COMMONWEALTH UPDATE ON HEALTH AND MEDICAL RESEARCH

CHA Research Symposium 2018
1 June 2018

David Abbott PhD
Principal Research Scientist
Office of Health and Medical Research
Australian Health System – 4 x PILLARS

1. Guaranteeing Medicare and access to medicines
2. Supporting our hospitals
3. Prioritising mental health, preventive health and sport, and
4. Investing in health and medical research

>$6 billion over the next five years on research
How does Australia compare?

R&D as a percentage of GDP
Commonwealth investment

- R&D Tax Incentives
- Research block grants
- NHMRC
- CSIRO
- ARC
- ANSTO
- NCRIS
- Rural R&D Corporations
- CRC programme
- BTF
- Other Health Portfolio
- MRFF (2016-17)
- Other Commonwealth
MEDICAL RESEARCH FUTURE FUND

- dedicated vehicle for priority-driven investment
- endowment fund ($20b), with capital preserved in perpetuity

<table>
<thead>
<tr>
<th>Year</th>
<th>2016-17 ($M)</th>
<th>2017-18 ($M)</th>
<th>2018-19 ($M)</th>
<th>2019-20 ($M)</th>
<th>2020-21 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>60.9</td>
<td>121.6</td>
<td>214.9</td>
<td>386.4</td>
<td>642.9</td>
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- additional and complementary to NHMRC
- Australian Medical Research Advisory Board
- inaugural MRFF STRATEGY and PRIORITIES
Disbursement projections

Expected Annual Disbursements ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Disbursements</th>
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<tbody>
<tr>
<td>2015-16</td>
<td>61</td>
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<tr>
<td>2016-17</td>
<td>122</td>
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<tr>
<td>2017-18</td>
<td>215</td>
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<tr>
<td>2018-19</td>
<td>386</td>
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$784m/4yrs

Source: Budget Paper 2, 2014-15
1. DISCOVERY

IDEA

BASIC RESEARCH
The majority of the research at this stage is publicly funded at universities, colleges and independent research institutions in every state.

2. DEVELOPMENT

CLINICAL TRIALS
Once a disease target is identified, drugs are designed and tested. Both public and privately funded research are involved.

PHASE I PHASE II PHASE III

REGULATORY APPROVAL
Human trials are completed. FDA approval. Industry is responsible for bringing a drug to market. Safety and evaluation continue after approvals.

3. DELIVERY

PATIENT CARE
Biomedical Translation Fund

- National Innovation and Science Agenda
- Investment in biomedical start-ups that are commercialising discoveries for market success
- For-profit venture fund (> $500M)
  - Combined Commonwealth and private capital
- Licensed private sector fund managers
  - OneVentures
  - Brandon Capital Partners
  - BioScience Managers
Medical Research Advisory Board

“ensure the MRFF is enduring and transformative”

Funding Principles (announced 6 December 2017)

- Contestable processes, peer review, diverse perspectives
- Collaboration across sectors and with end-users
- Focus on burden and unmet need – evidence gaps
- Game-changers balanced with sector improvements

2019-2021 Priorities (consultation from mid-2018)

- Broad engagement - consumers, researchers, clinicians, health system managers
2017-18 Announcements…

- **Australian Brain Cancer Mission** - $100m/10 years
  - research roadmap - double survival rates and improve quality of life
  - MRFF contribution of $50m, to be matched by co-funding partners

- **Clinical Trials** - $69m to award in 2017-18 and 2018-19
  - rare cancers, rare diseases and unmet need – 19 trials = $26m
  - $10m – targeted call for low survival cancers and diseases
  - further $33m for open call in 2018-19

- **BioMedTech Horizons**
  - Horizons 1.0 – $5m (precision medicine and 3D printing) – MTPConnect
  - Horizons 2.0 (medtech focus) – further $30m/4 years from 2017-18

- **Next Generation Clinical Researchers** (+$70m/5 years)
  - available via existing NHMRC fellowship schemes x 3
  - from 2018-19, transition to new Investigator Grants – integrated, flexible

- **Research Translation Centres** ($55m/3 years)
  - AHRTCs and CIRHs - primed and ready vehicles to tackle health system challenges
National Health and Medical Industry Growth Plan

• $1.3 billion total package – Budget 2018/19

• Genomics Health Futures Mission (Genomics Mission)
  o $500M over 10 years
  o clinical flagship studies - rare diseases, rare cancers and complex conditions
  o privacy, legal, social and familial impacts
  o analytical power backed by national standards
  o secure data holdings - access, analysis and sharing

• First project is a $20 million trial in pre-conception screening
Genomics Mission – foundational elements

- National Health Genomics Policy Framework 2017
- ACOLA: The Future of Precision Medicine in Australia 2018
- Large NHMRC grants - International Cancer Genome Consortium (ICGC) and Australian Genomics Health Alliance (AGHA)
- State and territory investments, e.g. Queensland Genomics Health Alliance
- International efforts, e.g. Global Alliance for genomics and Health (GA4GH), Global Genomic Medicine Collaborative (G2MC)
National Health Genomics Policy Framework

- COAG Health Council
- aligned policy settings across Australia
- agreed strategic priorities:
  - precision medicine
  - skilled workforce
  - safety and quality
  - financing/cost effectiveness
  - power of data
- national standards: data, research, ethics, legal and delivery
- efficient, effective, ethical and equitable – system integration
Genomics Mission – next steps

Steering Committee – Chaired by Professor Ian Fraser

Public Consultation – Operational Plan and options for IT solution

Considerations:
• Move from disease specific data holdings to federated or national approaches
• Build on strengths by identifying opportunities to scale-up
• Obvious areas are cancer and rare diseases, but what will genomics mean for chronic disease?
• Ethical, legal and social issues are critical, e.g. facilitate data sharing while protecting security and privacy
MRFF Strategy and Priorities

- Health system fully informed by quality health and medical research

**Strategy 2016-2021**
- Strategic and international horizons
- Data and infrastructure
- Health services and systems
- Capacity and collaboration
- Trials and translation
- Commercialisation

**Priorities 2016-2018**
Thank you