innovation and Higher Education-Agency for Science, Technology and Innovation in Denmark responsible for several large monitoring and impact assessment studies.

Rikke earned a PhD in Economics from the Aarhus University and George Washington University.

Speaker at ISRIA

OPENING AND CLOSING REMARKS

► RIKKE NØRDING CHRISTENSEN
Scientific Officer, Impact Assessment, Novo Nordisk Fonden, DK

DR. GERT VILHELM BALLING  
School Director 2017

Gert is Senior Scientific Officer, Impact Assessment, at the Novo Nordisk Fonden since 2014 and member of the Researchfish Steering Board since 2017. He is responsible for the implementation and continuous development of impact assessment in the Foundation as well as presentation of impact results to internal and external stakeholders.

Gert has a background in technology transfer, evaluation and organization build-up on a national and international scale. He has worked as special advisor for the Danish Government as well as for public research institutions in Denmark on research policy, research assessment and commercialization of research results since 2005. He has been chairing the Nordic Network for Technology Transfer, been member of the Board of Directors at ProTon Europe as well as appointed independent expert at EU Commission Expert Groups on commercialization of research results.

He gained his MA from Copenhagen University and Albert Ludwig University of Freiburg, Germany and a cross disciplinary PhD from the IT University of Copenhagen, Denmark & UCLA, US. He also has a Certificate in Business Administration and an international RTTP accreditation.

In his spare time he is active in outreach activities and has received nominations and awards for science dissemination.

Speaker at ISRIA

OPENING AND CLOSING REMARKS

► GERT VILHELM BALLING
Senior Scientific Officer, Impact Assessment, Novo Nordisk Fonden, DK
MARIETTA JEPPE
Marietta Jeppe, economist, works as an Officer, Impact Assessment, at the Novo Nordisk Fonden where her area of work are impact assessment, data and Researchfish. She is an economist from University of Copenhagen.

DR. HENRIK BARSULIND FOSSE
Henrik Barslund Fosse, economist, works as a Scientific Officer, Impact Assessment, at the Novo Nordisk Fonden. He has been working with R&D impact assessment as a researcher, consultant and senior government official. He has extensive experience assessing the economic impact of research and innovation, e.g. assessing policy instruments aimed at increasing private sector research and innovation. During his time at the Ministry of Higher Education and Science he was the national expert on STI at OECD and was engaged in multiple activities to share and spread the knowledge on R&D and innovation evaluation in the EU.

EMILIE RØNN JENSEN
Emilie is student assistant in the impact assessment team in the Novo Nordisk Fonden. Her main responsibilities is collecting data, data processing and preparing material for impact analysis. Currently she is finishing her master thesis in Economics at the University of Copenhagen.

JENS HOLten POUlsen
Jens works as a student assistant in the impact assessment team in the Novo Nordisk Fonden. His main responsibilities is collecting data, data processing and preparing material for impact analysis. He is about to finish his master in Sociology at the University of Copenhagen.
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<tr>
<th>First name</th>
<th>Last name</th>
<th>Organisation / Institution</th>
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<tr>
<td>Malak</td>
<td>Al Maghrabi</td>
<td>Hamad Bin Khalifa University, TN</td>
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<tr>
<td>Josep</td>
<td>Alias</td>
<td>Catalan Association of Public Universities (ACUP), ES</td>
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<td>Ion</td>
<td>Amizabalaga</td>
<td>AQuAS - Agency for Health Quality and Assessment of Catalonia, ES</td>
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<td>Urooj</td>
<td>Bakht</td>
<td>University of Lahore, PK</td>
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<td>David</td>
<td>Baxter</td>
<td>Gambling Research Exchange Ontario, CA</td>
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<td>Elina</td>
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<td>Humboldt-University Berlin, DE</td>
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<td>Dila</td>
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<td>Zachary</td>
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<td>Great Lakes Fishery Commission, US</td>
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<td>Jessica</td>
<td>Clark</td>
<td>UK Department for Business, Energy and Industrial Strategy (BEIS), UK</td>
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<td>Carla</td>
<td>Cox</td>
<td>Alzheimer's Research, UK</td>
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<td>Montse</td>
<td>Daban</td>
<td>Government of Catalonia, Secretariat for Universities and Research, ES</td>
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<td>Lisa</td>
<td>Danquah</td>
<td>University of Oxford, UK</td>
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<td>Carlos Primo</td>
<td>David</td>
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<td>María Luz</td>
<td>del Valle</td>
<td>BioCruces Health Research Institute, ES</td>
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<td>Michelle</td>
<td>Ellefson</td>
<td>Steno Diabetes Center Copenhagen, DK</td>
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<td>Kirash</td>
<td>Fartash</td>
<td>Vice-Presidency for Science and Technology, IR</td>
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<td>Emily</td>
<td>Gale</td>
<td>UK Medical Research Council, UK</td>
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<td>Saskia</td>
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<td>Insights for Impact, UK</td>
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<td>Nadja</td>
<td>Gmelch</td>
<td>UOC (Universitat Oberta de Catalunya), DE</td>
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<td>James</td>
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<td>The University of Melbourne, AU</td>
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<td>Eduardo</td>
<td>Guell</td>
<td>National Institute of Health Carlos III (ISICIII), ES</td>
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<td>Danish Agency for Science and Higher Education, DK</td>
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<td>Frederik</td>
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<td>IRIS Group, DK</td>
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<td>National Land Survey of Finland, Finnish Geospatial Research Institute, FI</td>
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<td>Anette</td>
<td>Heyle</td>
<td>Biotech Research and Innovation Centre (BRIC), UCPH, NO</td>
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<td>Yula</td>
<td>Ivanova</td>
<td>Novo Nordisk A/S, DK</td>
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<tr>
<td>Ulla</td>
<td>Jakobsen</td>
<td>Lundbeck Foundation, DK</td>
</tr>
<tr>
<td>David Boysen</td>
<td>Jensen</td>
<td>Agency for Research and Higher Education, DK</td>
</tr>
<tr>
<td>Marie Birk</td>
<td>Jørgensen</td>
<td>National Research Centre for the Working Environment, DK</td>
</tr>
<tr>
<td>Adam</td>
<td>Kamnetzky</td>
<td>The Policy Institute at King's College London, UK</td>
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<tr>
<td>Emma</td>
<td>Kinloch</td>
<td>The Policy Institute at King's College London, UK</td>
</tr>
<tr>
<td>Henning</td>
<td>Klarlund</td>
<td>Roskilde University, DK</td>
</tr>
<tr>
<td>Maria</td>
<td>Koufali</td>
<td>NIHR Nottingham Biomedical Research Centre, UK</td>
</tr>
<tr>
<td>Johanna</td>
<td>Linamaa</td>
<td>Åbo Akademi University (ÅAU), Research Services, FI</td>
</tr>
<tr>
<td>Ricarda</td>
<td>Lehmann</td>
<td>Novo Nordisk Foundation Center for Biosustainability, DE</td>
</tr>
<tr>
<td>David Budtz</td>
<td>Pedersen</td>
<td>Aalborg University, DK</td>
</tr>
<tr>
<td>Núria</td>
<td>Radó</td>
<td>AQuAS - Agency for Health Quality and Assessment of Catalonia, ES</td>
</tr>
<tr>
<td>Carl Felix</td>
<td>Rehberg</td>
<td>University of Sussex, SE</td>
</tr>
<tr>
<td>Wendy</td>
<td>Reijmerink</td>
<td>ZonMw, NL</td>
</tr>
<tr>
<td>Mohamed Ramadan</td>
<td>Rezk</td>
<td>Academy of scientific research and technology-Egypt, EG</td>
</tr>
<tr>
<td>Mikkel</td>
<td>Skjoldager</td>
<td>DAMVAD Analytics, DK</td>
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<tr>
<td>Karen</td>
<td>Skytte Larsen</td>
<td>Villum Fonden, DK</td>
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<tr>
<td>Nickie</td>
<td>Spile</td>
<td>Novo Nordisk Fonden, DK</td>
</tr>
<tr>
<td>Ricardo</td>
<td>Steffen</td>
<td>Universidade do Estado do Rio de Janeiro, BR</td>
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<tr>
<td>Meng Yuan</td>
<td>Sun</td>
<td>Novo Nordisk A/S, DK</td>
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<tr>
<td>Sarah</td>
<td>Thomas</td>
<td>NIHR, UK</td>
</tr>
<tr>
<td>Stefano</td>
<td>Usili</td>
<td>Newcastle University, IT</td>
</tr>
<tr>
<td>Bahareh</td>
<td>Yazdizadeh</td>
<td>Tehran University of Medical Sciences, IR</td>
</tr>
<tr>
<td>Abtesam</td>
<td>Yousuf</td>
<td>Qatar Foundation, QA</td>
</tr>
</tbody>
</table>
SPEAKERS AT ISRIA
FAVRHOLM, DENMARK 2017

- **PAULA ADAM**
  Agency for Health Quality and Assessment of Catalonia, ES

- **OMAR EL FAROUK BOUKHRIS**
  Director, Post Award, Qatar Foundation, QA

- **ANNE-MAREE DOWD**
  Executive Manager, Planning, Performance and Evaluation, CSIRO, AU

- **KATHRYN GRAHAM**
  Executive Director of Performance Management and Evaluation at Alberta Innovates, CA

- **JONATHAN GRANT**
  Assistant Principal, Strategic Initiatives and Public Policy, Professor of Public Policy at King's College London, UK

- **JONATHAN HAUGHTON**
  Professor at University of Suffolk, Boston and PhD. Professor Department of Economics, Beacon Hill Institute, US

- **PAVEL OVSIEKO**
  Senior Research Fellow in Health Policy and Management, University of Oxford, UK

- **ALEXANDRA POLLITT**
  Research Fellow at the Policy Institute at King's College London, UK

- **JESPER SCHNEIDER**
  Professor Department of Political Science - Danish Centre for Studies in Research and Research Policy at Aarhus University, DK

- **MAITE SOLANS-DOMÉNECH**
  Agency for Health Quality and Assessment of Catalonia, ES

- **MARK TAYLOR**
  Head of Impact (CCF), National Institute for Health Research (NIHR), UK

- **VOLKER THEN**
  Managing Director of the Centre for Social Investment at Heidelberg University, DE

Host organization:

- **GERT VILHELM BALLING**
  Senior Scientific Officer, Novo Nordisk Fonden, DK

- **THOMAS ALSLEV CHRISTENSEN**
  Head of Operations, Novo Nordisk Fonden, DK

- **RIKKE NØRDIING CHRISTENSEN**
  Scientific Officer, Novo Nordisk Fonden, DK
THE THREE-DIMENSIONAL PUZZLE

How to put it back together
This page shows how to put your three-dimensional puzzle back together again, after it's been taken apart. Follow the instructions, and your cube will be good as new again.

THE BLOCKS AT ISRIA

Each block in the puzzle represent a building block of Research Impact Assessment. On the following pages you can read about the content of each building block.

1. Understand the context
2. Identify the assessment purpose
3. Define indicators of success
4. Develop the design, methods & data collection
5. Communicate and use findings
6. Manage the assessment
WELCOME FROM THE DIRECTORS

Welcome from the Directors
Gert V. Balling, Novo Nordisk Fonden
Rikke Nørding Christensen, Novo Nordisk Fonden
Welcome from the Directors

GERT V. BALLING & RIKKE NØRDING CHRISTENSEN
Novo Nordisk Fonden

Participate engage with an international community of practice and have the opportunity to develop a research impact assessment plan.

Novo Nordisk Fonden
Impact Assessment Group

Research Impact Assessment (RIA)

Something about you

Program overview

Enjoy the trip!

OUR PRESENTATION TODAY

- First foundation grants awarded 1927
- Impact Assessment group established 2014
- Participated in ISRIA 2015 and 2016
- Published:
  - Impact of the Novo Nordisk Fonden
  - on Research, 2015
  - Societal Impact of the Novo Nordisk Fonden Grants 2016
  - The Economics of Research, 2016
THE RIA CONTEXT THEN....

Too academic and not practitioner focused
Little debate and isolation of interested stakeholders
A nascent but diffused community of practice
Few mechanisms to share practices and develop standards

TODAY IS THE FIRST ISRIA FORUM IN DENMARK

• This event is for alumni and the community
• Purpose is to share learning – peer to peer
• Discuss, what works, what doesn’t work, under what conditions
• Document strategies and tips to share with each other

BEST PRACTICES PROTOCOL:
6 BUILDING BLOCKS OF RIA

1. Understand the context
2. Identify the assessment purpose
3. Define indicators of success
4. Develop the design, methods & data collection
5. Communicate and use findings
6. Manage the assessment

RIA TRENDS, CHALLENGES, SOLUTIONS

TRENDS
• Real time – rapid development
• Demand for metrics (simple)
• Collaborative research and collective impact
• Research and innovation is a dynamic eco-system

RIA CHALLENGES
• Impact takes time – time lags
• Misuse of metrics – one number
• Attribution, contribution and proportionality
• Responsiveness and agility
ABOUT YOU

WHO ARE YOU?

- 23 COUNTRIES
- 59% FEMALE AND 41% MALE

REASONS FOR ATTENDING

- Learn about RIA (for some it's new, for some a refresher)
- Hear what others have done
- Network
- Learn what's new in RIA
- Gain tips, ideas, resources

MOST PARTICIPANTS ARE DIRECTLY ENGAGED IN RESEARCH

- Academia
- Not for Profit
- Government
- Research Funding Agency
- Private
- Industry
- Other
WELCOME Welcome from the Directors


WELCOME

WHAT’S TO COME

SPEAKERS

MOST PARTICIPANTS HAVE INTERMEDIATE RIA KNOWLEDGE

MOST PARTICIPANTS DEVELOP AND/OR PLAN IMPACT RESULTS

SPEAKERS AT ISRIA

Host organisations

Most organisations

SABA HINRICHS-KRAPELS
Senior Economist, Beacon Hill Institute, US

JONATHAN GRANT
Professor Department of Political Management and Evaluation at Aarhus University, DK

Pavel Ovseiko
Senior Research Fellow in Health Policy, Performance and Evaluation, CSIRO, AU

ALEXANDRA POLLITT
Research & Policy Fellow, Department of Political Science, Social Centre for Studies in Social and Research at Justice at University, DK

JONATHAN HAUGHTON
Lead Evaluation Officer with the World Health Organisation, CA

JONAS OUSTOR
Research Officer at Institute at King’s College London, UK

MAREK TOUCHE
Head of Impact CTC, National Institute for Health Research at Birmingham, UK

RASMUS HELTBerg
Executive Director of Performance and Evaluation at Aarhus University, DK

OMAR EL FAROUK BOUKHRIS
Director, Post Award, Management & Evaluation at Novo Nordisk Fonden, DK

SABA HINRICHS-KRAPELS, Paula Adam
Engaging Stakeholders to understand their needs

Jonathan Grant
What is Research Impact - Understand the context

Deanne Langlois-Klassen
Identify the Assessment Purpose

SPEAKERS
THANK YOU!

GERT V. BAILING
Novo Nordisk Fonden
Email: gvb@novo.dk

RIKKIE NØRDING CHRISTENSEN
Novo Nordisk Fonden
Email: rnc@novo.dk

UP NEXT…

BUILDING BLOCK 1

WHAT IS RESEARCH IMPACT
- UNDERSTAND THE CONTEXT
THE 6 BLOCKS IN RESEARCH IMPACT ASSESSMENT
**Block 1: What is research impact and understand the context**

What is research impact and why assess it

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The 4 A’s</td>
<td>Environmental scanning</td>
</tr>
<tr>
<td>2. Accountability</td>
<td>Unit of analysis</td>
</tr>
<tr>
<td>3. Advocacy</td>
<td>Do I need a baseline?</td>
</tr>
<tr>
<td>4. AnalysisAllocation</td>
<td>What is the counterfactual? Attribution vs. Contribution</td>
</tr>
</tbody>
</table>

How do my RIA stakeholders differ from MY interests, perspectives, needs and expectations?

**Conceptualising research impact**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>The art of conceptualization &amp; organising information</td>
<td>Review of research Impact assessment frameworks</td>
</tr>
</tbody>
</table>

**Block 2: Identify the assessment purpose**

Engaging Stakeholders to understand their needs

<table>
<thead>
<tr>
<th>Understand your audience</th>
<th>Aligning communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying your RIA stakeholders</td>
<td>Options to consider when planning to communicate your RIA to stakeholders account for context, purpose, and audience</td>
</tr>
<tr>
<td>• Key interests</td>
<td></td>
</tr>
<tr>
<td>• Perspectives &amp; needs</td>
<td></td>
</tr>
<tr>
<td>• Expectations</td>
<td></td>
</tr>
</tbody>
</table>

How do my RIA stakeholders differ from MY interests, perspectives, needs and expectations?

**Assessment questions**

- Describe the characteristics of a good and not-so-good assessment questions
- Aligning your assessment question to your RIA purpose
- How to refine and socialise your RIA question
OVERVIEW OF THE 6 BLOCKS IN RESEARCH IMPACT ASSESSMENT

Block 3: Define indicators of success

Indicators of success

- Principles of a good indicator
- Difference between an engagement and impact indicator
- Overlapping indicators across your program logic
- How to select Key Performance Indicators (KPI) and achieving balance
- Involving your stakeholders in selecting stakeholders

Block 4: Develop the design, methods and data collection

Methods

<table>
<thead>
<tr>
<th>Design</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is causality to your research?</td>
<td>Quantitative</td>
</tr>
<tr>
<td>How to select an appropriate combination of methods</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Experimental vs. other designs</td>
<td>Mixed methods</td>
</tr>
<tr>
<td>What data do I need?</td>
<td>Contrast the methods – how do you choose?</td>
</tr>
<tr>
<td>What resources do I need?</td>
<td>Triangulating your data</td>
</tr>
<tr>
<td>Reconfirm your design suits your audience</td>
<td></td>
</tr>
</tbody>
</table>

General introduction to the methods available quantitative, qualitative, mixed methods such as the following: economic returns, social return on investments, develop the design and data collection, interviews and focus groups, review and text mining, surveys, case studies, bibliometrics.
Block 5: Communicate and use findings

Communicating with decision-makers: developing an effective impact narrative

- How to effectively communicate the findings from your RIA to various stakeholder.
- Constructing and delivering your impact statement.

Block 6: Manage assessments

Embedding your assessment

- Embedding your impact framework at the institutional level
- Successful commissioning of an RIA
- Managing an RIA at the project level
  - Systems that can assist in tracking and storing evaluation data
  - People aspect to managing a RIA
- Exceeding expectations and delivering a successful RIA
Based on evidence, well-established principles, and best practices, the RIA Guidelines and Plan, provided in the following Sections, form part of your Toolbox. The Toolbox is not intended to be a complete resource on how to assess research impact. Rather, the materials in the Toolbox should be used as decision aids along with other information and materials provided during ISRIA, including faculty presentations and group work activities.

The Guidelines aim to assist assessors (evaluators), programme managers, and other staff in developing and reviewing programme-specific plans for assessing research impact. For example, programme managers can use the Guidelines to describe the outline of a plan to assessors or to engage with assessors about the content and considerations within a specific assessment plan. Similarly, trained assessors can use the Guidelines to enhance the quality of their plans by including several evidence- and practice-based considerations during the development of the plans.

The RIA Plan is a document that describes how you propose to assess the programme. It also looks forward, taking into consideration how you intend to manage the implementation of the plan and how the assessment results will be communicated to inform decisions about programme improvement and optimisation of impact. Provided as a template, the RIA Plan guides the development of an assessment based on ISRIA’s six building blocks and customised to the programme of interest.

The tools in the Toolbox should be adapted to fit the specific context and assessment; as similar documents in the literature reflect, tools such as these can take several different forms and have different titles. The tools are also intended to be ‘living documents’, with the programme-specific content being updated as necessary to reflect the complexities of the programme environment. Any such updates that are made during the planning process should be documented in different versions of the RIA Plan. This informs the assessment stakeholders of the changes and enables them to reflect on the different iterations of the RIA Plan.

Developing an RIA Plan requires critical thinking skills and a needs-based approach that reflects the purpose(s) of the assessment. The Guidelines are therefore designed as a tool to complement these types of skills and not serve as a replacement for them.
BLOCK 1
WHAT IS RESEARCH IMPACT

What is research impact and why assess it?
Jonathan Grant, The Policy Institute at King's

Conceptualising research impact
Jonathan Grant, The Policy Institute at King's
BLOCK 1
WHAT IS RESEARCH IMPACT

The purpose of this section is for you to make notes associated with the content presented for this Block and to build your expertise.

Learning Outcomes:
• Be able to describe the rationale and value of research impact assessment (RIA)
• Describe the discipline of RIA
• Understand the various RIA frameworks
• Perceived ‘competition’ between methods, models & approaches
• Emerging and diffused community of practice
• Describe the components to an “Impact Pathway”
• Describe the RIA context
• Need to build international capacity, share practices & develop standards

Programme and Assessment Context

Information Required in RIA Plan:
• Background information that highlights the past and current needs for the programme, including supporting evidence (e.g., research studies, government reports, results of past assessments, etc.) i.e., why was the programme developed?
• A description of the baseline, especially if a pre-post design is to be used (see Methods and Data Sources in Block 4)
• The relevance of the programme e.g., alignment to the organisation’s strategic plan or government priorities
• The goal(s) and objectives of the programme
• The programme’s scope and complexity
• The programme’s unit of analysis
• Funding and funding sources
• The programme time frame
• The governance structure of the programme (When there are partners, describe the roles and responsibilities of each partner in relation to both the programme and the assessment)
• A list of the key programme stakeholders, including a brief description of their roles and responsibilities in relation to the programme
• The target population(s) that are relevant to programme delivery i.e., a description (e.g., geographical area, age, etc.) of the group(s) that the programme intends to influence or provide benefits to
• The population(s) that will be affected by the programme (i.e. the beneficiaries of the programme)

Sources: Strategic plan; operational plan; vision and mission statements; programme plans and guides; documented assessment requirements; previously completed assessments; and the programme theory.
Tips:

- Be specific, clear, and concise when describing the programme goal(s) and objectives.
- Describe how the programme will be working with which major partners to benefit what specific stakeholder groups.
- For the unit of analysis, consider the following levels and think about the level at which the assessment findings will be used:
  - Research system
  - Field/area of research
  - Organisation/institution
  - Department or programme portfolio
  - Research group
  - Research project
  - Individual
- In general, research impact assessments are seldom done at levels smaller than the research group; however, this depends on the type of method selected (e.g., case studies can be done at the project level).
WHAT IS RESEARCH IMPACT AND WHY ASSESS IT?

Jonathan Grant, The Policy Institute at King’s
WHAT IS RESEARCH IMPACT AND WHY ASSESS IT?

JONATHAN GRANT
The Policy Institute at King’s

LEARNING OUTCOMES

- Have a shared understanding of what we mean by research impact.
- Be able to understand differing motivations for assessing research impact.

WHAT DO WE MEAN - BY RESEARCH IMPACT?

ACADEMIA

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Process</th>
<th>Outputs</th>
</tr>
</thead>
</table>

WIDER SOCIETY

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
</table>

IMPACT IS DEFINED AS...

“...an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia”

Source: http://www.hefce.ac.uk/rsch/REFimpact/
INTEREST IS NOT NEW IN THE IMPACT OF RESEARCH

As long as [universities] are vigorous and healthy and their scientists are free to pursue the truth wherever it may lead, there will be a flow of new scientific knowledge to those who can apply it to practical problems in Government, in industry, or elsewhere. “
Vannevar Bush
Science the Endless Frontier, 1945

“...there is another powerful and great cause of the little advancement of the sciences, which is this: it is impossible to advance properly in the course when the goal is not properly fixed. But the real and legitimate goal of the sciences is the endowment of human life with new inventions and riches.”
Francis Bacon
Novum Organum, 1620

“There is another powerful and great cause of the little advancement of the sciences, which is this: it is impossible to advance properly in the course when the goal is not properly fixed. But the real and legitimate goal of the sciences is the endowment of human life with new inventions and riches.”

There is another powerful and great cause of the little advancement of the sciences, which is this: it is impossible to advance properly in the course when the goal is not properly fixed. But the real and legitimate goal of the sciences is the endowment of human life with new inventions and riches.

Growing body of evidence on ways to monitor, measure & evaluate impacts.

Emergence of the science of science (and innovation) policy.

Scientifically rigorous quantitative basis for science policy.

Group of evaluators, researchers, policy makers, funders & consultants engaged in improving our understanding of research impact.

ACCOUNTABILITY
To taxpayers, donors, etc

ADVOCACY
‘Make the case’ for research funding

ANALYSIS
What works in research funding?

ALLOCATION
What to fund (institution, field, people, etc)

RIA AS A NOT A ‘DISCIPLINE’

DRAWS UPON MANY FIELDS

Source: Morgan Jones and Grant, 2013

WHY ASSESS RESEARCH IMPACT?

A
**THE INTERNATIONAL SCHOOL**

**8 - 12 OCTOBER 2017**

**Favrholm | DENMARK**

**on Research Impact Assessment**

---

**BUT THE SCHOOL SHARES**

**A SET OF PRINCIPLES**

1. Agnostic/neutral approach in the teaching of RIA
2. Transparent, open and accessible
3. RIA are useful to those that need it
4. RIA are practical and can be implemented in a feasible cost effective manner
5. Public value – public investments are used for public value
6. Build a community of practice - global perspective to maximise local capacity in RIA
7. Advance in understanding the theory-practice relationships
8. Public value – public investments are used for public value

---

**BE CLEAR ON THE PRIMARY PURPOSE OF YOUR RESEARCH IMPACT ASSESSMENT**

---

**THE NEED FOR RIA PRACTITIONERS & TOOLS**

- Impact assessment debate too academic & not practitioner-focused
- Perceived 'competition' between methods, models & approaches
- Emerging but diffused community of practice
- Need to build international capacity, share practices & develop standards

---

**LEARNING ACTIVITY**

1. Briefly describe a project that you are familiar with than involved assessing the impact of research
2. Think through the primary objective
3. Think through the secondary objective
4. Mark your project on the Venn diagram

---

**ACTIVITY TIME**

---
TAKE HOME MESSAGES

1. Know why you are assessing research impact
   - What is the objective of the research evaluation?
2. Use a multi-method, multi-dimensional approach
   - Don’t rely on one method (e.g., bibliometrics)
3. (Research) impact assessment is not easy
   - No (research) funder has the answer
4. Need to move from advocacy to accountability
   - Need “science of science” to understand what works
   - Need a practical evidence base for science policy
   - Need to “walk the talk” - ensure that funders of research apply same approaches to themselves as they do to the researchers they fund

RECOMMENDED READINGS


[http://www.exeter.ac.uk/media/universityofexeterresearch/ourresearchexcellence/describeprojectpdf%202013_05_04_7_Essays_on_Impact_FINAL.pdf]
CONCEPTUALISING RESEARCH IMPACT

JONATHAN GRANT
The Policy Institute at King’s

LEARNING OBJECTIVES

- To understand the importance of conceptualisation
- To review various research impact assessment frameworks that have been developed by others

OUTLINE

1. The art of conceptualization & organising information.
2. Review of research impact assessment frameworks.

LEARNING ACTIVITY

In table groups categorise the flags using whatever taxonomy you choose
FOUR APPROACHES TO ORGANISING INFORMATION

- By TIME
- By STRUCTURE
- By RANK
- By DEDUCTIVE REASONING

BY TIME: CHRONOLOGY

The Coca-Cola Bottle


OUTCOME AND IMPACT

What are the medium to long-term consequences of the activity?
What are the ultimate impacts that are aspired to?

INPUT

What is invested?
What resources are you working with?

PROCESSES

What are you doing to accomplish the research goals and objectives?
What are direct results?

OUTPUT

What is produced?

BY STRUCTURE: GEOGRAPHY

BY TIME: CAUSE-EFFECT

No data
1 - 1000
1001 - 2000
2001 - 5000
5001 - 65000
BY STRUCTURE: PESTLE

- Political
- Economic
- Social
- Technological
- Legal
- Environmental

BY STRUCTURE: INTERNAL BUSINESS OBJECTIVES

- To satisfy our shareholders and customers, what business processes must we excel at?

INTERNAL BUSINESS OBJECTIVES

- Measures
- Targets
- Initiatives

BY STRUCTURE: FINANCIAL OBJECTIVES

- To succeed financially, how should we appear to our shareholders?

FINANCIAL OBJECTIVES

- Measures
- Targets
- Initiatives

BY STRUCTURE: CUSTOMER OBJECTIVES

- To achieve our vision, how should we appear to our customers?

CUSTOMER OBJECTIVES

- Measures
- Targets
- Initiatives

Vision and Strategy

Block 1: Conceptualising Research Impact

Balanced Scorecard Framework


BY RANK: MACRO – MICRO

- Micro: Individual
- Mesos: Group
- Macros: Societal

BY STRUCTURE: INTERRELATIONSHIPS

- Individual
- Group
- Societal
- Meso
- Macro

Favrholm | Denmark 8 - 12 October 2017
HOSTED BY Favrholm | Denmark 8 - 12 October 2017
**AIMS OF THE STUDY**

Act as a ‘how-to guide’ to evaluating research

- Understand the challenges and trade-offs in evaluating research
- Provide examples of frameworks and tools used for evaluating research internationally

**OUTLINE**

1. The art of conceptualization & organising information.
2. Review of research impact assessment frameworks.

**WE REVIEWED SIX FRAMEWORKS …**

- Research Excellence Framework (REF), UK – assesses performance of UK universities to determine funding allocation
- STAR METRICS, US – uses data mining and other low burden methods to account for federal R&D spending
- Excellence in Research for Australia (ERA), AU – uses bibliometrics, and other quantitative indicators, to map R&D output
- Canadian Academy of Health Science (CAHS), CA – aims to provide consistency and comparability while retaining flexibility
- National Institute of Health Research (NIHR) Dashboard, UK – provides performance management information at various levels of aggregation
- Productive Interactions, EU – flexible approach to help institutions learn and improve their performance against their own goals
**WE REVIEWED SIX FRAMEWORKS** ...

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**HOW REF WORKED**

| PANEL A | Medical and life sciences |
| PANEL B | Physical sciences and engineering |
| PANEL C | Social sciences |
| PANEL D | Arts and humanities |

REF assesses the quality of research in all UK universities, in all disciplines. It is carried out by 36 expert panels, grouped into 4 main panels.

2011-12 PREPARATION
Panels were appointed; guidance and criteria were published

2012-13 SUBMISSIONS
Universities made submissions in whichever subjects they chose to

2014 ASSESSMENT
36 expert panels reviewed the submissions, guided by the 4 main panels

**WHAT WAS ASSESSED**

**PANELS JUDGED THE OVERALL QUALITY OF EACH SUBMISSION**

- 65% Quality of research OUTPUTS
- 20% IMPACT of research on society
- 15% The research ENVIRONMENT

191,150 research outputs by 52,061 staff were reviewed
16,975 impact case studies were reviewed
The review was based on data and information about the environment

**FOR THE FIRST TIME, REF HAS DEMONSTRATED**

**THE IMPACT OF UK RESEARCH IN ALL SUBJECTS**

- Over 250 research users judged the impacts, jointly with academic panel members.
- 44% of impacts were judged outstanding (4*). A further 40% were judged very considerable (3*).
- Impressive impacts were found from research in all subjects.
- REF shows many ways in which research has fuelled economic prosperity, influenced public policy and services, enhanced communities and civic society, enriched cultural life, improved health and wellbeing, and tackled environmental challenges.
While increasing African elephant numbers in the last 20 years has been a success for conservation efforts, it creates problems for farmers when the elephants raid their crops. Building on local anecdotal evidence, zoologists from the University of Oxford published a study in 2002 reporting that elephants avoided feeding on acacia trees hung with beehives. Partnering with a bioacoustician from Disney’s Animal Kingdom, the team went on to show that the buzz of aggressive bees caused elephants to emit a low-frequency rumble, causing other nearby elephants to retreat.

**IMPACT CASE STUDY **

**EXAMPLE 1:**

Using honey bees as an effective deterrent for crop-raiding elephants’

They went on to develop and test a novel elephant-deterrent beehive fence, built using low-tech, easy to maintain materials. The fences reduced raids on farmers’ crops, improving their food security. In tandem, sales of ‘elephant friendly’ honey from the beehives offset the costs of building the fence. UNESCO and the World Bank have since backed the use of beehive fences as a means to reduce human-elephant conflict. Projects are now running in farms across Kenya, Botswana, Tanzania, Mozambique and Uganda.

**WE REVIEWED SIX FRAMEWORKS …**

- Research Excellence Framework (REF), UK – assesses performance of UK universities to determine funding allocation
- STAR METRICS, US – uses data mining and other low burden methods to account for federal R&D spending
- Excellence in Research for Australia (ERA), AU – uses bibliometrics, and other quantitative indicators, to map R&D output
- Canadian Academy of Health Science (CAHS), CA – aims to provide consistency and comparability while retaining flexibility
- National Institute of Health Research (NIHR) Dashboard, UK – provides performance management information at various levels of aggregation
- Productive Interactions, EU – flexible approach to help institutions learn and improve their performance against their own goals

On 18 September 2012 a newly-discovered Coptic gospel fragment, purportedly dating from the 4th century, was announced in Rome. It generated worldwide publicity: for in it, Jesus refers to ‘my wife’.

Three days later, Professor Francis Watson posted a short paper online, in which he used a form of compositional analysis which he has pioneered to argue that the fragment is most probably a recent forgery. Watson’s paper was extensively read and reported, and widely regarded as conclusive. An imminent TV documentary on the fragment was promptly postponed indefinitely.

**IMPACT CASE STUDY **

**EXAMPLE 2:**

Watson’s research transformed the way that this fragment was perceived by an international public. As such, it prevented a serious scholarly error from becoming lodged in the public consciousness. It is an example of the power of a timely web-enabled intervention by a scholar in a fast-moving news story. *The Case of the Forged Gospel Fragment*, REF 2014 IMPACT CASE STUDY

*JESUS WAS MARRIED*
What are the medium to long-term consequences of the activity?

What are the ultimate impacts that are aspired to?

THE PAYBACK FRAMEWORK


THERE IS NO SILVER BULLET

Designing a research evaluation framework requires trade-offs:

- Quantitative approaches tend to produce longitudinal data, do not require judgement or interpretation and are relatively transparent, but they have a high initial burden
- Formative approaches tend to be comprehensive, evaluating across a range of areas, and flexible, but they do not produce comparisons between institutions
- Approaches that have a high central burden tend not to be suitable for frequent use
- Approaches that have been more fully implemented tend to have a high level of central ownership
- Frameworks that place a high burden on participants require those participants to have a high level of expertise (or should provide capacity building and training to achieve this)
THE FRAMEWORK SHOULD BE DESIGNED BASED ON THE PURPOSE OF THE EVALUATION

ACCOUNTABILITY
ADVOCACY
ANALYSIS
ALLOCATION

THERE ARE SOME PERENNIAL CHALLENGES TO RESEARCH ASSESSMENT

QUESTIONS AND DISCUSSION

FURTHER READING


• King’s College London and Digital Science (2015). The nature, scale and beneficiaries of research impact: An initial analysis of Research Excellence Framework (REF) 2014 impact case studies. Bristol, United Kingdom: HEFCE.

FURTHER READING


THANK YOU FOR YOUR ATTENTION!

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Twitter: @jonathancgrant
IDENTIFYING THE ASSESSMENT PURPOSE

Engaging stakeholders to understand their needs
Saba Hinrichs-Krapels, The Policy Institute at King’s
Paula Adam, ISOR

Assessment Questions
Deanne Langlois-Klassen, Alberta Innovates
IDENTIFY THE ASSESSMENT PURPOSE

Learning Outcomes:
• Be able to define your primary purpose for conducting an RIA
• Evaluate and articulate the context in which you are conducting your RIA
• Identifying your stakeholders and understand their key interests, perspectives, needs and expectations
• Consider preliminary communication options, challenges and approaches, linked to your key stakeholders and overall RIA purpose
• Understand how to develop assessment questions
• Describe the characteristics of good assessment questions
• Write specific assessment questions given stakeholders, purpose and general question(s)

Which Stakeholders Want the Impact Assessment

Information Required in RIA Plan:
• The level of influence that each primary assessment stakeholder has on the programme
• The frequency for RIA required by each primary assessment stakeholder and/or the timelines or points in the programme cycle when the information is needed, for example:
  • Frequency: annually, every other year, every 3 to 5 years, etc.
  • Timelines: at time of admission, discharge and/or follow-up, etc.

Sources: Stakeholder analysis, assessment requirements; and meetings with senior managers or programme staff.

Tips:
Identify the subset of key programme stakeholders (see Block 1) who also represent primary assessment stakeholders

• The primary users of the assessment often include:
  • Funders
  • Donors
  • Academic institutions
  • Researchers
  • Health organisations
  • Industry
  • Programme managers
• It may be necessary to prioritise the primary assessment stakeholders if there are multiple stakeholders with different information needs.
• Prioritisation can be done in several ways, including but not limited to the order of stakeholder importance, influence and/or closeness to the programme as well as through stakeholder mapping processes (for examples of approaches, see: http://www.brainmates.com.au/brainrants/some-practical-tools-for-stakeholder-management)
ENGAGING STAKEHOLDERS TO UNDERSTAND THEIR NEEDS

Saba Hinrichs-Krapels, The Policy Institute at King’s
Paula Adam, ISOR
ENGAGING STAKEHOLDERS TO UNDERSTAND THEIR NEEDS

SABA HINRICH-S-KRAPELS
The Policy Institute at King’s

PAULA ADAM
AQuAS

LEARNING OUTCOMES

- Identify stakeholders (depending on your purpose)
- Prioritise stakeholders (according to receptivity)
- Create appropriate channels
- Engage them in your RIA questions

EXAMPLES OF ENGAGEMENT FOR EACH A

ANALYSIS
What works in research funding?

ADVOCACY
‘Makes the case’ for research funding

ACCOUNTABILITY
To taxpayers, donors, etc.

ALLOCATION
What to fund (institution, field, people etc.)

REF assesses the quality of research in all UK universities, in all disciplines.

Examples of engagement for each A:
- Analysis commissioned by HEFCE; but assessment by peer review
- Results all available online
- Allocation coordinated by HEFCE

Examples of engagement for each A:
- Analysis commissioned by UKCDS; but informed Development sector funding
- Close communication with UKCDS (and ensuring our analysis aligned with Government budget concerns)
- UKCDS tweeted and used blogs and summaries to make analysis public

Panes judged the overall quality of each submission:
- Quality of research outputs: 85%
- Impact of research on society: 20%
- The research environment: 15%
PART 2
IDENTIFYING STAKEHOLDERS

EXAMPLES OF ENGAGEMENT FOR EACH A

ANALYSIS
What works in research funding?

ADVOCACY
‘Makes the case’ for research funding

ACCOUNTABILITY
To taxpayer, donors, etc.

ALLOCATION
What to fund (institution, field, people ...)


LEARNING ACTIVITY

5 MINUTES
IN SMALL GROUPS

WHO DO YOU NEED TO ENGAGE?

ANALYSIS
What works in research funding?

ADVOCACY
‘Makes the case’ for research funding

ACCOUNTABILITY
To taxpayer, donors, etc.

ALLOCATION
What to fund (institution, field, people ...)

Make a list (according to the 4A purpose)
PART 3
PRIORITYING STAKEHOLDERS

WHY AND HOW DO WE PRIORITY STAKEHOLDERS?

REGARD STAKEHOLDERS AS 'IMPACT CONSTITUENCIES'
Your Impact Constituency will generally have positive attitudes towards your research, or at least the potential to develop sympathy towards your research, and help you make a difference to the sector you are studying

A: Time is limited!
B: Not everyone responds to the same messages at the same time or in the same way
C: Not everyone will be as helpful in creating impact

INFLUENCE / INTEREST MATRIX

Keep your friends close, and your key stakeholders closer

<table>
<thead>
<tr>
<th>Influence</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>A – minimal effort</td>
</tr>
<tr>
<td>High</td>
<td>C – keep satisfied</td>
</tr>
</tbody>
</table>

LEARNING ACTIVITY

Divide up your stakeholders into this matrix

<table>
<thead>
<tr>
<th>Influence</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
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</tr>
<tr>
<td>High</td>
<td>C – keep satisfied</td>
</tr>
</tbody>
</table>

DIVISION INTO GROUPS

IN SMALL GROUPS

TIME LIMITS

15 MINUTES

HOSTED BY Favrholm | Denmark
8 - 12 October 2017
PART 4
CREATE CHANNELS

FLAG EXERCISE
CULTIVATING RELATIONSHIPS WITH STAKEHOLDERS

KEY STAKEHOLDERS
- Keep them informed and updated, meet them in person with some frequency, give them priority.
- "POWERFUL", NOT SO INTERESTED: be open, meet them at their convenience, make sure they don’t see you as a problem.
- "INTERESTED", NOT SO POWERFUL: keep informed, answer with emails and links to your work.
- "INTERESTED", NOT SO POWERFUL: follow on Twitter.

WORKING GROUPS / ROUNDTABLES

- Small groups engaging with and contributing to your research.
- Can be time-consuming to organise.
- Can be ‘preaching to the converted’.
- Key stakeholders get an ‘early’ sight of your research and can champion it (snowball effect).
- Good way to get ‘buy-in’ and to engage your networks of users and stakeholders.
- On the other hand, articulating or providing better support for popular pre-existing ideas can still be valuable.
**BRIEFING NOTES**

Short (1000-2000 word) briefing notes that spell out the key findings of a piece of research, briefly describing how you got there and giving any recommendations.

- Ideal for time-poor, high-level decision-makers.
- Must formulate a coherent and accessible narrative.
- Lines can be picked up by media.
- Can over-simplify complex research.
- Can leave you open to criticism.
- Hard to produce without professional support.

**PAMPHLETS**

Accessible, message-led publications that enable the reader to understand the research and the implications without the depth and impenetrability of some academic journals.

- Good way to engage policymakers and think-takers.
- Can raise media profile (if pushed).
- Can be picked up by policymakers.
- Time-consuming.
- Need an outlet.

**BLOGGING**

Discrete posts online of providing accessible ‘versions’ of research, findings and implications.

- Good way to build a digital profile.
- Open access – so can draw in all stakeholders.
- Short – works for the time poor.
- Can get ‘lost’ in the internet ether.
- Require regular maintenance and upkeep to retain audience (see Constituencies).

**BMC TIPS ON WRITING BLOGS**

1. Advise that blogs are between 300-600 words.
2. Try to avoid using technical language – write the blog in the style of an opinion piece you would find in a high brow newspaper – it doesn’t have to be dumbed-down, just clear.
3. There’s no need for formal references in the blog – just make sure if you reference findings from another piece of work or another article that you add in a hyperlink to that work.
4. Keep paragraphs short. It’s ok for a blog to be long, but it’s good practice to space the paragraphs out more than you normally would in a Word document, so that it doesn’t look too dense on the page.
TWITTER CAMPAIGNS

- Can create and supplement your research network.
- Can create a digital profile for your work.
- Very easy to ‘push’ headlines

- Can over-simplify.
- Can cause conflict.
- You may end up talking in an echo chamber of like-minded individuals.

INFOGRAPHICS

- Visual way to communicate messages.
- Excellent to communicate lots of data.
- Grabs attention quickly.
- Can be used for tweets and briefings.

- Can be costly.
- Needs to be complemented by text in some contexts.

PART 5
ASK THE RIGHT QUESTION(S)

- Identify your channels

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>A - minimal effort, B - keep informed</td>
</tr>
<tr>
<td>High</td>
<td>C - keep satisfied, D - key stakeholders</td>
</tr>
</tbody>
</table>

382 MILLION people worldwide are estimated to have diabetes

8.3% of the global adult population (aged 20-79) are undiagnosed

20% 40% 40%
DEVELOPING QUESTIONS
WITH STAKEHOLDER

- Workshop
- Delphi survey

DIVERGENCE

- Workshop
- Interviews
- Focus group

CONVERGENCE

FINDING THE RIGHT QUESTIONS

- Initial question
- Narrower question
- Other track question

HOW STOP POLLUTION ENTERING THE SEA?

- How stop pollution at source?
- How stop pollution?

HOW CLEAN UP THE SEA WATER?

- How clean up the sea water?

HOW CLEAN UP PLASTICS IN THE SEA?

- How clean up plastics in the sea?
LEARNING ACTIVITY

15 MINUTES

IN SMALL GROUPS

Choose one stakeholder individual or group.

What should be the key question you address with them?

PART 6 / CASE STUDY

HEALTH RESEARCH ASSESSMENT IN CATALONIA (SPAIN):

THE SARIS SYSTEM

SARIS is a Strategic Instrument of the Strategic Plan of Health Research and Innovation of Catalonia (PERIS), 2016-2020

PERIS AS A FUNDAMENTAL VALUE

TO IMPROVE HEALTH

STANDARDISED PROCESS OF RIA

DESIGN USED BY THE ISOR GROUP IN AQUAS

What is being assessed?

Several approaches for RIA study

RIQA question specification

Choice of mix-method

Key informants / players

RIQA product

Experts

AQuAS team - multidisciplinary experience

Expert panels

External reviewers

Assessment question

Project

Research setting

Programme

Countries / regions

Disease / discipline

Institution / centre

Programme

Region, country

Research group

Disease / discipline

Bibliometrics

Economic evaluation

Interviews

Data mining

Questionnaires

Network analysis

Researchers

Research managers

Healthcare professionals

Healthcare professionals

Patients

Healthcare managers

Industry

Stakeholders

Flagship publication

Scientific articles

General approach to a RIA study

RIA question specification

Choice of mix-method

Key informants / players

RIQA product

ANALYSIS

ADVOCACY

ALLOCATION

ACCOUNTABILITY

ENGAGING STAKEHOLDERS TO UNDERSTAND THEIR NEEDS
VALUES OF THE SARIS

Before SARIS...

Inspired in ISRIA values...

Excellence

Orientation to impact on health

Orientation to the needs of stakeholders

Orientation to practice

Orientation to global and local reach

THE CONCEPT OF ‘RESPONSIBLE ASSESSMENT’
IN THE SARIS

• Rather than wait 5 years to assess the impact of PERIS, SARIS wants to become an influential stakeholder
• Apply global lessons learnt from RIA experiences and ISRIA learnings before impact happens
• Include ‘analysis’ (research on research) as a key ‘actor’
• Promotion of a broad conception of engagement including
  • Engaged research community
  • Engaged policy system (health and research)
  • Engaged organisations
  • Engaged assessment system
  • Engaged patient
• Co-responsibility (all actors) in accelerating and enhancing impact on health
• Promote ‘research on research’ and the use of evidence in scientific policy

THE OBJECTIVES AND PILLARS OF THE SARIS

OBJECTIVES

- IMPROVEMENT (IMPACT)
- LEARNING
- MOTIVATION

PILLARS

- ACCOUNTABILITY
- IMPACT
- ENGAGEMENT

PRODUCTS

- Health Research Outcomes Scoreboard
- SARIS Reports
- Community of Practice

AUDIENCE

- Governments
- Influential decision makers
- Interested researchers
- Health Research system stakeholders

INFLUENCIAL STAKEHOLDERS
OF TRANSLATIONAL HEALTH SCIENCES RESEARCH IN CATALONIA

- Researcher
- Patient and family
- Research policy maker
- Health policy maker
- Health centre manager
- Research career incentives system
- R&D manager in health centres
- Public administration regulators
- Clinician and health practitioner
- Peer reviewer
- Assessment agency
**Stakeholders Influence Across the Research Process of PERIS**

**Key stakeholders**
- Research policy-makers
- Public administration
- Funding rules
- Clinicians and practitioners
- Patients
- Health managers
- Researchers
- Assessment agents

**Influence on**
- Priority setting
- Ex-ante assessment
- Research development
- Research uptake

**How AQUAS Supports Influential Stakeholders in Addressing Greater Impact**

- **Analysis**
  - Research performance according to programme design
  - Health system
  - Research needs and relevance

- **Engagement**
  - Communicating and mobilizing
  - Incentives for the community
  - Estee measures

**One Strength of SARIS**

- **Research assessment agency**
- **Health system assessment agency**

**Thank you for your attention!**

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BLOCK 2

ASSESSMENT QUESTIONS

Deanne Langlois-Klassen, Alberta Innovates
ASSESSMENT QUESTIONS

DEANNE LANGLOIS-KLASSEN
Alberta Innovates

LEARNING OUTCOMES

- Understand how to develop assessment questions
- Describe the characteristics of good assessment questions
- Write specific assessment questions given stakeholders, purpose and general question(s)

“The most serious mistakes are not being made as a result of wrong answers. The truly dangerous thing is asking the wrong question.”


ASSESSMENT QUESTIONS

Essential discussions about:
- Who wants the answers
- Intended use (purpose)

Give structure to the assessment
Facilitate appropriate and thoughtful planning
BUT....

Developing questions of relevance and quality is not without its challenges.

**PROCESS FOR DEVELOPING QUESTIONS**

- Clarify the program objectives
  - What is to be achieved?
- Identify the assessment purpose
- List and prioritize general questions
- Determine which specific questions can be realistically addressed

**FACTORS TO CONSIDER**

- Purpose(s) of assessment
- Diversity of stakeholder perspectives
- Program performance areas at issue for the stakeholders
- Availability of resources required to answer the questions
- Focus on the most important information needs

**“GOOD” QUESTIONS**

- Relevant to stakeholder needs & purpose
- Reasonable & appropriate to actual program activities
- Answerable
- Observable indicators available
- Available time, resources & expertise
- Not just about “what” but also “how good”
- Associated with relevant criteria by which to judge performance
- Avoid ambiguous or vague terms
GENERAL ASSESSMENT QUESTIONS

Broad, overarching questions that the stakeholders need answered for the purpose(s) of the assessment

- What the assessment is expected to answer
- Focus on a small number of questions (5-7)

PRIORITIZE GENERAL QUESTIONS

- Align with the purpose
- Are of importance to most stakeholders
- Provide necessary information on important program areas
- Can be answered with available resources and on time
- Will be supported (and used) by the assessment stakeholders

EXAMPLES OF GENERAL QUESTION

- Is the program producing the expected impacts?
- Were there any unintended (positive or negative) impacts?

SPECIFIC ASSESSMENT QUESTIONS

Identify a set of specific questions for each general question that, when answered, fulfill the purpose

- Informs indicator selection
- Consider existing or requested indicators
- Include an agreed upon performance standard
DEVELOPING SPECIFIC QUESTIONS

Use logic model to identify program elements essential to the performance issue raised by each general question

- Increases likelihood of specific questions being important and relevant

KEY MESSAGES

1. Questions link to assessment purpose
2. Logic model is an important tool for developing specific questions
3. Co-develop questions with stakeholders
4. Ensure good and quality questions
5. Prioritization is often required
6. Don’t rush the process!

If you do not know how to ask the right question, you discover nothing.

W. Edwards Deming

FURTHER READING

THANK YOU!

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BLOCK 3
DEFINING INDICATORS OF SUCCESS

Indicators of Success
Anne-Maree Dowd, CSIRO
Kathryn Graham, Alberta Innovates
BLOCK 3
DEFINE INDICATORS OF SUCCESS

Learning Outcomes:
• Understand how to generate a balanced set of key performance indicators (KPIs)
• Use your impact pathway (logic model) to generate indicators
• Select KPIs of interest to stakeholders
• Understand how to operationalise KPIs

Programme Theory

Information Required in RIA Plan:
• A narrative about how the programme is understood to contribute to the intended impacts through its activities, which could be articulated in the form of a narrative (e.g., theory of change statement) or as a table or figure (e.g., programme logic model, strategy map, etc.)
• Clearly explain the linkages between the inputs, activities, outputs, reach, and impacts
• External factors that influence whether the impacts will be achieved

Sources: Programme documentation and stakeholder communication.

Tips:
• Use a series of 'if...then' questions to develop the programme theory (e.g., if these inputs are provided, then the programme can complete those activities, etc.)
• When developing the programme theory, note any critical assumptions that could jeopardise the programme’s success as well as any critical success factors. If measured, these factors could provide significant insight into the assessment results.
• The programme theory should be written so that a reader who is unfamiliar with the programme will understand it
• If a specific framework (see Block 1) is not being used, clearly articulate what the programme intends to change
BLOCK 3

INDICATORS OF SUCCESS

Anne-Maree Dowd, CSIRO
Kathryn Graham, Alberta Innovates
INDICATORS OF SUCCESS

KATHRYN GRAHAM  
Alberta Innovates

ANNE-MAREE DOWD  
CSIRO

LEARNING OUTCOMES

- Know the characteristics of good indicators
- Understand the steps in operationalising Key Performance Indicators (KPIs)
- Select KPIs of interest to your stakeholders
- Generate a balanced set of KPIs across the impact pathway

WHY IS MEASUREMENT IMPORTANT?

“What gets measured gets improved”
Peter F. Drucker

INDICATORS DEFINED

Measure, metric and indicator often used interchangeably

- Indicator: The particular characteristic or dimension used to determine change (e.g. speed)
- Measure/metric: The unit of measurement (e.g. km/hr)
**IMPORTANCE OF ‘GOOD INDICATORS’**

- Tells a brief, convincing performance story about what has (or has not) been achieved
  - Especially when using a balanced set of indicators
- Provides the evidence to answer stakeholder questions about impact

**USE OF ‘GOOD’ INDICATORS**

- Help track progress and achievement of goals
- Provide measures of change (or not) to inform decisions and actions
- Feed into reporting systems

**TYPES OF INDICATORS**

<table>
<thead>
<tr>
<th>LEADING</th>
<th>LAGGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives an indication BEFORE the anticipated impact occurs</td>
<td>Provides the evidence AFTER the impact has occurred</td>
</tr>
<tr>
<td><strong>CHARACTERISTICS:</strong></td>
<td><strong>CHARACTERISTICS:</strong></td>
</tr>
<tr>
<td>- Input-oriented</td>
<td>- Output-oriented</td>
</tr>
<tr>
<td>- Hard to measure</td>
<td>- Easy to measure</td>
</tr>
<tr>
<td>- Easy to influence</td>
<td>- Hard to influence or improve</td>
</tr>
<tr>
<td>e.g. patient daily referral volumes</td>
<td>e.g. patient average referral to admission cycle times</td>
</tr>
</tbody>
</table>

**STEPS FOR GENERATING & SELECTING INDICATORS**

1. Engage stakeholders and strategically align
2. Develop assessment questions across your impact pathway
3. Generate a list of possible indicators
4. Assess and select the best KPIs
5. Review indicators for use and action
STEP 1: ENGAGE STAKEHOLDERS & STRATEGICALLY ALIGN

- Participative approach
  - Ask stakeholders about impacts and indicators of interest
- Strategically align & review purpose and target
  - Vision & mission
  - Program goals & objectives
  - Organisational and or external mandatory requirements

STEP 2: DEVELOP IMPACT ASSESSMENT QUESTIONS ALONG YOUR IMPACT PATHWAY

- Develop impact assessment questions
  - Ask stakeholders what they need to know
  - Indicators give the evidence to answer their questions

STEP 3: GENERATE A LIST OF POSSIBLE INDICATORS

- RESEARCH LITERATURE BEST PRACTICES
  - Mixed methods and multi-data sources
  - Triangulate across multiple data sources
- EXAMPLE OF INDICATORS:
  - Highly Skilled People
  - New or Improved Products/Services
  - Annual Growth Sales per Year
- EXAMPLE OF DATA SOURCES:
  - Indicator libraries
  - Software application tools

EXAMPLE OF QUESTIONS AND INDICATORS ALONG THE IMPACT PATHWAY

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
<th>IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What resources were invested in the Program?</td>
<td>What are you doing to achieve your Program goals?</td>
<td>What are the direct products/services/techniques produced by your Program?</td>
<td>What were the benefits/consequences of using your solutions?</td>
<td>ECONOMIC IMPACT</td>
</tr>
<tr>
<td>•輕-/ Typed</td>
<td>• High-quality</td>
<td>• Appropriation funding</td>
<td>• Strategic management, planning, implementation</td>
<td>• Diversified economy, quality workforce, productivity improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Staff FTE</td>
<td></td>
</tr>
<tr>
<td>STRATEGIC IMPACT</td>
<td></td>
<td></td>
<td></td>
<td>ENVIRONMENTAL IMPACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Water savings, habitat rehabilitation, reduced CO2 emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SOCIAL IMPACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Health, wellbeing, social cohesion</td>
</tr>
</tbody>
</table>
TWO APPROACHES

Benchmarking for Comparison Purposes
Easier to benchmark if use standardized indicators with definitions
- Enables comparison across different organizations
- Assist in driving continuous improvement

Use of Impact Categories allows “Fit for Purpose” Indicators
Identifies common impact areas
- Encourages thinking about the types of impact
- Can choose different indicators
- Allows for customised continuous improvement

NAPHRO INDICATORS

1. Provincial share of national & other funding
2. Research & Innovation (R&I) - GDP
3. Pharmaceutical R&I spending
4. Biotechnology R&I spending
5. Federal-level funding success rates
6. Licensing
7. Spin-offs
8. Employment
9. Educational impacts

ENVIRONMENTAL IMPACT CATEGORIES

SOCIAL IMPACT CATEGORIES

ECONOMIC IMPACT CATEGORIES

FIT FOR PURPOSE INDICATORS

1. Air quality
2. Ecobusiness health and integrity
3. Access to resources and opportunities
4. Climate
5. Quality of life (material security and livelihoods)
6. Natural resources and land
7. Safety
8. Energy generation and consumption
9. Security (e.g. cyber, biological, civil and military)
10. Resilience
11. New services, products, experiences and market
12. Indigenous culture and heritage
13. Securing and protection existing markets
14. Innovation and human capital (creativity and invention)
15. Social cohesion

LEARNING ACTIVITY

At your table choose the envelope labelled road trip indicators
Read the instructions provided and discuss in your group which indicators map best to the impact pathway
STEP 4: ASSESS & SELECT THE BEST KPIS

1. Think of the ‘big picture’
2. Importance and feasibility
3. Some indicators are better at:

- Telling a story that typically needs several indicators
- Answering the ‘so what’ question
- Informing action – the ‘now what’

CRITERIA FOR SELECTING A BALANCED SET OF INDICATORS

- Focused on the organization’s objectives
- Appropriate for the stakeholders who are likely to use the information
- Balanced to cover all significant areas of work performed by an organization
- Robust enough to cope with organizational changes (such as staff changes)
- Integrated into management processes
- Cost-effective (balancing the benefits of the information against collection costs)


TOOLS FOR SELECTING KEY PERFORMANCE INDICATORS

1. DELPHI TECHNIQUE
   - Structured way to collect qualitative information from experts in relevant fields
   - Use ranking, scoring & feedback to arrive at consensus

2. INDICATOR QUADRANT TECHNIQUE
   - Used to develop & select performance indicators
   - Delphi characteristics:
     - Structured information flow
     - Regular feedback
     - Participant anonymity
   - Feasibility +
   - Feasibility -
   - Importance -
   - Importance +

STEP 5: REVIEW INDICATORS FOR USE AND ACTION

- Identify aspirational indicators & data sources
- Select a key set of indicators
- Balanced set of indicators
- Balance with leading indicators
- Look at contribution bundles
- Focus on the program change

CAUTIONS

- Measuring too many things
- Using only lagging indicators
- Double counting
- Focusing on the wrong indicator
- Only selecting available indicators
2 LEARNING ACTIVITY

1. The envelope labeled “Indicators” contains a number of indicators.
2. Sort the indicators from least to most important and select 3 key performance indicators (KPIs) that best answer the assessment question.
3. Provide a rationale for why you selected each of your 3 KPIs and why other indicators were excluded.

15 MINUTES
IN SMALL GROUPS

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KEY MESSAGES

1. Engage stakeholders
2. Impact pathways can be a useful tool
3. Triangulate data sources for generating indicators
4. Use criteria to select a balanced set of KPIs
5. Evidence from indicators should inform action

Metrics alone are not sufficient for assessing impact.

THANK YOU!

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