

Human
Fertilisation &
Embryology
Authority

Using HFEA data effectively to benefit the sector and patients

**Annual conference 2018
workshop**

Chair: Margaret Gilmore

www.hfea.gov.uk



Human
Fertilisation &
Embryology
Authority

Fertility treatment 2014- 2016: trends and figures

**Past, present and future
reporting to benefit the sector
and patients**

Lisa Whiting

Data and Insights Analyst

15 March 2018

www.hfea.gov.uk

Reports

Egg and sperm donation
in the UK: 2012-2013

Egg and sperm donation in the UK: 2012-2013

Improving outcomes
for fertility patients:
multiple births
2015

Improving outcomes for fertility patients:
multiple births 2015

Fertility
treatment
2014
Trends and figures

Fertility treatment 2014 – trends and figures

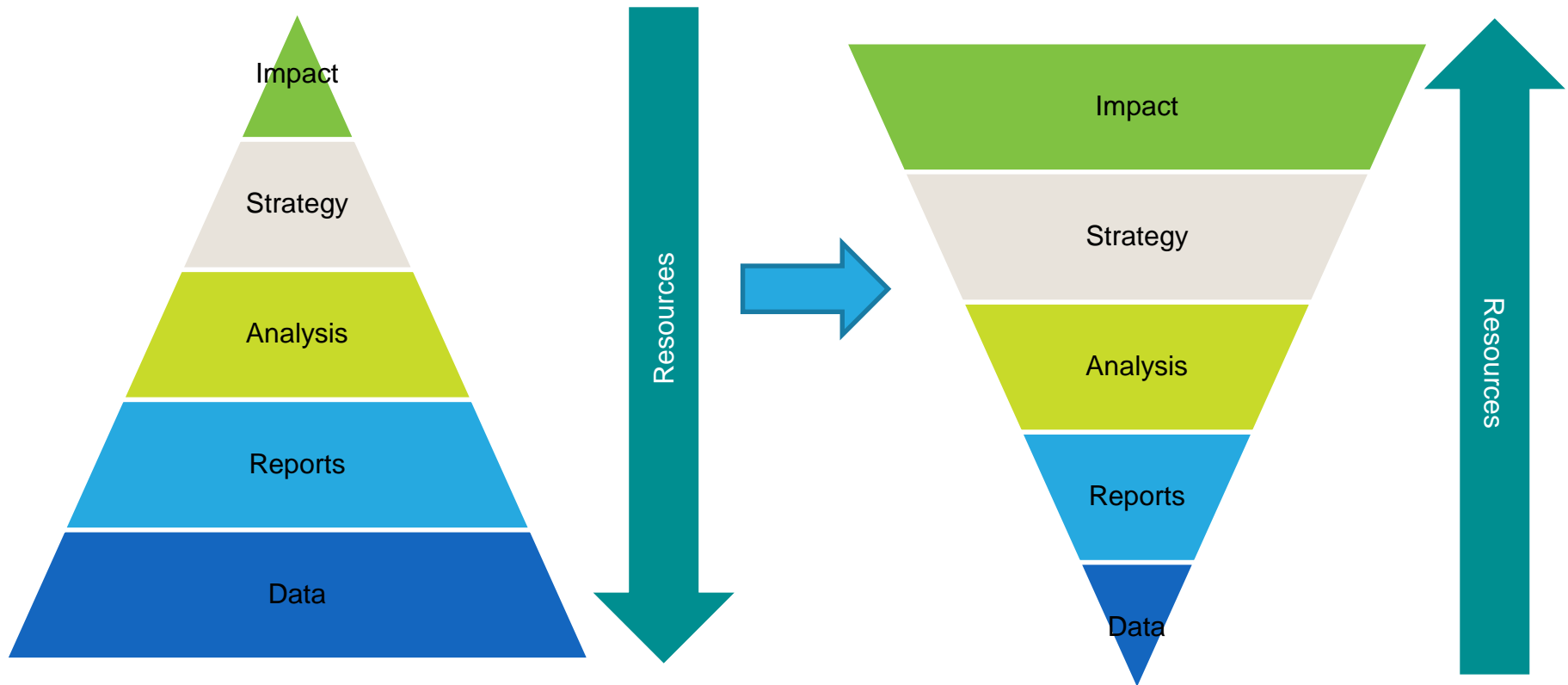
State of
the fertility
sector:
2016-17

State of the fertility sector 2016-2017

Fertility
treatment
2014-2016
Trends and
figures

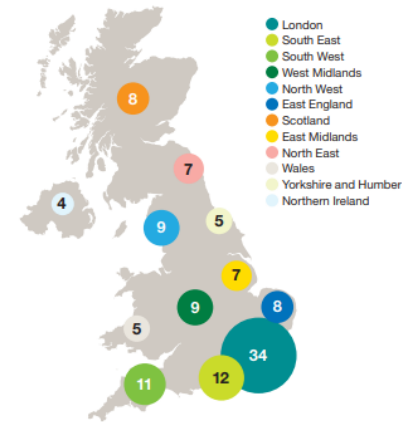
Fertility treatment 2014-2016: trends and figures

Shifting resource to impact



State of the fertility sector

- 74% of clinics have a five star inspection rating and all 21 research licences show the highest level of performance.
- 86% of clinics met (or were soon to meet) the 10% multiple births target.
- There had been an increase in Grade C incidents from 2015 to 2016, and a decrease in Grade B incidents.
- In 2016 there were:
 - 325 grade C incidents
 - 176 grade B incidents
 - 1 grade A incident.

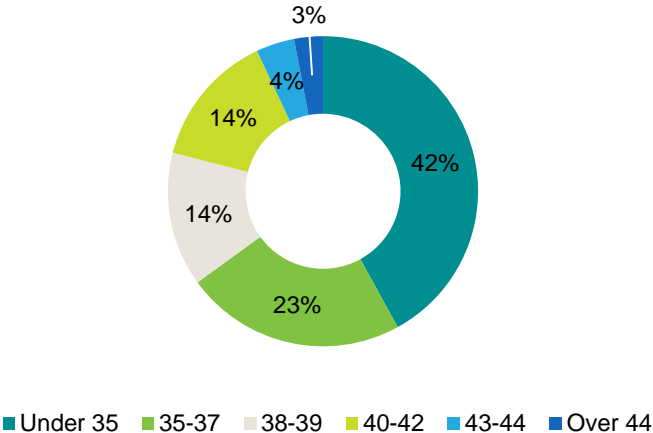


Fertility treatment 2014-2016

- published on 14 March 2018
- treatment cycles from 2014, 2015 and 2016
- new sections on IUI and surrogacy
- IVF by egg and sperm source
- expanded data on PGD and egg freezing
- more accessible and detailed underlying data tables
- for patients, clinicians, researchers, and the public.

Demographics

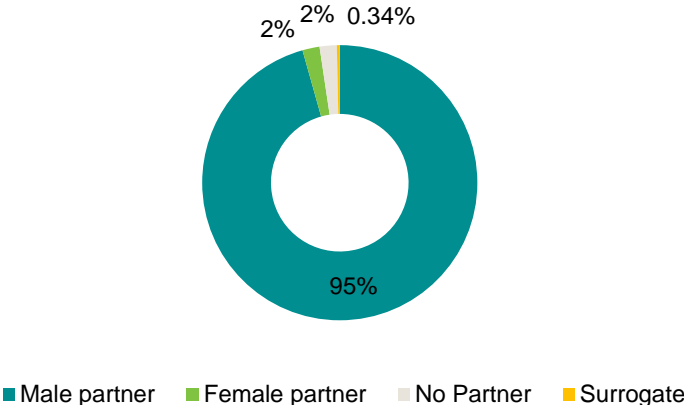
IVF by age, 2016



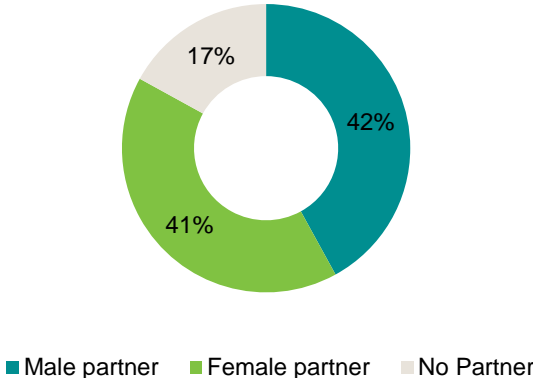
Proportion of NHS-funded IVF by nation



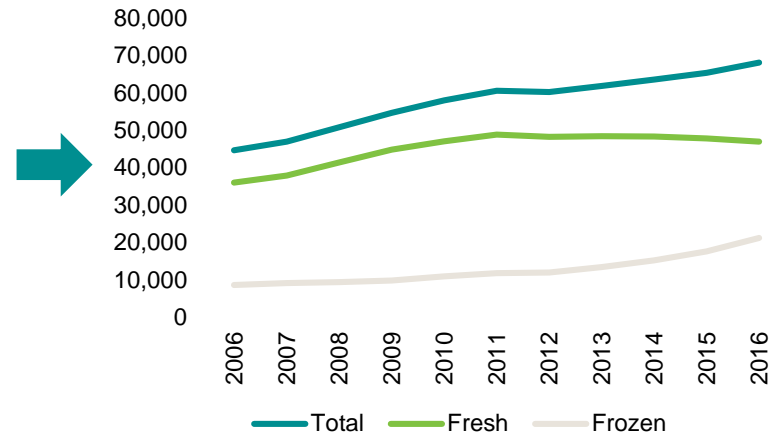
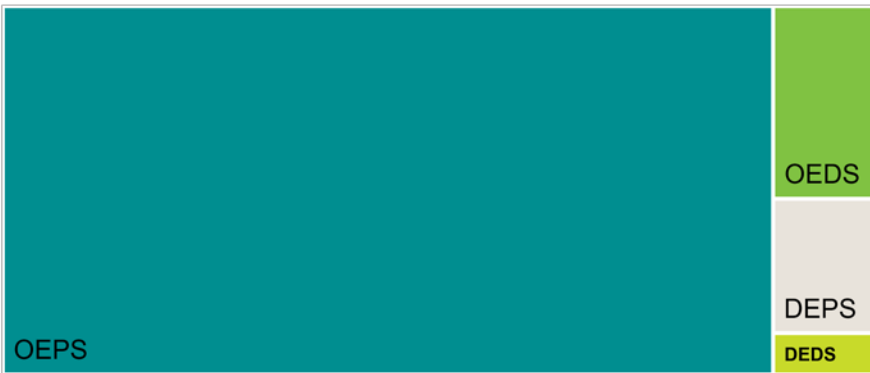
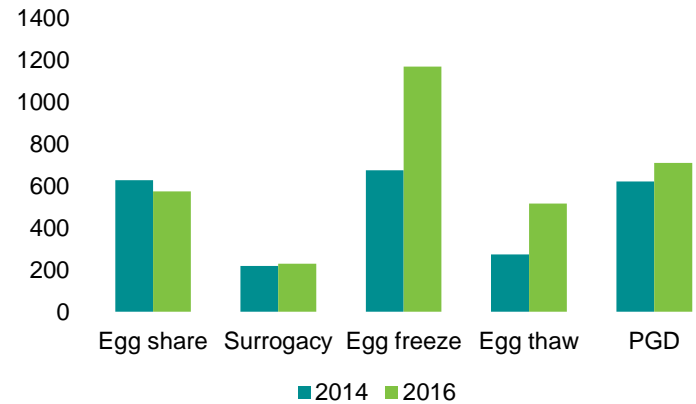
IVF by partner status, 2016



DI by partner status, 2016

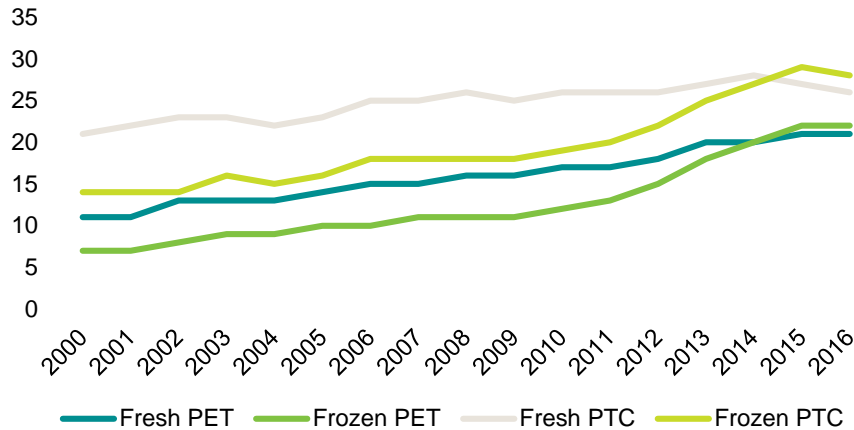


Treatment numbers



Birth rates

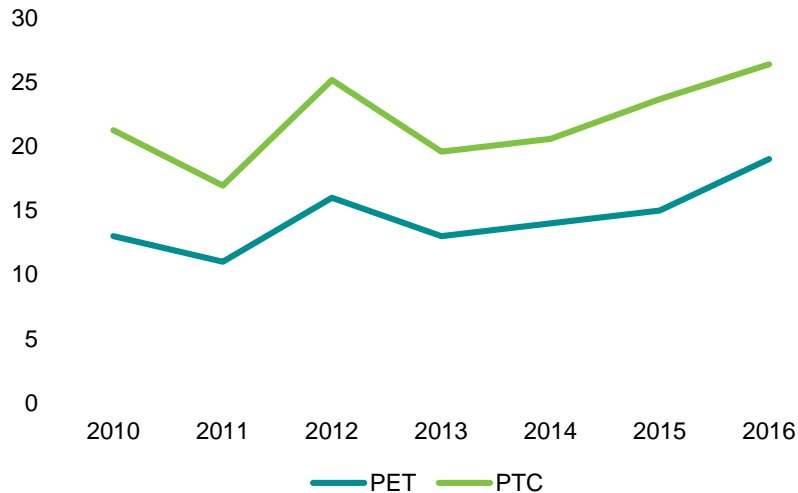
IVF birth rates



In 2016, the IVF birth rate PET was 22% for frozen, and 21% for fresh.

Frozen birth rates overtook fresh for the first time in 2015.

Egg thaw birth rates

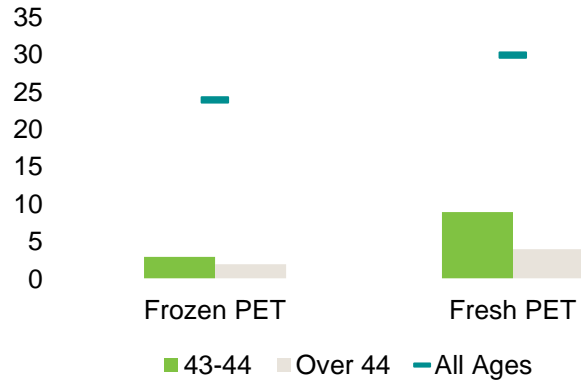


The egg thaw birth rate has increased from 14% PET in 2014, to 19% PET in 2016.

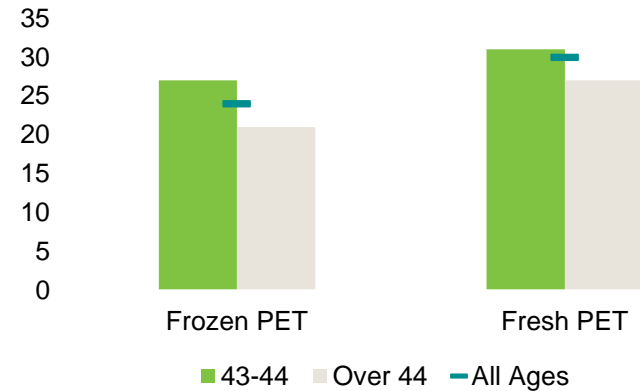
In 2016, the egg thaw birth PET was only 2% below IVF overall.

Areas of interest

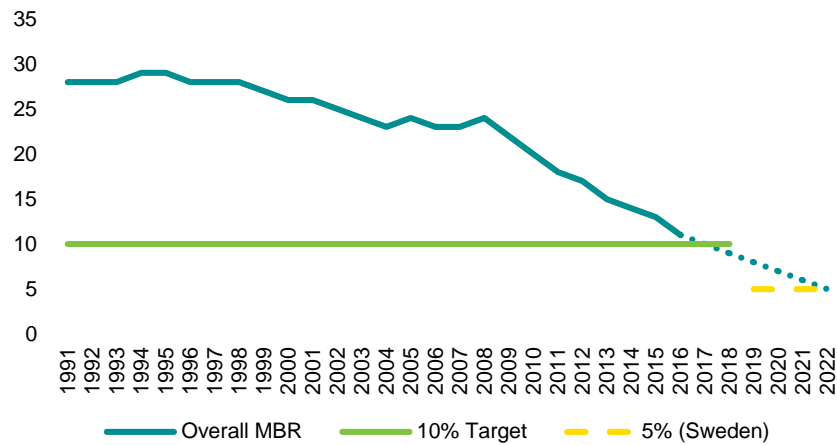
Own eggs IVF



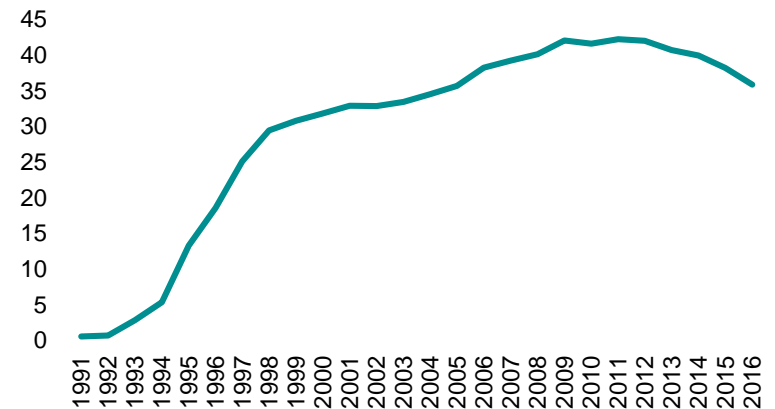
Donor eggs IVF



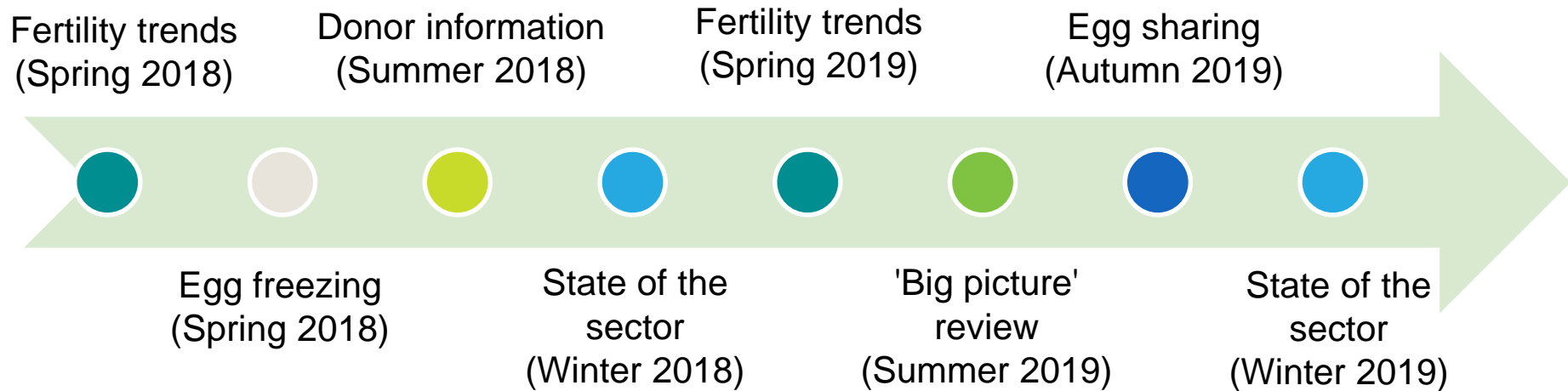
IVF multiple birth rate



ICSI as a proportion of IVF



Future reporting



Questions to consider

- How can we ensure the data and information we publish is useful for clinics and patients?
- How can we use data to drive improvements in the sector?
- What has been most useful in reports published to date?

Please feel free to email us at intelligenceteam@hfea.gov.uk or chat to us throughout the day.

www.hfea.gov.uk





Human
Fertilisation &
Embryology
Authority

Why do we need to use our data effectively?

Jessica Hepburn

15 March 2018

www.hfea.gov.uk

Using data effectively: A case study of egg freezing



HFEA Annual Conference
15 March 2018, London

Dr Zeynep Gurtin
Senior Research Associate
London Women's Clinic
Zeynep.Gurtin@Londonwomensclinic.com

The
London
Women's
Clinic



Fertility treatment 2014

Trends and figures

Chair's Foreword

“This year we have published figures on the emerging area of egg freezing for the first time. Freezing techniques are relatively new, and were very rare only five or six years ago. Interest from patients and the media has grown considerably in recent years, however, and we felt it was time to provide more clarity.”

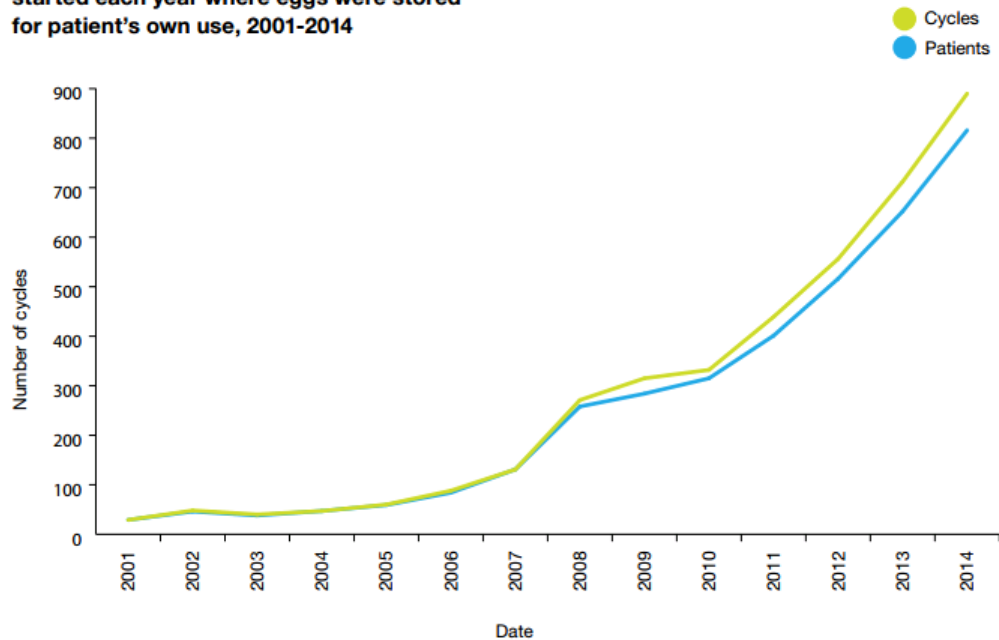
Sally Cheshire

Two main questions:

1. How many patients are storing their eggs?
2. How many patients are thawing eggs for treatment?

Numbers of women freezing own eggs

Figure 11: Number of women and cycles started each year where eggs were stored for patient's own use, 2001-2014



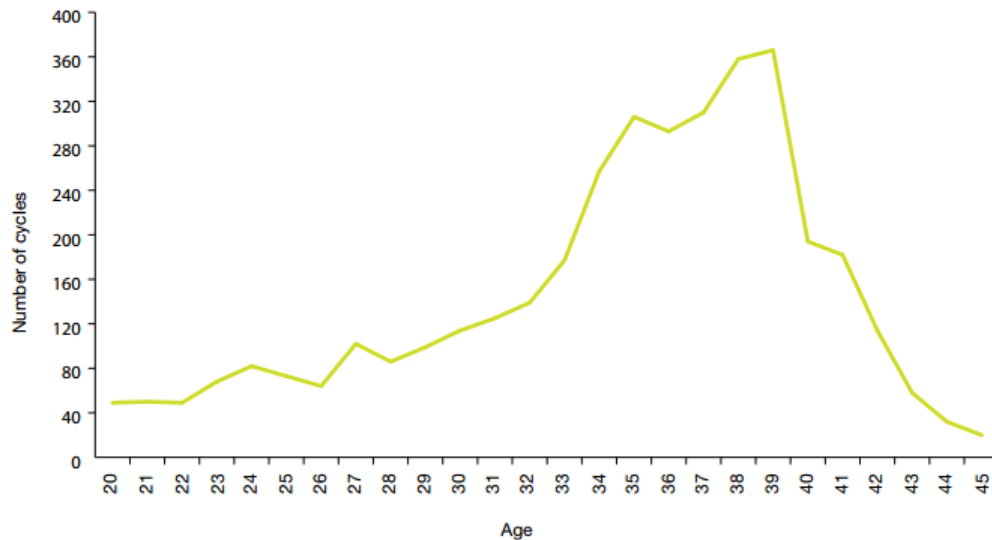
In 2014, 816 women started treatment aiming to freeze their own eggs for future treatment.

Reasons for freezing are not recorded in great detail but include women who:

- Have a condition or are facing medical treatment for a condition that may affect their fertility (e.g. chemotherapy for cancer)
- Are concerned about age-related fertility decline but not currently in a position to have a child
- Are at risk of injury or death (e.g. Armed Forces deployment)
- Are about to undergo gender reassignment

Age of women freezing their eggs

Figure 12: Number of storage cycles started by woman's age (20-45) at start of cycle, 2001-2014



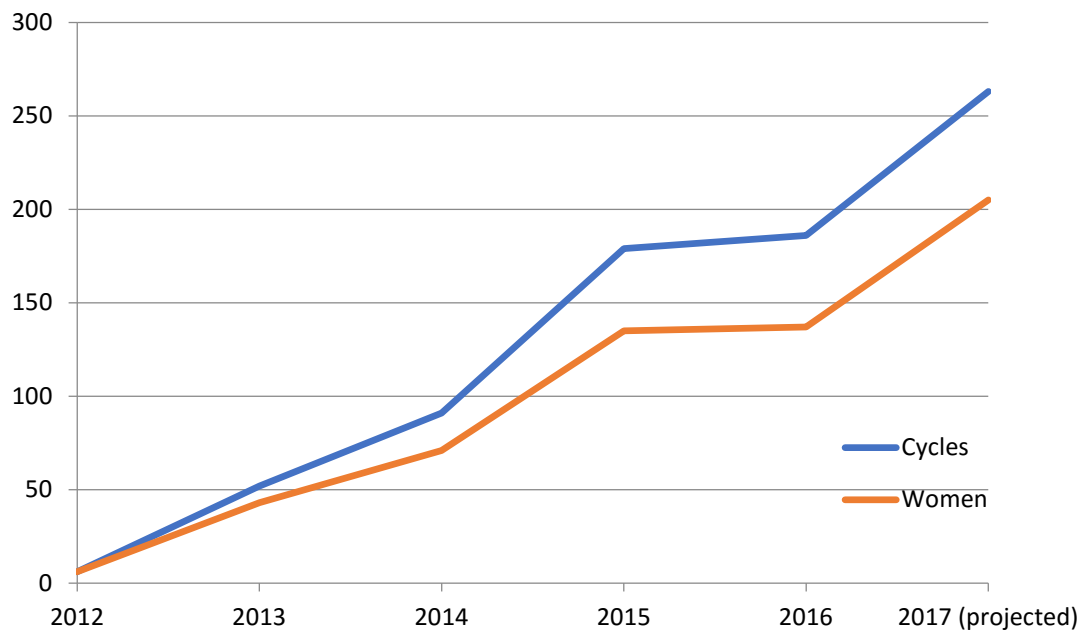
Figures are presented in two age groups: 37 years and under and 38 and over.

Two-thirds of the women freezing eggs are 37 and younger, and a third are 38 and older.

54.1% of 38< group and 36.4% of <37 group recorded “no male partner” as reason for freezing eggs. What were the other reasons?

“In both groups, the second most common reason was ‘other’. Further given reasons are unexplained infertility and low sperm count.”

So, we decided to look at our figures at the LWC



The HFEA reported that 65 clinics had frozen and stored eggs in 2014, but eight clinics performed half of the cycles.

Compared to the 816 women who started treatment nationally in 2014, at the LWC we had 71 women starting 91 cycles of treatment.

This suggests that the LWC has a very large proportion of egg freezing, and thus makes our data quite significant.

We created a database and performed a 5-year analysis on all 514 cycles of own egg freezing treatments undertaken by 342 women at the LWC between 2012-2017.

What did we find out?

1. There were four distinct categories of egg freezers among our patients, and each category had a very distinct average patient profile.



What did we find out?



4.3% IEF

Small File Freezers
single 27.4 year relationship, 95.2
yes from 1990s to 2000s, less
egg freezing storage, no egg
time from treatment to form was
subsequently available

100% All Egg Freezers

Average age 37.5; undertaken 1.5 cycles of egg freezing; frozen 7 eggs per cycle

75.7% SEF

Single, 37.4 years old. 1 cycle of egg freezing, 7 eggs frozen Eggs still in storage

2.1% MEF

Single, 27.3 years old. 1 cycle of egg freezing, 11 eggs frozen. Eggs will be in storage for considerable time

17.9% CEF

In a heterosexual relationship, 39.2 years old. At least 2 cycles, 4 or 5 eggs frozen per cycle Large proportion of eggs thawed for treatment

4.3% IEF

In a heterosexual relationship, 35.5 years old. 1 (unintended) cycle of egg freezing, 9 eggs frozen. Eggs thawed for treatment if sperm subsequently available

What did we find out?

1. There were four distinct categories of egg freezers among our patients, and each category had a very distinct average patient profile.
2. Women freezing their eggs for social reasons were the largest category, but there were also a significant number of Clinical Egg Freezers, as well as smaller numbers of patients who were freezing eggs incidentally (for unexpected reasons), or for medical reasons.



What did we find out?

1. There were four distinct categories of egg freezers among our patients, and each category had a very distinct average patient profile.
2. Women freezing their eggs for social reasons were the largest category, but there were also a significant number of Clinical Egg Freezers, as well as smaller numbers of patients who were freezing eggs incidentally (for unexpected reasons), or for medical reasons.
3. These different categories of egg freezing became particularly significant when we looked at the thaw data.



Who is thawing their eggs and after how long?

Figure 13: Number of thawing cycles started each year and women, 2001-2014

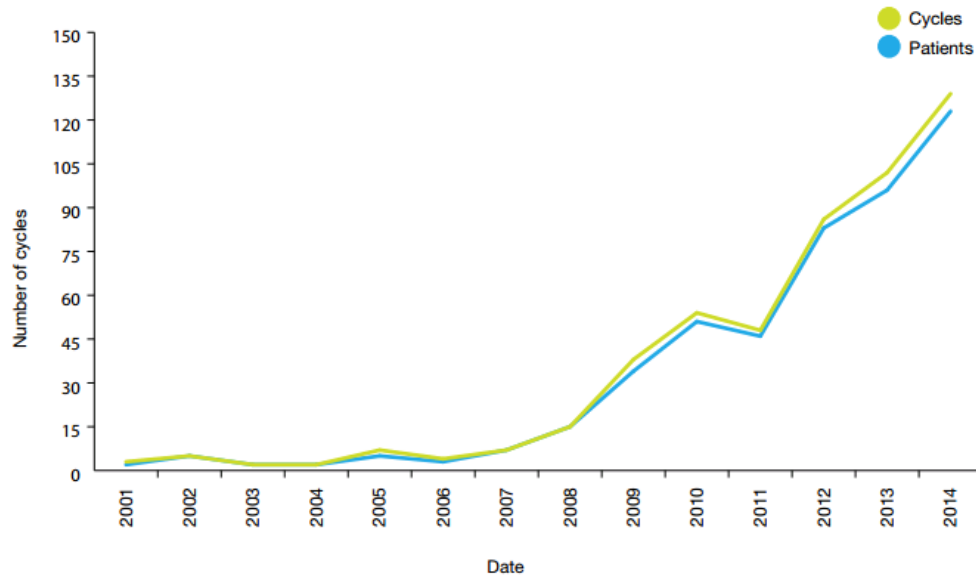
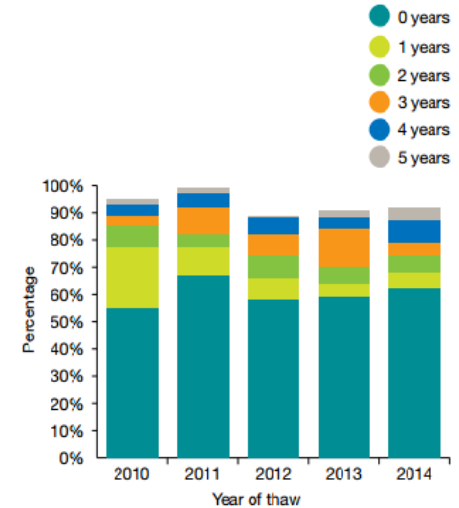
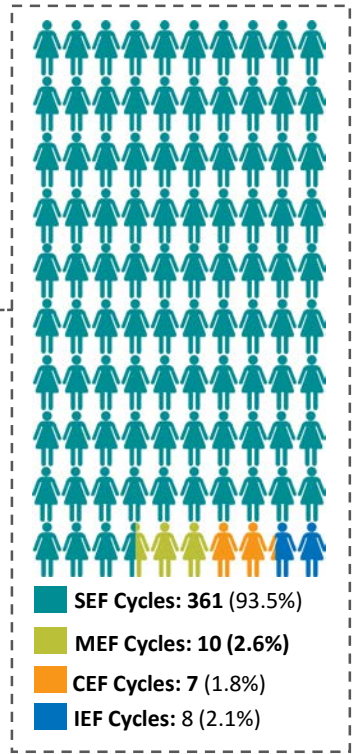
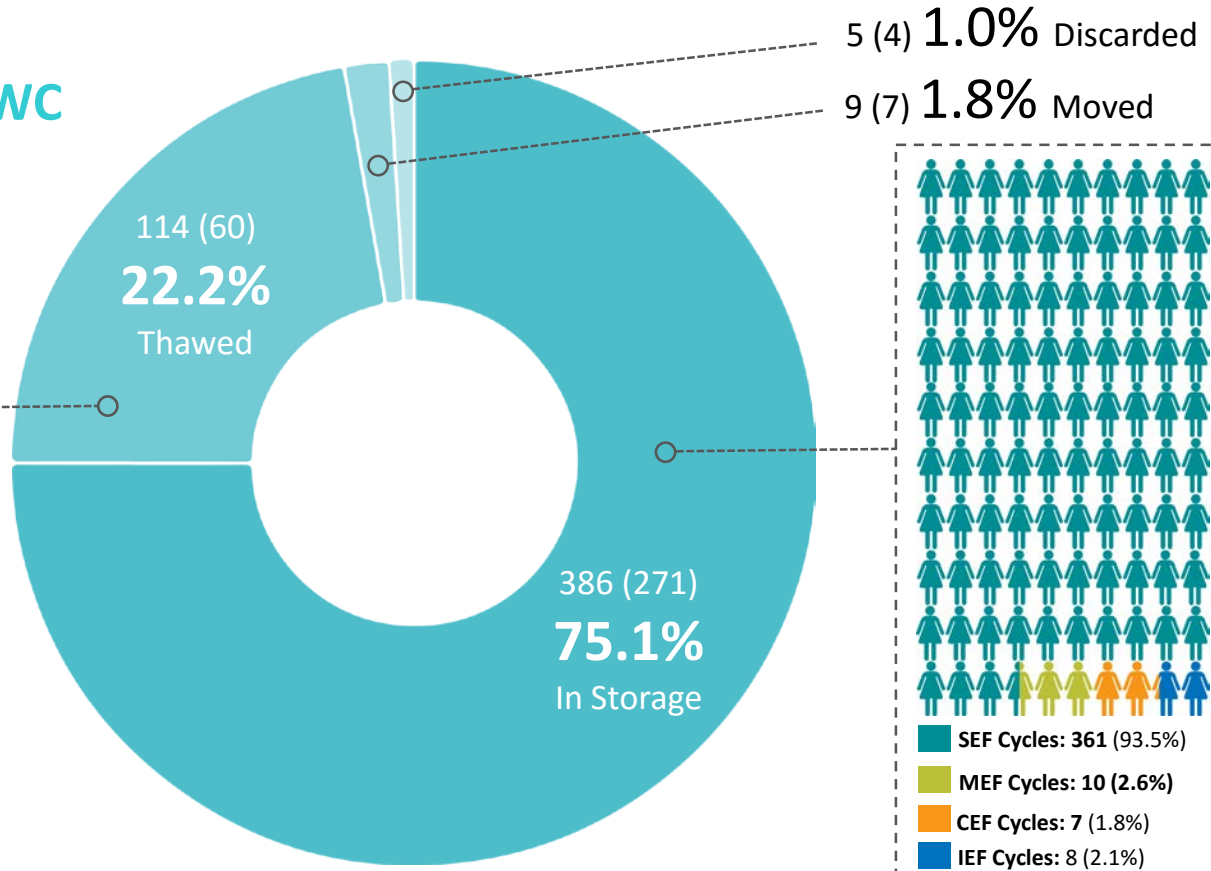


Figure 14: Number of thaw cycles each year and how long the eggs had been frozen for, 2010-2014



“Of the thawed egg cycles performed, well over half used eggs which had been frozen for less than a year. These are unlikely to be those of women freezing in order to preserve their fertility in the longer term, but maybe those that had to put their treatment on hold for unexpected reasons, for instance, if donor or partner sperm was not available at the right time.”

Eggs frozen at the LWC



What did we find out?

1. There were four distinct categories of egg freezers among our patients, and each category had a very distinct average patient profile.
2. Women freezing their eggs for social reasons were the largest category, but there were also a significant number of Clinical Egg Freezers, as well as smaller numbers of patients who were freezing eggs incidentally (for unexpected reasons), or for medical reasons.
3. These different categories of egg freezing became particularly significant when we looked at the thaw data.
4. Most “social freezers” still have their eggs in storage, and the great majority of thaw cycles are undertaken by women who frozen their eggs not for social, but for clinical or unexpected reasons. Thus, to date, the majority of children born from frozen eggs, are not actually born to women intentionally “postponing” motherhood via egg freezing.



It is very important to....

- Ask the right questions of the data – particularly when trying to understand a newly-emerging and fast-developing phenomenon.
- Think critically about what the data may cover or obscure, as well as what they reveal.
- Record as much relevant detail as possible at the stage of data collection (both by clinics and by the HFEA), so that a variety of questions may be asked (and answered!) in the future.
- Include social scientists in the conversation about clinical and regulatory practice!



THANK YOU



Research performed in collaboration with:
Trina Shah, Jinjun Wang and Dr Kamal Ahuja at the London Women's Clinic
and Professor Susan Golombok at Centre for Family Research, University of Cambridge

Questions and discussion

www.hfea.gov.uk