sulphadoxine-pyrimethamine in Ghanaian children. *PLoS One.* 2010:5(8):e12223. doi: 10.1371/journal.pone.0012223.

3. Nonvignon J, Aryeetey GC, Issah S, et al. Cost-effectiveness of seasonal malaria chemoprevention in upper west region of Ghana: *Malar J*. 2016 Jul 16;15:367. doi: 10.1186/s12936-016-1418-z.

### OP91 Health Technology Assessment On The Da Vinci Surgical System Using Real World Data In China

#### **AUTHORS:**

Yingpeng Qiu (stevenqiu215@163.com), Yue Xiao, Kun Zhao, Liwei Shi, Binyan Sui

#### **INTRODUCTION:**

The Da Vinci surgical system is classified as a type "A" medical device in China; the procurement plan of which is regulated by the National Health and Family Planning Commission (NHFP). Between 2010 to 2015, there were thirty-four Da Vinci surgical robots purchased, and installed in thirty tertiary public hospitals across the country. In order to generate context-specific evidence and support further capital funding decisions, the NHFP commissioned a Health Technology Assessment (HTA) of Da Vinci surgical robots, with a focus on real use of the technology in those tertiary public hospitals.

#### **METHODS:**

Nine hospitals were selected to collect real word data between 2013 to 2015. Using a cross-sectional survey, data of all robotic surgical cases were collected and described. The unit costs of the robotic surgery were estimated from activity based costing. We also collected cases of prostatectomy (427 versus 421) and hysterectomy (247 versus 105) using the robotic system and laparoscope respectively, and then compared hospital fees and effectiveness during hospitalization.

Simulation of the budget impact on health insurance in Shanghai City over the next 5 years was also performed.

#### **RESULTS:**

A full HTA was conducted based on real data from nine public hospitals in the central and eastern region. Based on a systematic review methodology, we appraised evidence on safety, effectiveness and cost-effectiveness of the Da Vinci surgical robot. Data on technology use, clinical management, and pricing and payment were collected through a cross-sectional survey and interviews of hospital managers, surgeons and nurses. We designed a cohort study on cost-effectiveness of Da Vinci-assisted prostatectomy and hysterectomy, comparing Da Vinci-assisted and laparoscopic prostatectomy (427 vs 421) and Da Vinci-assisted and laparoscopic hysterectomy (247 versus 105). Ethics and inequity issues were discussed based on patient interviews. A budget impact analysis was performed based on scenario mapping of promoting Da Vinci-assisted prostatectomy in Shanghai City over a 5-year timeline.

#### **CONCLUSIONS:**

Due to a lack of evidence on long-term clinical effectiveness and high impact on public finances, the Da Vinci robotic robot should not be procured in large numbers in China. For equipment purchasing the government should strengthen regulations and require the public hospitals to collect more evidence.

# OP92 Addressing Challenges Of Implementing A Health Technology Assessment Framework In South Africa

#### **AUTHORS:**

Jani Mueller (dbmueller7@yahoo.de)

#### **INTRODUCTION:**

South Africa is in the process of providing comprehensive health insurance to all its citizens, thus

paving the pathway for Health Technology Assessment (HTA) to play a significant role in provision of safe and effective healthcare. The National Department of Health (DoH) has a published framework and Health Technology Act and strategies since the 1990s to improve health outcomes, and service and delivery of care. The purpose of this study is to explore challenges faced in the implementation of the framework and policies.

#### **METHODS:**

The study will be based on review and analysis of health technology policies and legislations introduced in South Africa since the 1990s. These documents are available from the DoH archive. The review from this grey literature was supplemented by information collected from a self-completion questionnaire, which was distributed to key stakeholders. Respondents were identified by direct contact with ministries of health and professional bodies, and included health professionals from the public and private healthcare sector, for example, practitioners, experts from hospitals, and industry representatives. The questionnaire addressed issues pertaining to decision making regarding health service delivery and the status of HTA in the country.

#### **RESULTS:**

The framework lays out the strategy to facilitate appropriate utilization of health technologies and includes among others, an HTA section. Fragmented use of HTA or parts thereof has been observed in the public and private health care sector. Furthermore, the respondents pointed out that decisions on health technology can be political, institutional or professionally driven whereas they all agreed that a formal and institutional implementation of HTA would improve healthcare service.

#### **CONCLUSIONS:**

The goal to achieve universal health care provides an excellent window of opportunity for formal use of HTA in policy- and decision-making. However, (i) the inadequate number of trained professionals and education and training opportunities (ii) lack of awareness and understanding of the principles of HTA

and its impact on the improvement of health care are among the many challenges faced by the system. It has also been observed that national and regional champions can act as change agents and would have a snowball effect.

## OP93 Conditional Financing In Health Technology Assessment Practice: The Dutch Experience

#### **AUTHORS:**

Amr Makady (amakady@zinl.nl), Hugo Nijmeijer, Ard van Veelen, Anthonius de Boer, Hans Hillege, Olaf Klunger, Wim Goettsch

#### INTRODUCTION:

In 2007, the National Healthcare Institute (ZIN) initiated conditional financing (CF) of expensive hospital drugs as an example of conditional reimbursement schemes (CRS). CF is a 4-year procedure encompassing initial HTA assessment (T = 0) followed by additional data collection via outcomes research (separately assessing appropriate use & cost-effectiveness in routine practice) and re-assessment (T = 4). This study aims to review performance and experiences with CF in the Netherlands to date.

#### **METHODS:**

All dossiers for drugs that underwent the full CF procedure were reviewed. Using a standardized data abstraction form, two researchers independently extracted information on procedural, methodological and decision-making aspects (that is, related to implemented outcomes research, evidence assessment and appraisal). A scoring algorithm was used to assess all three aspects.

#### **RESULTS:**

Fourty-seven candidates were nominated for CF; fourty-four underwent T=0 assessments and eleven T=4 assessments. The procedure extended beyond 4 years for 10/11 candidates. For the eleven candidates,