DIFFUSION OF NEW TECHNOLOGIES POST REIMBURSEMENT – MONITORING
THE USE OF LIRAGLUTIDE IN PRIMARY CARE

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OBJECTIVES: Liraglutide, a GLP-1 receptor agonist used to treat Type 2 diabetes patients, is reimbursed in Ireland since November 2009. A 1.2mg maintenance dose is also available. The aim of this study was to examine utilisation of liraglutide and exenatide prescriptions during the first 2 years of reimbursement.

METHODS: Data on physician characteristics, physicians’ views on liraglutide, and patient characteristics were collected. Results from a retrospective chart extraction survey suggest that patient characteristics differed between patients initiated on pens vs. vials, and that despite insulin pens being perceived as having better outcomes by physicians, economic considerations play a dominant role in the choice of insulin vials.

RESULTS: The majority of physician respondents were part of a group practice (77.8%) and treated a mean of 235.5 (SD = 185.0) Type 2 patients ≥ 65 years old in 2009. Patient characteristics were similar in terms of age and diabetes duration. However, significantly more Caucasians (p = 0.011) and patients covered by Medicare only (p = 0.015) were initiated on pens, whereas significantly more women (p = 0.003), Black/African Americans (p = 0.011), and dual eligible patients (Medicare + Medicaid; p = 0.008) were initiated on vials. Patients initiated on vials had higher median baseline HbA1c values (8.7 vs. 8.4, p < 0.001). Survey findings suggested that physicians prescribed vials primarily due to patients’ economic constraints (62.9% of vial users vs. 43.8% of pen users), although a majority of physicians considered pens better than vials (89.2% in terms of adherence, 65.1% in terms of HbA1c control, and 55.4% in terms of resource utilization).

CONCLUSIONS: Results from this retrospective chart extraction survey suggest that patient characteristics differed between patients initiated on pens vs. vials, and that despite insulin pens being perceived as having better outcomes by physicians, economic considerations play a dominant role in the choice of insulin vials.

CHARACTERISTICS OF LONG-ACTING SOMATOMATOSTATIN (SSA) USE IN AFRICAN AMERICANS IN THE NETHERLANDS

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OBJECTIVES: To compare the potential cost of long-acting treatment with lanreotide vs. octreotide for acromegaly using patient treatment characteristics from the PHARMO Record Linkage System (RLS) in the Netherlands. METHODS: A cost minimization model was used to compare the lifetime costs of the SSAs. Data for patients with chronic acromegaly among elderly type 2 diabetes patients. METHODS: An online survey of 352 U.S. primary care physicians was used to collect retrospective patient chart data on 500 elderly type 2 diabetes patients who initiated on basal insulin analogs in 2009. For each physician, patient chart selection was randomized among multiple patients. Data on physician characteristics, physicians’ views on liraglutide, and patient characteristics were collected.

RESULTS: The majority of physician respondents were part of a group practice (77.8%) and treated a mean of 235.5 (SD = 185.0) Type 2 patients ≥ 65 years old in 2009. Patient characteristics were similar in terms of age and diabetes duration. However, significantly more Caucasians (p = 0.011) and patients covered by Medicare only (p = 0.015) were initiated on pens, whereas significantly more women (p = 0.003), Black/African Americans (p = 0.011), and dual eligible patients (Medicare + Medicaid; p = 0.008) were initiated on vials. Patients initiated on vials had higher median baseline HbA1c values (8.7 vs. 8.4, p < 0.001). Survey findings suggested that physicians prescribed vials primarily due to patients’ economic constraints (62.9% of vial users vs. 43.8% of pen users), although a majority of physicians considered pens better than vials (89.2% in terms of adherence, 65.1% in terms of HbA1c control, and 55.4% in terms of resource utilization).

CONCLUSIONS: Results from this retrospective chart extraction survey suggest that patient characteristics differed between patients initiated on pens vs. vials, and that despite insulin pens being perceived as having better outcomes by physicians, economic considerations play a dominant role in the choice of insulin vials.

PATIENT ACCESS, HbA1c KNOWLEDGE, AND HEALTH OUTCOMES AMONG TYPE 2 DIABETES PATIENTS IN CANADA

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OBJECTIVES: Although the primary goal among patients with type 2 diabetes (T2D) is glycaemic control, lack of patient education and health care access may represent a major obstacle to proper disease management, particularly in emerging markets such as Brazil. The aim of the current study was to document the level of patient knowledge of HbA1c levels and its effect on health outcomes. METHODS: Data were analyzed from the Brazil 2011 National Health and Wellness Survey, a cross-sectional health survey of adults in Brazil (N=12,000). Demographics (age, gender, education, socioeconomic status, insurance type), health history (HbA1c level, FPG level, frequency of testing), and health outcomes (health status using the SF-12v2, work productivity loss using the WPAI, and health care resource use) were assessed for all respondents. RESULTS: A total of 480 respondents (4.0%) reported a diagnosis of T2D of whom 85.38% did not know their level of HbA1c. Among those who were aware of their HbA1c levels, 60.34% reported being uncontrolled (i.e., ≥ level 7%). Patients who were uncontrolled reported significantly lower physical health status (39.43 vs. 46.58%) and a significantly greater percentage work overall impairment (42.93% vs. 25.58%) compared with those who were controlled (all p<0.05). Access to care also was associated with better outcomes as those with private insurance were significantly more likely to have an HbA1c test in the past 3 months (15.75% vs. 6.57%) and significantly less likely to have never been tested (38.32% vs. 43.01%) than those with just public insurance (all p<0.05).

CONCLUSIONS: The lack of awareness of HbA1c levels suggests a significant gap in patient education. Given the high probability of being uncontrolled, this lack of patient education may have significant humanistic and economic consequences for Brazil from a societal perspective. Improvement in access and education may help improve overall T2D management.

MAIN FACTORS ASSOCIATED TO COSTS OF TYPE 2 DIABETES MELLITUS (DM2) CARE IN SPAIN. A SYSTEMATIC REVIEW OF THE 2001-2011 LITERATURE

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OBJECTIVES: Type 2 diabetes mellitus (DM2) patients are at long-term risk of cardiovascular events and of microvascular complications that contribute to the burden of the disease. The objective is to identify the main factors directly associated to costs of DM2 care in Spain. METHODS: A systematic review of cost of disease studies published in English or Spanish between January 2001 and December 2011. A search of electronic databases [international and national] and hand search of reference lists of key publications was performed. A methodological quality assessment of reviewed publications applying the Center for Evidence Based Medicine (CEBM) 2007 tool was performed. All costs updated to € 2011. RESULTS: A total of 1505 articles were identified, 639 were excluded and 28 were retrieved. Total national health care expenditure intended for DM2 care in Spain was about €2,800 million per year. Direct costs varied between €851.23 and €9,882.80 per patient/year. Main cost drivers were: other pharmaceutical treatments different from antidiabetics (37.83%), hospital admissions (31.93%), medical visits (25.57%), and oral antidiabetics (46.7%). Severe and moderate hypoglycemias increased costs 174 and 8 times, respectively, compared to those episodes with no need of medical care. DM2 costs increased by 59.5% if the goal of HbA1c<7% was not reached; by 30% with obesity, and by 64.5% if disease related complications appeared. Each 10% raise in adherence to oral antidiabetic treatment represented a 2% to 4% reduction in DM2 costs. Levels of CEBM recommendation were 2c (16 studies), 3b (8 studies) and 4 (4 studies).

CONCLUSIONS: Main factors directly associated to costs of DM2 care in Spain were hypoglycemia, DM2 related complications, HbA1c control, obesity and treatment adherence. Strategies aimed to improve these factors would have a major impact on costs reduction.

OBESITY AND FREQUENT HYPOGLYCEMIA IN EUROPEAN TYPE 2 DIABETES PATIENTS

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OBJECTIVES: To examine the association between obesity and hypoglycemia in adults with type 2 diabetes (T2D), and assess whether hypoglycemic events (‘hypos’) and obesity are related to health care use among these patients in France, Germany, and the UK. METHODS: Data from the 2011 SEU National Health and Wellness Survey were used (n=57,512). All data were self-reported. T2D patients were grouped according to frequency of hypog by assuming assistance from others (moderate/severe hypog); those reporting moderate/severe hypog at least once weekly intervals, there were more users on shorter intervals with octreotide than lanreotide (15/46 [33%] vs 2/12 [17%] injected every 3 weeks or more frequently and 9/44 [19%] vs 5/12 [41%] in 1-3 months respectively). Based on similar dosing but longer injection intervals for lanreotide users, there appeared to be a 5% lower average cost per acromegalic patient treated with lanreotide over octreotide. CONCLUSIONS: The longer injection interval observed with lanreotide was accompanied by a lower number of injections potentially associated in reduced costs compared to octreotide. However, the patient numbers of this rare disease and the limited period of treatment stability limit the power to detect differences between preparations.