

Ultrasound Perspective

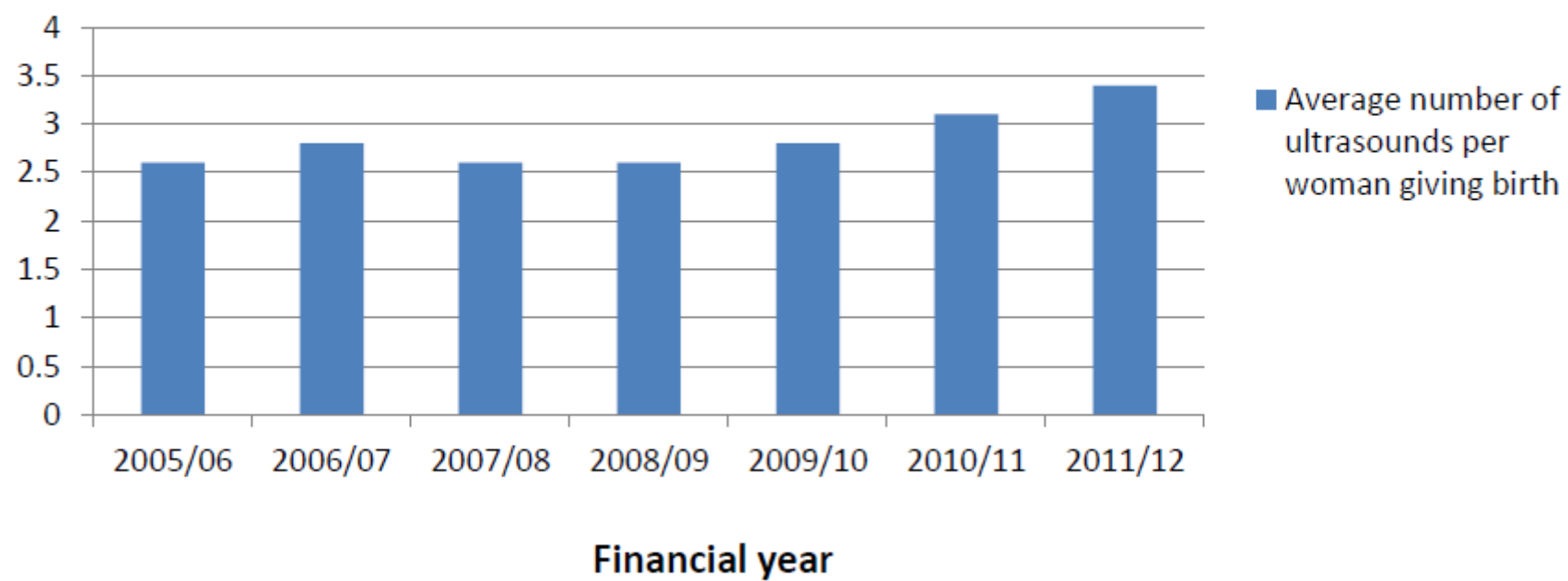
Dr David Perry

Clinical Director of Women's Ultrasound

August 2015



**Figure 3: Average scans per woman
(By financial year of completed pregnancy)**



Source: Ministry of Health Briefing Paper, 2013

Table 2: Primary maternity ultrasound volumes, by financial year of expected or actual birth, 2004/05 to 2011/12

Financial Year of Due Date	Total ultrasounds funded for women due in this financial year	Total women due in this financial year receiving scans	Total number of women giving birth
2004/05*	131,055	63,508	58,316
2005/06	185,822	81,376	59,615
2006/07	202,870	85,516	62,590
2007/08**	194,789	85,816	64,741
2008/09	194,461	82,787	64,049
2009/10	211,260	84,349	64,992
2010/11	225,309	83,351	63,581
2011/12	238,358	82,256	61,916

The above table shows ultrasounds completed by financial year of due date or actual birth, not by financial year in which the scans were provided.

*2004/05 data is incomplete. Maternity data from 2002 onwards was migrated from the old payment system (HBL Apps) to the Proclaim system in 2004.

** From 1 July 2007 DHBs could no longer claim for ultrasound scans (or any other services) under the Notice.

Source: Ministry of Health Briefing Paper, 2013

Table 7: Change in primary maternity ultrasound volumes by indication, 2007/08 and 2011/12 (by service date)

Reason for Ultrasound	Number provided in 2007/08	Number provided in 2011/12	Percentage increase
Pelvic mass in pregnancy	59	184	212%
Early evaluation for chromosomal abnormality follow up	283	707	150%
Suspected growth abnormality (IUGR or macrosomia) follow up	2702	6584	144% ←
Suspected growth abnormality (IUGR or macrosomia)	20716	44196	113% ←
Uterus not equal to dates	19098	29908	57% ←
Anatomy follow-up	4371	6656	52%
Suspected fetal compromise	1412	2096	48%
Prior to booking CVS or amniocentesis or Nuchal Translucency	9166	13452	47%
Dating and early evaluation for chromosomal abnormality	32558	42529	31%
Antepartum haemorrhage	466	549	18%
Maternal postpartum	862	933	8%
Malpresentation	2524	2668	6%
Threatened abortion	15812	16578	5%
Anatomy	59969	58995	-2%
Suspected intrauterine fetal death	94	88	-6%
Check placenta	2768	2531	-9%
Abdominal pain	794	667	-16%
Suspected ectopic pregnancy	1894	1556	-18%
Consideration of termination	13375	10160	-24%
Total	188923	241037	128%

Source: Ministry of Health Briefing Paper, 2013

Table 6: Reason for primary maternity ultrasound and percentage of total, 2011/12 (by date of ultrasound service, not due date of pregnancy)

Reason for Ultrasound	Number carried out in 2011/12 (service date)	Percentage of all ultrasounds
Anatomy	58995	24%
Suspected growth abnormality (IUGR or macrosomia)	44196	18% ←
Dating and early evaluation for chromosomal abnormality	42529	18%
Uterus not equal to dates	29908	12% ←
Threatened abortion	16578	7%
Prior to booking CVS or amniocentesis or Nuchal Translucency	13452	6%
Consideration of termination	10160	4%
Anatomy follow-up	6656	3%
Suspected growth abnormality (IUGR or macrosomia) follow up	6584	3% ←
Malpresentation	2668	1%
Check placenta	2531	1%
Suspected fetal compromise	2096	1%
Suspected ectopic pregnancy	1556	1%
Maternal postpartum	933	0%
Early evaluation for chromosomal abnormality follow up	707	0%
Abdominal pain	667	0%
Antepartum haemorrhage	549	0%
Pelvic mass in pregnancy	184	0%
Suspected intrauterine fetal death	88	0%
Total	241037	100%

Source: Ministry of Health Briefing Paper, 2013

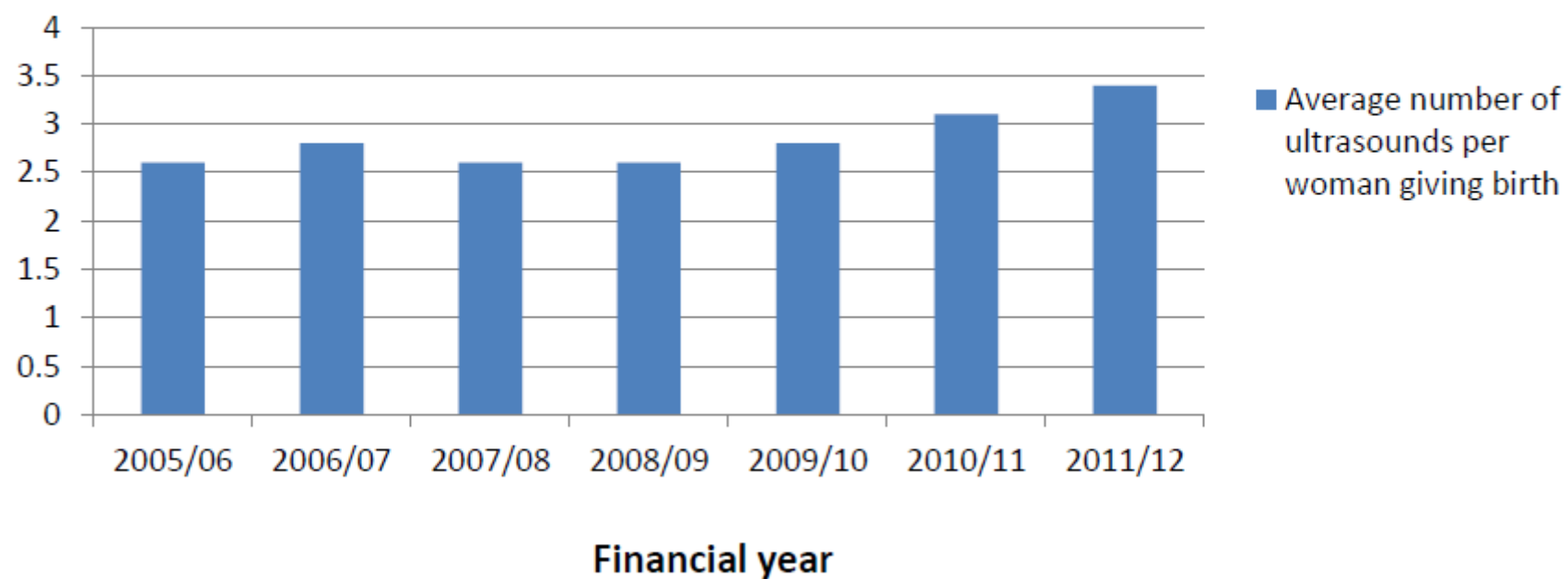
NMMG tasked by MoH with reviewing Primary Maternity US utilisation:

Increased cost of S88 funded scans

Anecdotal concerns raised to NMMG about GROW chart
increasing numbers of growth scans

NMMG have also heard concerns about excessive numbers
of growth scans in SGA pathway women

**Figure 3: Average scans per woman
(By financial year of completed pregnancy)**



Source: Ministry of Health Briefing Paper, 2013

Why did S88 funded growth scan numbers more than double in 4 years?

Change in funding of DHB scans from S88 to bulk?

Movement of obstetric scans from public to private sector ?

Lack of standards for appropriate indications for scans?

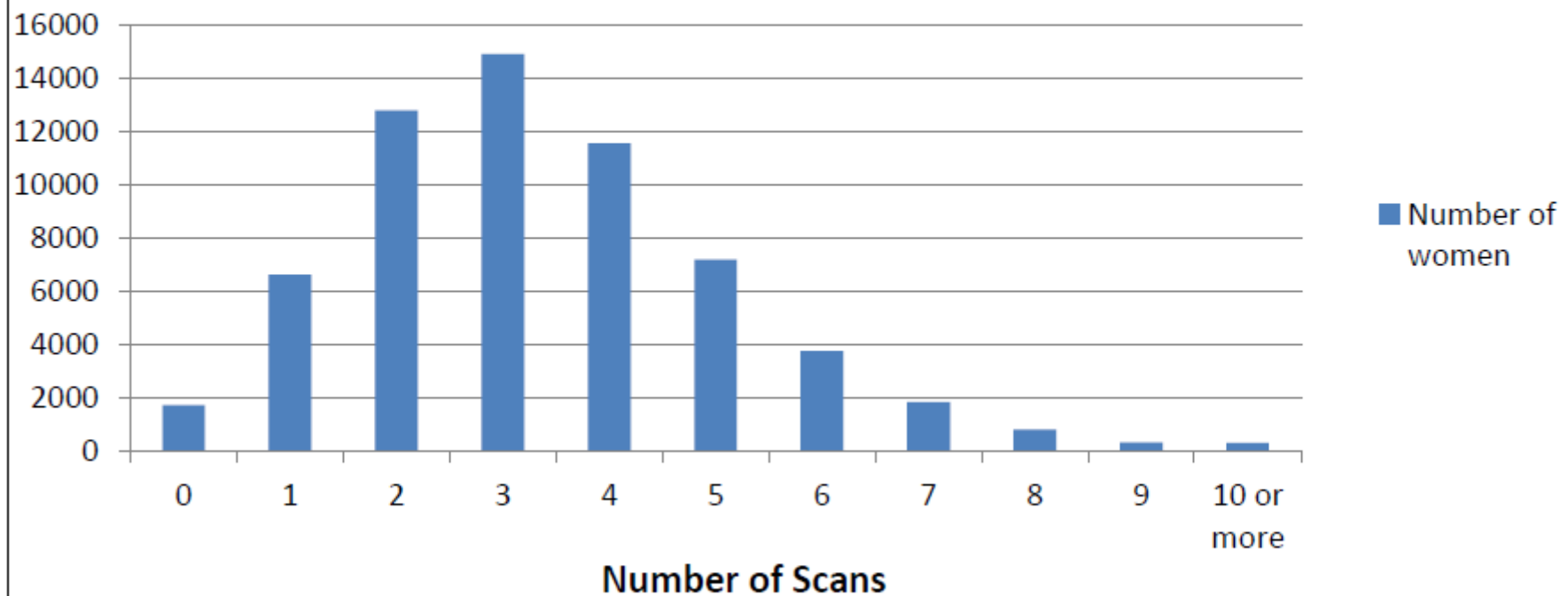
Lack of audit of performed scans?

Obesity and other co-morbidities?

Increased referrer and consumer demand?

Impact of GROW charts?

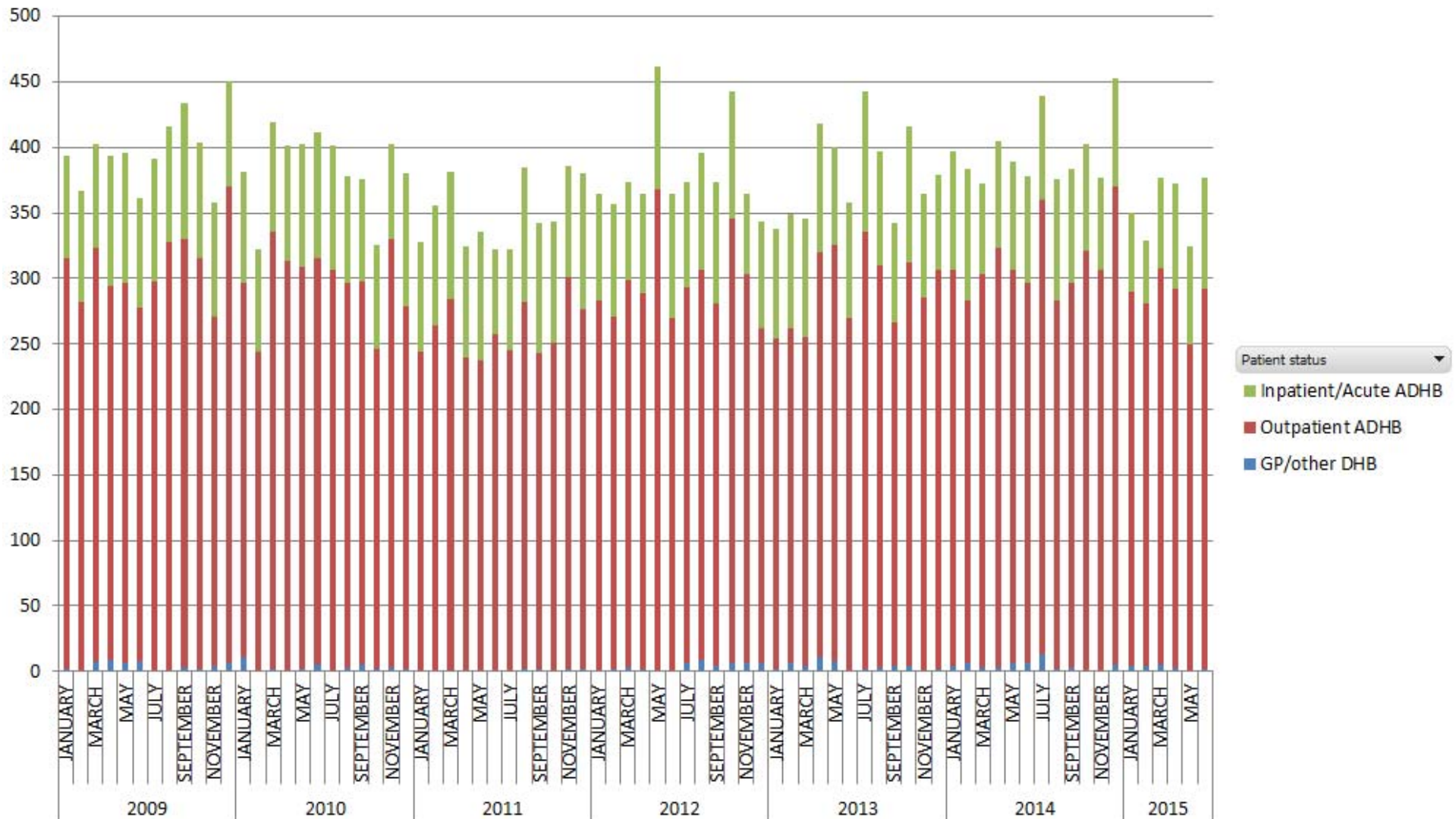
**Figure 1: Number of scans per woman
(Completed pregnancy in 2011/12)**



Source: Ministry of Health Briefing Paper, 2013

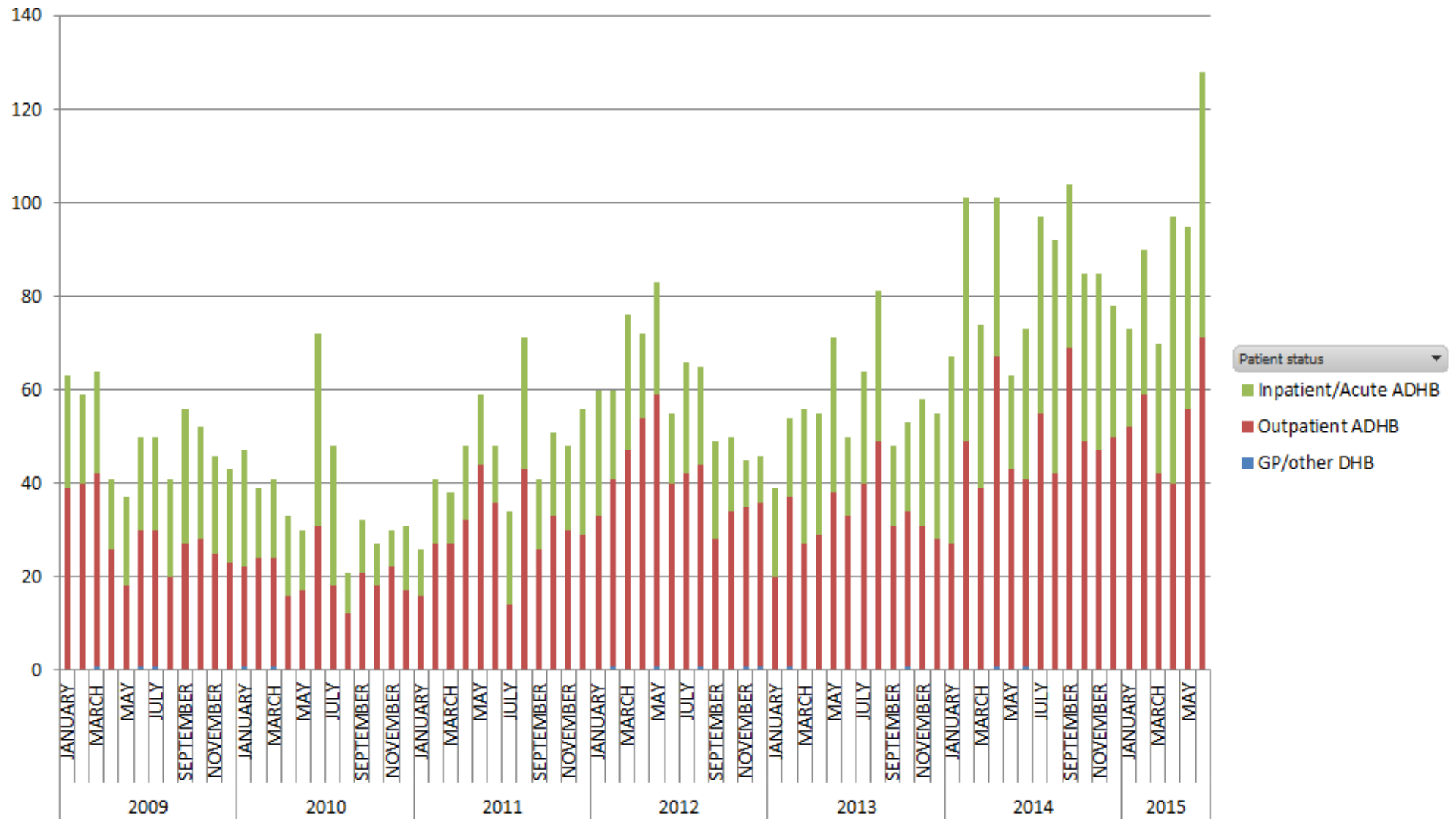
Growth scans at ADHB

Number of exams



Doppler scans at ADHB

Number of exams



Growth and Doppler scans at other DHBs?



Growth and Doppler scans at other DHBs?

No national data of bulk funded DHB maternity ultrasound

Highly variable US provision across country

Some DHBs perform no primary maternity US

What effect is GROW having on growth scan numbers?

