

## Pre-term birth impact report

### THEN 2000



"I don't know why this has happened and I don't know if it will happen again"

Obstetrician to mother of pre-term baby



IVF:

Multiple embryos transferred resulting in more high risk multiple pregnancies



Obstetric practice potentially caused harm by delivering babies early

### NOW 2017



**Improved care: Identifying who is at risk**

- Prior pre-term birth
- Underweight
- Smoker
- Uterine abnormality
- Cervical surgery
- Full dilation caesarean



**Predictive tests** (saves health and human cost by reassuring women they will go to full-term/focusses care to those in most need)

- Cervical length
- Biomarkers such as fetal fibronectin
- Decision making apps developed



**Treatments**

- Cervical stitches
- Arabin pessary
- Progesterone



**Supporting parents and babies**

- Magnesium sulphate to reduce the risk of cerebral palsy
- Targeted steroid to improve baby's lung function
- Better targeting of women to hospitals with neonatal care facilities improves the chances of the baby

### Tommy's clinic

Established the first pre-term birth clinic in the UK, helping over 1300 new patients each year. Tommy's clinic model of care has been transferred throughout the UK to over 30 centres

**Clinic outcomes:**



Of 120 high risk women with multiple losses, referred from other hospitals, 90% have a healthy baby (expected reoccurrence 30–50%)



**Hospital pre-term birth**  
– reduction of 22%

2004 9.17%  
2011 7.18%



**Hospital pre-term birth <32 weeks**  
– reduction of 20%

2004 3.47%  
2011 2.79%



**Dept. of Health Innovation Award**

In 10 years pre-term birth reduced by 15% compared to surrounding hospital regions

### Research pipeline

(projects in progress)



Raise national standards by implementation of guidance to reduce pre-term birth



Screening in early pregnancy



Refining interventions around personalised care