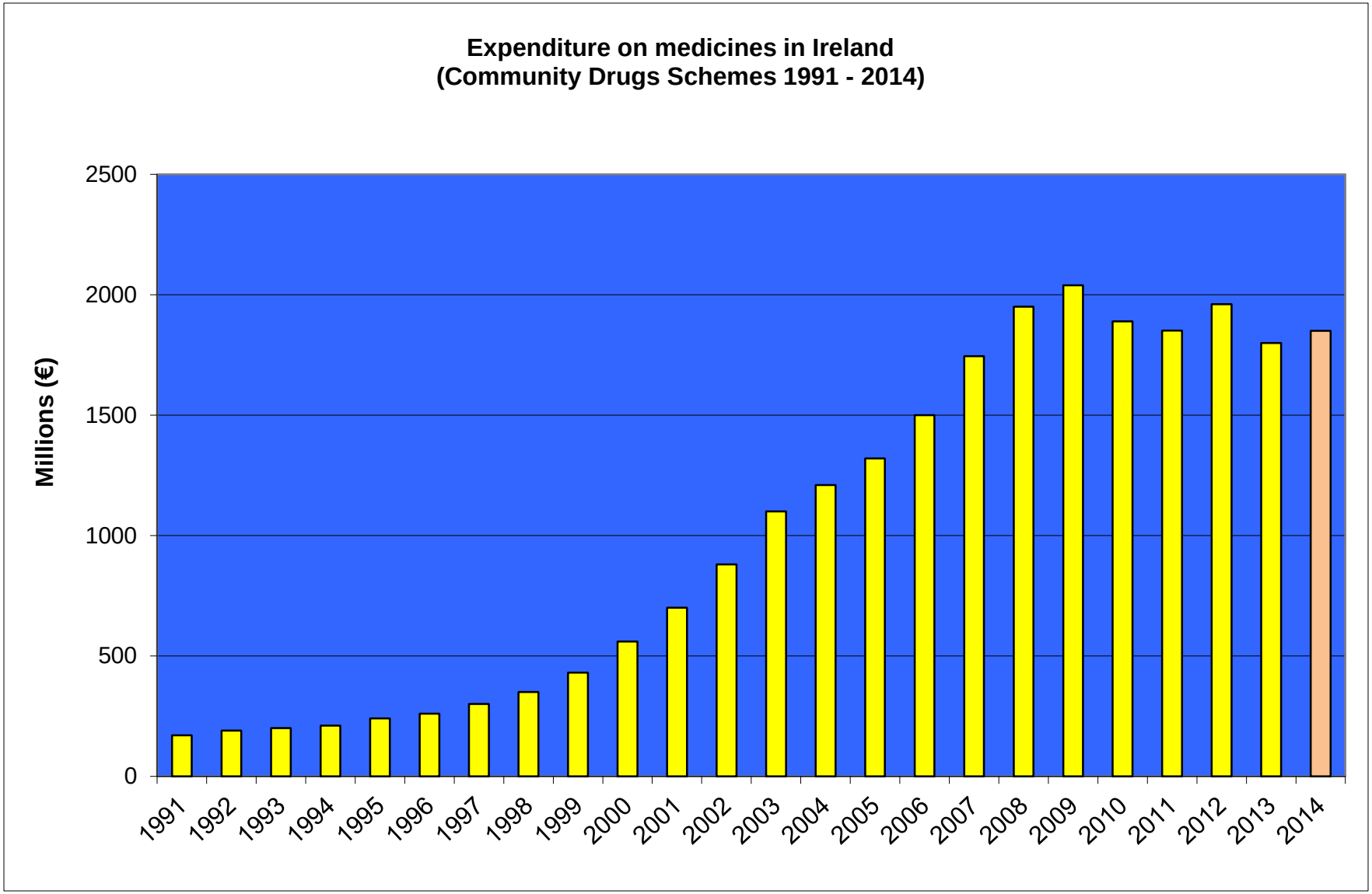
The Medicines Management Programme (MMP) – update
3rd National Medicines Forum
RCPI 30th April 2015

Michael Barry

The Medicines Management Programme (MMP)

- The Medicines Management Programme (MMP) was established in January 2013

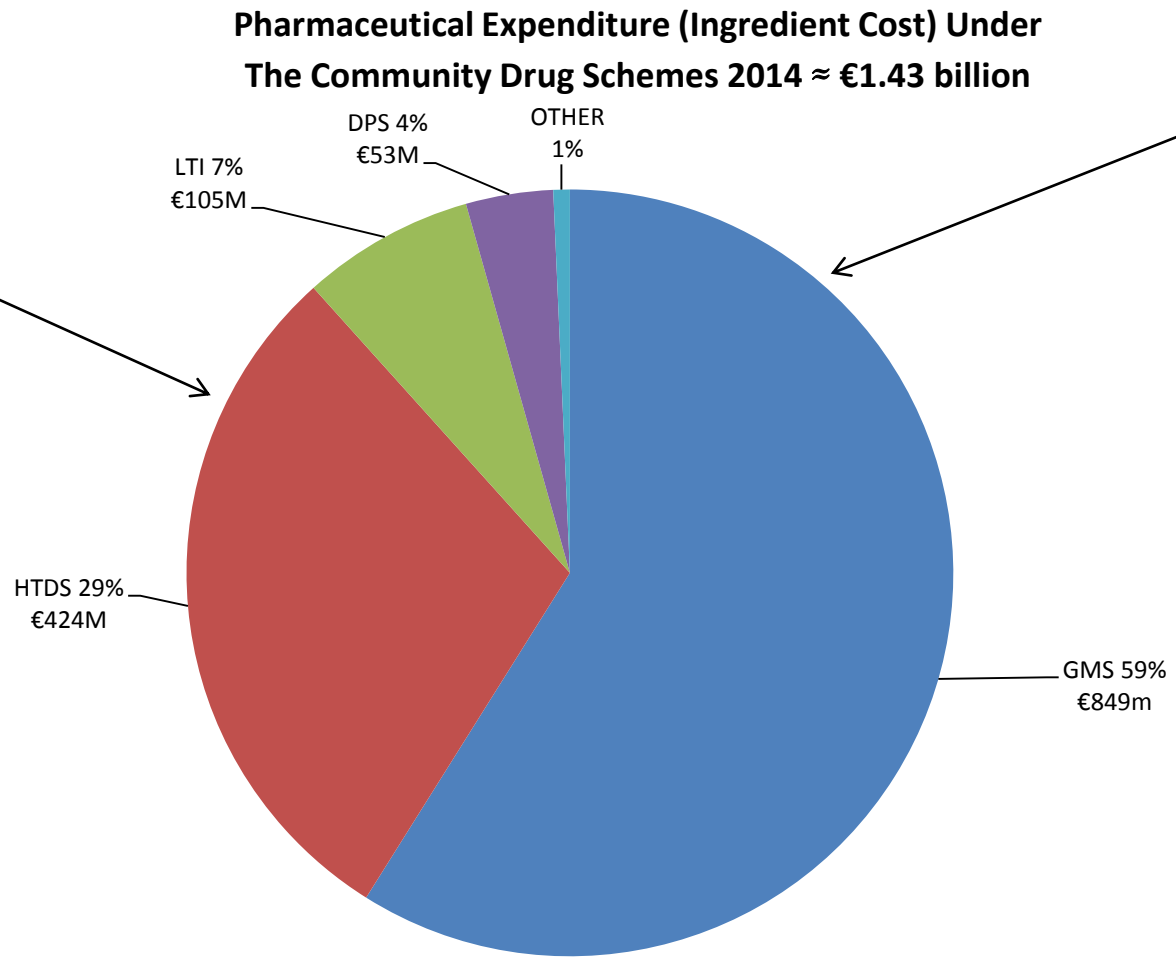
- Aim - **sustained** national leadership relating to
  - Safe
  - Effective
  - Cost –effective prescribing


Expenditure on medicines in Ireland
(Community Drugs Schemes 1991 - 2014)
Millions (€)
2500
2000
1500
1000
500
0
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

Drug expenditure in Ireland

HTDS Cost

€485 million in 2014 (25% of total expenditure)



GMS Volume

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Health Service Executive

Most frequently prescribed medicines

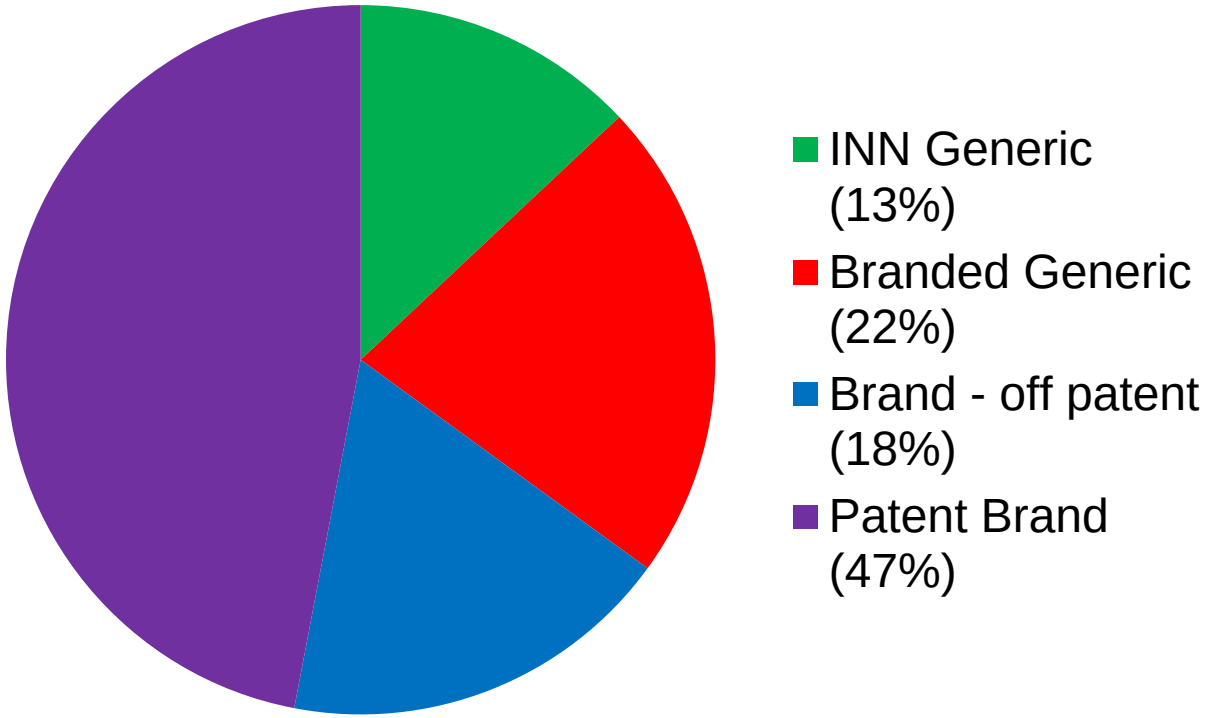
- Acetylsalicylic Acid
- Atorvastatin
- Levothyroxine sodium
- Paracetamol
- Bisoprolol
- Calcium combinations
- Salbutamol (Inhaled)
- Esomeprazole
- Amlodipine
- Rosuvastatin

Most expensive medicines

- Adalimumab
- Clinical nutritional products
- Etanercept
- Atorvastatin
- Salmeterol + other drugs for OAD
- Pregabalin
- Esomeprazole
- Ivacaftor
- Formoterol + other drugs for OAD
- Tiotropium

Generic dispensing under the Community Drugs Schemes – Q3 2014

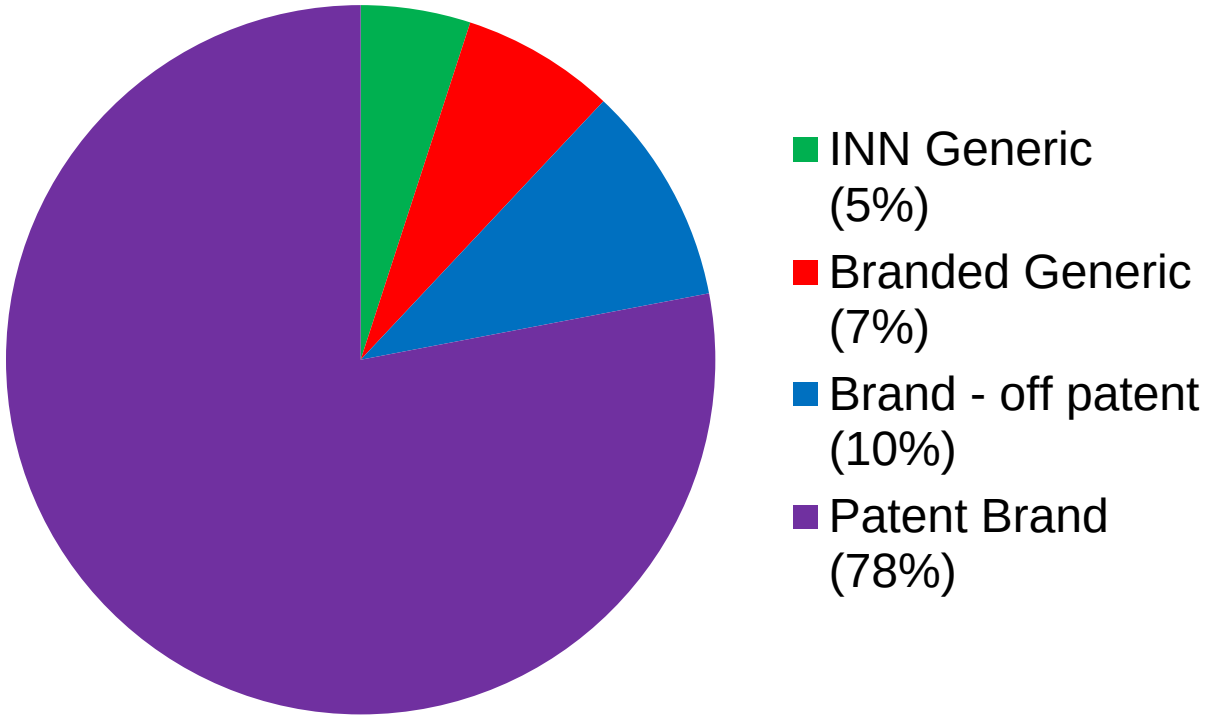
volume (items)



INN generic dispensing rate has doubled over the last 12 months

Generic dispensing under the Community Drugs Schemes – Q3 2014

Expenditure €



The % expenditure on patent branded products has increased significantly

Affordability – funding very high cost drugs !

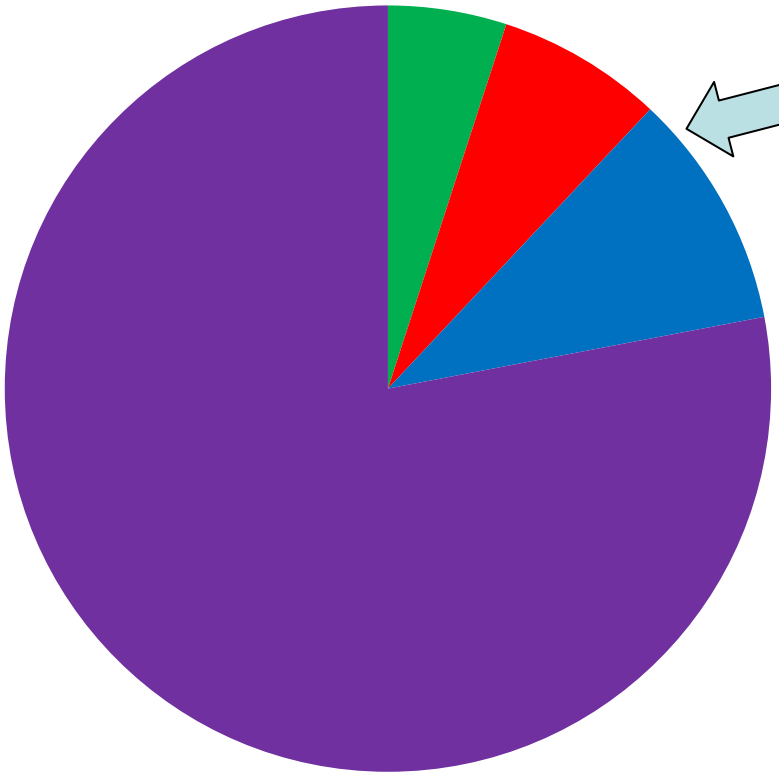
Eculizumab is a humanized monoclonal antibody that blocks the activation of terminal compliment at C5. It is indicated for the treatment of paroxysmal nocturnal haemoglobinuria (PNH) and atypical haemolytic uraemic syndrome (aHUS)

Eculizumab (Soliris) costs € 430,000 per patient per annum

So what can we do ?

Reduce expenditure in the off patent side of the market

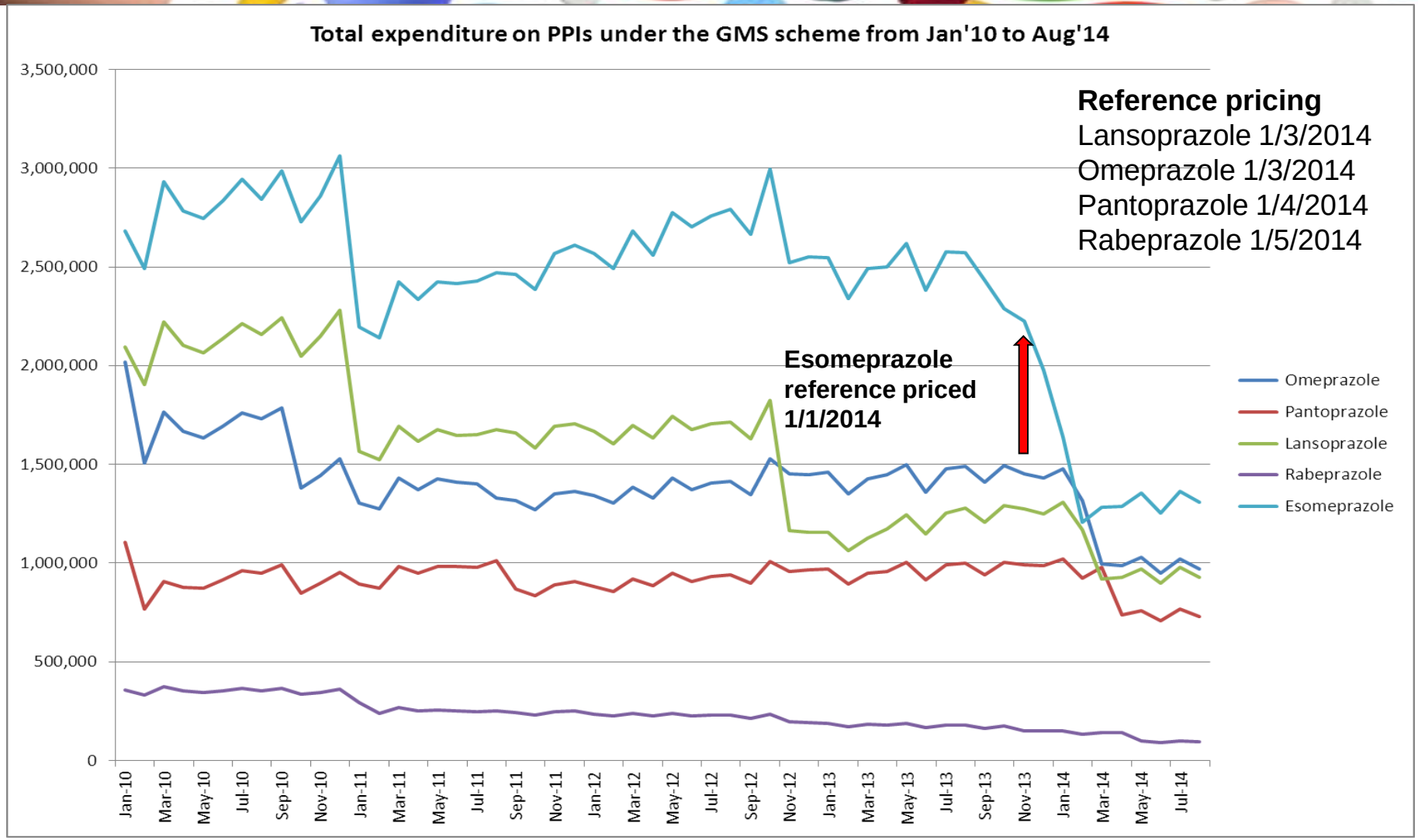
Apply rigorous HTA to the patented side of the market



Reference pricing

The HSE sets a price for the original branded product and its generics (phase 1 reference pricing)

- If the patient wishes to obtain the original branded product they will have to pay the difference between the reference price and the price of the originator product
- Some 37 products have been reference priced to date
- Atorvastatin (Lipitor) was the first drug to be reference priced on 1st November 2013
- Esomeprazole (Nexium) followed on the 1st January 2014.



Total PPI expenditure (GMS & DP) - August 2013 = € 7,444,232 ⟶ August 2014 = € 4,527,540

Δ = € 2,916,692/month

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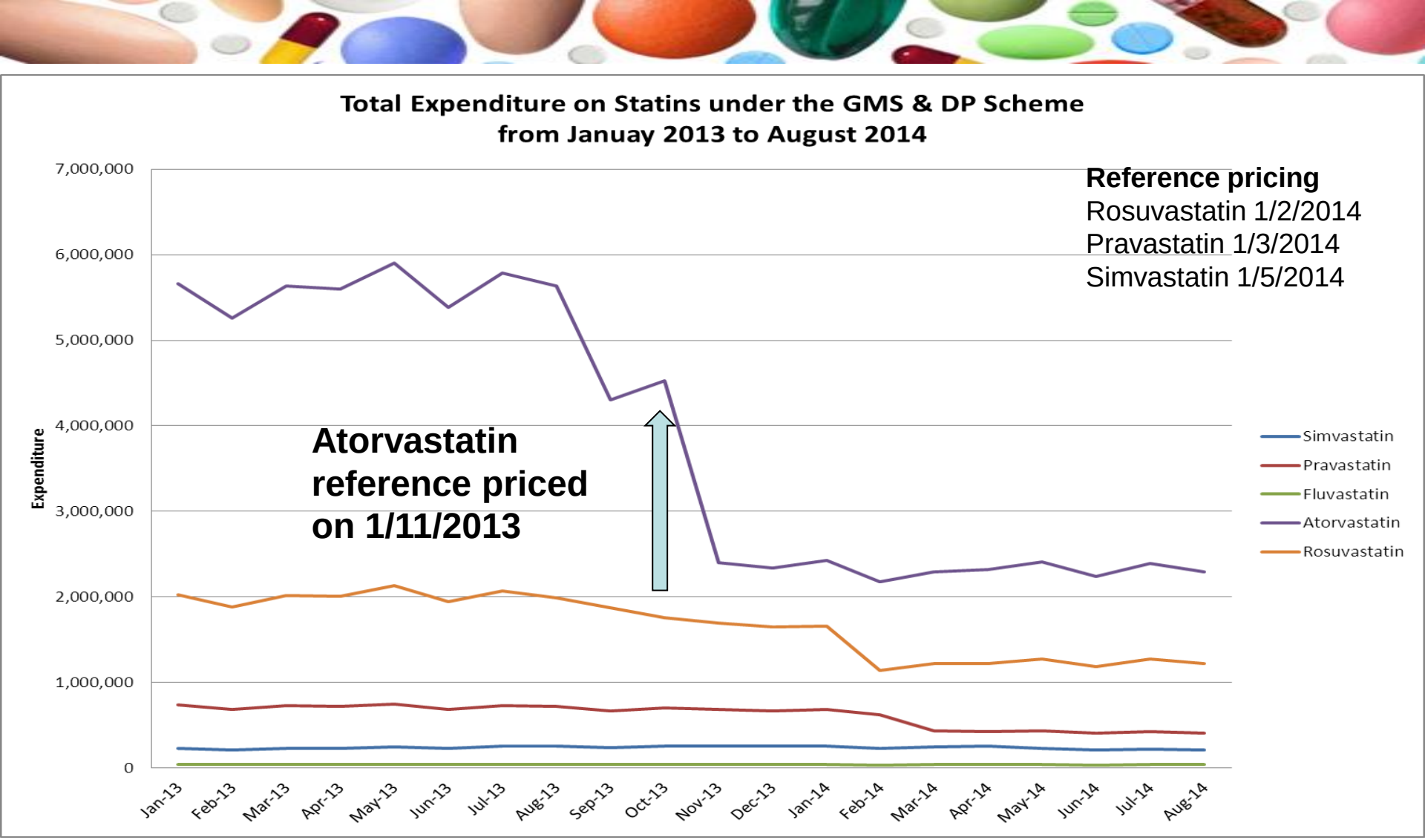

Total statin expenditure (GMS & DP) - August 2013 = € 8,620,780 ⟶ August 2014 = € 4,156,212

Δ = € 4,464,568/month

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As prescribers we can influence drug expenditure even after reference pricing

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Statins - SIMVASTATIN

PPI - LANSOPRAZOLE

ACE inhibitor - RAMIPRIL

ARB - CANDESARTAN

SSRI - CITALOPRAM

SNRI - VENLAFAXINE

LABA + ICS – Budesonide + Formoterol (Bufomix)

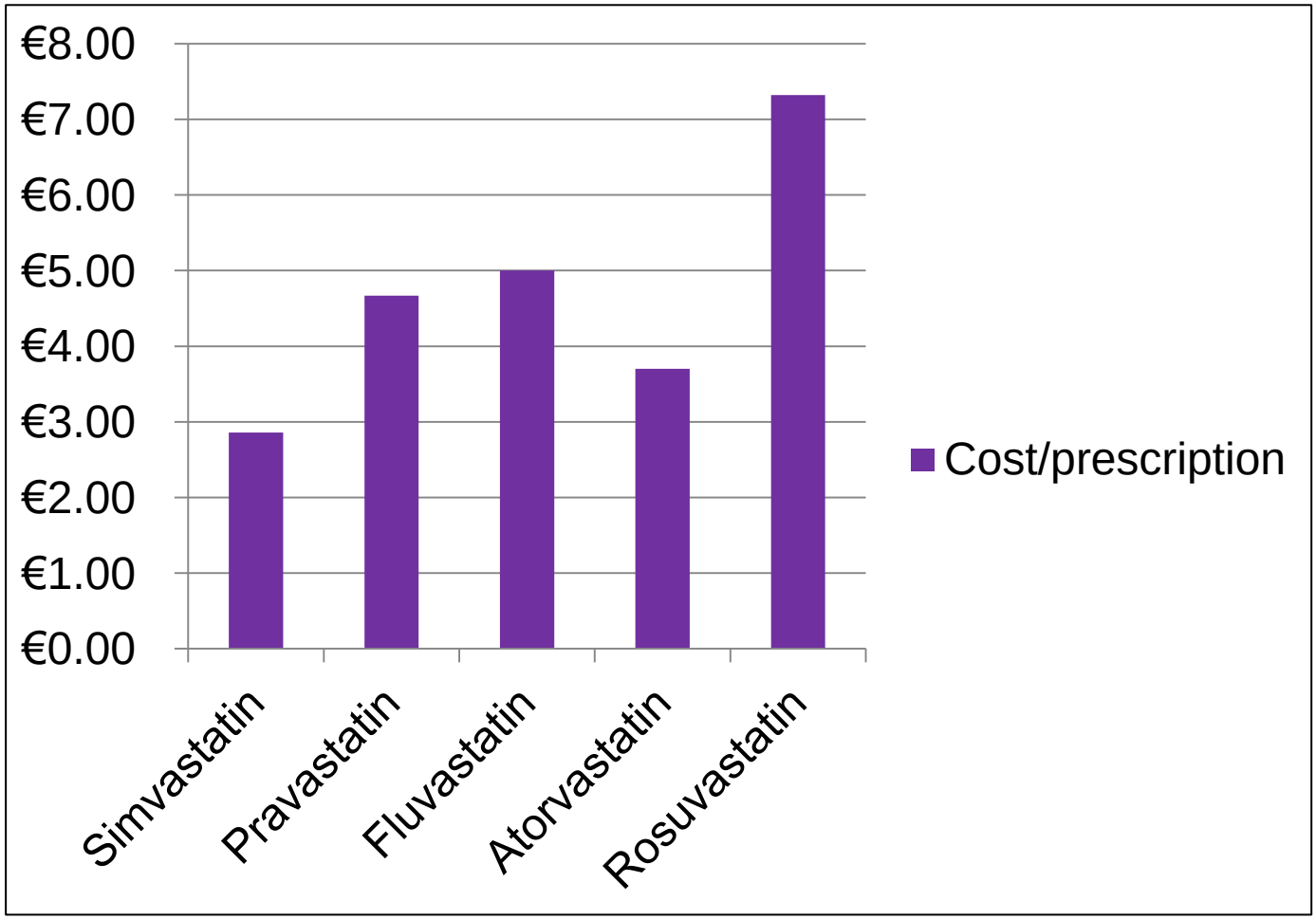
Antimuscarinics - TOLTERODINE

Statins – April 2013

Simvastatin is recommended as the statin of first choice

- **Over 310,000 patients receive a statin each month**
- **Approx 4.2 million statin prescriptions issued/annum**
- **Total expenditure exceeds € 50 million/annum**
- **The calculated ingredient cost per prescription item for simvastatin remains the lowest in the therapeutic class**

Calculated Ingredient cost per statin prescription after reference pricing



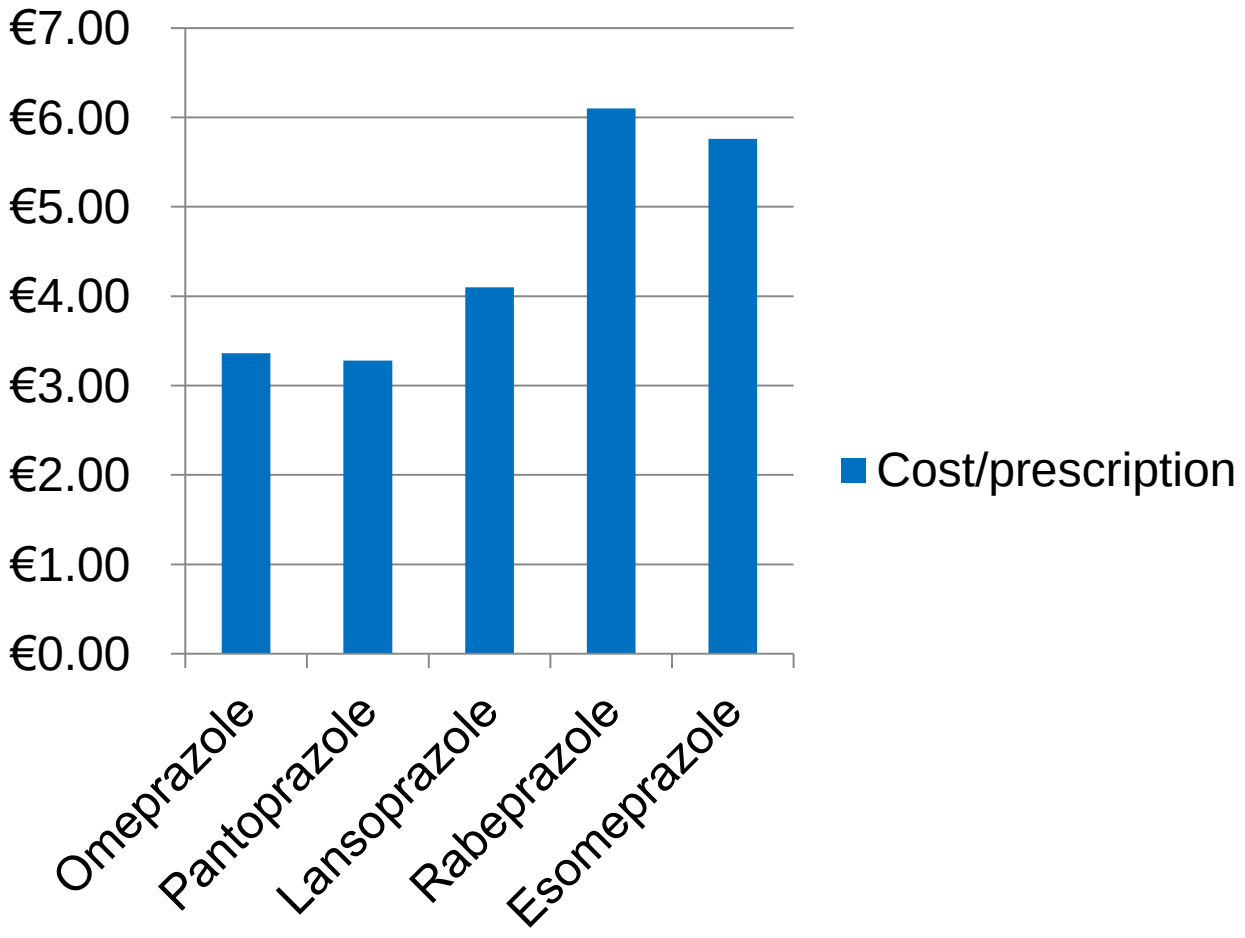
If we prescribed any other statin in preference to rosuvastatin savings of over **€ 4 million/year** could be made

Proton pump inhibitors (PPIs) – April 2013

Lansoprazole is recommended as the PPI of first choice

- **Over 265,000 patients receive a PPI each month**
- **Approx 3.6 million PPI prescriptions issued/annum**
- **Total expenditure exceeds € 55 million/annum**
- **Esomeprazole is one of the most expensive PPIs and accounts for over 32% of all PPI prescriptions**

Calculated Ingredient cost per PPI prescription after reference pricing



If we prescribed any other PPI (with the exception of rabeprazole) in preference to Esomeprazole (Nexium) savings of over **€ 1.4 million/year** could be made

ABE = € 1,400,000 per annum

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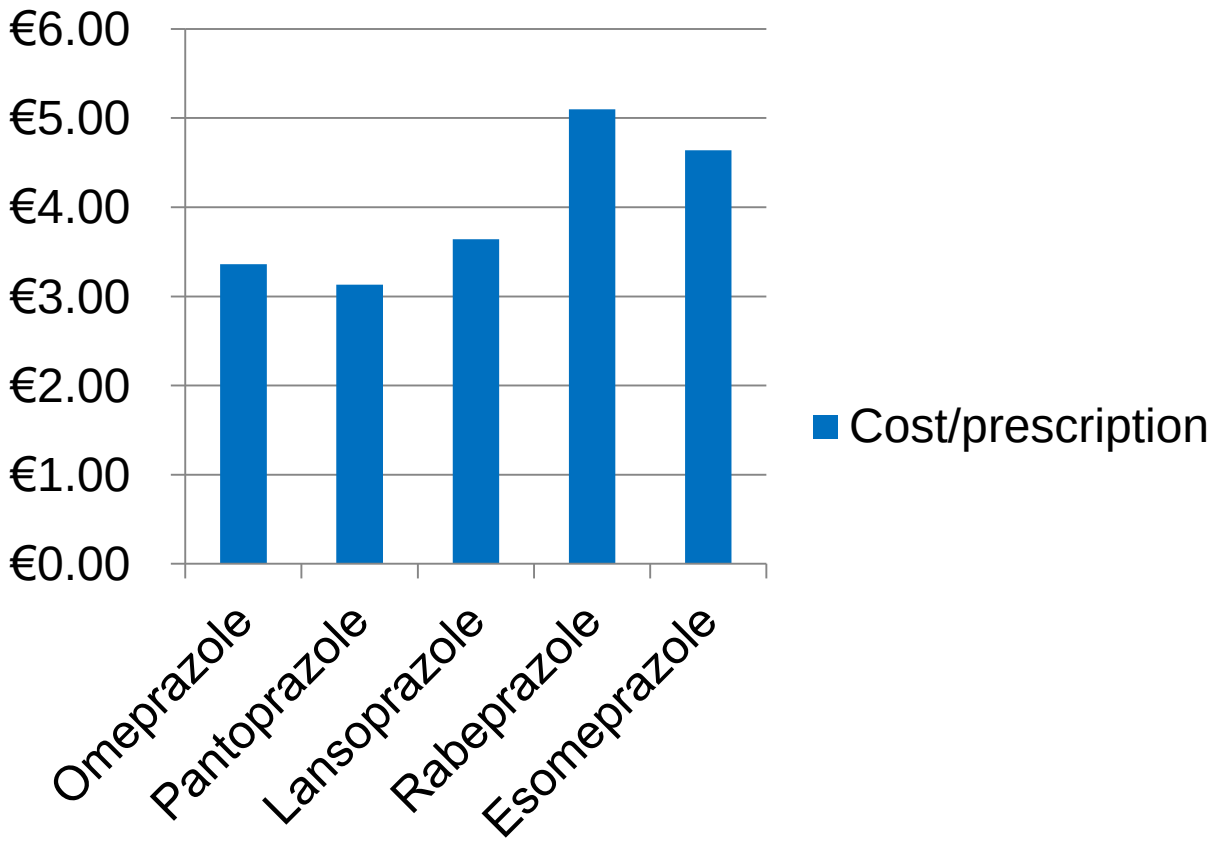
Calculated Ingredient cost per PPI prescription after reducing to the ‘lower’ maintenance dose.



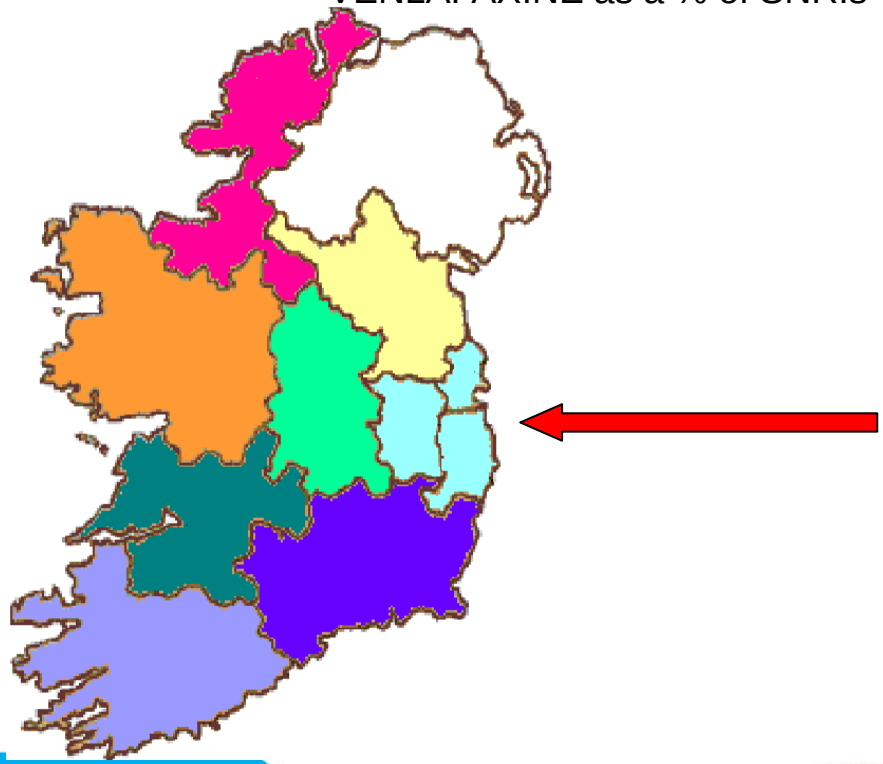
If we prescribed the lower maintenance dose of PPI’s (in 80% of cases) savings of approximately **€ 2.27 million/year** could be made

Reduction to maintenance dose = € 2.27 million per annum

National and Regional Prescribing rates of Preferred Drugs

Highest prescribing rates for 'preferred drugs'

RAMIPRIL as % of all ACE inhibitors = 66% [SHB]
CANDESARTAN as % of all ARBs = 13% [SEHB]
LANSOPRAZOLE as % of all PPIs = 31% [NEHB]
SIMVASTATIN as % of all Statins = 10% [NWHB]
CITALOPRAM as % of all SSRIs = 23% [ERHA]
VENLAFAXINE as a % of SNRIs = 72% [ERHA]



Local Prescribing Rates 2014

RAMIPRIL as % of all ACE inhibitors = 48%

CANDESARTAN as % of all ARBs = 11%

LANSOPRAZOLE as % of all PPIs = 25%

SIMVASTATIN as % of all Statins = 5%

CITALOPRAM as % of all SSRIs = 23%

VENLAFAXINE as % of all SNRIs = 72%

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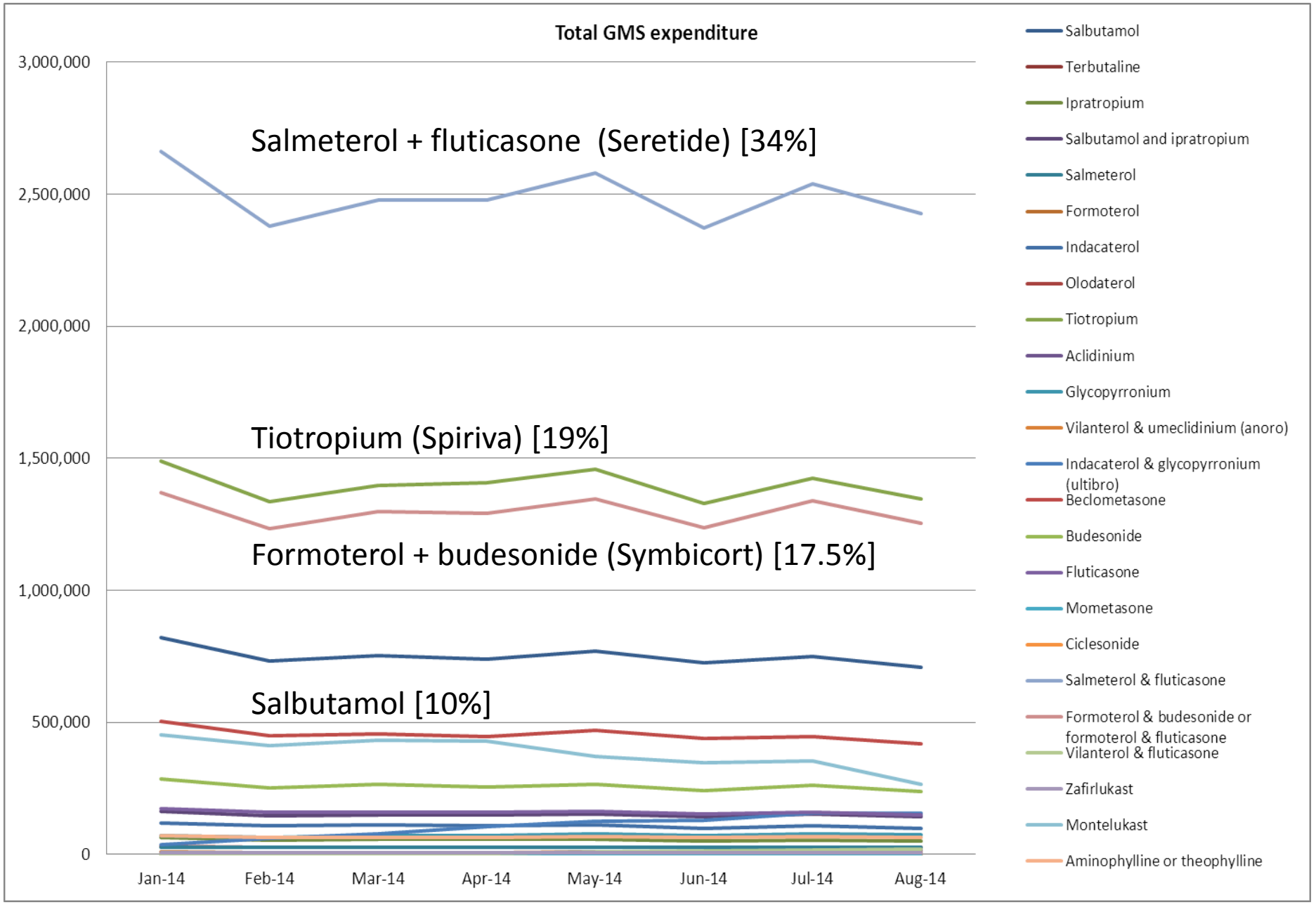
Inhaled medicines for Asthma and COPD

- There are over 50 licensed inhalers for asthma and over 25 licensed inhalers for COPD
- Expenditure on inhalers for asthma and COPD is approx € 98 million per annum (€ 86 million GMS & € 12 million DPS).
- It is estimated that COPD accounts for 84% of this expenditure (€ 82 million/annum)


Total GMS expenditure
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Salmeterol + fluticasone (Seretide) [34%]
Tiotropium (Spiriva) [19%]
Formoterol + budesonide (Symbicort) [17.5%]
Salbutamol [10%]
Salbutamol
Terbutaline
Ipratropium
Salbutamol and ipratropium
Salmeterol
Formoterol
Indacaterol
Olodaterol
Tiotropium
Aclidinium
Glycopyrronium
Vilanterol & umeclidinium (anoro)
Indacaterol & glycopyrronium (ultibro)
Beclometasone
Budesonide
Fluticasone
Mometasone
Ciclesonide
Salmeterol & fluticasone
Formoterol & budesonide or formoterol & fluticasone
Vilanterol & fluticasone
Zafirlukast
Montelukast
Aminophylline or theophylline

ICS and LABA inhalers for Asthma & COPD

- **€50 million** on ICS and LABA combination inhalers (€ 44 million GMS) e.g. Symbicort® and Seretide®
  - €2.4 million/month Seretide® (GMS only)
  - €1.3 million/month Symbicort® (GMS only)

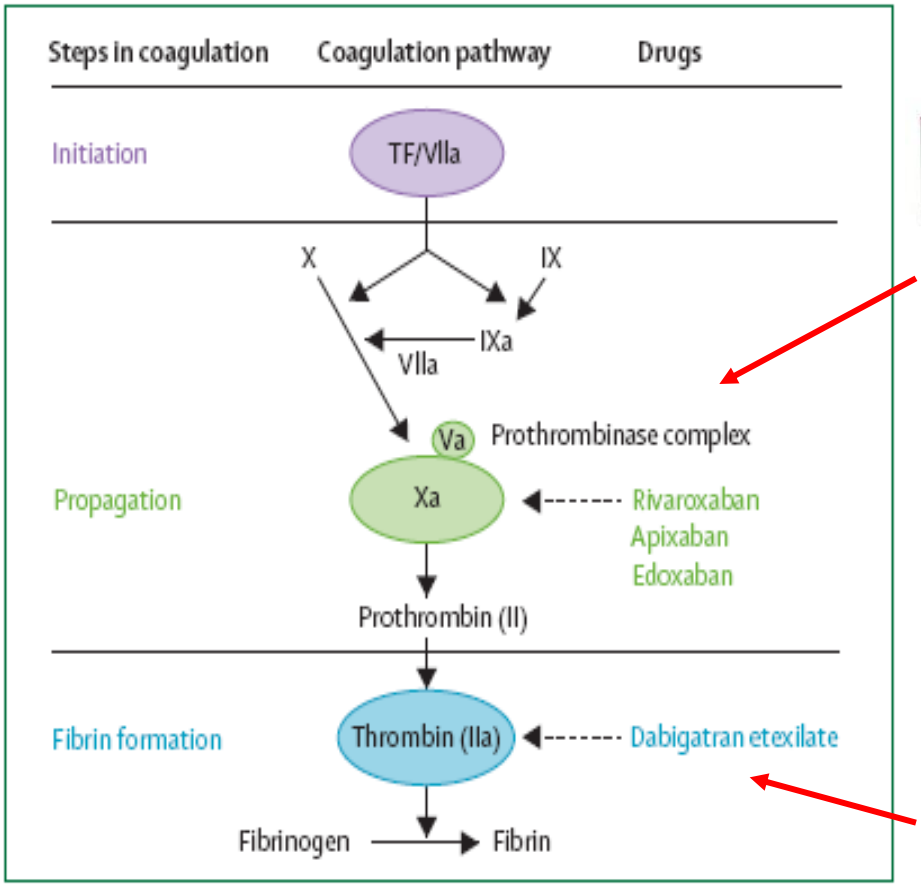
- New products in this group including hybrid (“generic”) inhalers offer opportunity to reduce expenditure

- The ‘Symbicort’ equivalent **Bufomix**
  (budesonide 320 µg + formoterol 9 µg)
  is **35% cheaper** than Symbicort
  42% cheaper than Seretide **]**

- Therefore the most cost-effective inhaled corticosteroid + long acting beta 2 agonist combination product is **Bufomix**

The new oral anticoagulants

- Reimbursement approval for new Anticoagulant
- Over 70% of NOAC prescribing is for patients ≥ 70 years
- 70-74 yrs = 17.53%
- 75 + yrs = 52.51%



Atrial fibrillation accounts for 86.9% of all applications for NOACs

Majority of patients in Ireland receive the 110 mg b.d. dose

ROCKET-AF was a non-inferiority trial

Only 50% of all patients in Ireland receive the 5 mg b.d. dose

	RE-LY[2,3]				ROCKET-AF[4]			ARISTOTLE[5]		
	Dabigatran 110 mg (n=6015)	Dabigatran 150 mg (n=6076)	Warfarin* (n=6022)	RR (95% CI)	Rivaroxaban (n=7131)	Warfarin* (n=7133)	HR (95% CI)	Apixaban (n=9120)	Warfarin* (n=9081)	HR (95% CI)
Stroke or systemic embolism	1·54%	1·11%	1·71%	110 mg vs warfarin, 0·90 (0·74–1·10); 150 mg vs warfarin, 0·65 (0·50–0·81)	2·1	2·4	PPOT, 0·79 (0·66–0·96); ITT, 0·88 (0·75–1·03)	1·27%	1·60%	0·79 (0·66–0·95)
		Δ = 37			Δ = 21			Δ = 30		
Haemorrhagic stroke	0·12%	0·10%	0·38%	110 mg vs warfarin, 0·31 (0·17–0·56); 150 mg vs warfarin, 0·26 (0·14–0·49)	0·26	0·44	0·59 (0·37–0·93)	0·24%	0·47%	0·51 (0·35–0·75)
		Δ = 17			Δ = 12			Δ = 21		
Intracranial haemorrhage	0·23%	0·32%	0·76%	110 mg vs warfarin, 0·30 (0·19–0·45); 150 mg vs warfarin, 0·41 (0·28–0·60)	0·49	0·74	0·67 (0·47–0·93)	0·33%	0·80%	0·42 (0·30–0·58)
		Δ = 26			Δ = 18			Δ = 42		
Fatal or disabling stroke	0·94%	0·66%	1·01%	110 mg vs warfarin, 0·93 (0·72–1·21); 150 mg vs warfarin, 0·66 (0·50–0·87)	1·28	1·75	..	0·50%	0·71%	..
		Δ = 20			Δ = 34			Δ = 19		
All deaths	3·75%	3·64%	4·13%	110 mg vs warfarin, 0·91 (0·80–1·03); 150 mg vs warfarin, 0·88 (0·77–1·00)	4·5	4·9	0·92 (0·82–1·03)	3·52%	3·94%	0·89 (0·80–0·998)
		Δ = 27			Δ = 29			Δ = 19		
Major bleed	2·87%	3·32%	3·57%	110 mg vs warfarin, 0·80 (0·70–0·93); 150 mg vs warfarin, 0·93 (0·81–1·07)	3·6	3·4	1·04 (0·90–1·20)	2·13%	3·09%	0·69 (0·60–0·80)
		Δ = 12			Δ = 13			Δ = 86		

TTR=64%

TTR=55%

TTR=62%

NOACs – do the patients that you treat differ from those who participated in the clinical trials ?

There are significant age differences between patients studied in the pivotal clinical trials and those being treated with NOAC in clinical practice e.g. % of patients at or above 80 years of age:

Drug	Clinical Trial	PCRS database
Rivaroxaban	18.5%	37.5%
Dabigatran	17%	37%
Apixaban	13.3%	45.5%

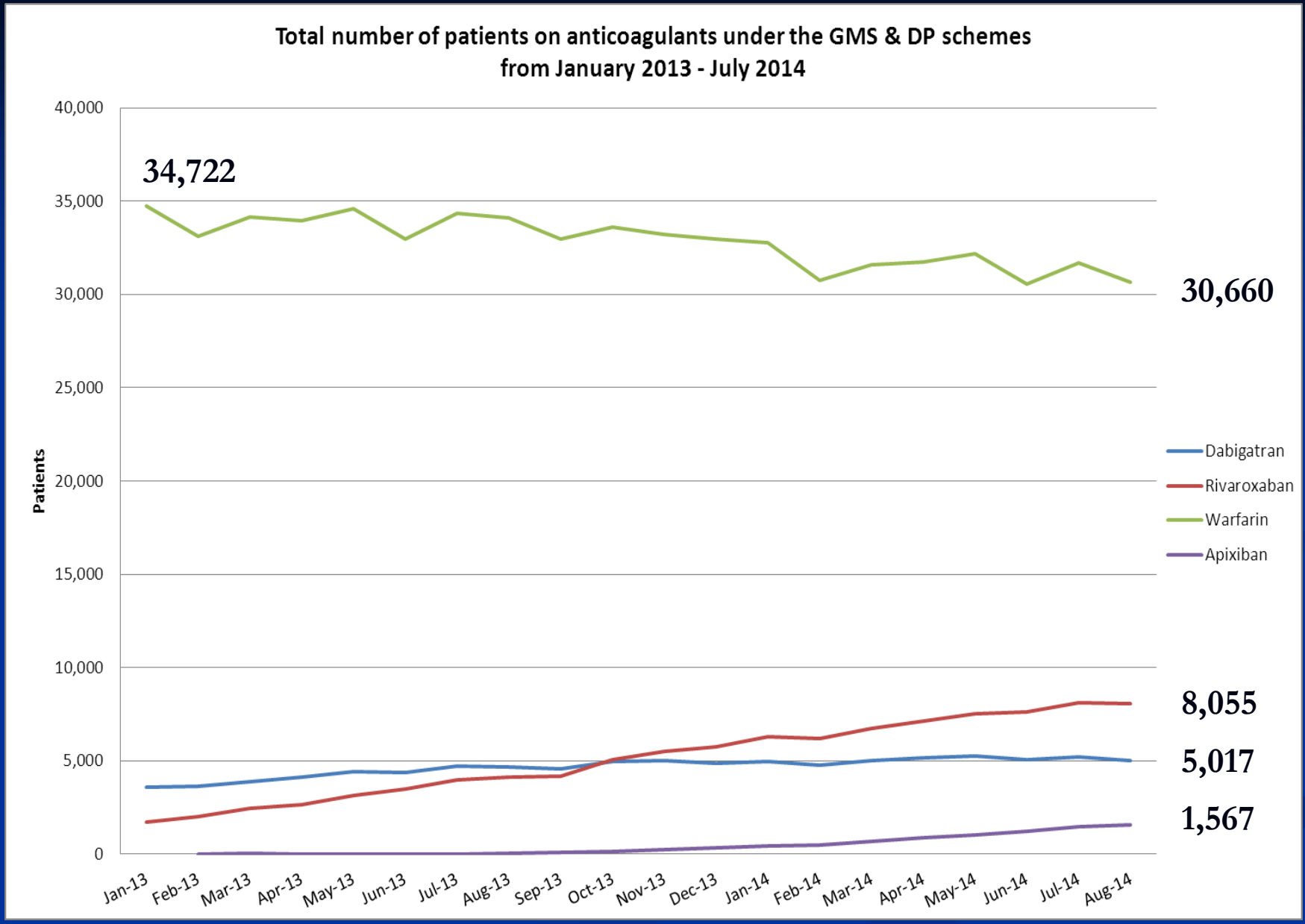
Implications:

Dose adjustment for dabigatran as such patients should be treated with 110 mg twice daily. Apixaban dose also influenced by patient age.

In addition to the age related reduction in CrCl which is of relevance for dabigatran, rivaroxaban & apixaban

The MMP recommends that NOACs are avoided where the CrCl < 30 ml/min

Resource implications


Total number of patients on anticoagulants under the GMS & DP schemes from January 2013 - July 2014
Patients
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
34,722
30,660
8,055
5,017
1,567
Dabigatran
Rivaroxaban
Warfarin
Apixiban
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13
Oct-13
Nov-13
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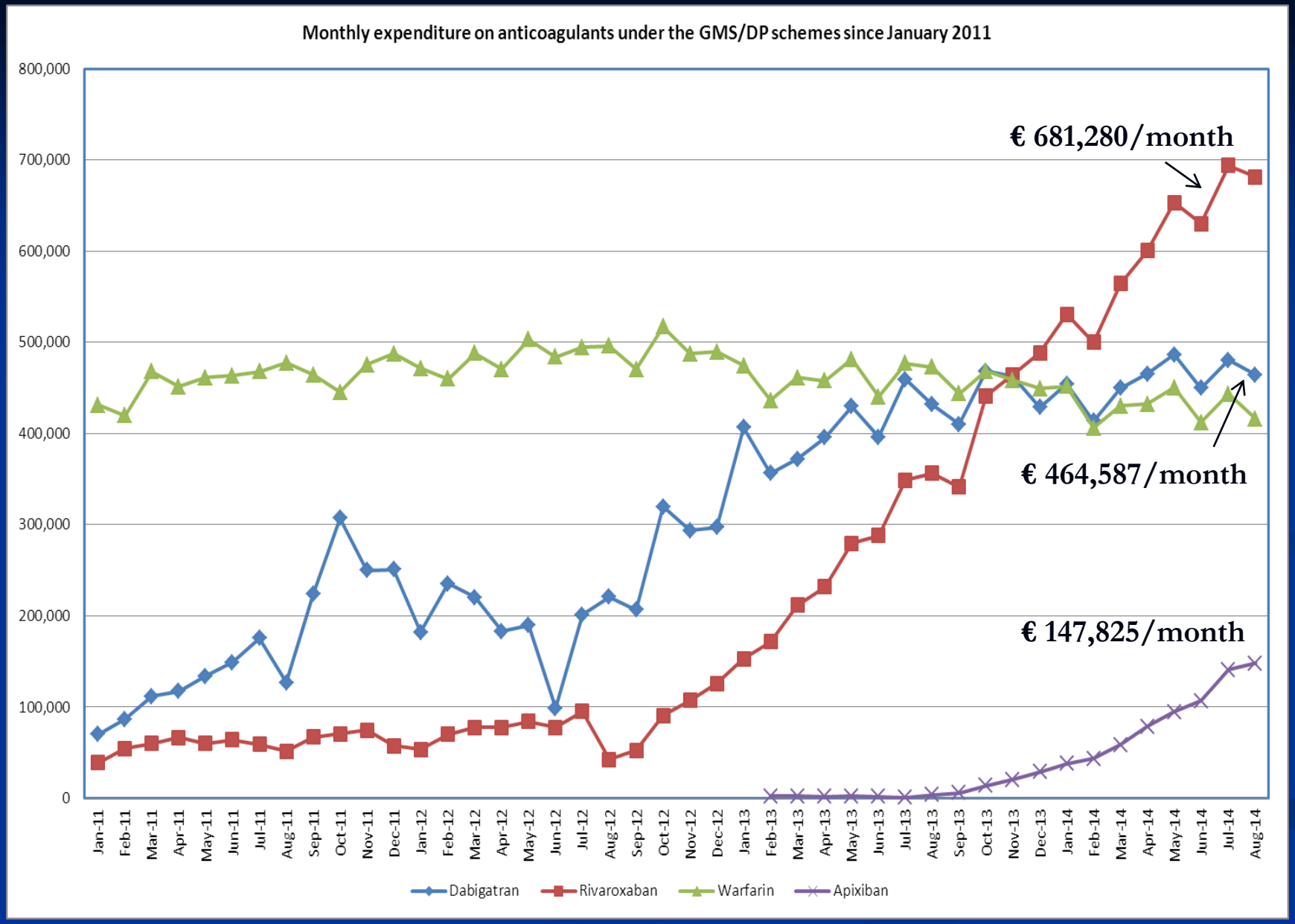
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Aug-14



NCPE January 2015

The new Reimbursement Approval form for NOACs – enhancing safety

CHADS SCORING SYSTEM	
PARAMETER	SCORE
cardiac failure/LV dysfunction	1
hypertension	1
age ≥ 75 years	1
diabetes	1
stroke/TIA/thromboembolism	2
CHADS score =	

CHADS-VASC SCORING SYSTEM	
PARAMETER	SCORE
cardiac failure/LV dysfunction	1
hypertension	1
age ≥ 75 years	2
diabetes	1
stroke/TIA/thromboembolism	2
peripheral vascular disease/prior myocardial infarction,aortic plaque	1
age 65 – 74 years	1
sex category i.e. female	1
CHADS-VASc score =	

HAS-BLED SCORING SYSTEM (To be completed for all applications)	
PARAMETER	SCORE
hypertension (systolic BP>160 mmHg)	1
abnormal renal function, dialysis or creatinine >200 µmol/l	1
abnormal liver function, bilirubin>2 & transaminases>3x (ULN)	1
stroke	1
bleeding history/predisposition to bleeding	1
labile INRs i.e. unstable/high INRs or time in therapeutic range < 60%	1
drugs e.g. antiplatelet agents, NSAIDs	1
alcohol abuse	1
HAS-BLED score =	

A HAS-BLED score ≥ 3 out of 9 indicates 'high risk so caution is needed'	
What is the calculated glomerular filtration rate (GFR) ml/min ? (1)	

(1) Use the Cockcroft-Gault eqn to estimate the GFR = (140-age years) x (Weight kg) x constant [1.23 for males & 1.04 for females]/serum creatinine µmol/l.

Summary Final Check:		
Is CHADS score >= 2 ?	Yes/No	
Is HAS-BLED score < 3?	Yes/No	
Is Calculated GFR > 30 ml/min	Yes/No	
If No to any of the above, reconsider the use of NOAC		

Prescribing guide for NOACs

www.hse.ie/yourmedicines

Prescribing tips

NOAC – Prescribing tips for NOACs

NON-VALVULAR ATRIAL FIBRILLATION (NVAF)

GENERAL INFORMATION

Creatinine Clearance (CrCl) should be measured using Cockroft-Gault equation (SI units): CrCl = (140 – Age (yrs)) x Weight(kg) x constant [1.23 for males & 1.04 for females] / Serum Creatinine ($\mu mol/L$)

APIXABAN

Adjust dose for AGE, BODY WEIGHT, RENAL FUNCTION, and consider INTERACTIONS

DOSING GUIDELINES	Treatment of NVAF
Standard dose	5 mg BD
Serum creatinine > 133micromol/L (measured) ***AND*** ≥80yrs ***OR*** weight ≤60kg (Or any two of three above i.e. serum creatinine, age ≥80, weight ≤60kg)	2.5mg BD
CrCl 15-29ml/min [use Cockroft-Gault equation (SI units)] (regardless of age or weight)	2.5mg BD – **EXTREME CAUTION**, consider alternative (review HAS-BLED and other risk factors)
CONTRAINDICATED in CrCl < 15ml/min	

Interactions : this list is not exhaustive; for full list of interacting drugs and for management of same see Summary of Product Characteristice (SmPC) (www.medicines.ie or www.hpra.ie)

- **CONTRAINDICATED** with other anticoagulants (unless switching, then refer to individual SmPC for guidance)
- **AVOID CONCURRENT USE** (increased bleeding risk): Strong **inhibitors** of CYP3A4 and P-gp (e.g. Ketoconazole, Itraconazole, Posaconazole, Voriconazole)
- Anti-retrovirals – check SmPC for details
- **CAUTION (risk of reduced efficacy)**: Strong **inducers** of CYP3A4 and P-gp (e.g. carbamazepine, phenytoin, phenobarbitone, rifampicin, St Johns Wort)
- **CAUTION** (increased bleeding risk): NSAIDS including aspirin
- Antiplatelet agents including aspirin will increase risk of bleeding

***Contraindicated** in patients with **hepatic disease** associated with coagulopathy and clinically relevant bleeding risk. Not recommended in severe hepatic impairment.*

DABIGATRAN

Adjust dose for AGE, RENAL FUNCTION, GORD, and INTERACTIONS

DOSING GUIDELINES	Treatment of NVAF
Less than 75 years (see also options below)	150mg BD
75-80 years	150mg BD or if LOW thrombotic risk and HIGH bleeding risk give 110mg BD
Over 80 years	110mg BD
Renal Impairment (CrCl 30ml/min-50ml/min)	150mg BD (110mg BD if high bleeding risk)
CONTRAINIDICATED in CrCl < 30ml/min	
GORD/Gastritis/Oesophagitis	110mg BD
Concomitant Verapamil (take verapamil at the same time as dabigatran)	110mg BD

Interactions : this list is not exhaustive; for full list of interacting drugs and for management of same see SmPC (www.medicines.ie or www.hpra.ie)

- **CONTRAINDICATED** with other anticoagulants (unless switching, then refer to individual SmPCs for guidance)
- **CONTRAINDICATED**: Ciclosporin, dronedarone, itraconazole, ketoconazole, tacrolimus
- **AVOID CONCURRENT USE** (reduced efficacy): P-gp **inducers** (e.g. carbamazepine, phenytoin, rifampicin, St Johns Wort
- **CAUTION**: P-gp **Inhibitors** (e.g. amiodarone, clarithromycin, quinidine, ticagrelor)
- Verapamil (P-gp **inhibitor**) – **REDUCE DOSE** of dabigatran (take verapamil and dabigatran at the same time)
- **CAUTION (increased bleeding risk)**: NSAIDs, including aspirin
- SSRI/SNRIs – increased risk of bleeding

***Contraindicated** in **hepatic impairment** or liver disease expected to have any impact on survival. Not recommended in hepatic impairment.*

Important information: DO NOT OPEN OR CRUSH CAPSULE
Blister Pack : Store in the ORIGINAL PACKAGE in order to protect from moisture - not suitable for Monitored Dosage Systems (MDS)

RIVAROXABAN

Adjust dose for RENAL FUNCTION and consider INTERACTIONS

DOSING GUIDLINES	Treatment of NVAF
Standard Dose	20mg once daily
CrCl: 30-49ml/min	15mg once daily (caution with concomitant medications which increase rivaroxaban plasma concentration)
CrCl: 15-30 ml/min (**CAUTION**)	15mg once daily – **EXTREME CAUTION**, consider alternative
CONTRAINDICATED in CrCl < 15ml/min	

Interactions : this list is not exhaustive; for full list of interacting drugs and for management of same see SmPC (www.medicines.ie or www.hpra.ie)

- **CONTRAINDICATED** with other anticoagulants (unless switching, then refer to individual SmPC for guidance)
- **AVOID CONCURRENT USE** (increased bleeding risk): Strong **inhibitor**s of CYP3A4 and P-gp (e.g. ketoconazole, itraconazole, voriconazole, posaconazole, HIV protease inhibitors
- **AVOID:** Dronedarone –(limited clinical data)
- **CAUTION**: Strong **inhibitors** of CYP3A4 (e.g. clarithromycin) **AND** renal impairment
- **CAUTION** (risk of reduced efficacy): Strong **inducers** of CYP3A4 and P-gp (e.g. carbamazepine, phenytoin, phenobarbitone, rifampicin, St Johns Wort)
- **CAUTION** (increased bleeding risk**)**: NSAIDs, Platelet aggregation inhibitors including aspirin

***Contraindicated** in **hepatic disease** associated with coagulopathy and clinically relevant bleeding risk*

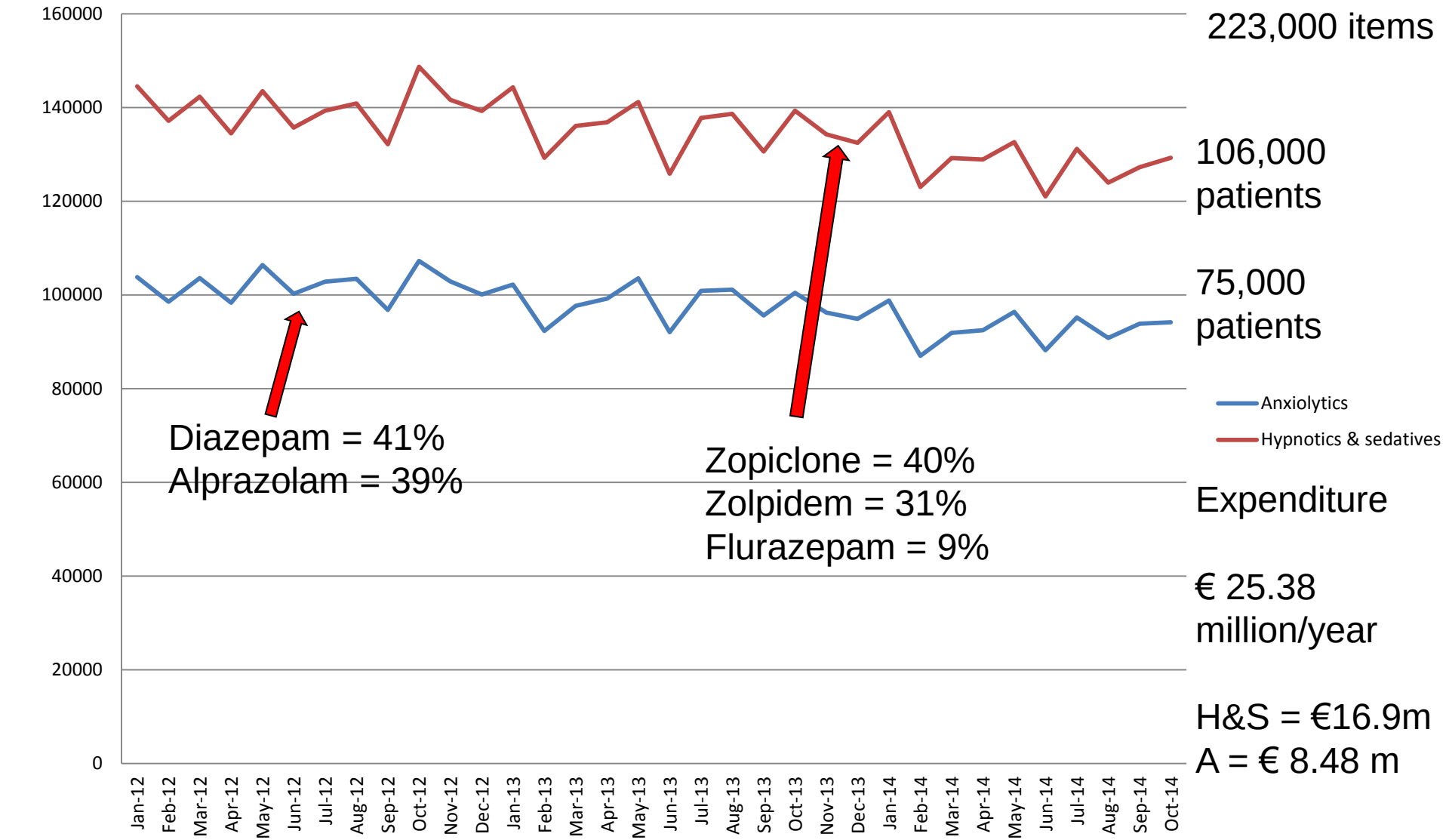
- **Important information: 15mg and 20mg tablets should be taken WITH FOOD**

Reference: SmPC for Eliquis®(Apixaban), Pradaxa® (Dabigatran) and Xarelto®(Rivaroxaban) (format adapted from prescribing aid developed in GUH) ***Version 1.0 MMP May 2014***

Therapeutic areas under review

- Pregabalin (Lyrica)
- Oral Nutritional Supplements
- Anxiolytics
- Hypnotics & Sedatives

Total number of Prescriptions under the GMS (Anxiolytics vs Hypnotics & Sedatives) 3 year trend



223,000 items

106,000 patients

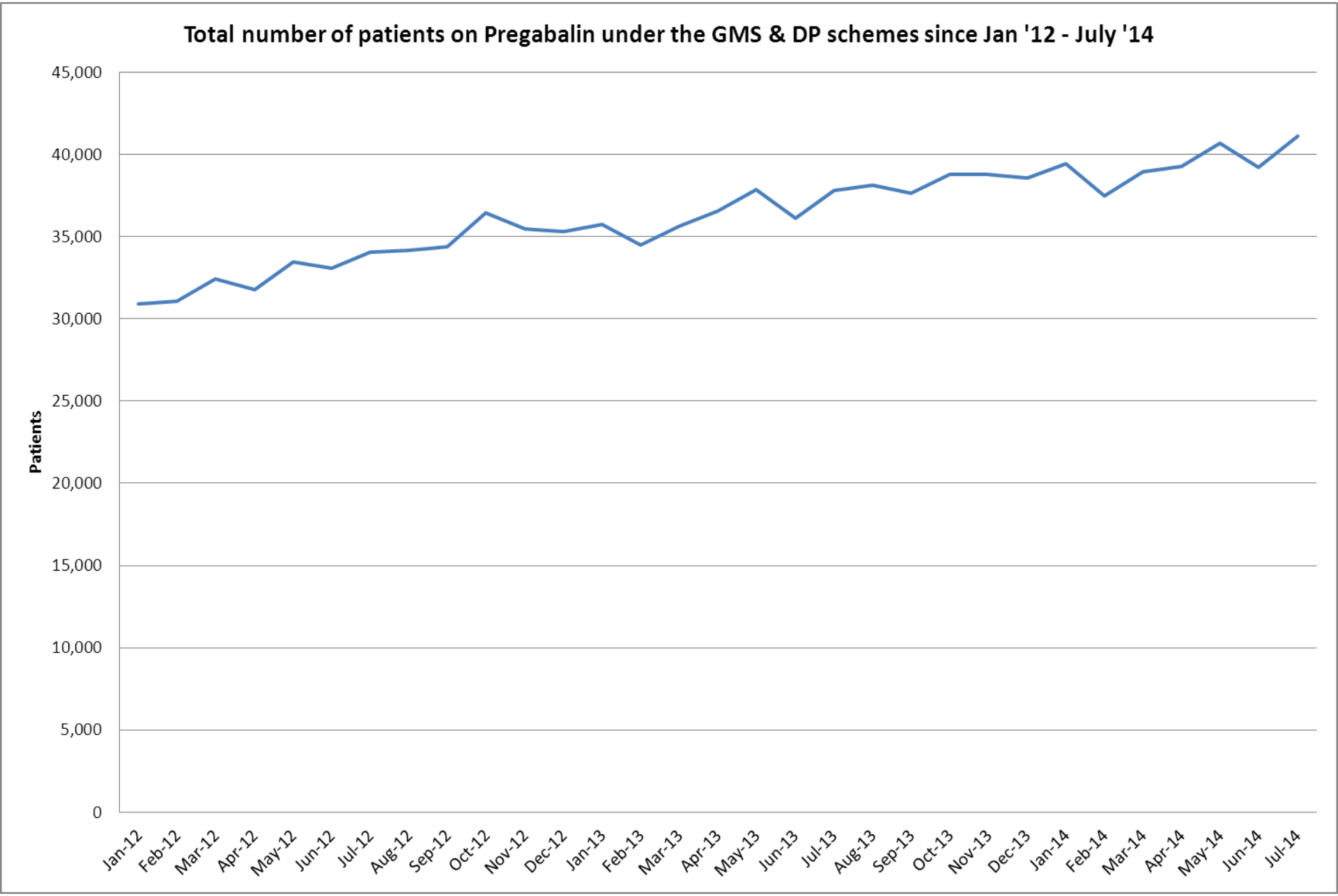
75,000 patients

Expenditure

€ 25.38 million/year

H&S = €16.9m

A = € 8.48 m


Total number of patients on Pregabalin under the GMS & DP schemes since Jan '12 - July '14
Patients
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
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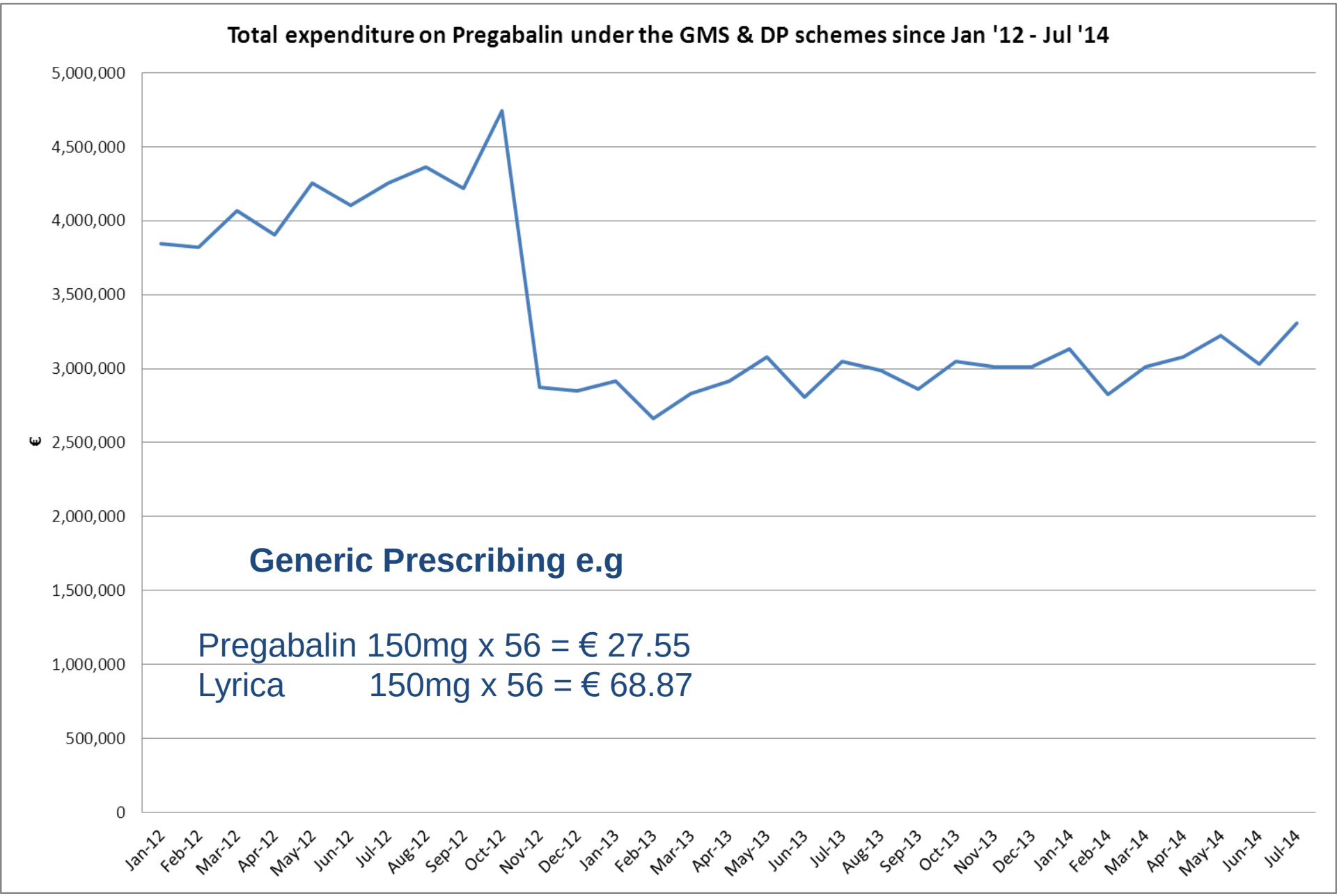
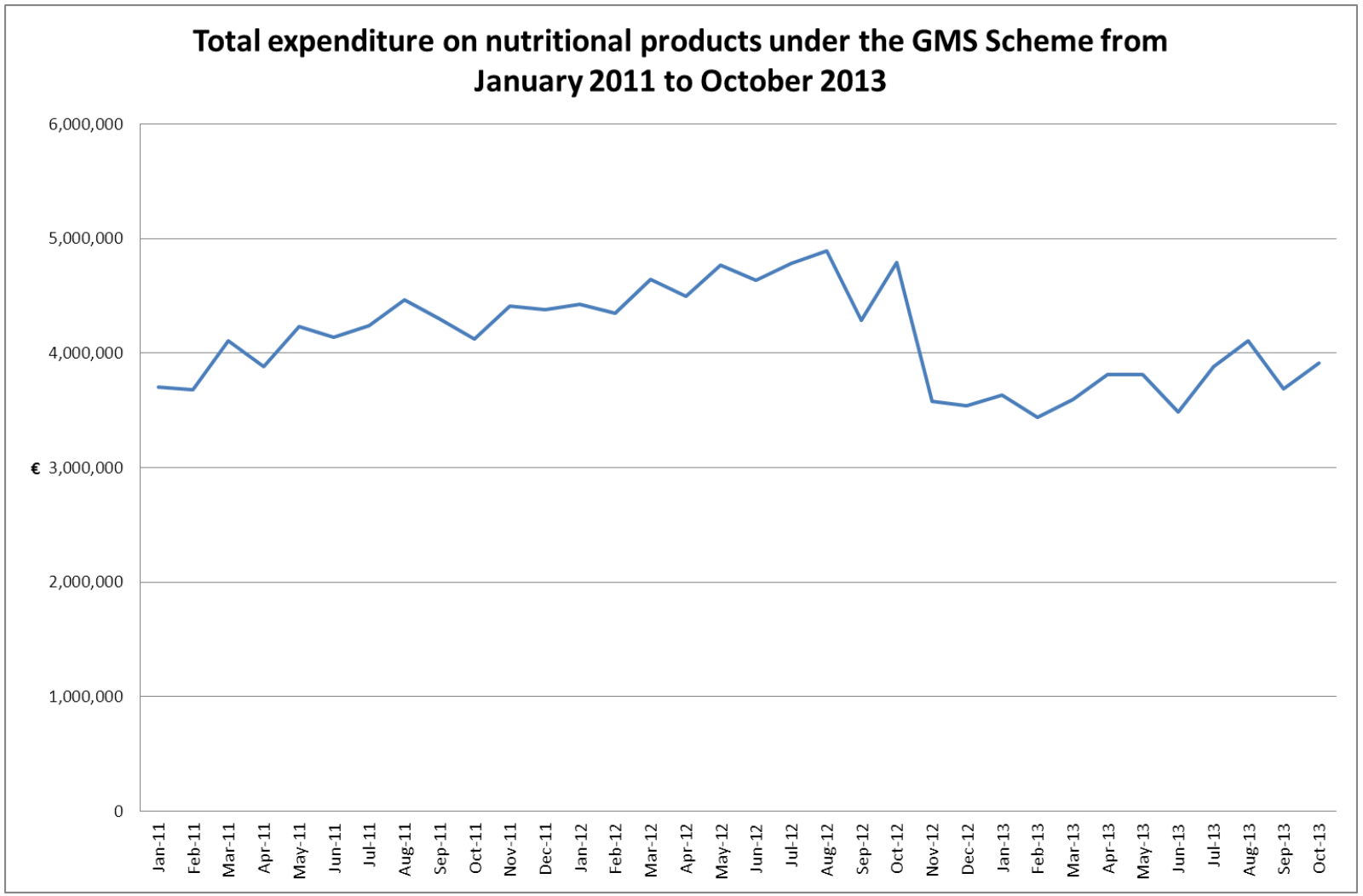
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14


Total expenditure on Pregabalin under the GMS & DP schemes since Jan '12 - Jul '14
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
€
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Generic Prescribing e.g
Pregabalin 150mg x 56 = € 27.55
Lyrica 150mg x 56 = € 68.87

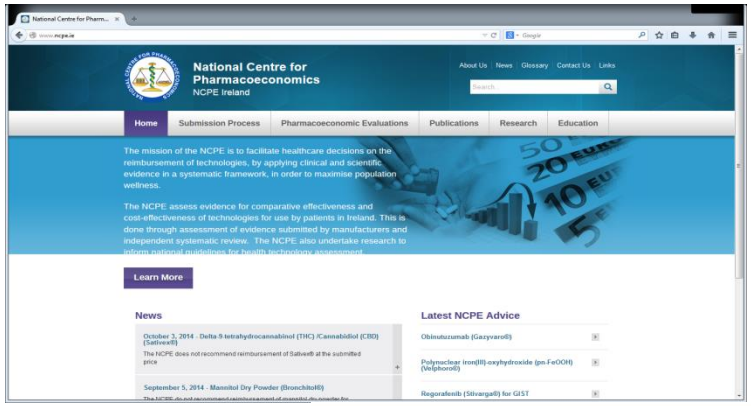
Oral nutritional supplements



Other areas of interest to the MMP include:

- Prescribing of anti-TNF therapies, e-authorisation project
- New treatments for Hepatitis C (Hepatitis C Registry)
- Eculizumab for PNH & aHUS
- Use of Health Technology Assessment for existing therapies and diagnostics e.g. **pregabalin, lignocaine patches** (Versatis)
- Treatment of diabetic retinopathy
- The impact of Hospital prescribing on the Community Drugs Schemes
- Benzodiazepine prescribing
- **Oral Nutritional Supplements & diabetic test strips**
- Ongoing monitoring the utilisation and expenditure of medicines

NCPE/MMP/NMIC/HSE/HIQA/DOH



An Roinn Sláinte
DEPARTMENT OF HEALTH

Preferred Drugs
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MEDICINES MANAGEMENT PROGRAMME

National Medicines Information Centre
VOLUME 19
NUMBER 1
2013
ST. JAMES'S HOSPITAL • DUBLIN 8
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UPDATE ON MANAGEMENT OF NON-VALVULAR ATRIAL FIBRILLATION

- Atrial fibrillation (AF) is a major risk factor for embolic strokes which are usually more severe than strokes due to other causes
- The goals of therapy are to reduce the thromboembolic risk, control the heart rate and rhythm and relieve symptoms
- Choice of anti-thrombotic therapy involves assessment of the risks of stroke and bleeding at an individual level
- The risk of AF-related stroke changes over time, therefore patients should be re-evaluated regularly

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Dr Roisín Adams
Dr Emer Fogarty
Dr Laura McCullagh
Dr Cara Usher
Dr Aisling O'Leary
Dr Lesley Tilson
Niamh Geraghty
Prof Susi Schmitz
Prof Cathal Walsh
Clare Walsh
Dr Jennifer Kieran
Dr Susan Spillane
Dr Kathleen Bennett
Sarah Clarke
Dearbhla O'Sullivan
Dr Valerie Walshe
Claudine Hughes
Shaun Flanagan
Kate Mulvenna
Paddy Burke
Dr Helen Flint
Michael Shannon
Dr Aine Carroll
Mr John Hennessy

Third National Medicines Forum

Dr. Mary Jo MacAvin

April 30th 2015

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MEDICINES MANAGEMENT PROGRAMME

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

NATIONAL MEDICINES INFORMATION CENTRE (NMIC)
[20 years a-growing!]

30th April 2015

Dr MaryJo MacAvin
Medical Advisor

Introduction

- Established in 1994
- Situated in St James's Hospital Dublin
- Funded by money from the DOH&C/ HSE

Aims of the NMIC

To promote the **safe, effective and economic** use of medicinal products in patients by the **active and passive provision of accurate drug information** and advice to all members of the healthcare profession.

NMIC staff

- Full-time Medicines Information Pharmacists (chief / senior pharmacist grades)
- Two part-time Medical Advisers
- Secretarial support

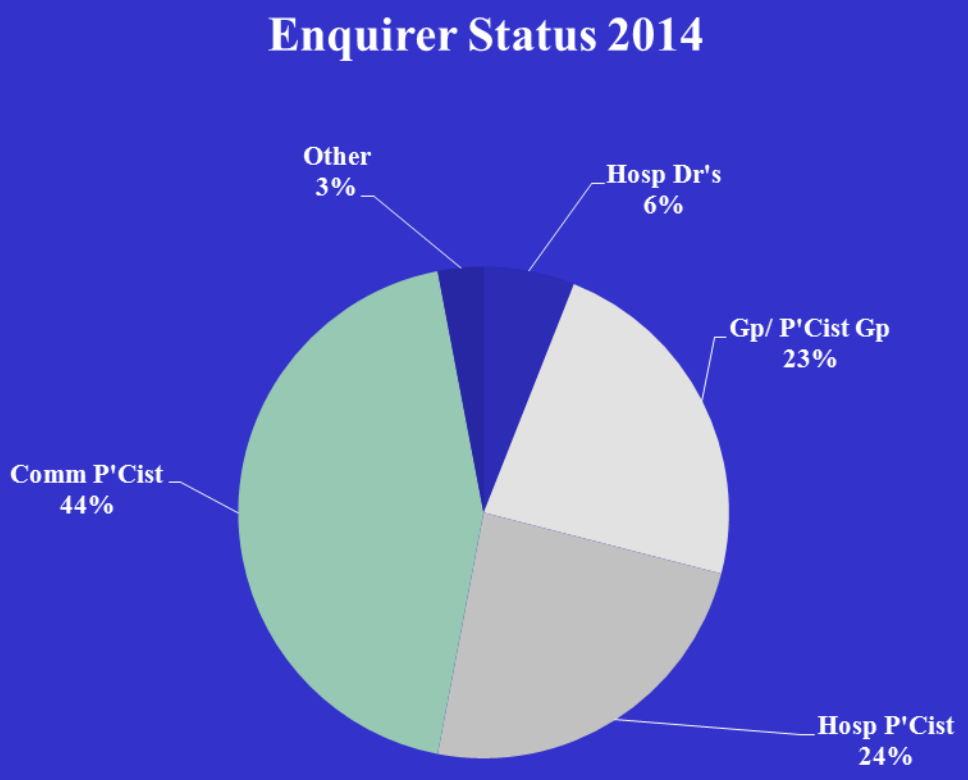
PLUS

- External advisors and experts (help with peer review of publications)

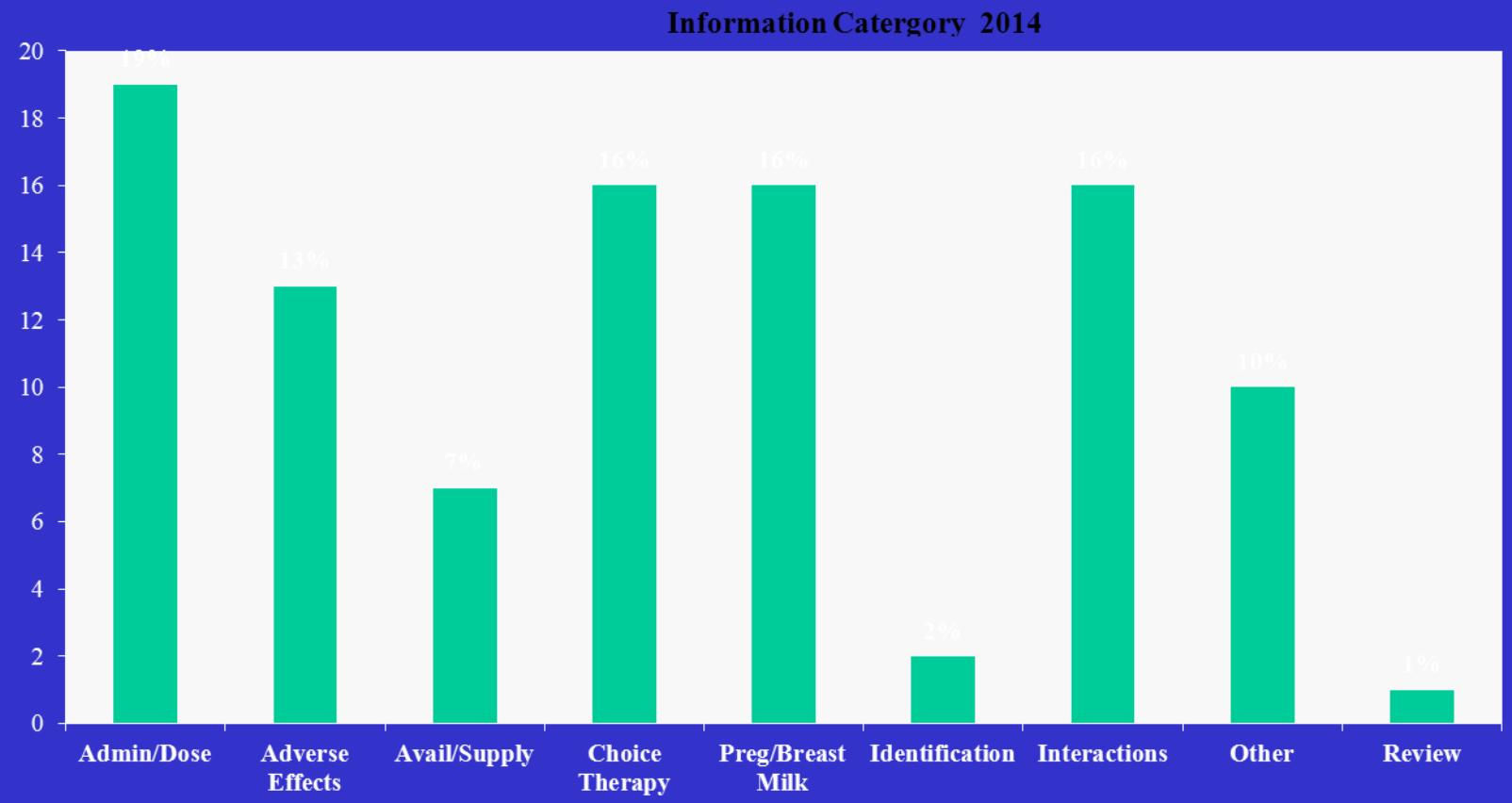
Overall Functions of NMIC

1. Provision of information in response to queries from healthcare professionals in primary and secondary care on all aspects of therapeutic use of medicines
2. Provision of regular bulletins/newsletters to healthcare professionals (distributed via GMS postal system or via e-mail)
3. Educational role has developed over recent years

Drug Information Enquirer data: 2014 (NMIC)



Drug information category data: 2014 (NMIC)



Sources of Information

- Not exhaustive:
  - www.medicines.ie prescribing information (SmPC) for most ***branded*** medicines authorised in Ireland
  - Health Products Regulatory Authority (previously the Irish Medicines Board) www.hpra.ie
    - Details on ***all authorised medicines*** in Ireland
  - British National Formulary **www.bnf.org**
  - **www.hrb.ie:** click on the ***Cochrane*** button for systematic reviews / meta-analyses
  - www.nice.org.uk: Website for UK National Institute for Health and Care Excellence
  - **www.ffprhc.org.uk:** Faculty of Sexual & Reproductive Healthcare
  - **www.hpsc.ie:** information on infectious diseases in Ireland, (see Topics A – Z) including some patient leaflets in different languages on some diseases (under "other languages" in the A-Z)
  - www.ema.europa.eu – the European Medicines Agency
  - Electronic databases available (Medline, Ovid, Micromedex etc)

The enquiry answering service is for all HCPs…

- Can contact the service by email, phone, letter, fax.
- Contact details are on all publications….
  - Telephone: 01 4730589/ 1850 727727
  - E-mail: nmic@stjames.ie
- Service is regularly monitored (monthly to users of the service and also internal peer review)
  - Audit tool is UK MI validated

Practicalities……..

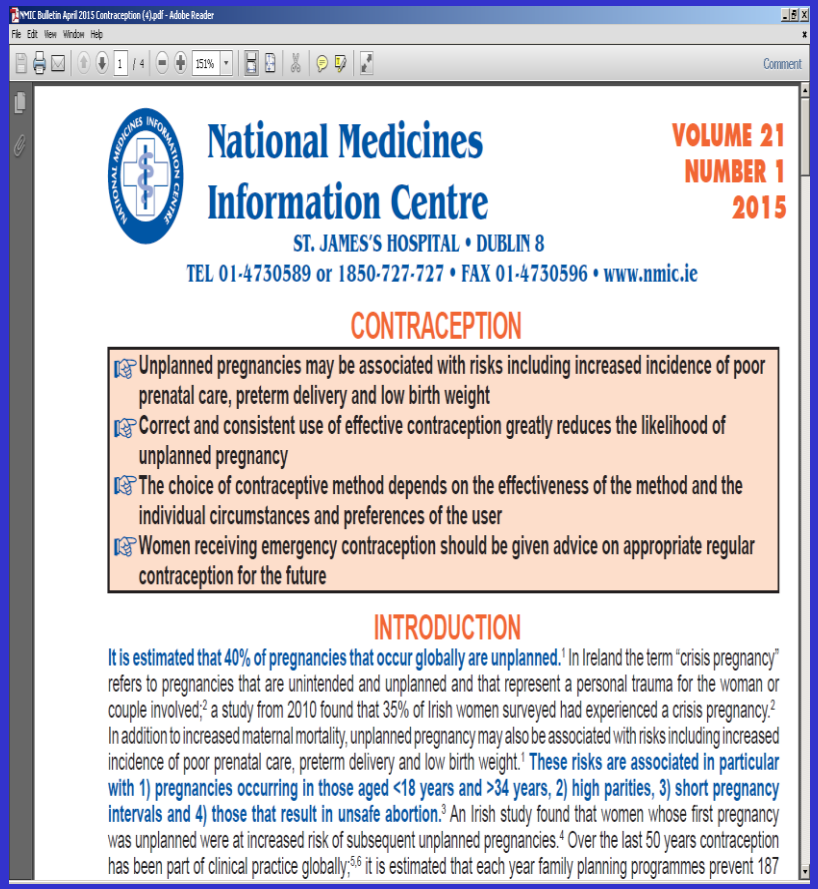
When an enquirer contacts the NMIC the staff would usually request the following in relation to the enquiry:

- Patient-specific information (age, pregnant/not if female, other medical factors)
- Disease-specific information (e.g. for infection is it new/uncomplicated, recurrent, prior treatment)
- Degree of urgency for reply
  - **** Time allowed by enquirer dictates the depth of the data provided***

Overall Functions of NMIC

- Provision of information in response to enquiries from healthcare professionals in primary and secondary care on all aspects of therapeutic use of medicines
- Provision of regular bulletins/newsletters to healthcare professionals
- Educational Role

Proactive information



NMIC Bulletin April 2015 Contraception (4).pdf - Adobe Reader

National Medicines Information Centre

VOLUME 21
NUMBER 1
2015

ST. JAMES'S HOSPITAL • DUBLIN 8

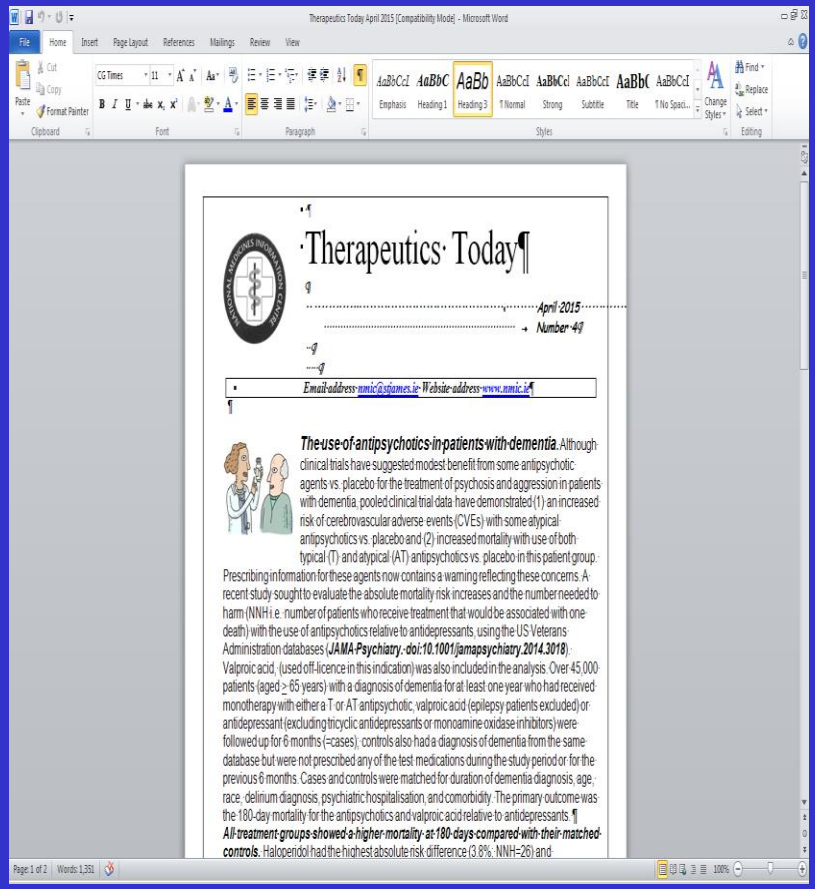
TEL 01-4730589 or 1850-727-727 • FAX 01-4730596 • www.nmic.ie

CONTRACEPTION

- Unplanned pregnancies may be associated with risks including increased incidence of poor prenatal care, preterm delivery and low birth weight
- Correct and consistent use of effective contraception greatly reduces the likelihood of unplanned pregnancy
- The choice of contraceptive method depends on the effectiveness of the method and the individual circumstances and preferences of the user
- Women receiving emergency contraception should be given advice on appropriate regular contraception for the future

INTRODUCTION

It is estimated that 40% of pregnancies that occur globally are unplanned.[1] In Ireland the term "crisis pregnancy" refers to pregnancies that are unintended and unplanned and that represent a personal trauma for the woman or couple involved;[2] a study from 2010 found that 35% of Irish women surveyed had experienced a crisis pregnancy.[2] In addition to increased maternal mortality, unplanned pregnancy may also be associated with risks including increased incidence of poor prenatal care, preterm delivery and low birth weight.[1] **These risks are associated in particular with 1) pregnancies occurring in those aged <18 years and >34 years, 2) high parities, 3) short pregnancy intervals and 4) those that result in unsafe abortion.**[3] An Irish study found that women whose first pregnancy was unplanned were at increased risk of subsequent unplanned pregnancies.[4] Over the last 50 years contraception has been part of clinical practice globally,[5,6] it is estimated that each year family planning programmes prevent 187



Therapeutics Today April 2015 [Compatibility Mode] - Microsoft Word

Therapeutics Today

April 2015
Number 49

Email address nmic@stjames.ie Website address www.nmic.ie

The use of antipsychotics in patients with dementia. Although clinical trials have suggested modest benefit from some antipsychotic agents vs. placebo for the treatment of psychosis and aggression in patients with dementia, pooled clinical trial data have demonstrated (1) an increased risk of cerebrovascular adverse events (CVEs) with some atypical antipsychotics vs. placebo and (2) increased mortality with use of both typical (T) and atypical (AT) antipsychotics vs. placebo in this patient group. Prescribing information for these agents now contains a warning reflecting these concerns. A recent study sought to evaluate the absolute mortality risk increases and the number needed to harm (NNH i.e. number of patients who receive treatment that would be associated with one death) with the use of antipsychotics relative to antidepressants, using the US Veterans Administration databases (***JAMA Psychiatry. doi:10.1001/jamapsychiatry.2014.3018***). Valproic acid, (used off-licence in this indication) was also included in the analysis. Over 45,000 patients (aged ≥ 65 years) with a diagnosis of dementia for at least one year who had received monotherapy with either a T or AT antipsychotic, valproic acid (epilepsy patients excluded) or antidepressant (excluding tricyclic antidepressants or monoamine oxidase inhibitors) were followed up for 6 months (=cases); controls also had a diagnosis of dementia from the same database but were not prescribed any of the test medications during the study period or for the previous 6 months. Cases and controls were matched for duration of dementia diagnosis, age, race, delirium diagnosis, psychiatric hospitalisation, and comorbidity. The primary outcome was the 180-day mortality for the antipsychotics and valproic acid relative to antidepressants. ***All treatment groups showed a higher mortality at 180 days compared with their matched controls.*** Haloperidol had the highest absolute risk difference (3.8%; NNH=26) and

Publications from NMIC

- Bulletins (6 per year)
- Newsletters (monthly)

Circulated to GPs/pharmacists via the GMS postal service / NMIC postal list / **email** / available on the NMIC webpage at **www.nmic.ie**

  - **Audited by way of surveys to our readers**

You are welcome to sign up!

Bulletins

Systematic review of particular therapeutic topic / review of most commonly asked questions in a specific area

Topics

- recent advances in knowledge or management of disease
- frequently asked topic (NMIC database) or
- changes in safety of medications

[editorial committee / external experts]

"Therapeutics Today" Newsletter

Short summaries of recent articles on therapeutics

All major journals reviewed each week for items of relevance to general practice

Also, items that arise from queries are also included e.g. stock shortages / withdrawal of medicines (and possible substitution)

Safety alerts included (and updates given in consecutive newsletters as appropriate)

Overall Functions of NMIC

1. Provision of information in response to queries from healthcare professionals in primary and secondary care on all aspects of therapeutic use of medicines
2. Provision of regular bulletins/newsletters to healthcare professionals (distributed via GMS postal system or via e-mail)
3. Educational role

Educational role

- Lectures on prescribing issues to medical and pharmacy undergraduates (TCD, UCD) and postgraduate students
- Prescribing workshops to Basic Specialist Training physicians for the RCPI
- Workshops with GP trainees for the ICGP
- CPD meetings with GPs
- Involved in quality assurance of CPD modules for pharmacists

We are delighted to work with all HCPs!

In conclusion

- NMIC is here to help you by providing information on medicines in a proactive and reactive way.

Third National Medicines Forum

Dr. Tamasine Grimes

April 30th 2015

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Health Service Executive

Trinity College Dublin
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The University of Dublin

Medicines Reconciliation: Maintaining safety through transitions of care

Tamasine Grimes, PhD, MPSI

Associate Professor in Practice of Pharmacy

Trinity College Dublin and Tallaght Hospital

tagrimes@tcd.ie

@tagrimes

Overview

- Medication-related vulnerabilities at care transitions.
- The evidence-base.
- Policy context.
- Advancing practice in Ireland.

May CR et al. BMJ 2009;339:b2803.

Medication safety in Ireland

26 % of Irish people aged 50+ use 5+ medicines daily.

The Irish Longitudinal Study on Ageing, 2013 (TILDA).

> 8 % of all emergency hospital admissions are drug-related.

Ahern F et al (2013) Emerg Med J doi:10.1136/emermed-2012-201945.

8 % of incidents reported to Clinical Indemnity Scheme are drug-related.

Annual report, 2012.

6 % of acute inpatient discharges have a potentially severe drug error

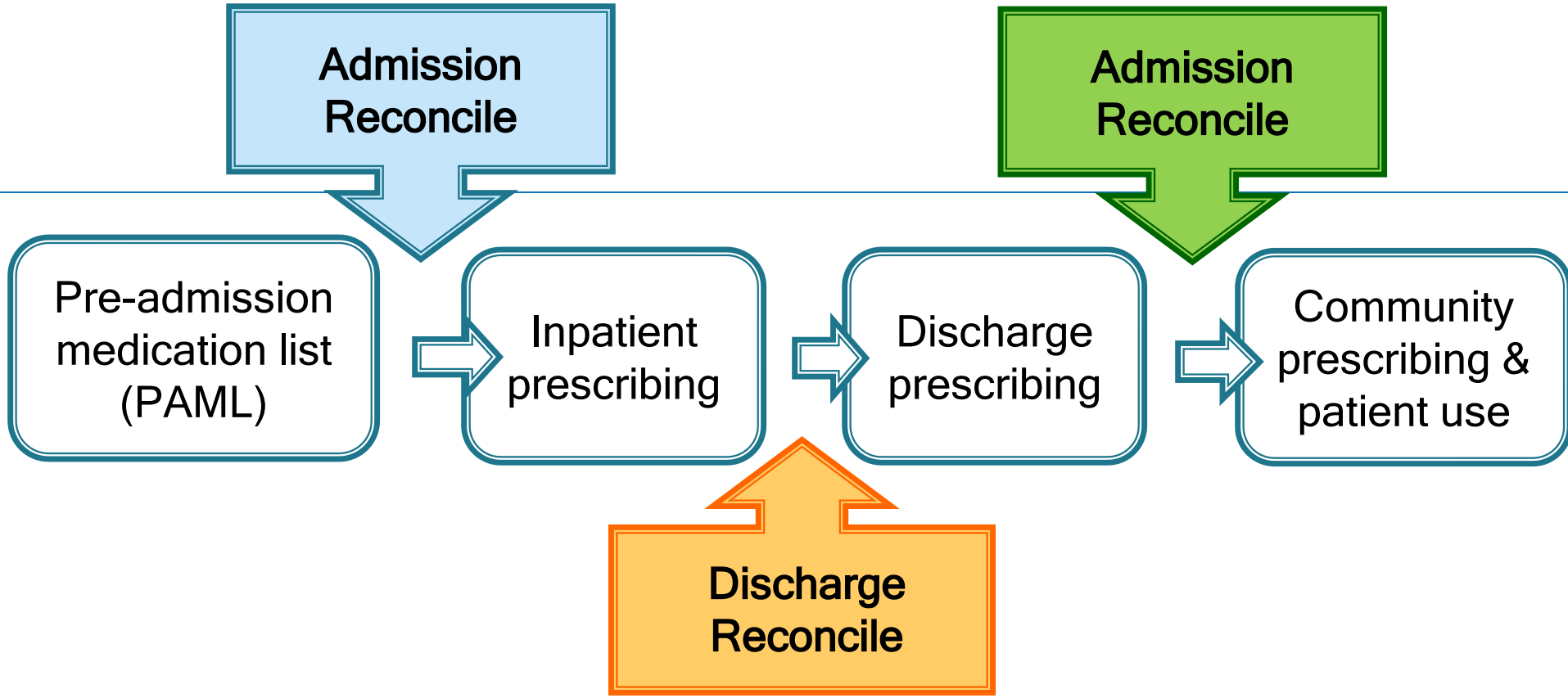
Grimes T et al (2014) BMJ Qual Saf doi:10.1136/bmjqs-2013-002188.

Effective communication

Change of responsibility

Transfer of information

Change of accountability



Galvin et al (2013) Int J Clin Pharm 35(1):14-21.
Gallagher J et al (2014) BMC Health Services Research 14:177.
McCullagh M et al (2015) Irish Med J 108(4):38-40.

Grimes T et al (2011) Br J Clin Pharmacol 71(3):449-457.
Grimes T et al (2014) BMJ Qual Saf doi:10.1136/bmjqs-2013-002188.
Holland D. (2015) Int J Clin Pharm 37(2):310-319.

O'Riordan & Grimes (2014) Int J Clin Pharm 36(4):836.
Carroll H et al (2014) GP Forum.

Association between hospitalisation and medication use?

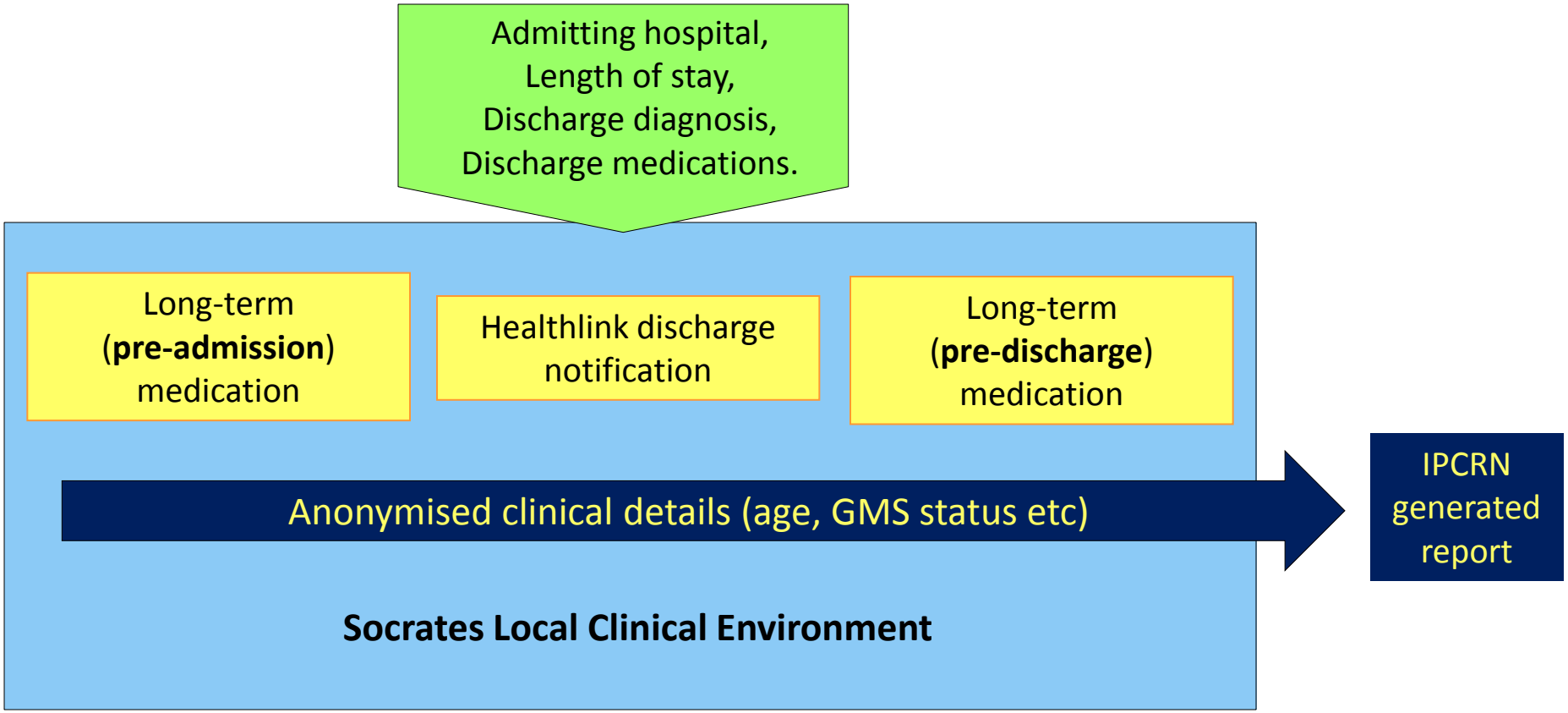
Overnight hospital stay linked to potentially **unintentional long-term discontinuation** of medication. Discontinuation of statins and antiplatelets/ anticoagulants rendered patients up to 11% more likely to experience **death, ED visit or emergency hospitalisation** than those whose medication continued.

Bell CM et al (2011). JAMA 306(8):840-847.

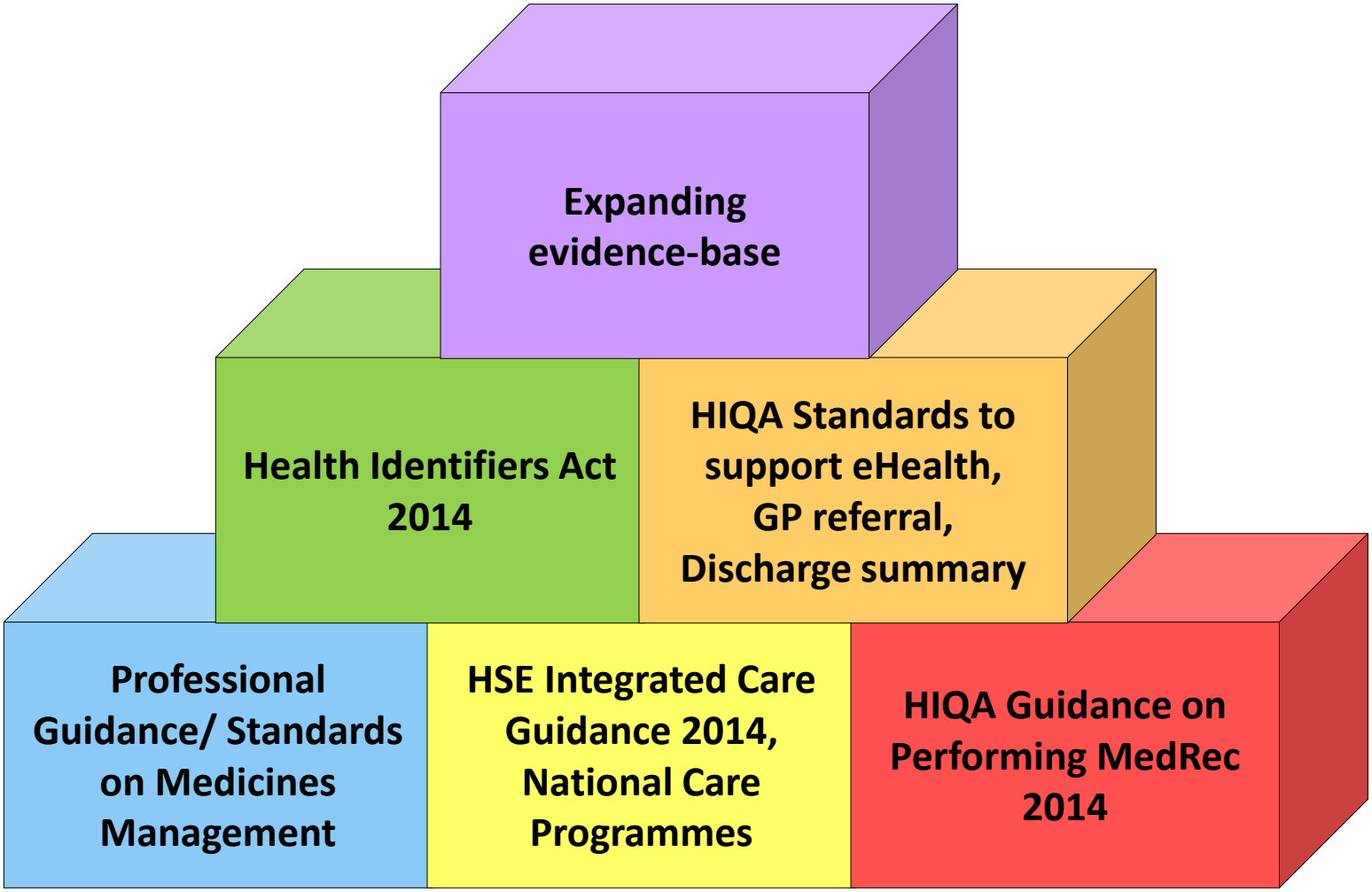
Of 124,051 older adults hospitalized for Acute Myocardial Infarction, 9,607 (7.7%) were outpatient **Potentially Inappropriate Medicine** (PIM) users at admission, which increased to 8.6% at discharge ($P < .001$).

Lund BC et al (2015) J Am Geri Soc 63(4):699–707.

Association between hospitalisation and medication use?



Medication Reconciliation – some building blocks.



What does the evidence tell us regarding strategies to improve medication safety at care transfer?

Interventions for improving medication reconciliation across transitions of care (Protocol)

Redmond P, Grimes TC, McDonnell R, Boland F, Hughes C, Fahey T

THE COCHRANE COLLABORATION®

This is a reprint of a Cochrane protocol, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2013, Issue 10

http://www.thecochranelibrary.com

REVIEW ARTICLE

ONLINE FIRST | HEALTH CARE REFORM

Hospital-Based Medication Reconciliation Practices

A Systematic Review

Stephanie K. Mueller, MD; Kelly Cunningham Sponsler, MD; Sunil Kripalani, MD, MSc; Jeffrey L. Schnipper, MD, MPH

Key findings: 17 of 17 studies showed reduction in discrepancies; 5 of 6 showed reduction in potential ADEs; 2 of 2 showed reduced ADEs; mixed findings regarding post hospital healthcare utilisation (2 of 8). Key aspects of successful interventions included intensive pharmacy staff involvement and targeting the intervention to a high risk patient population.

Mueller SK, et al. Arch Intern Med. 2012;172(14):1057-1069. doi:10.1001/archinternmed.2012.2246.

Annals of Internal Medicine | SUPPLEMENT

Medication Reconciliation During Transitions of Care as a Patient Safety Strategy

A Systematic Review

Janice L. Kwan, MD*; Lisha Lo, MPH*; Margaret Sampson, MLIS, PhD; and Kaveh G. Shojania, MD

Key findings: Pharmacists play a major role in most successful interventions. Medication reconciliation alone probably does not reduce post-discharge hospital utilization but may do so when bundled with interventions aimed at improving care transitions.

Kwan J, et al. Ann Intern Med. 2013;158(supplement):397-403.

Systematic review

Comparative economic analyses of patient safety improvement strategies in acute care: a systematic review

Edward Etchells,[1,3,6] Marika Koo,[2,3] Nick Daneman,[1,3,6] Andrew McDonald,[1,3,6] Michael Baker,[4,6] Anne Matlow,[1,5,6] Murray Krahn,[4,6] Nicole Mittmann[2,3,6]

Key finding: Pharmacist-led medication reconciliation was the only strategy (to prevent adverse drug events) with adequate effectiveness data, based on one randomised trial and several non-randomised controlled trials. Pharmacist-led medication reconciliation dominated over a strategy of no reconciliation.

Etchells et al (2012) BMJ Quality & Safety 21:448e456.
doi:10.1136/bmjqs-2011-000585.

Components of successful interventions.

Collaborative practice – multi-disciplinary.

Complex interventions involving:

- medication reconciliation, medication optimisation,
- patient/carer education & counselling, follow-up,
- transmission of information.

Agrawal A, et al. World Congress on Health Informatics, Brisbane, Australia, August 2007. **Gillespie** U, et al. Arch Intern Med. 2009;169(9):894-900. **Jack** BW, et al. Ann Intern Med. 2009;150:178-187. **Koehler** BE, et al. Journal of Hospital Medicine 2009;4:211–218. **Kwan** Y, et al. Arch Intern Med. 2007;167:1034-1040. **Schnipper** JL, et al. Arch Intern Med. 2006;166:565-571. **Schnipper** JL, et al. Arch Intern Med. 2009;169(8):771-780. **Scullin** C, et al. J Eval Clin Pract. 2007;13:781–788. **Walker** PC, et al. Arch Intern Med. 2009;169(21):2003-2010.

http://www.hiqa.ie/publications/guidance-health-and-social-care-providers-principles-good-practice-medication-reconcili

Retroactive medication reconciliation process

Step 1	Step 2	Step 3	Step 4
Primary medication history used to build admission orders.	Admission medication orders.	Best possible preadmission medication list (BPML) as early as possible.	Compare BPML with admission medication orders and resolve any differences.

Proactive Medication Reconciliation Process

Step 1	Step 2	Step 3
BPML is used to Build admission medication orders.	Admission medication orders.	Verify every medication has been assessed by prescriber and pharmacist.

Health Service Executive 2014. Integrated Care Guidance: A practical guide to discharge and transfer from hospital.

OPEN ACCESS

Collaborative pharmaceutical care in an Irish hospital: uncontrolled before-after study

Tamasine C Grimes,[1,2] Evelyn Deasy,[1,2] Ann Allen,[1] John O'Byrne,[1] Tim Delaney,[1] John Barragry,[3] Niall Breslin,[3] Eddie Moloney,[3] Catherine Wall[3]

▶ Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10.1136/bmjqs-2013-002188).

[1]Pharmacy Department, Tallaght Hospital, Dublin, Ireland
[2]School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin, Ireland
[3]Medical Directorate, Tallaght Hospital, Dublin, Ireland

Correspondence to
Dr Tamasine C Grimes

ABSTRACT

Background We investigated the benefits of the Collaborative *P*harmaceutical *C*are in *T*allaght Hospital (PACT) service versus standard ward-based clinical pharmacy in adult inpatients receiving acute medical care, particularly on prevalence of medication error and quality of prescribing.

Methods Uncontrolled before-after study, undertaken in consecutive adult medical inpatients admitted and discharged alive, using at least three medications. Standard care involved

BACKGROUND AND INTRODUCTION

Periods of patient care that involve a transfer across organisations or transfer between professionals are more vulnerable with regard to medication safety than other periods.[1–4] Medication error is more prevalent at these junctures and may result in harm: a type of adverse drug event (ADE). Medication reconciliation (here on referred to as MedRec) is a process advocated to prevent harm consequent to reconciliation error,[5–9] and in

Grimes T et al (2014) BMJ Qual Saf doi:10.1136/bmjqs-2013-002188.

Collaborative Pharmaceutical Care at Tallaght Hospital

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

THE MEATH FOUNDATION
FONDÚIREACHT NA MÍ

TALLAGHT HOSPITAL

My Medicines is a list of all of the medicines and supplements you take and some of their details.

Please fill in the My Medicines information inside this leaflet.

This is your record of your medicines. Please keep this document safe and bring it with you when coming to Tallaght Hospital or attending any healthcare appointment. If you become ill, you or a family member can bring this record to hospital.

We also ask that you bring all of your medicines, in their original boxes and containers if you have them, with you when coming to the hospital.

Your medicines list will help hospital staff treat you safely.

KNOW YOUR MEDICINES
ZERO HARM

IMPORTANT

To fill out My Medicines you need **all your medicines in front of you** including prescribed, non-prescribed and over the counter medicines.
If you don't know what medicines you take or you need help filing out My Medicines ask your pharmacist, doctor, friend or relative to help you.

TALLAGHT HOSPITAL

www.tallaghthospital.ie

Leaflet Prepared 2/4/2015

working together to improve safety

Information for patients and families

My Medicines

KNOW YOUR MEDICINES
ZERO HARM

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working together to improve safety

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Icaach cech chedmal

MedRec within a medical team-based model where clinical pharmacists attend the post-take ward round

Byrne S et al (2012). Int J Clin Pharm 34(1):208.

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Naas General Hospital

Can we prioritise/ target patients for pharmaceutical care?
From evidence to clinical practice

- **Number of medicines used**
- **Morbidity burden**
- **Renal impairment**
- **High risk drug**
- **Age**
- **Gender**

Cahir et al (2010) Br J Clin Pharmacol 69(5):543-552. **Grimes** T et al (2011) Br J Clin Pharmacol 71(3):449-457. **Hamilton** et al (2011) Arch Intern Med 171(11):1013-1019. **O'Connor** et al (2012) Age and Ageing 41:771–776. **Saedder** et al (2015) Br J Clin Pharmacol doi: 10.1002/bcp.12600. **Saedder** et al (2014) Eur J Clin Pharmacol 70:637–645.

Some observations, some opportunities

- Skill mix and task allocation,
- Make the process lean,
- Allow all practitioners to practice at the top of license,
- Collaborate,
- Intelligently use intelligence.

Acknowledgements

Academic and practice colleagues

Ann Allen, Vanesha Bhagwan, John Barragry, Kathleen Bennett, Fiona Boland, Niall Breslin, Sharon Byrne, Evelyn Deasy, Tim Delaney, Tom Fahey, Michelle Fitzsimons, Mairead Galvin, Jennifer Hayde, Carmel Hughes, Marie-Claire Jago-Byrne, Ciara Kirke, Gráinne Kirwan, Ronan McDonnell, Ciara McManamly, Eddie Moloney, John O'Byrne, Aisling O'Leary, Patrick Redmond, Cathal Walsh, Catherine Wall.

... And many more

Discussion & question time ...

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Medicines Reconciliation: Maintaining safety through transitions of care

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Third National Medicines Forum

Olive O'Connor

April 30th 2015

Preferred Drugs
THE RIGHT CHOICE, RIGHT NOW.
MEDICINES MANAGEMENT PROGRAMME

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

National Medicines Forum
30th April 2015

Olive O'Connor, Creative Founder of

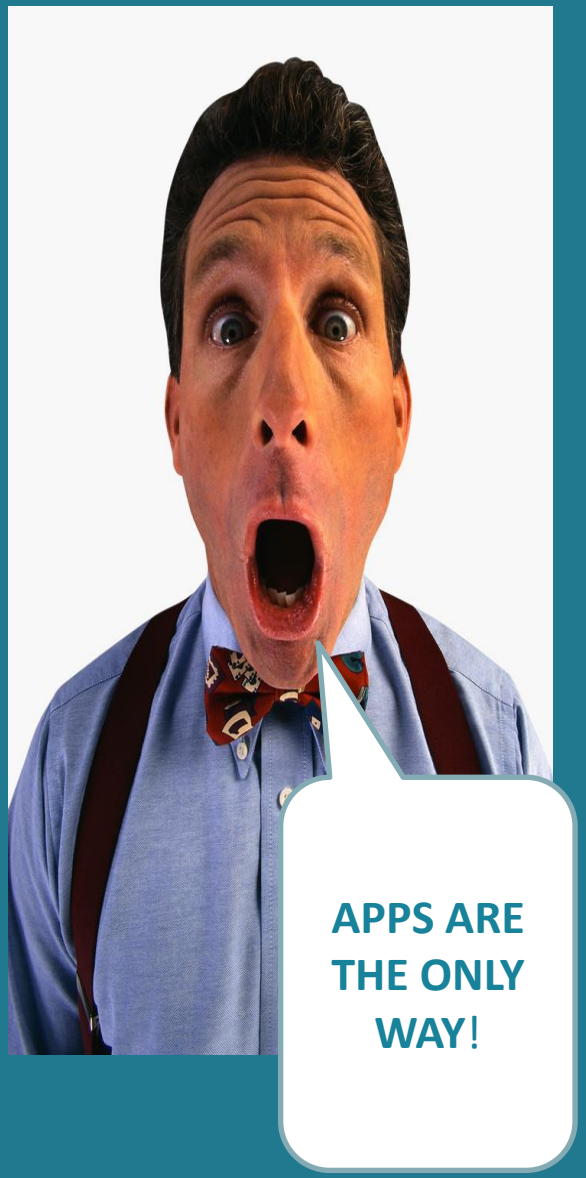
Medi Stori
What's Your Medistori?

The MediStori is like a Filofax, but for health.

Is that…Paper???

In Today's World?

That Will Never Work!



Really? Are you sure?

Do all public hospital waiting rooms have Wi-Fi?
How many "clicks" does it take to write down a note?
What happens when computers break down?
Does paper rely on batteries or passwords?
How many people are taking notes with pen and paper today?

Is technology the cure for everyone & everything?

Is it the right thing for me?

I am Olive. And I am the Patient.

My Problem…

Medi Stori

When did I give right medication?

So hard to get diagnosed!

Trying to remember appointments!

Communication Breakdown!

Everybody's Problem…

I wish I knew why I was taking this medication.

I wish they would take their medications as prescribed.

The Water Tablet Case
The Inhaler Case

Medi Stori

There is an urgent need for a universal, unified **approach**.

Medi Stori

Solutions Need to Be Simple.
Cultures Needs to Be Converted.
Patients Need to Be Participating.
Professionals Need to Be Proactive.

Policy Needs to Meet Practicality.

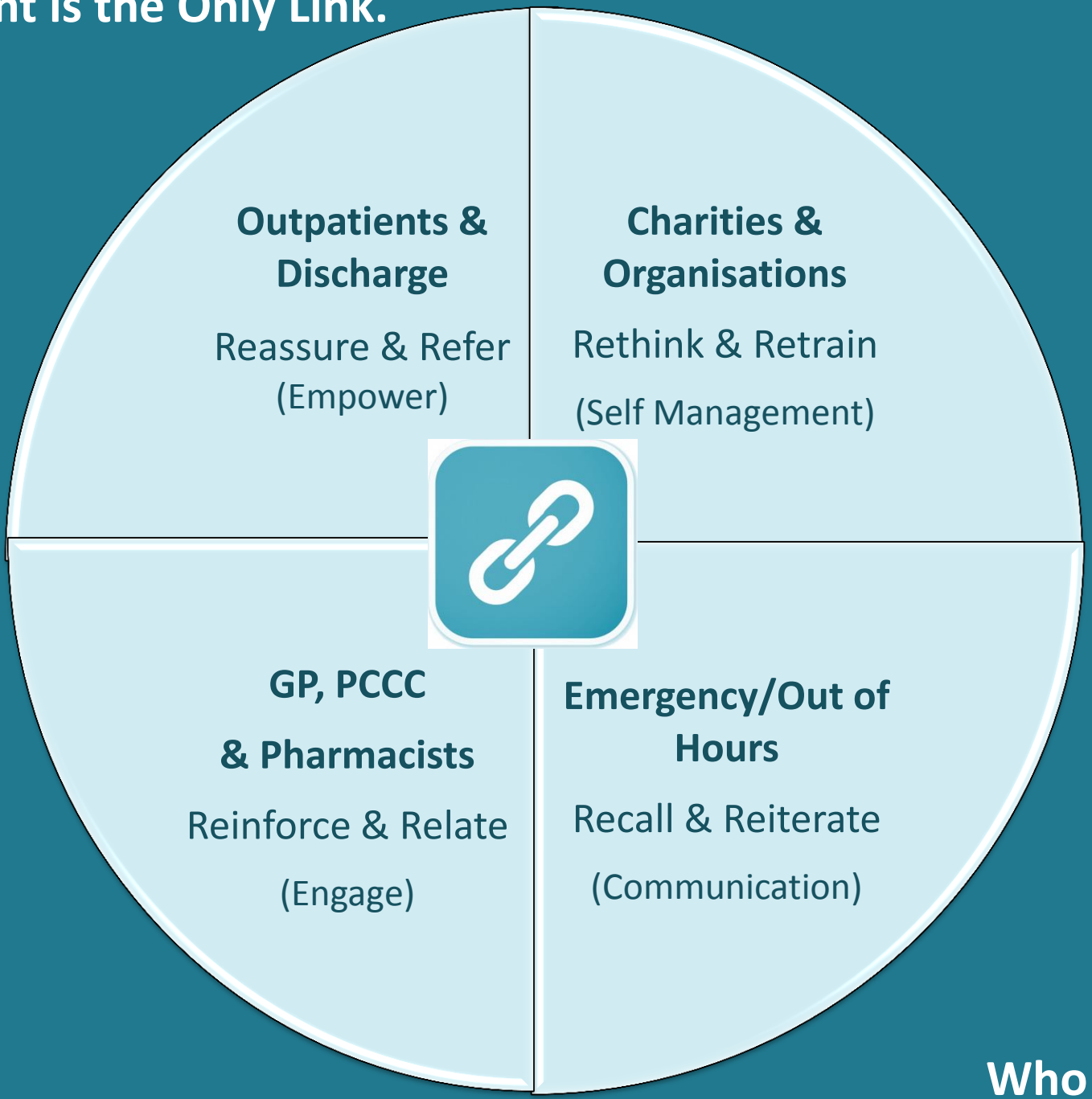
Does the HCP have to fill it in?
No. Unless they want to.

Is there not already PHR's?
Yes…too many, all different.

Why not an app?
We asked – they told us.

So will there be technology?
Yes.

The Patient is the Only Link.



Who Needs It?

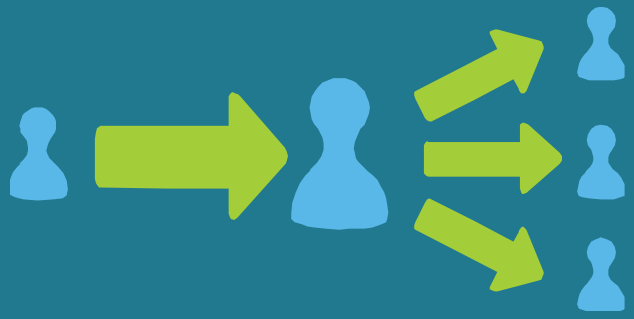
Focus on the task in hand…

Multiple Illnesses!

Multiple Symptoms
+
Multiple Practitioners
+
Multiple Medications

Multiple-Minding!

Elderly Parent
+
Children
+
Working Fulltime



Who first???

MediStori Recommended through Paediatric Out-Patient Clinics Initially And Through Charities and Organisations

Why Paediatrics?

- Children's medications are not pills
- Patient can' t speak for themselves
- Parent juggling with family, work, commitments
- Parents are good self managers…
- Parents do help nurses by caring for child

Why in OPD Clinics?

- Patient time waiting – average 1 hour – can be used more effectively
- Specialists can give more accurate information of disease
- Medical teams are usually present/nearby at these clinics
- Patient file is to hand for reiteration
- Diagnosis / referrals happen here
- Leaflet for Charity Given to Family

Where?

Collaborative, Comparative Study…

Research Compiled & Completed by NUIG – Dr Padraig Mac Neela (Psychologist)

Primary Objectives

- *Make Changes Based on Patient Needs*
- *Who & Where is it Best to Recommend it to Patients*

Secondary Objectives

- *Medication management*
- *Join the acute's themselves and primary care*
- *Behaviour & culture changes*

Cost Savings…

iCAN Irish Children's Arthritis Network

HEART CHILDREN IRELAND

Arthritis Ireland

Irish Dysautonomia Awareness

DySpraXiA

IRISH EDS & HMS

Business Case for the MediStori: Case Study

Per Patient	Per Annum	
Hospital Bed x 1 night	€800.00	A hospital bed costs €800 per night – it is proven that if patients are part of the decision making process and are trained in self-management they become more reassured, educated and informed & there is a high chance that they will not be readmitted or kept in as long as a patient who is not.
Medication Compliance	€300.00	If a patient has a better understanding of their medications and has a simple tool-kit to help them keep track of when they took them, there is a major chance of increasing medication adherence and compliance. This has a huge cost saving as it will stop re-ordering of drugs that are not needed; it will help reduce readmissions to hospitals due to medication related illnesses and it can even help cure/treat the issue and prevent visits to the GP.
A&E Re-Admission	€200.00	There is significant evidence of people being admitted to hospital due because they are not reassured about their illness, treatment or diagnosis. There is also a high increase in admissions to A&E at weekends and afterhours and evidence has shown this can be because after hour GP's have no history on patients presenting to them and they can feel vulnerable and/or not confident enough to treat/diagnose a patient as they do not have enough information on the patient to make an accurate decision.
Inappropriate Diagnostics	€300.00	When health professionals are unsure as to whether the patient has had appropriate/previous tests done, sometimes they re-test them "to be on the safe side". This has a huge burden of cost, risk and time on both stakeholders. This can be effectively reduced if a patient is able to tell a consultant when and where they last had medical investigations done and this will save time and money on needless retesting.
Phone Calls/No Link	€100.00	As patients end up in A&E / being admitted the nurse needs a full up to date list of prescription or the patient. This usually ends up with a phone call (or 3!) to a GP or pharmacy. If the patient has this information to hand they can reduce this wastage of time (costs of calls) etc. for both the nurse and the GP/pharmacy and can have their medications written up on time for themselves.

Collaboration is a must for the MediStori…

- Dr Philip Crowley – National Director Quality Improvement & Patient Safety
- Quality Improvement team – Greg Price, Director of Advocacy
- RCPI – Dr John Fitzsimons & Dr Peter Lachman
- Mayo General Hospital – Chief Pharmacist Blanaid O'Connell
- June Boulger – National Lead Patient & Public Involvement in Acutes
- Tim Delaney – Zero Harm Initiative
- Temple Street Hospital – Grainne Dowdall, Child Health Information Co-ordinator
- Dr. Peter Sloane –GP WHO GAMA Project –Clinical Programmes and Strategy –
- ICGP - Speaking at the Master Classes (Dr Margaret O'Riordan)
- INMO – Claire Mahon & David Hughes
- Dr. Helen Flint –National Lead Medicines Management Programme
- Prof. Alf Nicolson –Clinical Lead Paediatric Programme
- Collaboratively working with the Irish Patients Association, Patient Focus, Irish Pharmacy Union, HPRA, Irish Carers Association plus all/any other organisations as need arises…

Partnerships are the key to success…

Thank You!

What's Your MediStori?

www.medistori.com

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Dr. Brendan O'Shea

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Medicines Management
The view from General Practice

3rd National Medicines Forum

Dr Brendan O' Shea Dr Gearoid O' Connor Dr Diarmuid O' Keefe

TCD Department of Public Health and Primary Care ***and*** TCD HSE GP Training Scheme

COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH | TRINITY COLLEGE DUBLIN
Ollscoil Átha Cliath | The University of Dublin

Medicines Management

Views from General Practice at home and abroad

3rd National Medicines Forum

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Background

General Practice and Prescribing

- Prior to 1995 Chaotic / Unknown / Unrecognised
- 1995 National Drug Savings Scheme
- ……..Back to Chaos by mid 2000's
- 2000 Electronic Medical Records in GP (GPIT)
- 2012 iPCRN
- 2013 Preferred Drugs Scheme

2020 ?

St John's Newfoundland 1984

- Medical Students in their 4th & 5th Years

  Junior Interns

  6-8 Patients

  All orders (Rx & Ix) co signed by their Intern

  Excellent active learning

  Smoother transition into full role

Wyeth Medica Newbridge 1991

- Standard Operating Procedures
- GMP (Good Manufacturing Process)
- Condition of the floor…..
- Comparisons with local A/E

- What about ‘GCP ?’

2007 ‘GP drugs savings scheme fails to hit right target, despite expectations’

Eilish O'Regan

‘The amount of drugs savings generated fell from €3.5m in 2000 to just €670,000 in 2005.

The Comptroller's report also showed that a programme which allowed GPs to draw down €105.2m from the health service to improve their practices has yet to be evaluated.

GPs were given ***budget targets*** annually to encourage them to be more cost effective in their prescribing, mostly by substituting branded drugs with cheaper generic versions which were proved as just as effective.

The doctors were able to retain the savings they made and invest the money in improving their surgeries and services to patients (??)

The Comptroller found as many as 27pc of GPs went over their budget limits.

It was also found only 5pc of the 1,395 GPs in the scheme managed to achieve savings every year.’

2000 Geraldton, W.Australia.

- Population 27,000
- 18 GPs, 3 Specialists, 2 Hospitals, 4 NCHDs
- Daily Routine
- Prescribing……

‘Hi Sheila, I need a permission for Clarithromycin….’

2000 GPIT

- Collaboration between ICGP/HSE
- Process – Well integrated Expert Group
- Standards for licenced clinical software (6-8)
- Common functions, architecture, disease coding

2015 Most GP Practices using EMRs

2013 iPCRN

- Clinical database search engine
- C 800 GPs utilising
- Realtime automated data collection
- Your own Vs Peer Performance
- Self Selected areas – Tailored Audit / Research

iPCRN
Irish Primary Care Research Network

2015

The Patients' Perspective

A Survey of Chronic Disease Management in Ireland

Whiston L, Casey E, Seraukina T, Darker C, O' Shea B.

517/600 – 86% response rate

- CDM Study

	Yes	No
Would you be happy for your doctor to prescribe a generic version of your medicine, if the Irish Medicines Board guaranteed it? (N=509; 98.4%)	442 (86.8%)	67 (13.2%)

The Patients' Perspective

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Generic Switching

PRAGMATIC STUDY IN 2 PRACTICES

TCD HSE GP TRAINING SCHEME

Perceptions and acceptability of the Preferred Drugs Scheme and generic switching from patients' perspectives.

Dr. Gearoid O Connor, Dr. Diarmuid O Keeffe,
Dr. Catherine Darker, Dr. Brendan O' Shea

TCD HSE GP Training Scheme

Background

- April 2013 ‘Preferred Drugs Scheme’ launched
  Single “preferred” drug within a class
  Maximise safe, effective and cost effective prescribing
- First phase Statins & PPI’s
  If 50% of PPI’s were Lansoprazole, HSE savings 7.5 million/year
- New prescriptions
- Long term therapy and switching

Aims and Methods

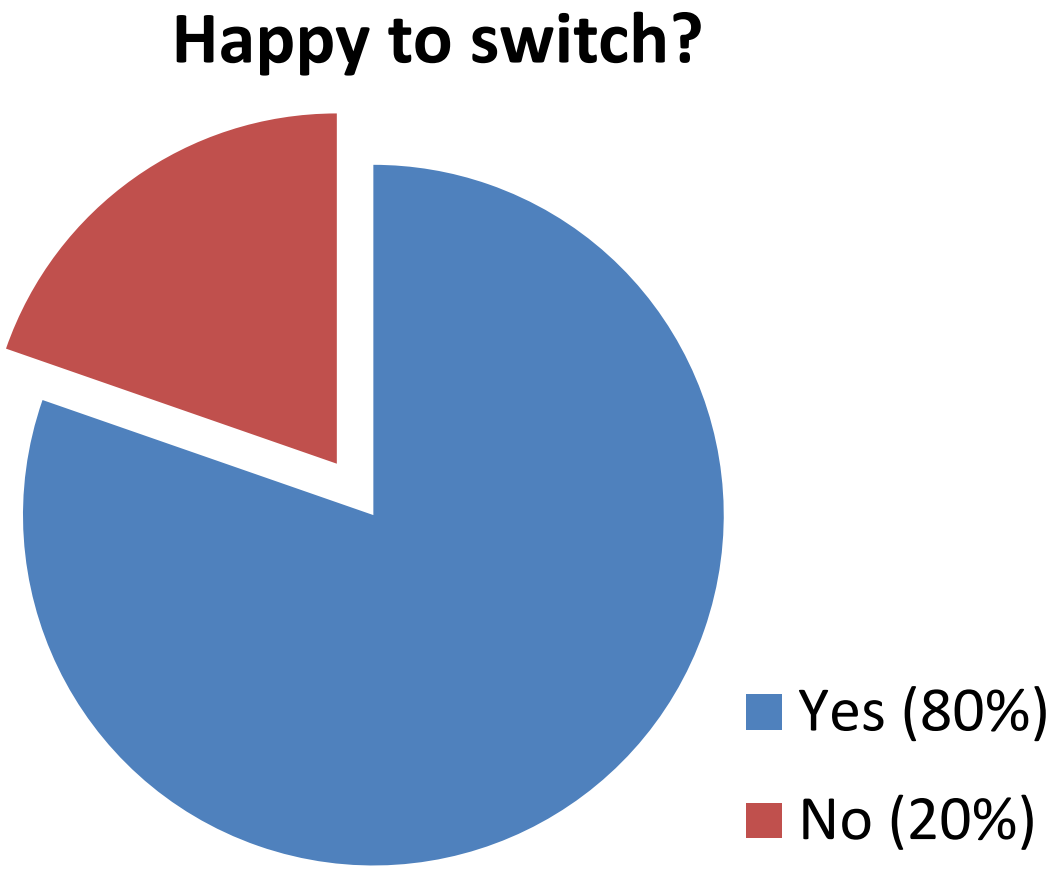
Investigate acceptability of switching patients on non-lansoprazole PPIs to lansoprazole

Convenience sample / 2 Teaching Practices / Ethics Approval obtained

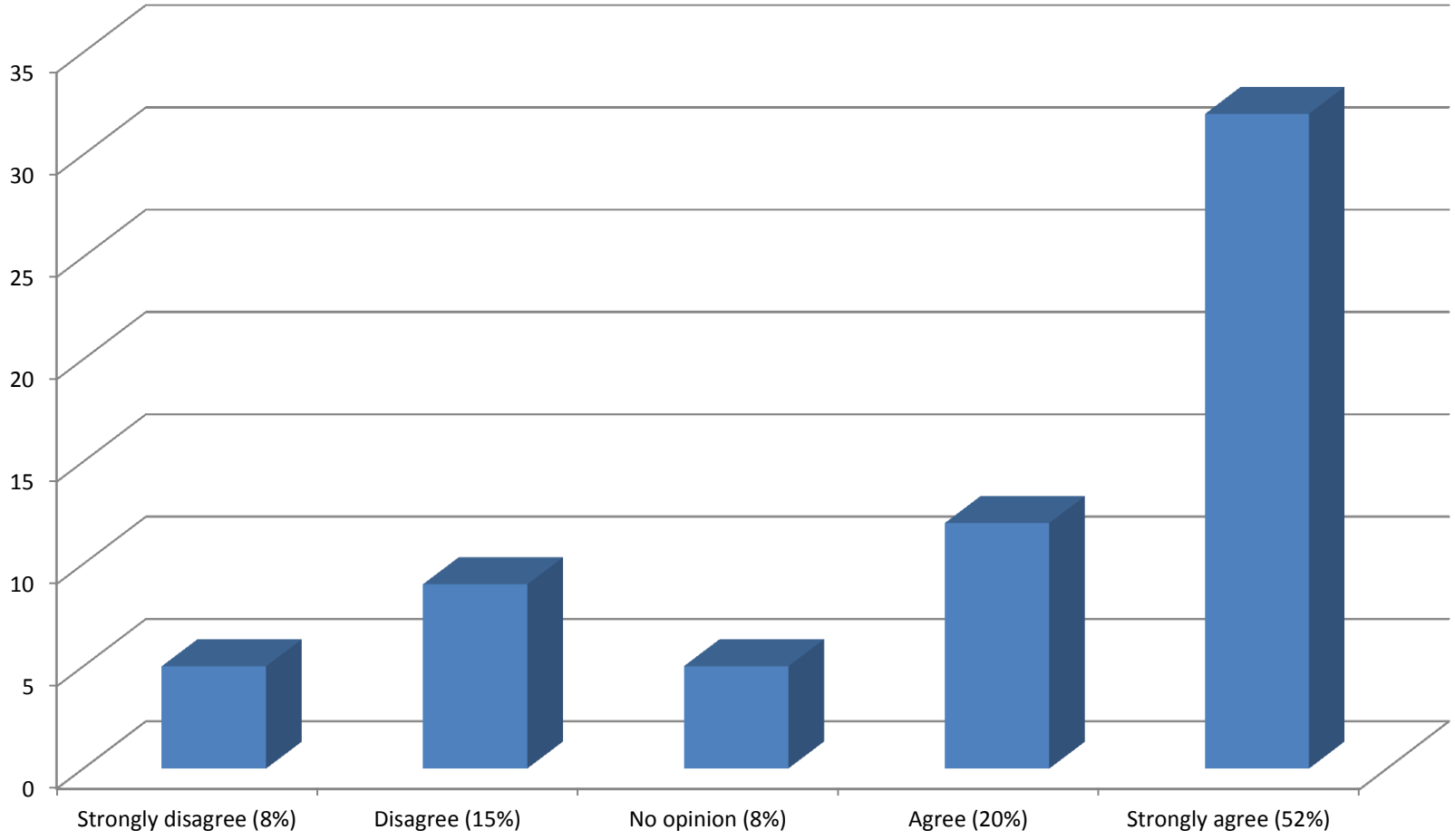
- Identified when collecting repeat prescriptions
- Information sheet regarding the study
- Complete preliminary questionnaire
- If agreeable, PPI changed to lansoprazole
- Repeat phone survey at 6 weeks

Results (Preliminary)

n=61



It is important to reduce the cost of medications as far as safely possible



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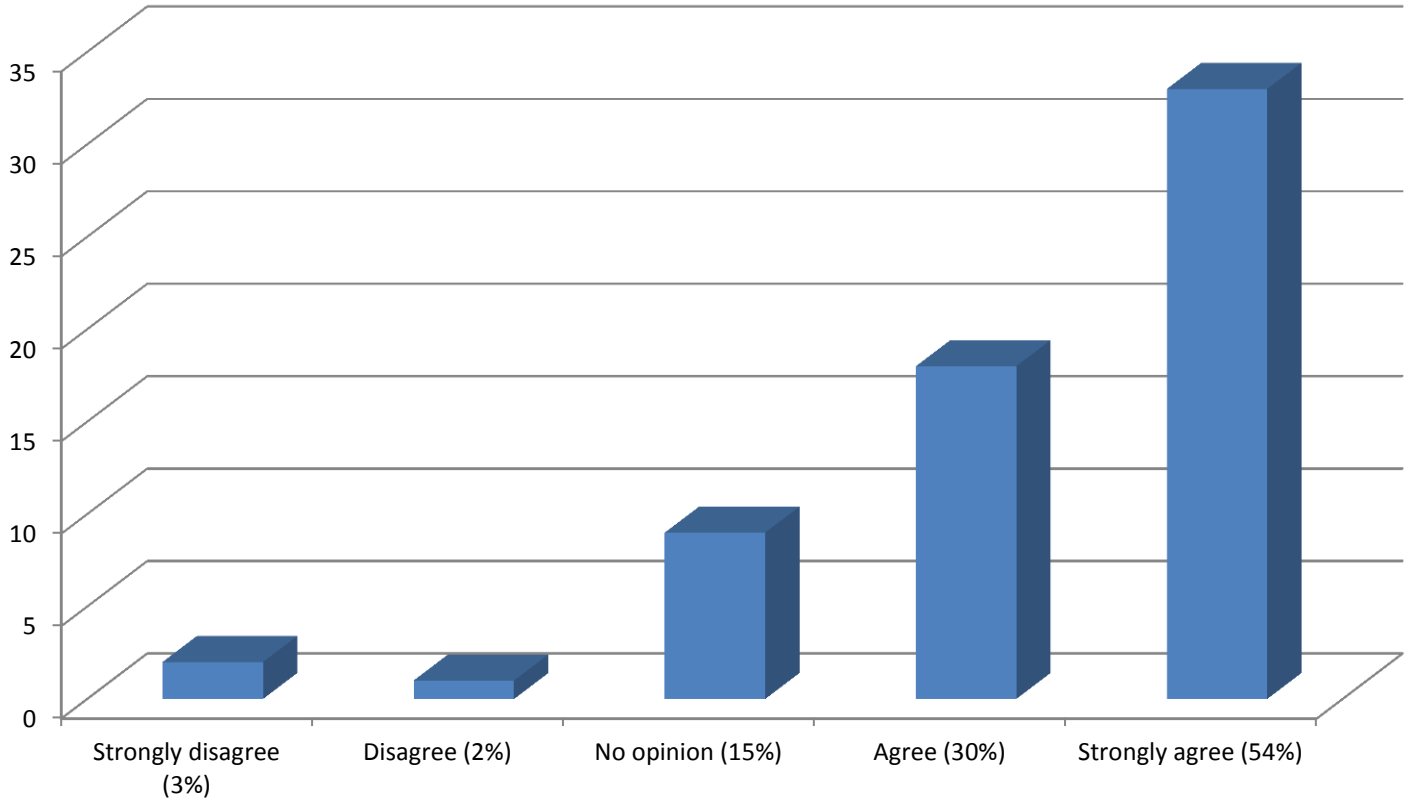
If a medicine is licensed, it is safe ?



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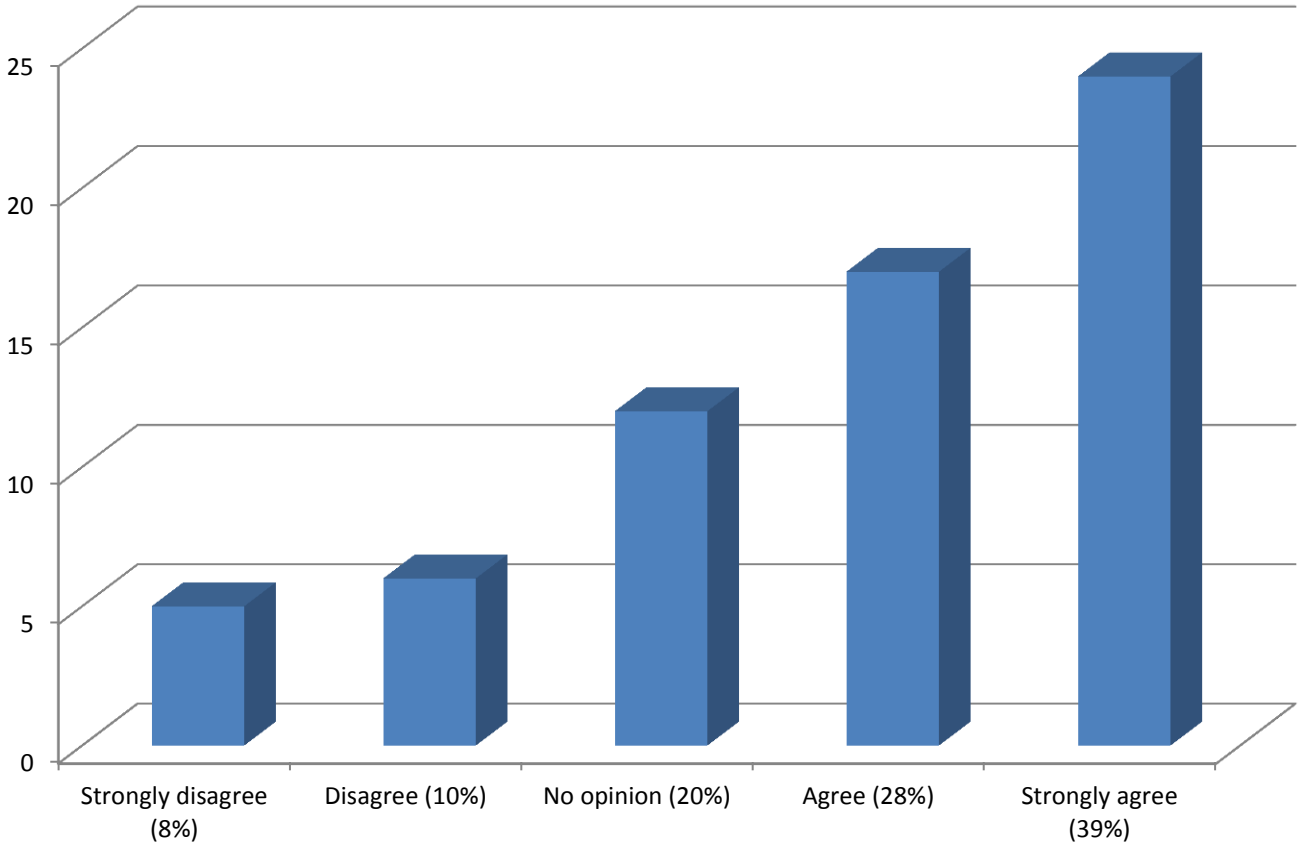
If my GP recommends a change for cost reasons, it is safe ?



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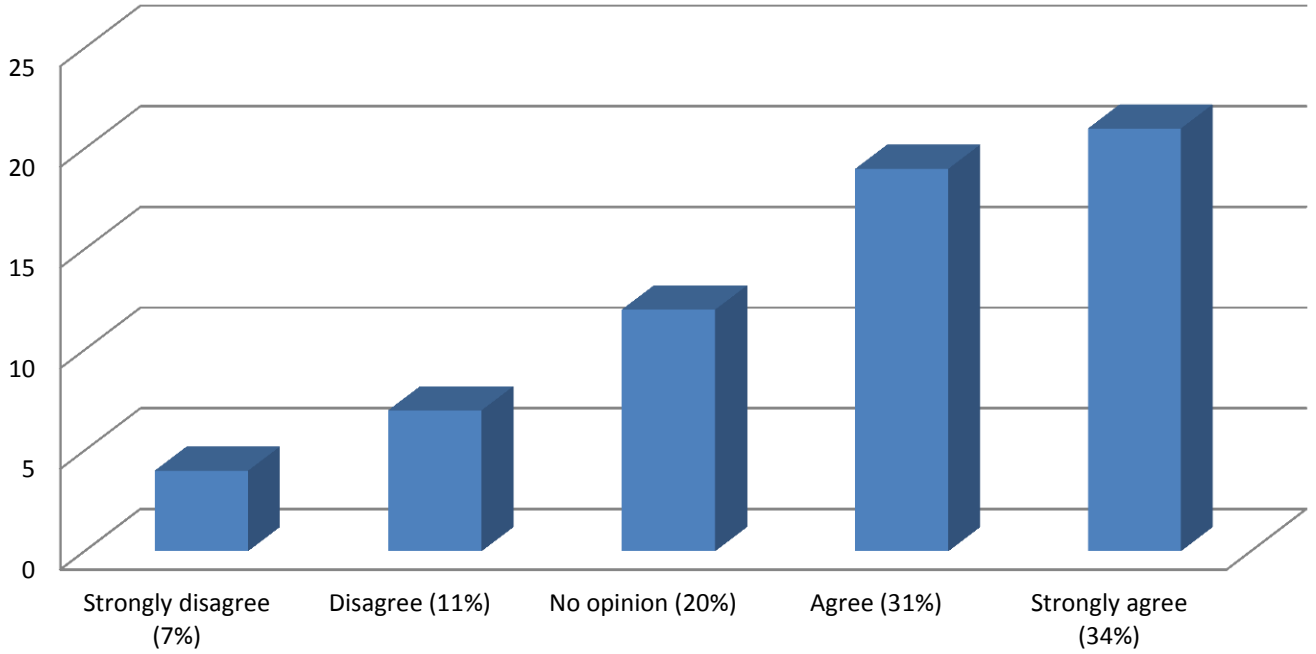
If my GP recommends a switch for cost reasons, it will be effective ?



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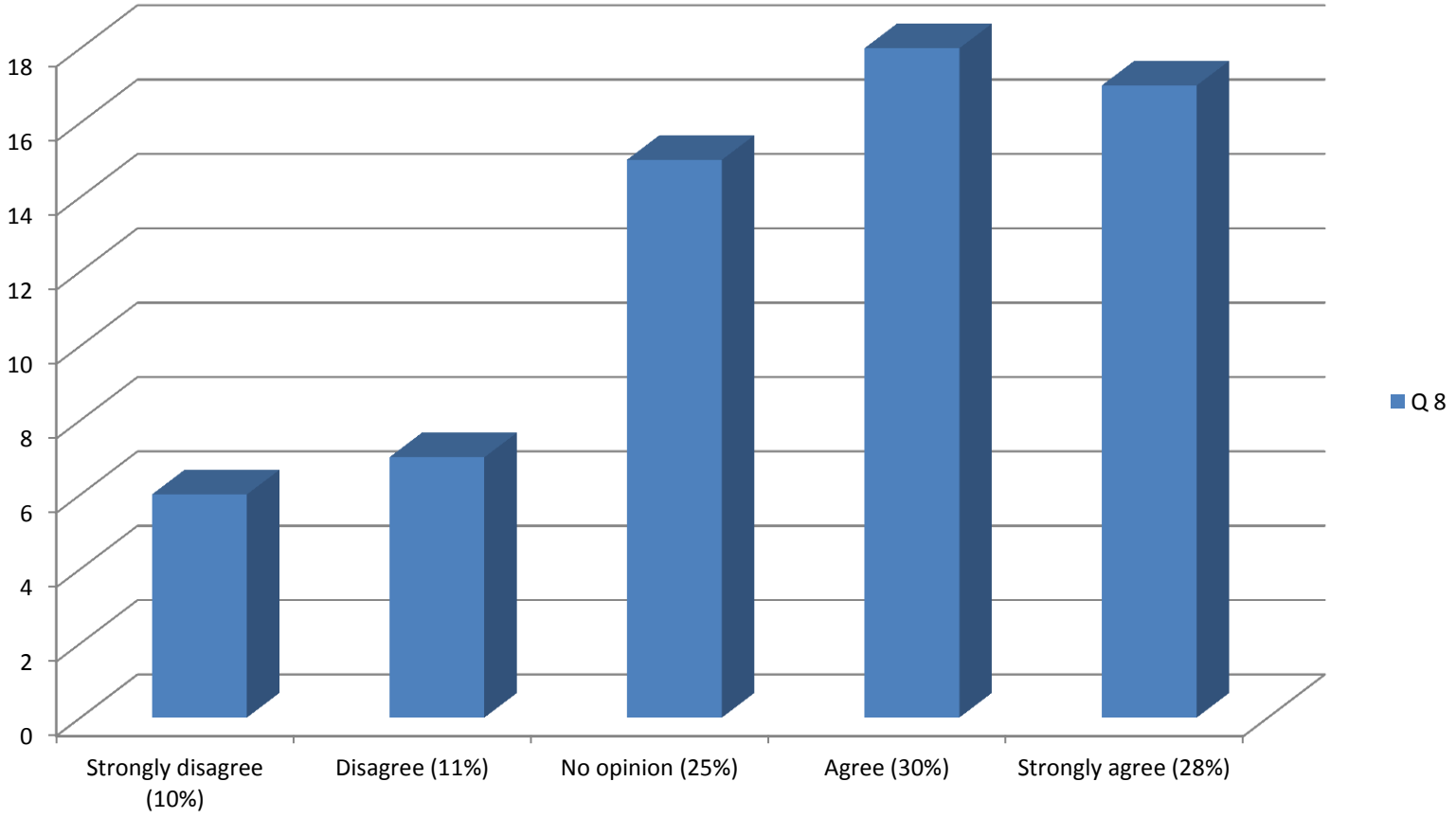
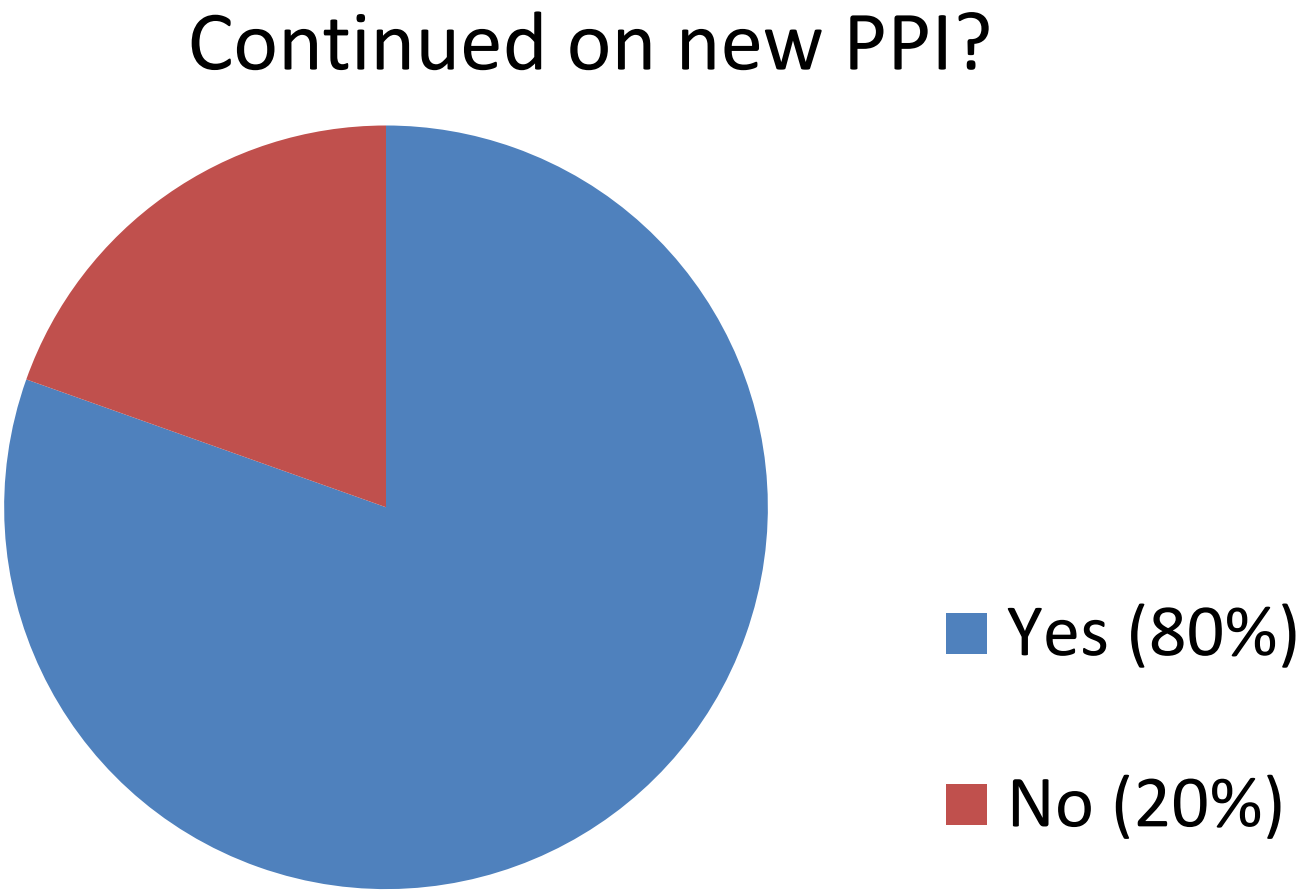
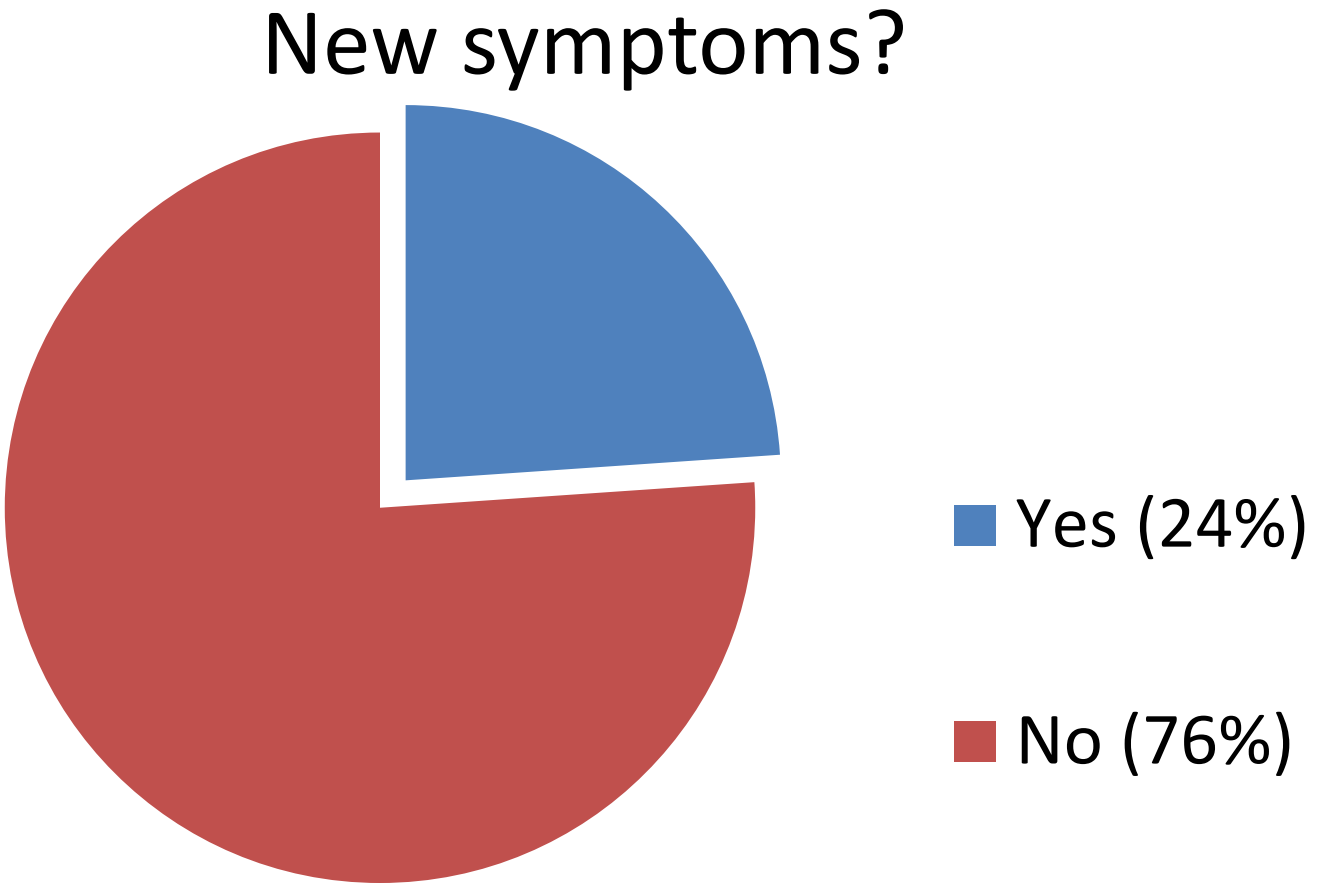
If my GP recommends a switch for cost reasons, there will be no new side effects ?



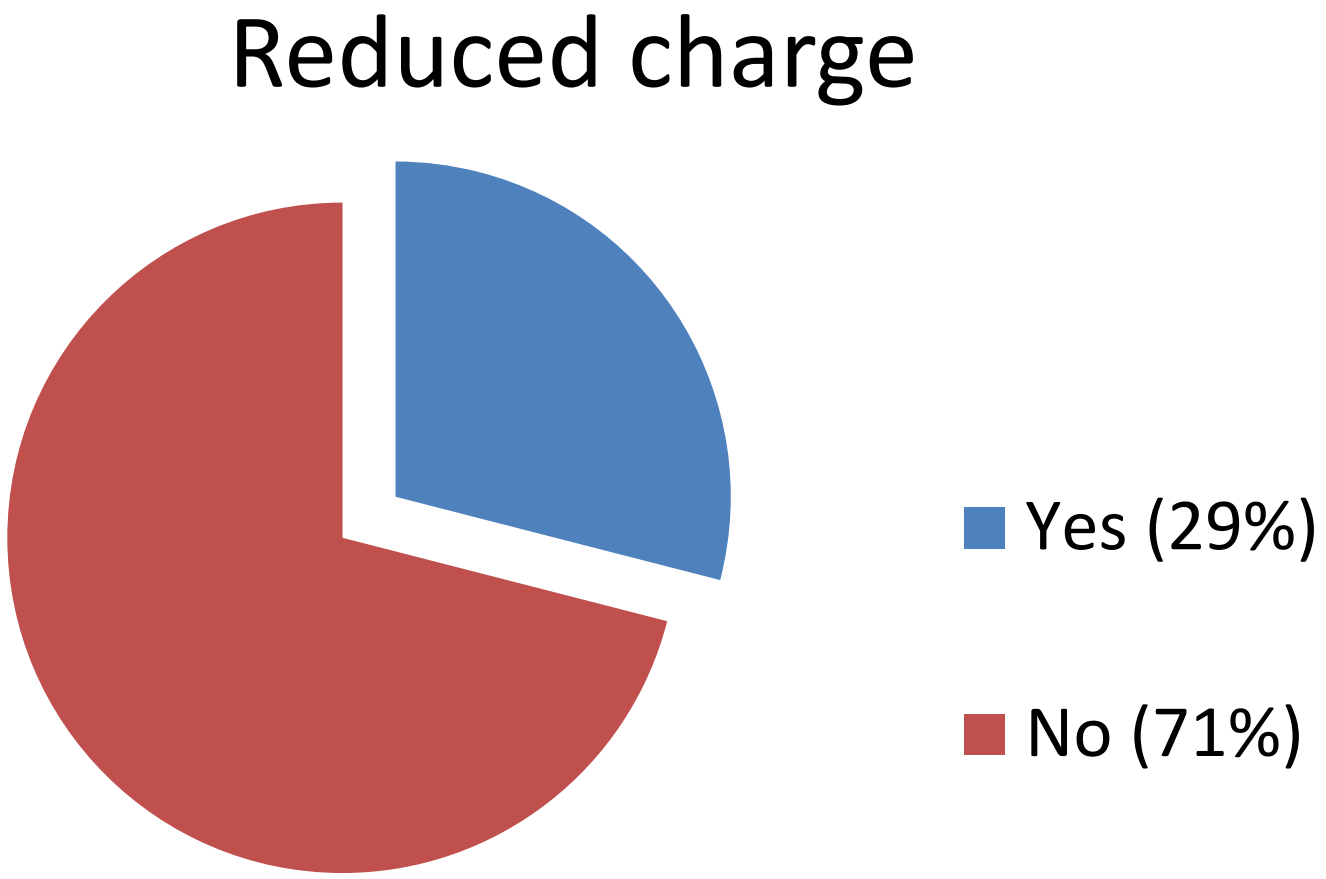
Look back phone survey - results at 6 weeks….



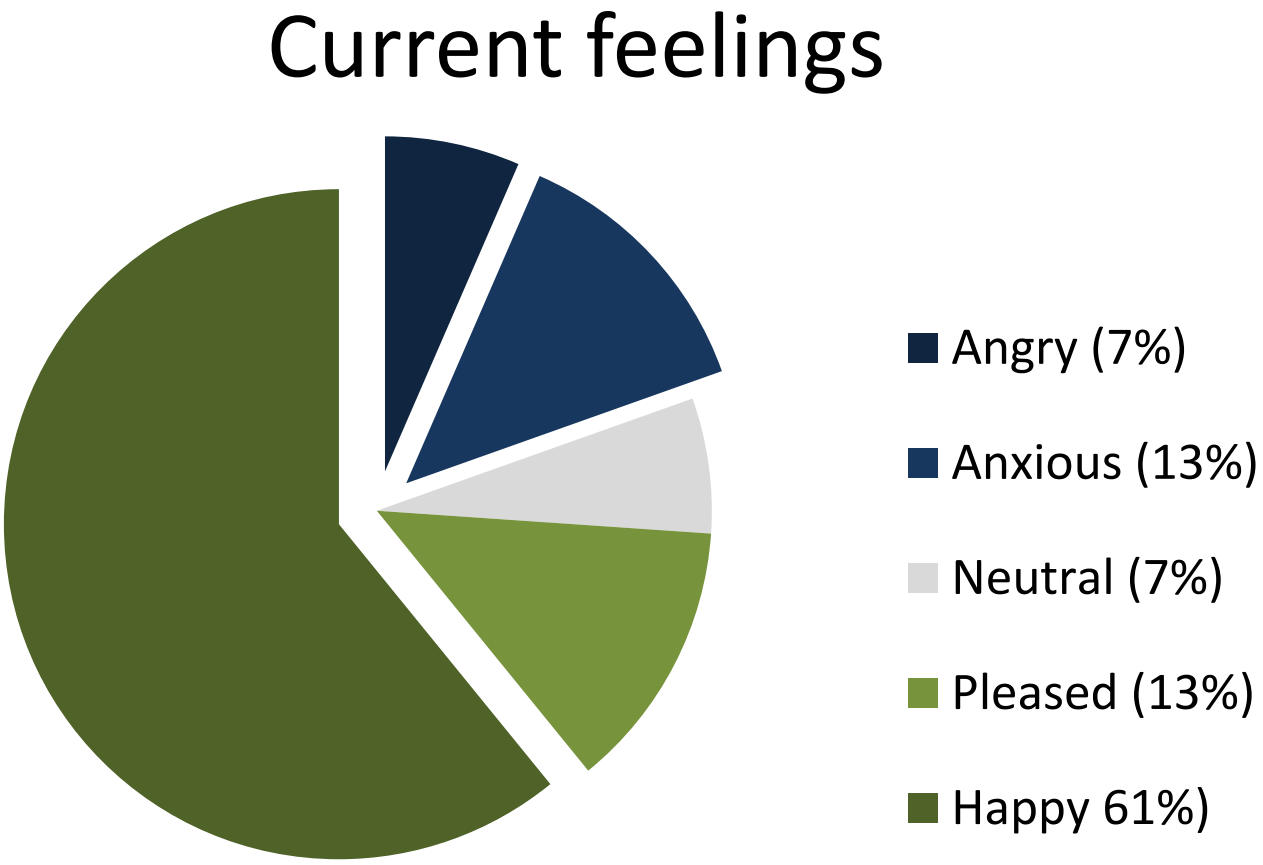
Results at 6 weeks



Results at 6 weeks



Results at 6 weeks



Discussion/Conclusions

- More resistance to switch than anticipated
- Anxiety / apprehension to switching for cost reasons
- Proportion of patients unhappy on switching
- Other ‘preferred drugs’ would be more difficult to switch due to higher risk / complexityinvolved (ie; SSRI, ACE inhibitor)

These matters require to be addressed…..

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Conclusions

What is the smart thing to do right now ?

Where do we want to be in 2020 ?

2020 Vision

- GPIT to CIT – Jumpstart IT in Secondary Care
- Don’t be waiting for the dull boys and girls……
- Pragmatic studies
- Information – ‘Whole System Ownership’
- Smarthealthcare.ie
- Extend Preferred Drugs Scheme to n = 100

  Savings accounted and re directed to

  Primary Care CDM

The Current Situation

Previously….

Today….

Tomorrow ?

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