

Annual Report 2010-2011







This Report is available from The Reproductive Technology Council website http://www.rtc.org.au

A copy may be obtained free of charge from: The Executive Officer The Western Australian Reproductive Technology Council 189 Royal Street EAST PERTH WA 6004

September 2011



Dr David Russell-Weisz A/Chief Executive Officer Department of Health 189 Royal Street EAST PERTH WA 6004

Dear Dr Russell-Weisz

It is with pleasure that I submit the Annual Report of the Reproductive Technology Council (Council) for the financial year 2010-2011. This report sets out details of reproductive technology practices in this State and activities of the Council, as required by the *Human Reproductive Technology Act 1991*. It is in a form suitable for submission to the Minister for Health and also, as is required, to be laid by the Minister before each House of Parliament.

This year Council has focused on the assessment of surrogacy applications and the development of guidelines and standards for counselling surrogacy participants. This year, Council approved the first surrogacy application under the *Surrogacy Act 2008*.

Council recognises that some people find it very difficult to reach a decision regarding their stored embryos, and is developing an 'End of Embryo Storage' brochure to provide information on the available options.

Council members have liaised with the Department of Health to inform submissions to the legislative review of the *Prohibition of Human Cloning Act 2002* and *Research Involving Human Embryos Act 2002*.

Council members have also liaised with the Department of Health to inform submissions to the Senate inquiry into donor conception practices in Australia. In addition, the Reproductive Technology Council Counselling Committee continues to build expertise in facilitating contact between participants of donor conception, which has informed policy development and professional education.

It is not possible for Council to operate effectively without the significant support of a number of people who provide their expertise and time to attend to matters requiring Council consideration. I especially wish to thank Council and Committee members for their ongoing commitment. Finally, I recognise the ongoing financial contribution by the Department of Health, the support of Legal and Legislative Services, and the administrative support provided by staff of the Reproductive Technology Unit.

Yours sincerely

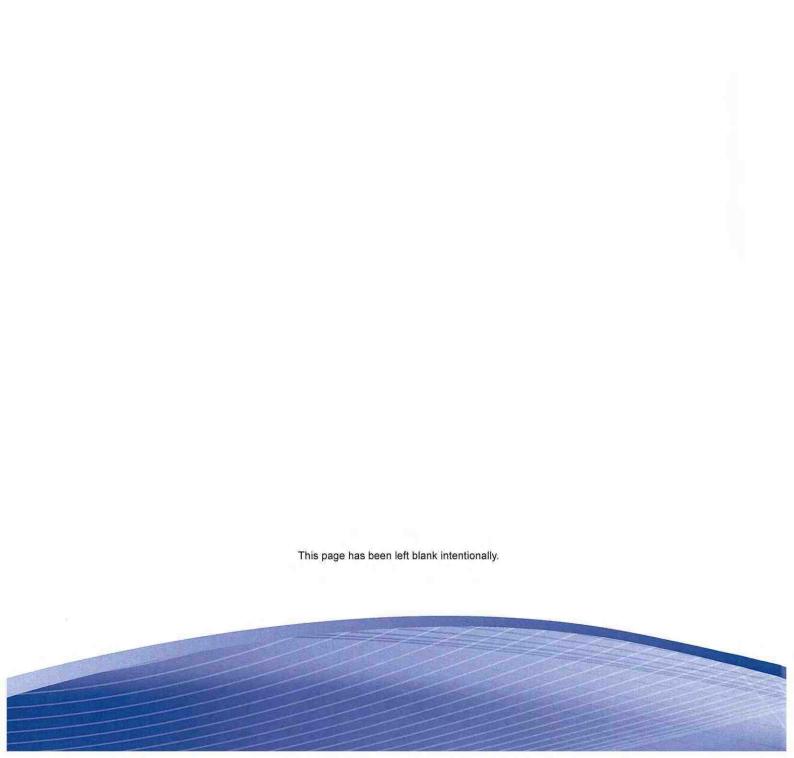
**CA Michael AO** 

la Minare

Chair

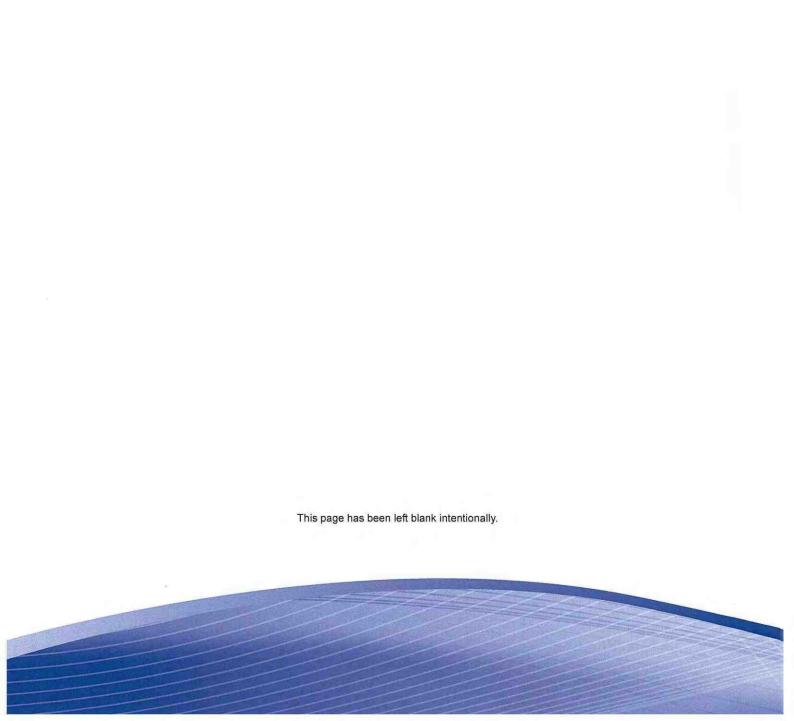
Reproductive Technology Council

9 September 2011



# Contents

Executive Summary	
Introduction	
Council Functions	3
Council Chair and Committee Chairs	
Membership of the Council 2010-2011	6
Counselling Committee	
Embryo Storage Committee	8
Licensing and Administration Advisory Committee	
PGD Advisory Committee	
Scientific Advisory Committee	
Operations of the Council	
Meetings	
Membership	
Reproductive Technology Unit	
Licence Holders and Exempt Practitioners	
Applications to Council	
The Council's Role as an Advisory Body	15
Publications and Presentations	
Developments in Reproductive Technology	
Reproductive Technology Registers	19
The Reproductive Technology Database	19
The Voluntary Register Database	20
Acknowledgements	
References	22
	22
Appendix 1: Licence Holders & Exempt Practitioners	24
2: Financial Statement	
3: Approved Counsellors	25
4: Operations of Licence Holders	20
Table 1: Approved applications for extension of storage	11
2: Genetic condition tested	12
3: Surrogacy arrangements	13
4: Approved innovative procedures	13
5: Voluntary Register applications	20
6: Matches from Voluntary Register	21
7: IVF treatments	26
8: IVF donation and recipient cycles	27
9: Dispersal of stored embryos	27
Figure 1: Progression of fresh IVF cycles	28
2: Progression of thawed embryo cycles	29
3. Number of IVF with ICSI	29
4: Number of sperm donors by age group	30



# **Executive Summary**

This report was prepared by the Reproductive Technology Council (Council) for the Chief Executive Officer (CEO), Department of Health, to comply with the requirements of Section 5(6) of the *Human Reproductive Technology Act 1991* (HRT Act). The CEO is required to submit the report to the Minister for Health, to be laid before Parliament. The report outlines the use of assisted reproductive technology in the State, and operation of the Council for the financial year from 1 July 2010 and ending 30 June 2011 (this year).

Council has an important role as an advisory body to the Minister for Health and to the CEO on issues related to reproductive technology, and the administration of the HRT Act and the *Surrogacy Act 2008* (Surrogacy Act). Council is also responsible for licensing assisted reproductive technology (ART) services and monitoring standards of practice.

No new licences were issued this year. Four practitioners requested that their exemption to practice under the HRT Act be revoked. This leaves a total number of eight exempt practitioners for Western Australia (WA).

Council members reviewed a range of applications for approval under the HRT Act. The applications included a range of ART related matters such as embryo storage extensions and surrogacy.

Council approved 26 embryo storage extension applications this year. Council recognises that some people find it very difficult to reach a decision regarding their stored embryos. Consequently, an 'End of Embryo Storage' brochure is being developed to provide consumer information on the available options.

Council approved nine applications for genetic testing of embryos. Each application was supported by a letter from a clinical geneticist and the recommendations of the Preimplantation Genetic Diagnosis (PGD) Advisory Committee.

This year Council received and approved the first surrogacy application under the Surrogacy Act. In total, seven surrogacy applications have been approved this year. Council has also developed recommendations for the assessment and counselling of surrogacy participants including existing children.

The 2010-2011 budget allocation to Council was \$46,050 with expenditure totalling \$25,918 for the year. The Financial Statement outlining the distribution of expenses is provided in this Annual Report. Council has a long record of remaining within the allocated budget, and predicts expenditure for the forthcoming financial year will remain within budget.

Council members have liaised with the Department of Health to inform submissions to the Independent Review of the *Prohibition of Human Cloning for Reproduction Act* 2002 and *Research Involving Human Embryos Act* 2002.

Council members have also liaised with the Department of Health to inform submissions to the Senate inquiry into donor conception practices in Australia.

In addition, the Reproductive Technology Council Counselling Committee continues to build expertise in facilitating contact between participants of donor conception, which has informed policy development and professional education.

Data collected from annual reports submitted by Western Australian licensees show that 3386 women underwent in vitro fertilisation treatment. Fertility clinics undertook 5100 cycles of in vitro fertilisation (fresh or thaw) this year, an increase of 10% compared to the previous year.

At total of 1265 intrauterine inseminations were undertaken, which represents a reduction of 14% compared to the previous year.

The number of embryos in storage as of 30 June 2011 was 17771 compared to 17264 the previous year. The number of embryos in storage has stayed relatively constant for the past three years.

There were 13 cases of ovarian hyperstimulation syndrome, with 10 women requiring hospital admission. There were no reports of mortality in association with fertility treatment.

There were 2502 counselling sessions this year, representing an increase of 20% on the previous year. Most counselling provided was a single session and involved the provision of information.

Treatment trends for assisted reproductive technology show a steady increase in the number of cycles (10% per annum), in line with national trends. There has been no change to the proportion of fresh to thaw treatment cycles for several years. No Gamete Intra Fallopian Transfer (GIFT) has been undertaken for the past four years.

The effective operation of Council requires the significant and dedicated support of Council and Committee members, and the ongoing financial and administrative support provided by the Department of Health. This support is essential to enable the Council to meet all of the responsibilities set out in the HRT Act and the Surrogacy Act and to ensure the effective regulation of ART services in WA under these Acts.



## Introduction

This Annual Report provides a comprehensive account of the activities of the Council and future plans and events. Council regulates assisted reproductive technology practices in WA, as set out in the HRT Act and the Surrogacy Act. The report is structured around the legal accountabilities and major activities of the Council. Taking into consideration the requirements of the HRT and surrogacy legislation, the report sets out the operation of the Council, the activities of licence holders, and significant technical and social trends in relation to assisted reproductive technology.

#### **Council Functions**

The functions of the Council are outlined in section 14 of the HRT Act and include:

- providing advice to the Minister on issues relating to reproductive technology, and the administration and enforcement of the HRT Act;
- providing advice to the CEO of Health on matters relating to licensing, administration and enforcement of the HRT Act;
- to formulate and review a Code of Practice and guidelines to govern assisted reproductive technology practices and storage procedures undertaken by licensees, and thereby to regulate the proper conduct, including counselling provision, of any reproductive technology practice;
- to encourage and facilitate research, in accordance with the HRT Act, into the causes and prevention of all types of human infertility and the social and public health implications of reproductive technology and;
- to promote informed public debate on issues arising from reproductive technology, and to communicate and collaborate with other similar bodies in Australia and wider.

The Minister for Health determines Council membership and is required to ensure that Council comprises individuals with special knowledge, skills and experience in ART, and therefore Council also has members who are consumer representatives and members with expertise in public health, ethics and law.

The next section provides biographies of the Council Chairperson and Committee Chairpersons, a list of Council membership, and the terms of reference and membership of the various Council Committees.



#### **Council Chair and Committee Chairs**

#### **Professor Con Michael**

Professor Con Michael is the Chair of the Reproductive Technology Council and also chair of the Licensing and Administration Advisory Committee. Professor Michael is the Consultant Medical Advisor for St. John of God Healthcare Inc. and Emeritus Professor of Obstetrics and Gynaecology at the University of Western Australia. He is a Fellow of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, a Director of the Australian Medical Council, and a member of the Australian Health Practitioner Regulation Agency Management Committee. Professor Michael was named an Officer of the Order of Australia in 2001.

## Rev. Brian Carey

The Reverend Brian Carey is Chair of the Embryo Storage Committee. Reverend Carey is a Minister of the Uniting Church in Australia. He has many years of involvement in bioethics at a State and National level and has presented papers on the full range of ethical/medical subjects at conferences and Universities. Reverend Carey was the Applied Ethicist for the State of Victoria's Bio-technology Committee and a member of the Stem Cell Working Group. He was a member of Monash Medical Centre and Epworth Hospital's Human Research Ethics Committee for over twenty years, and is currently a member of the Ethics Committee of the Department of Health and also a member of the Ethics Committee of the Western Australian Genetics Council.

#### Dr Jim Cummins

Dr Jim Cummins is Chair of the Scientific Advisory Committee. He is an Associate Professor in Anatomy at Murdoch University. In his role of reproductive biologist, he has been involved with assisted reproduction since 1981 when he helped establish the Queensland Fertility Group. Dr Cummins is a member of the editorial board for the journals Human Reproduction, Reproduction, Fertility and Development, and Reproductive Biomedicine Online. He is a member of the Fertility Society of Australia and the Australian Society for Reproductive Biology.



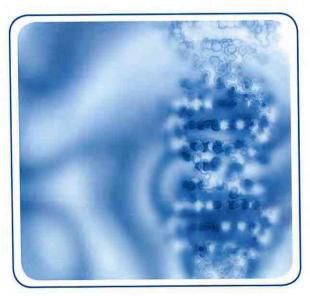
#### Ms Suzanne Midford

Ms Suzanne Midford is Chair of the Counselling Committee. As a Specialist Clinical Psychologist and Clinical Director of Perth Psychological Services she has a wide range of expertise in the field of surrogacy, donation of human gametes, disclosure issues in donation, and broader issues related to reproductive technology. Ms Midford is a Director on the National Board of The Australian Clinical Psychology Association and an educator for the postgraduate Clinical Psychology programme, University of Western Australia. Her many years of involvement in reproductive technology include research, expert witness testimony, and the provision of professional development and education.

## **Dr Beverly Petterson**

Dr Beverly Petterson is Chair of the PGD Advisory Committee. She is a Senior Honorary Research Fellow at the Institute for Child Health Research, and a member of the WA Register of Developmental Anomalies Advisory Committee and the WA Cerebral Palsy Register Advisory Committee. Dr Petterson was a lecturer in Anatomy and Human Biology at the University of Western Australia, teaching and researching in genetics. She has served as the Chair of the Tertiary Entrance examination for Human Biology and has been a long term member of the Human Genetics Society of Australasia.





# Membership of the Council 2010-2011

#### **Reproductive Technology Council Members**

**Professor Con Michael** - Chair (nominee of the Minister for Health representing the Australian Medical Association)

**Dr Simon Clarke** - (nominee of the Royal Australian & New Zealand College of Obstetricians & Gynaecologists)

A/Professor Jim Cummins - (nominee of the Minister for Health)

Ms Justine Garbellini - (nominee of the Health Consumers' Council WA)

**Professor Roger Hart** - (nominee of the University of Western Australia, School of Women's and Infants' Health)

Ms Anne-Marie Loney - (nominee of the Minister for Child Protection)

Dr Brenda McGivern - (nominee of the Law Society of Western Australia)

**Dr Joe Parkinson** - (nominee of the Minister for Health)

Dr Beverly Petterson - (nominee of the Minister for Health)

**Ms Patrice Wringe** - (nominee of the Department for Communities, Office of Women's Interests)

A/Professor Mo Harris - (Executive Officer ex officio, Senior Policy Officer, Department of Health)

**Ms Jenny O'Callaghan** - (Executive Officer ex officio, Senior Policy Officer, Department of Health. January 2008 - June 2011).

#### Reproductive Technology Council Deputy Members

Ms Jane Baker - (nominee of the Minister for Child Protection)

**Dr Peter Burton** - (nominee of the University of Western Australia, School of Women's and Infants' Health)

Reverend Brian Carey - (nominee of the Minister for Health)

**Dr Angela Cooney** - (nominee of the Australian Medical Association)

**Dr Andrew Harman** - (nominee of the Law Society of Western Australia)

**Ms Suzanne Midford** - (nominee of the Department for Communities, Office of Women's Interests)

**Dr David Miller** - (nominee of the Minister for Health)

**Dr Kathy Sanders** - (nominee of the Minister for Health)

**Dr Lucy Williams** - (nominee of the Royal Australian & New Zealand College of Obstetricians & Gynaecologists)

**Dr Nyaree Jacobsen** - (Deputy Executive Officer ex officio, Senior Policy Officer, Department of Health)

**Ms Jen Parker** - (Deputy Executive Officer ex officio, Senior Policy Officer, Department of Health).

## **Counselling Committee**

#### Terms of Reference:

In relation to counselling:

- Establishing standards for approval of counsellors as Approved Counsellors, as required by the Code of Practice or Directions of the HRT Act for counselling within licensed clinics, and for counselling services available in the community.
- Recommending to the Reproductive Technology Council (Council) those counsellors deemed suitable for Council approval or interim approval, and reconsidering those referred back to the Committee by the Council for further information.
- Monitoring and reviewing the work of any Approved Counsellor.
- Convening training programs for counsellors if required.
- Establishing a process whereby counsellors may have approval withdrawn or may appeal a Council decision.
- Reporting annually as required by Council for its annual report to the CEO of Health, including information on its own activities and information reported to it by Approved Counsellors.
- Advising and assisting the Council on matters relating to consultation with relevant bodies in the community and the promotion of informed public debate in the community on issues relating to reproductive technology.
- Advising the Council on matters relating to access to information held on the IVF and Donor Registers.
- Advising the Council on psychosocial matters relating to reproductive technology as the Council may request.

#### Membership:

Ms Suzanne Midford (Chair)
Ms Jane Baker
Mr Peter Fox
Ms Justine Garbellini
Ms Anne-Marie Loney
Ms Iolanda Rodino
Ms Patrice Wringe
A/Professor Mo Harris (ex officio)
Ms Jenny O'Callaghan (ex officio)
Ms Jen Parker (ex officio).



## **Embryo Storage Committee**

#### Terms of Reference:

With the agreement of the Minister for Health as required under s(10)(4) of the HRT Act, the Council, by resolution under s11(1) of the HRT Act, may delegate this Committee to:

- Make decisions on applications for extension of the periods of storage of embryos on a case by case basis, based on the criteria agreed to by the Council, and to provide to the next meeting of Council details of all decisions made since the previous meeting.
- Provide other advice or carry out other functions relating to the storage of embryos, as instructed by the Council.

#### Membership:

Rev Brian Carey (Chair), Dr Brenda McGivern, Ms Suzanne Midford, Ms Patrice Wringe, A/Professor Mo Harris (ex officio) and Dr Nyaree Jacobsen (ex officio).

## **Licensing and Administration Advisory Committee**

#### Terms of Reference:

- Advise the Council on matters relating to licensing under the HRT Act, including the suitability of applicants and conditions that should be imposed on any licence.
- Advise the Council generally as to the administration and enforcement of the HRT Act, particularly disciplinary matters.
- Advise the Council as to suitable standards to be set under the HRT Act, including clinical standards.
- Advise the Council on any other matters relating to licensing, administration and enforcement of the HRT Act.

#### Membership:

Professor Con Michael (Chair), Professor Roger Hart, Dr Brenda McGivern, Ms Suzanne Midford, Dr Joe Parkinson, Ms Patrice Wringe, A/Professor Mo Harris (ex officio) and Dr Nyaree Jacobsen (ex officio).

## **PGD Advisory Committee**

The Terms of Reference for preimplantation genetic diagnosis (PGD) is taken to include all diagnostic procedures that may be carried out in vitro upon or with a human embryo or egg undergoing fertilisation prior to implantation.

#### Terms of Reference:

- To advise Council on factors that it should consider when deciding whether to approve PGD, both generally and for specific cases.
- To advise Council on standards for facilities, staffing and technical procedures.
- To advise on how ongoing process of approval of PGD should be managed effectively by the Council.
- To monitor outcomes of diagnostic procedures involving embryos.
- To advise on other relevant matters as requested by Council.

The Committee may consult with relevant experts in the preparation of this advice for the Council including, but not limited to, counselling in relation to PGD with the Counselling Committee and legal issues in relation to PGD with a Department of Health lawyer.

#### Membership:

Dr Beverly Petterson (Chair), Dr Peter Burton, Dr Ashleigh Murch, Dr Sharron Townshend, A/Professor Mo Harris (ex officio) and Dr Nyaree Jacobsen (ex officio).

## **Scientific Advisory Committee**

#### Terms of Reference:

With the agreement of the Minister for Health as required under s(10)(4) of the HRT Act this Committee may provide the Reproductive Technology Council with scientific advice in relation to:

- Any project of research, embryo diagnostic procedure or innovative practice for which the specific approval of the Council is (or may be) sought.
- Review of the HRT Act, which is to be carried out as soon as practicable after the expiry of five years from its commencement and any other matter as instructed by the Council.

#### Membership:

A/Professor Jim Cummins (Chair), Dr Peter Burton, Professor Roger Hart, Dr Joseph Parkinson, Dr Beverly Petterson, Dr Kathy Sanders, A/Professor Mo Harris (ex officio) and Dr Nyaree Jacobsen (ex officio).

# **Operations of the Council**

## Meetings

The Council met on 10 occasions during the year, with attendances reaching quorum at all meetings. The Counselling Committee met on four occasions; the PGD Advisory Committee met on one occasion, with several applications for PGD assessed out of session. The Embryo Storage Committee met on one occasion. The Licensing and Administrative Committee did not meet. The Scientific Advisory Committee did not meet, however members contributed to reviews of data fields.

## Membership

#### Outgoing and incoming members

Mr Peter Fox stepped down as a Council member in November 2010. Council acknowledged his commitment and significant contribution over the years. Council welcomed one new member and two new deputy members. Ms Justine Garbellini of the Health Consumers' Council was appointed to member status in April, 2011. New deputy members Dr Andrew Harman, Law Society of WA and Dr Lucy Williams, Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) were appointed in April 2011. Council would also like to acknowledge Ms Jenny O'Callaghan for her valuable contribution to Council as Executive Officer from January 2008 to June 2011.

## Reproductive Technology Unit

The Department of Health Reproductive Technology Unit provides administrative support to Council:

**Executive Officer**, Senior Policy Officer, A/Professor Mo Harris (Registered Nurse, Registered Midwife, Doctor of Philosophy).

**Deputy Executive Officer**, Senior Policy Officer, Dr Nyaree Jacobsen (Bachelor of Science, Bachelor of Veterinary Medicine and Surgery, Postgraduate Diploma in Health Administration).

**Deputy Executive Officer**, Senior Policy Officer, Ms Jenny Parker (Registered Nurse, Bachelor of Science (Health Promotion)).





## **Licence Holders and Exempt Practitioners**

No new licences were issued this year. Practice or storage facilities must renew their licence every three years. In addition, facilities must comply with the Fertility Society of Australia Reproductive Technology Accreditation Committee (RTAC) Code of Practice and Certification Scheme (RTAC, 2010). Each year all critical criteria and a third of good practice criteria and Quality Management Systems are audited. All standards are audited every three years. Fertility service providers must use a JAS-ANZ (Joint Accreditation System, Australian & New Zealand) accredited certification body for RTAC certification. Details of practice and storage licence holders are listed in Appendix 1.

Medical practitioners, who meet the requirements of the HRT Act, may provide artificial insemination procedures if they have a licence exemption. No new applications were received and four exemptions were revoked at the request of the exempt medical practitioner. A list of exempt practitioners is provided in Appendix 1.

## **Applications to Council**

Council is required to approve certain ART practices, including the storage of embryos beyond ten years, research projects, innovative procedures and diagnostic testing of embryos. The following sections describe the activities for this year.

#### Storage applications

Council approval is required for the storage of embryos beyond the authorised 10 year time limit. An extension may be granted under s24 (1a) of the HRT Act if Council considers there are special circumstances. Applications must be made by eligible participants (that is, by those for whom the embryos were created, or by donor recipients). Storage of gametes beyond the authorised 15 years time limit also requires approval. Council received 26 applications to extend the authorised storage period. Table 1 shows the approved extended storage periods for this year.

		Ext	ension (ye	ars)		
	1	2	3	4	5	Total
Sperm	0	0	1	0	0	1
Embryos	6	2	1	1	15	25
Total	6	2	2	1	15	26

Table 1: Approved applications for extension of storage

Council recognises that it can be difficult for people to reach a decision regarding their stored embryos, and is developing an 'End of Embryo Storage' pamphlet to provide information on the available options.

#### Preimplantation genetic testing

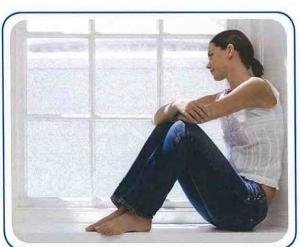
Council approves applications for genetic testing of embryos. Preimplantation genetic diagnosis can be used where there is a known risk for serious genetic conditions. Preimplantation genetic screening looks for abnormal numbers of chromosomes (aneuploidy screening), which is a common cause of pregnancy failure. Each application is supported by a letter from a clinical geneticist. Council approval may be subject to a feasibility study and the advice of the PGD Advisory Committee. Approved PGD applications for this year are listed in Table 2.

Table 2: Genetic condition tested

Condition	n
Adrenoleukodystrophy	1
Cystic fibrosis	2
Hypophosphatemic rickets	1
Haemophilia A	1
Motor neurone disease	1.
Neurofibromatosis-1	2
Tay Sachs disease	1

All diagnostic procedures for a fertilising egg or an embryo must have the prior approval of the Council. General approval may be provided in the Code of Practice (or Directions) or specific approval given in a particular case (sections 7(1)(b), 14(2b) 53(W)(2)(d) and 53(W)(4) of the HRT Act).





#### Surrogacy applications

The Surrogacy Act sets out the requirements for a surrogacy arrangement and prescribes the processes. The Surrogacy Regulations 2009 outline the requirements for an application, including medical assessments, psychological assessments, counselling requirements and legal advice for surrogacy participants. Council approved the first surrogacy application this year and has approved a total of seven applications. The annual reporting requirements are shown in Table 3.

Table 3: Surrogacy arrangements

Reporting requirements	n
Commenced treatment intending to become an arranged parent in a surrogacy arrangement	7
Council approval sought for surrogacy arrangement	7
Surrogacy arrangements approved by Council	7
Surrogacy arrangements involving donor gametes	1-1
Surrogacy arrangements using embryos created from sperm and oocyte provided by a donor	0
Withdrawal from surrogacy arrangements and the reason	0
Pregnancies in connection with surrogacy arrangements	2
Live births in connection with surrogacy arrangements	0

#### Innovative procedures

Innovative procedures must be approved by Council under Direction 9.4. New and innovative procedures are monitored through the approval process and annual reporting. Approved innovative procedures are listed in Table 4.

Table 4: Approved innovative procedures

Procedure	Clinic	Reference Number
Assisted hatching	Concept Fertility Clinic	1009
	Fertility Specialists WA	1019
In vitro maturation	Concept Fertility Clinic	1016
	Fertility Specialists WA	1020
Oocyte cryopreservation	Concept Fertility Clinic	1017
	Fertility Specialists WA	1021
Vitrification of oocytes	Hollywood Fertility Centre	1025
	Fertility North	1026

As new technology and techniques become widely adopted procedures may be considered routine rather than innovative. However, a licensee is required to demonstrate they have sufficient expertise with the procedure.

Council applies the National Health and Medical Research Council (NHMRC, 2008) definition for 'innovative' procedures: "A therapeutic, diagnostic or laboratory procedure that is aimed at improving reproductive outcomes beyond existing methods but has not been fully assessed for safety and/or efficacy."

No applications were received for innovative procedures this year and no procedures were reclassified.

#### Research applications

Research projects undertaken by licensees (other than research on excess ART embryos requiring an NHMRC licence) must receive Council approval. While general Council approval has been granted for some types of research, including surveys of participants or research involving additional testing of samples collected at the time of a procedure, specific approval is required for all other research projects. Summary information indicating the current status and related matters of any Council approved research project must be submitted with the licensee's annual report. No applications to undertake research were submitted to Council this year.

#### National Health and Medical Research Council licences

Differences between State and Commonwealth legislation has led to uncertainty regarding the authority for the NHMRC to license and monitor excess ART embryo research. No research that required an NHMRC licence is being undertaken in WA. The legal uncertainty for legislators, researchers and licensees will need to be resolved through amendment to the HRT Act. The possible means of achieving this are under legal consideration.

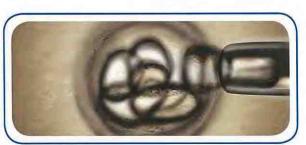
#### Complaints

The Council did not receive any formal complaints regarding the operations of licensees during the year.

#### **Finances**

The 2010-2011 budget allocation to Council was \$46050, with expenditure totalling \$25918 for the year. The Financial Statement outlining the distribution of expenses is provided in appendix 2. Council has a long record of remaining within the allocated budget, and predicts expenditure for the forthcoming financial year will remain within budget.





# The Council's Role as an Advisory Body

The Council has a prescribed role to promote public debate and discussion on reproductive technology and to communicate and collaborate with similar organisations or groups. A primary function of Council, also set out in the HRT Act, is to advise the CEO and Minister for Health on matters relating to ART.

Council considered a wide range of issues this year. Particular attention has been given to surrogacy applications. Council is working to further develop support systems and information resources for surrogacy legislation. Importantly, Council surrogacy policy development has been informed by the activities of the Counselling Committee. This has included recommendations for the standards of psychological assessment of surrogacy participants and minimum requirements for all parties seeking to participate in a surrogacy arrangement.

Council has contributed to a range of legislative reviews. Council members have informed a submission from the Department of Health to the Independent Review of the *Prohibition of Human Cloning for Reproduction Act 2002* and *Research Involving Human Embryos Act 2002*.

Council members contributed to Department of Health submissions to the Senate inquiry into the practices in relation to donor conception in Australia. Importantly, the Counselling Committee continues to build expertise in facilitating contact between participants of donor conception. This represents a unique knowledge base that has informed policy development and professional education. An education programme has been developed for approved counsellors to support donor conception participants in the release of identifying information and support of donor conception participants who wish to meet.

Council also provides opportunities for all Approved Counsellors (Appendix 3) to participate in on going professional development.

#### Future activity

Other areas identified as warranting future Council attention include:

- Possible amendments to the HRT Act including posthumous use of gametes and provisions for embryo research.
- Awareness of the Voluntary Register, including a 'Time to tell campaign' encouraging 'openness' in the area of donor conception.
- Sperm donor shortages.
- Promotion of fertility awareness and preservation of fertility.
- In vitro derived gametes.
- Long-term monitoring of assisted reproductive treatment outcomes.

Council members are all active in the field of assisted reproductive technology. The next section lists the publications and presentations of Council members and demonstrates the level of activity, expertise and commitment to scientific endeavour and social and ethical debates related to reproductive technology.

#### **Publications and Presentations**

#### **Papers**

Brown J, Pan A, Hart RJ. Gonadotrophin-releasing hormone analogues for pain associated with endometriosis. *Cochrane Database of Systematic Reviews*. 2010; Issue 12. Art. No: CD008475. doi: 10.1002/14651858.CD008475.pub2

Celi P, Miller DW, Blache D, Martin GB. Interactions between nutritional and opioidergic pathways in the control of LH secretion in male sheep. *Animal Reproduction Science* 2010;117 (1-2): 67-73.

Clarke J, Showell MG, Hart RJ. Antioxidants for female subfertility. *Protocol of Cochrane Review*. 2011. 735307080923073485

Hart R, Doherty DA, Mori T, Huang R-C, Norman RJ S, Franks S, Sloboda D, Beilin B, Hickey M. The extent of metabolic risk in adolescent girls with features of the Polycystic Ovary Syndrome. *Fertil Steril*. 2011; Jun;95(7):2347-53, 2353.e1.

Hickey M, Doherty D, Atkinson H, Sloboda DM, Franks S, Norman RJ, Hart R. Clinical, ultrasound and biochemical features of the polycystic ovary syndrome (PCOS) in adolescents: Implications for the diagnosis of PCOS. *Human Reproduction* 2011;26(6):1469-77.

Kroon B, Hart RJ, Wong BMS, Yazdani A. Antibiotics prior to embryo transfer in ART. *Cochrane Database of Systematic Reviews*. 2011, Issue 2. Art. No: CD008995. doi: 10.1002/14651858.CD008995

Kroon B, Yazdani A, Johnson N, Chapman M, Hart R. Fibroids in Infertility – Consensus statement from ACCEPT (Australasian CREI Consensus Expert Panel on Trial evidence). *Aust N Z J Obstet Gynaecol.* 2011, Mar 22. doi: 10.1111/j. 1479-828X.2011.01300.x

Martin GB, Blache D, Miller DW, Vercoe PE. Interactions between nutrition and reproduction in the management of the mature male ruminant. *Animal*. 2010;4(7): 1214-1226.

Miller DW, Bennett EJ, Harrison JL, Findlay PA, Adam CL. Adiposity and plane of nutrition influence reproductive neuroendocrine and appetite responses to intracerebroventricular insulin and neuropeptide-Y in sheep. *Reproduction Fertility Development*. 2010;23:329-338.

Nice PA, Fleming PA, Bennett NC, Bateman PW, Miller DW. Exposure to non-kin females rapidly affects testicular responses in non-reproductive male Damaraland mole-rats. *Journal of Zoology*. 2010;281(3):154-159.

Showell M, Brown I, Yazdani A, Stankiewicz MT, Hart RJ. Antioxidants for male subfertility. *Cochrane Database of Systematic Reviews* 2011; Issue 1. Art. No: CD007411. doi: 10.1002/14651858.CD007411.pub2

Sloboda D, Hickey M, Hart R. Reproduction in females: the role of the early life environment. *Human Reproduction Update*. 2011; Mar-Apr;17(2):210-27.

Stewart LM, D'Arcy Holman, Hart R, Finn J, Mai Q, Preen DB. How effective is in vitro fertilization? *Fertil Steril*. 2011; Apr;95(5):1677-83.

Rodino IS, Burton PJ, Sanders KA. Donor information considered important to donors, recipients and offspring: an Australian perspective. *Reproductive BioMedicine Online*, 2011;22,303-311.

#### **Book Chapters**

Bhattacharya S, Johnson N, Tijani HA, Hart R, Pandey S, Gibreeal AF. Female Infertility. *BMJ Clinical Evidence*. 2010. (On-line publication Nov 2010).

**Harris M**. Chapter 41: Assessment and management of female physiologic processes. In: *Farrell & Dempsey, Smeltzer and Bare's Textbook of Medical Surgical Nursing*. 2010. 2nd Australasian Edition.

Harris M. Chapter 42: Management of patients with female reproductive disorders. In: Farrell & Dempsey, Smeltzer and Bare's Textbook of Medical Surgical Nursing. 2010. 2nd Australasian Edition.

Kroon B, **Hart R**. The management of fibroids and polyps In: Kovacs G. (Ed) *How to Improve Your Art Success Rates*. 2011. Cambridge Books Online, Cambridge University Press.

#### Presentations

**Dr N. Jacobsen**. Preimplantation Genetic Testing in WA. Fertility Nurses of Australasia, Perth. 18 May 2011.

**Dr N. Jacobsen**. Surrogacy: a brief history of timely legislation. Public Forum on Surrogacy, Murdoch University, 13 May 2011.

**Dr N. Jacobsen**. J. O'Callaghan. The Surrogacy Act 2008. Family and Adoption Services, Perth, 5 August 2010.

**Ms Jen Parker**. How the Voluntary Register Can Assist Your Patients, Fertility Nurses Association, University Club, University of Western Australia. 28 September 2010

**Dr J. Parkinson**. ART: processes. Secondary Students. Prendiville College, Perth, 13 May 2011.

Dr J. Parkinson. Science and Ethics. Murdoch University. Perth. 19 October 2010.

**Dr J. Parkinson**. ART: processes and ethical issues. Secondary Teachers. Perth, 28-29 September 2010.

**Dr J. Parkinson**. ART: processes and ethical issues. Secondary Teachers. Bunbury, 7-8 September 2010.

**Dr J. Parkinson**. Surrogacy in WA: an update. Senior Religious Teachers. Perth, 21 July 2010.

**Dr J. Parkinson**. ART: processes and ethical issues. Secondary Teachers. Perth, 8-9 July 2010.

## **Developments in Reproductive Technology**

Legislative Review of Prohibition of Human Cloning for Reproduction Act 2002 and Research Involving Human Embryos Act 2002

The Prohibition of Human Cloning for Reproduction Act 2002 and Research Involving Human Embryos Act 2002 were subject to legislation review (Legislation Review Committee, 2011). The Review Committee, chaired by the Hon Peter Heerey QC, made 33 recommendations, mainly to retain current legislation or provide greater clarity to enhance the powers of the NHMRC Embryo Research Licensing Committee.

#### Senate Inquiry into Donor Conception in Australia

The practices in relation to donor conception in Australia were subject to a Senate inquiry over 2010-2011. The report of the Legal and Constitutional Affairs References Committee was published in February 2011 and made several recommendations including nationally consistent legislation and giving a high profile to regulation of donor conception practices in all states and territories.

## **Oocyte Cryopreservation for Non-medical Reasons**

Methods of oocyte cryo preservation have advanced significantly and there is increasing interest in fertility preservation for 'social' reasons. A recent on-line survey of over 1,000 women in Belgium found that they were open to the idea of 'social' oocyte freezing (Stoop, Nekkebroeck & Devroey, 2011). The Human Embryology and Fertilisation Authority, UK suggest that women discuss oocyte cryopreservation with a clinic if: "you are concerned about your fertility declining as you get older, and are not currently in a position to have a child." The Dutch Association for Obstetrics and Gynaecology and the Dutch Association for Clinical Embryology support freezing oocytes for non-medical reasons (Sheldon, 2010). Recently, Dutch Members of Parliament voted to allow women to freeze oocytes to delay parenthood (Sheldon, 2011). As a relatively new technique, with limited outcome data, it will be important to develop strategies to monitor emerging social trends and treatment outcomes.

## **ART and Childhood Development**

Carson et al., (2011) used data from the UK Millennium Cohort Study (18552 families) to investigate the effects of fertility treatment on the cognitive outcomes on children up to the age of 5 years (2.4% of the sample). Assisted reproduction had no impact on children's cognitive development at the age of 3 or 5 years. The researchers found ART children had better verbal ability but lower spatial and non-verbal scores than the comparison group (after control for environmental and socio-economic factors). The results of this study are reassuring however ART requires large scale, longitudinal, prospective studies of families to inform practice and policy.

#### **Emotional Distress and ART**

Researchers undertook a systematic statistical analysis (meta-analysis) of 14 studies of pre-treatment emotional distress (feelings of tension, nervousness, or worry) in women and achievement of pregnancy after an ART cycle (Boivin, Griffith & Venetis 2011). The stress effect of ART is well known and women may believe that the emotional consequences can cause of ART failures. The findings of this study support the view that emotional distress is not related to failure of a single treatment cycle. However, further studies of the biological and psychosocial relationship between emotional distress and subsequent treatment cycles would be of value to patients, practitioners and policy makers.

# Reproductive Technology Registers

## The Reproductive Technology Database

Information on ART for Western Australia is provided to the Department of Health by licensees and exempt practitioners, as set out in Schedule 2 Part 2 of the Directions under the HRT Act. Data relating to ART is collected annually, by pro-forma, from each fertility service provider in WA. In addition, clinics regularly submit their computer data to the Department of Health, which maintains this mandatory data collection. This Reproductive Technology Database enables ongoing monitoring of practice and provides an important resource for epidemiological research. Appendix 4 provides summary data from the annual reports of fertility service providers in WA.

Amendments to the HRT Act in 2004 set out that all donated reproductive material can only be accepted when there is consent from the donor for release of their identifying information. This provides a record of identifying information relating to donation and birth outcomes that have resulted from those donations.

Reproductive Technology Data are managed through the Performance, Analysis and Quality Division of the Department of Health. Council has supported the RTU in the design of operational projects to enhance the effectiveness of data management and verification of data through establishing internal links between Reproductive Technology Data and birth outcome from the Midwives Notification System. Council is also working towards improved access to the Reproductive Technology Database for research purposes. Legislative amendments have been recommended to facilitate researcher access and links with additional data sets.

#### **Approved Research Projects**

Council have approved the following research projects:

- Significant adverse health outcomes in children born from assisted conception treatment. Council approval received 14 November 2001.
- Hospital morbidity outcomes in women following treatment through Assisted Reproductive Technology (ART) in Western Australia. Recommenced in 2008.
- Economic implications of ART infants and spontaneously conceived infants: inpatient costs in the first five years of life. Council approval received 27 November 2009.

## The Voluntary Register Database

The Voluntary Register provides a service for participants of donor conception (donor-conceived adults, recipients, and donors) in the State who wish to access their donor and/or recipient information. This includes people born from donor assisted conception before 2004 as there is no legislated authority to access information about their donor. Relevant non-identifying information can be provided and also identifying donor information to a donor-conceived person who is over 18 years of age. Release of information can only be provided with consent and after professional counselling. The Voluntary Register applications for each year are shown in Table 5.

Table 5: Voluntary Register applications

Year	Donor-conceived Adult	Recipient	Donor	Total
2002	VIVE 1 TYPE	13	10	24
2003	2	10	7	19
2004	0	7	3	10
2005	2	5	7	14
2006	1	10	4	15
2007	2	15	8	25
2008	2	11	6	19
2009	4	4	7	15
2010	2	7	4	13
Total	16	82	56	154

Donor participants who lodge an application with the Voluntary Register can choose a range of options:

- registration of name
- access to non-identifying information from the Register
- access to identifying information from the Register (with consent)
- existence of half siblings
- · notification of serious heritable medical condition.

Links between participants are established from the donor code. Matches from the Voluntary Register are taken to mean that participants have chosen to release identifying information, and have undertaken the required counselling with the intention of making contact with each other. Table 6 shows the number of matches and contacts from the Voluntary Register.

Table 6: Matches from Voluntary Register

Donor participants	Matched	Made Contact
Parent recipient and donor	6	4
Half siblings	7	3
Total	13	7

A campaign has been proposed to increase public awareness of the service offered by the Voluntary Register.

# **Acknowledgements**

Council wish to acknowledge the following people and Department of Heath for their commitment and support:

Ms Deborah Andrews, Legal and Legislative Services, Department of Health.

Mr Tony Satti, Mr Alan Joyce, Mr Christopher Joyce and Ms Cinnamon Le. Performance, Analysis and Quality Division, Department of Health.

Ms Sandra Lynch, Ms Evelyn D'Souza and Mr Louie Miovski, Administration and Accounting, Department of Health.

Dr Simon Towler and the Office of the Chief Medical Officer (DoH), Supervisory responsibility and management.

The Council also wishes to thank former RTU staff Ms Jenny O'Callaghan, Mr Russ Milner, Ms Meina Lee for their support and Ms Caitlin Moran (Undergraduate student, University of Western Australia).



## References

Boivin J, Griffith E, Venetis CA. (2011) Emotional distress in infertile women and failure of assisted reproductive technologies: meta-analysis of prospective psychosocial studies *BMJ*; 342:d223

Carson, C, Kelly Y, Kurinczuk, JJ, Sacker A, Redshaw M, Quigley MA. (2011) Effect of pregnancy planning and fertility treatment on cognitive outcomes in children at ages 3 and 5: longitudinal cohort study *BMJ*; 343:d4473

Legal and Constitutional Affairs References Committee (2011) Donor conception practices in Australia. *Commonwealth of Australia*. Canberra.

Legislation Review Committee. (2011) Legislation Review: Prohibition of Human Cloning Act 2002 and Research Involving Human Embryos Act 2002, Reports, Canberra.

NHMRC Ethical Guidelines on the Use of Assisted Reproductive Technology in Clinical Practice and Research. Canberra.

Reproductive Technology Accreditation Committee. (2010) Code of practice for assisted reproductive technology units. Fertility Society of Australia.

Reproductive Technology Accreditation Committee. (2010) Certification scheme. Fertility Society of Australia.

Sheldon T. (2010) Dutch medical associations support freezing oocytes for non-medical reasons. *BMJ*. Sep 3;341:c4823. doi: 10.1136/bmj.c4823

Sheldon T. (2010) Dutch Members of Parliament vote to allow women to freeze oocytes to delay parenthood. *BMJ*. 342:d2530 doi: 10.1136/bmj.d2530

Stoop D, Nekkebroeck J, Devroey P. (2011) A survey on the intentions and attitudes towards oocyte cryopreservation for non-medical reasons among women of reproductive age. *Hum Reprod.* Mar;26(3):655-61. Epub 2011 Jan 5.

Wang YA, Chambers GM, Sullivan EA. (2010) Assisted reproductive technology in Australia and New Zealand 2008. *Assisted reproduction technology series no. 14*. Cat. No PER 49. Canberra AIHW.





# Appendix 1: Licence Holders & Exempt Practitioners

#### **Practice and Storage Licences:**

Fertility North Pty Ltd Suite 213 Specialist Medical Centre Joondalup Health Campus Shenton Avenue JOONDALUP WA 6027

Fertility Specialists South Pty Ltd trading as Fertility Specialists South 1st Floor 764 Canning Hwy APPLECROSS WA 6153

In Vitro Laboratory Pty Ltd trading as Concept Fertility Centre Concept Day Hospital 218 Nicholson Road SUBIACO WA 6008

JL Yovich Pty Ltd trading as PIVET Medical Centre 166-168 Cambridge Street LEEDERVILLE WA 6007 Sydney IVF Perth Pty Ltd trading as Hollywood Fertility Centre Hollywood Private Hospital Monash Avenue NEDLANDS WA 6009

Western IVF Pty Ltd trading as Fertility Specialists of Western Australia Bethesda Hospital 25 Queenslea Drive CLAREMONT WA 6010

The Keogh Institute for Medical Research Sir Charles Gairdner Hospital 2 Verdun Street NEDLANDS WA 6009 (Artificial insemination only)

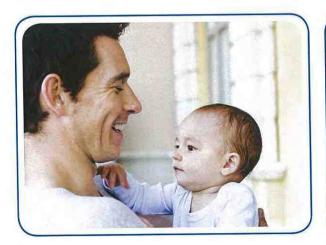
## **Exempt Practitioners:**

<u>Name</u>	<u>Location</u>
Dr R Kirk	Mount Helena
Dr H Leslie	Albany
Dr DN Lawrance	Kelmscott
Dr KA McCallum	Kalgoorlie
Dr C Russell-Smith	Kwinana
Dr BGA Stuckey	Nedlands
Dr JM Vujcich	West Perth
Dr R Watt	Mandurah

# Appendix 2: Financial Statement

The Department of Health funds the administration of the HRT Act, including the operations of the Council. The 2010-2011 Council budget allocation was \$46,050, with expenditure totalling \$25918 for the financial year. Council has a long record of remaining within the allocated budget, and anticipates that the 2011-2012 budget will support Council's capacity to meet all Council functions set out in the HRT Act.

Expenditure by Category	Expenditure (\$)	Income (\$)
Staff or Council: Training/Registration/Course fees Travel Interstate	6551	
Food supplies/catering	1255	
Administration and clerical	0	
Purchase of external services:	0	
Reproductive Technology Council Sessional fees	13977	* ************************************
Other expenses:	410504	
Books/magazines/subscriptions	40	
Freight/ cartage/postal	0	
Stationery	3592	
Printing including Annual Report	372	
Maintenance equipment	131	
Total	25918	46050





# Appendix 3: Approved Counsellors

Name	Professional address	Telephone / Fax
Ms Louise Buck	Fertility Specialists of WA Bethesda Hospital, 25 Queenslea Dr, Claremont WA	Ph (08) 9284 2333 Fax (08) 9340 6383
Ms Antonia Clissa	Concept Fertility Centre PO Box 966, Subiaco WA	Ph (08) 9382 2388
Ms Deborah Foster-Gaitskell*	<ol> <li>Suite 6 Hollywood Specialist Medical Centre, 95 Monash Ave, Nedlands WA</li> <li>Fertility Specialists South, First Floor 764 Canning Hwy, Applecross WA</li> </ol>	Ph 0430 006 497 Fax (08) 9386 9314 Ph (08) 9316 8832
Ms Jane Irvine	661C Newcastle St, Leederville WA	Ph 0418 913 900
Ms Cailin Jordan	Hollywood Fertility Centre,     Monash Ave, Nedlands WA     Stirk Medical, Canning Rd,     Kalamunda WA	Ph (08) 9389 4200 Ph (08) 9293 3022
Ms Rosemary Keenan*	6 Laxton Way, Karrinyup Lakes Lifestyle Village, Gwelup WA	Ph (08) 9447 8365
Ms Suzanne Midford*	Perth Psychological Services,     Suite 6/401 Oxford St, Mt Hawthorn WA     Perth Psychological Services Unit,     2/36 Ormsby Terrace, Mandurah WA	Ph (08) 9443 3709 Fax (08) 9443 3718
Ms Helen Mountain	Genetic Services of WA, King Edward Memorial Hospital, 374 Bagot Rd, Subiaco WA	Ph (08) 9340 1603 Fax (08) 9340 1725
Ms Marian Rawlins	Genetic Services of WA, King Edward Memorial Hospital, 374 Bagot Rd, Subiaco WA	Ph (08) 9340 1525 Fax (08) 9340 1678
Ms Iolanda Rodino*	Concept Fertility Centre,     218 Nicholson Road, Subiaco WA     Hollywood Fertility Centre,     Hollywood Hospital, Monash Avenue     Private Practice – North/South	Ph (08) 9382 2388 Ph (08) 9389 4200 Ph (08) 9389 7212
Ms Margaret van Keppel*	267 Walcott St, North Perth WA     PIVET Medical Centre, 166-168     Cambridge St, Leederville WA	Ph (08) 9443 3655 Fax (08) 9443 8665 Ph (08) 9422 5400
Dr Elizabeth Webb	Fertility North, Suite 213, Joondalup     Health Campus, Joondalup WA     Suite 201, Specialist Medical Centre,     Joondalup Health Campus,     Joondalup WA	Ph (08) 9301 1075 Ph (08) 9400 9871

<sup>\*</sup>Counsellors able to undertake 'telling issues' counselling of children.

# Appendix 4: Operations of Licence Holders

The aggregated data, tables, graphs, analysis and interpretation of data in this appendix have been provided by the Performance, Analysis and Quality Division of the Department of Health. Data is presented on the activities of licence holders for this year and also trend data for the past 10 years.

### Background

Fertility clinics licensed under the HRT Act are required to submit reports at the end of each financial year. This section outlines the information submitted by licensees. Six clinics in WA have Storage Licences and Practice Licences authorising artificial fertilisation procedures including in vitro fertilisation (IVF). One licensee has a Storage Licence and a Practice Licence limited to providing artificial insemination.

#### Assisted Reproductive Technologies in WA

Assisted reproductive technologies are procedures that are used to help women become pregnant (Wang et al., 2010). The procedure of in vitro fertilisation (IVF) involves fertilisation of oocytes in a laboratory and placing the embryo in the womb. This procedure can be a fresh cycle, where the embryo is not cyropreserved (frozen), or a thaw cycle where the embryo is thawed and transferred to the uterus.

A total of 3386 women underwent IVF treatment this year. This is an increase of 10% (n=297) compared to the previous year. There were 5110 treatment cycles compared to 5090 the previous year. Table 7 provides an overview of the initiated cycles.

**IVF Thaw** Total **IVF Fresh** 1214 3386 Women treated 2172 2007 5110 3103 Treatment cycle 2729 2729 Cycle with oocyte retrieval 3950 1790 2160 Cycle with embryo transfer 1380 Cycle with embryo storage 1380

Table 7: IVF treatments

Fresh IVF transfer techniques included surgical sperm aspirations (n=169) and Intra Cytoplasmic Sperm Injection (n=1757). Intra Cytoplasmic Sperm Injection (ICSI) is a procedure where a single sperm is directly injected into an egg and the fertilised egg is transferred to the womb.

IVF treatment cycles that involved either donation or use of donated sperm, oocytes or embryos (recipient) are shown in Table 8. There were 91 sperm donors in total for this year, of which 21 were new donors.

Table 8: IVF donation and recipient cycles

	Donation		Rec	ipient
	Fresh	Thaw	Fresh	Thaw
Sperm			132	85
Oocyte	49		35	43
Embryo	0	0	8	27

A total of 1265 intrauterine insemination treatment cycles were reported by six licensees and two exempt practitioners, which represents a 14% reduction compared to the previous year. The overall clinical pregnancy rate per treatment was 6% (81 pregnancies), of which 68 were singleton (84%), 11 were twin (14%), and there were two pregnancies with unknown plurality. The partners' sperm were used for 80% of procedures and donor sperm for 20% of procedures. Gonadotrophin was used for 49% of cycles, 40% were natural cycles, and Clomid was used in 11% of cycles.

#### Embryo storage

The number of embryos in storage as of the 30 June, 2011 was reported as 17771. The dispersal of embryos for this year is shown in Table 9.

Table 9: Dispersal of stored embryos

Embryo dispersal	n
Embryos in storage 30/06/10	17264
Embryos created from IVF	4629
Used in frozen embryo transfer treatments	2737
Transferred between clinics in WA	151
Transferred to clinics outside WA	61
Transferred from interstate	39
Embryo disposition	1173
Embryos in storage 30/06/11	17771

#### **Public Fertility Clinic Referrals**

This year 98 patients from King Edward Memorial Hospital Fertility Clinic were referred to Concept Fertility Clinic. A total of 193 treatment cycles were undertaken with 70 women having IVF with fresh embryo transfer and 28 thawed embryo transfer.

#### Serious morbidity and mortality

There were 10 hospital admissions (more than 48 hours) for serious ovarian hyperstimulation syndrome and three cases were reported as severe ovarian hyperstimulation. There were no reports of mortality in association with fertility treatment during the year.

#### Counselling

A total of 2502 counselling sessions were undertaken this year, which represents a 20% increase from the previous year (n=2090). Most participants (79%) received a single session and the majority of these entailed information counselling (77%), while the remaining participants received support counselling (19%). Therapeutic counselling accounted of 4% of the sessions.

Of the 21% of participants who had more than one session, 45% had support counselling, and 41% had information counselling. Counselling for donors and donor recipients accounted for 38% of all sessions. There were 926 donor counselling sessions representing a 17% increase from the previous year.

## Assisted Reproductive Technology Trends in WA

This next section presents the last 10 years of ART data collected in WA to illustrate trends in assisted reproductive technology.

Treatment trends for ART are shown in Figures 1 and 2 for fresh and thawed treatment cycles. There has been a steady increase in the number of treatment cycles and this is in line with national trends of a 10% increase per year (Wang et al., 2010). The proportion of fresh IVF treatment has remained steady over the past seven years at approximately 59-60% of cycles. There have been no GIFT cycles undertaken for the last four years.

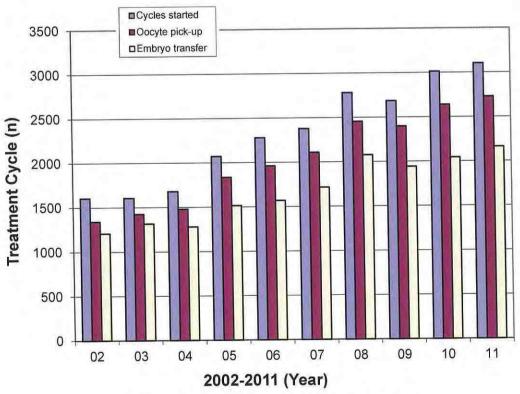


Figure 1: Progression of fresh IVF cycles

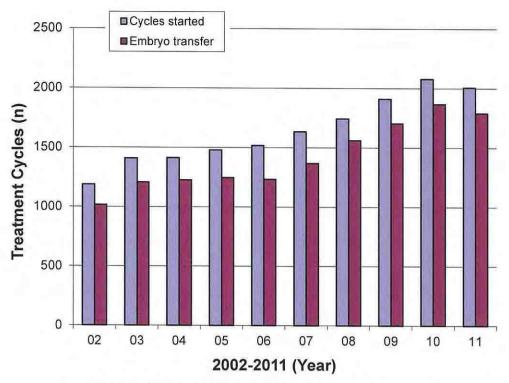


Figure 2: Progression of thawed embryo cycles

The number of IVF procedures where ICSI was used is shown in Figure 3, which illustrates increased use over the last 10 years. Prior to the development of ICSI many couples had little hope of pregnancy and donor assisted conception was often the only alternative.

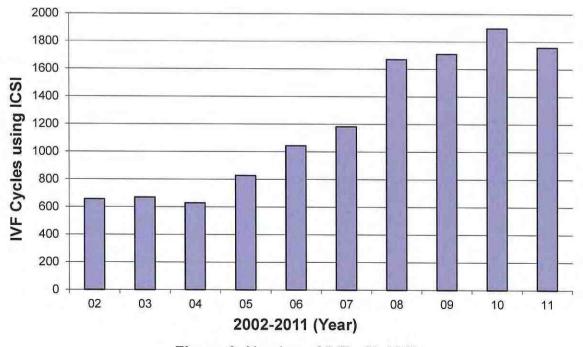


Figure 3: Number of IVF with ICSI

The number of sperm donors has gradually increased over the past ten years as shown in Figure 4. Men in the 41-50 year old age range represent the largest group of donors. The minimum age for sperm donation is 18 years old and while there is no legal upper age limit for sperm donation, most clinics recommend the ideal age range of 18 to 50 years old.

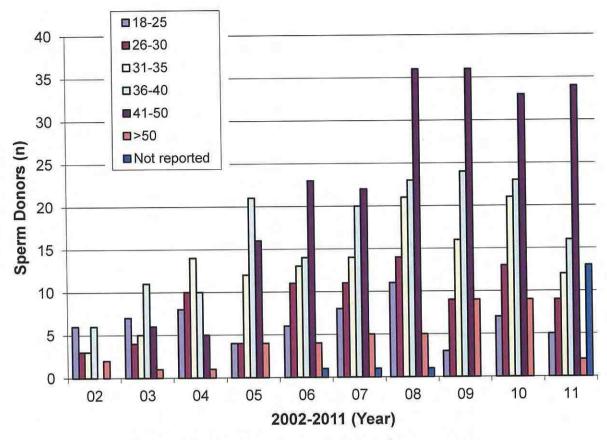


Figure 4: Number of sperm donors by age group

