

## CONCLUSIONS:

Only the involvement of both, pharmaceutical companies and HTA bodies within a unified European framework can lead to a mature and transparent procedure with a reliable outcome independent of legal requirements.

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## VP182 Network Amongst The Health Technology Assessment Ecosystem

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### INTRODUCTION:

There has been a growing interest in international collaboration among Health Technology Assessment (HTA) organizations on macro, meso, and micro policy-making levels. Global member-driven professional HTA societies make contributions to scientific improvement and enhance interactions in the HTA ecosystem. However, little is known about collaboration between HTA organizations at the global level. This study intends to examine the main drivers of network relationships of HTA organizations.

### METHODS:

Social network analysis was used to ascertain the relationships between HTA organizations and to visualize the main drivers of collaboration. The total number of memberships of the HTA organizations of the *International Society For Pharmacoeconomics and Outcomes Research* (ISPOR), Health Technology Assessment International (HTAi), International Network of Agencies for HTA (INAHTA), EuroScan, European Network for HTA (EUnetHTA), HTAsiaLink, Red de Evaluación de Tecnologías en Salud de las Américas (RedETSA) were considered to create the network. Ten different types of HTA organizations were considered in the analysis including the Ministry of Health (MoH), university, for-profit, and hospitals. The

Fruchterman-Reingold algorithm was used to perform network analysis; average clustering coefficient and average path length were examined to measure collaborative performance.

### RESULTS:

A network graph of the HTA ecosystem shows the highest collaborative frequency in terms of HTA organizations, occurred with members of the Ministry of Health, government agencies, universities, and non-profit organizations. The average path length was 2.21 and the average clustering coefficient was 36.576 which indicates an obvious clustering effect.

### CONCLUSIONS:

These study results highlight that the network throughout the HTA ecosystem is driven by government organizations. Integrating the private sector into the system, creating common information and data sharing strategies, and improving the number of internationally experienced HTA professionals are essential strategies to foster collaboration in HTA organizations. As HTA is shaped by local dynamics and there is no gold standard for HTA implementation, encouragement of collaborative efforts is the only way to prevent duplication of effort and to make health technologies available for everyone.

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## VP184 A Cost Analysis Of Flash Glucose Monitoring Systems In Veneto Region

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### INTRODUCTION:

A novel, sensor-based, factory-calibrated Flash Monitoring System (FMS) has recently proved to be an effective alternative to conventional self-monitoring of blood glucose (SMBG) in patients affected by type 1 and

type 2 diabetes. The 14-days adhesive sensor, that continuously measures glucose levels in the interstitial fluid, can transfer glucose levels data to a handheld reader or a smartphone equipped with a specific medical app. The uptake of the new technology has been limited so far, because of its high costs. A cost analysis has been conducted to identify the optimal target population of introducing FSM in Veneto.

#### **METHODS:**

The model was designed with a 1-year time horizon for patients with diabetes using intensive insulin in Veneto region. The costs of the new technology was estimated using inputs from the two main randomized controlled trials (the IMPACT study and the REPLACE study) published in the international literature, Regional evidence-based guidelines and administrative database. Resource utilization included strips, lancets, needles, sensors, distribution and patients training. Regional unit costs were adopted.

#### **RESULTS:**

FSM has not shown so far relevant and statically significant benefits in terms of severe adverse events' reduction. Estimated yearly costs for a FSM user included glucose monitoring, technology training and distribution costs, for a total of EUR1277 per patient. The new technology has been shown to be affordable in diabetic patients with i) 4years<age<18years, ii) continuous subcutaneous insulin infusion and iii)  $\geq 5$  blood glucose monitoring per day.

#### **CONCLUSIONS:**

The Veneto Region should carefully consider prescribing extension to other diabetic patients categories, since the high cost of the new technology. A strict prescribing monitoring is strongly recommended with the aim of ensuring appropriateness and avoiding overspending.

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## **VP189 Hemolysis Induced By Modern Infusion Pumps During Blood Transfusion**

#### **AUTHORS:**

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#### **INTRODUCTION:**

Following a first field evaluation conducted in 2013, we found that hemolysis can be induced by infusion pumps during blood transfusion. Actually, limited data is available on the risk of hemolysis associated with the most used infusion pumps in Quebec hospitals: InfusomatSpace (peristaltic), Plum A+TM (piston) and ColleagueCXE (shuttle).

#### **METHODS:**

Staff from the blood bank and the Health Technology Assessment (HTA) unit in our hospital collaborated in 2016 to assess the hemolysis and potassium level (that is, a blood test sensitive to hemolysis) induced by the use of the three infusion pumps mentioned above. Measurements were taken for each pump at five flow rates, from 30 to 450 ml/hour, and were compared with measurements taken before using the pumps. Tests were conducted with 135 red blood cell (RBC) units. RBC units were aged from 10 to 28 days.

#### **RESULTS:**

The shuttle- and piston-type pumps resulted in low hemolysis levels. The peristaltic-type pump produced significantly more hemolysis. However, the absolute value of hemolysis remained within the range recommended by the regulatory agencies in North America and Europe. Potassium levels did not increase with the use of the pumps.

#### **CONCLUSIONS:**

The collaboration between the blood bank and the HTA unit led to the conclusion that modern infusion pumps