

## Abstract 4CPS-193 Table 1

| Service                        | Inpatient n= | Outpatient n= |
|--------------------------------|--------------|---------------|
| Dialysis                       | 30           | 19            |
| Transplant                     | 26           | 18            |
| Polypharmacy review            | 30           | 16            |
| Targeted CKD medication review | 28           | 15            |

While responses to most TDF items relating to clinical practice were positive, the majority (n=24) disagreed that they had sufficient time to practise their role.

For prescribing, 16 of the 24 active NMPs were prescribing daily, six weekly and only one ad hoc. They were prescribing in all renal conditions (n=13), dialysis (n=11), transplantation (n=10), anaemia (n=7) and bone mineral disease (n=6). TDF items for prescribing were mostly positive but (n=11) disagreed that they had sufficient time to practise.

**Conclusion** Results of this survey indicate high levels of complex clinical practice including widespread NMP activity, demonstrating development of practice, including prescribing, since the previous systematic reviews.<sup>1 2</sup> Qualitative research is required to provide further in-depth insights to practice.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

4CPS-194

#### CLINICAL IMPACT OF GENOMIC BIOMARKERS PREDICTORS OF RESPONSE AND THE THERAPEUTIC STRATEGY IN PATIENTS WITH MYELODYSPLASTIC SYNDROME ASSOCIATED WITH DEL(5Q)

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**Background** According to OMS-2016, myelodysplastic syndrome (MDS) associated with del(5q) is manifested by a transfusion-dependent progressive bone marrow failure, with Lenalidomide acting as the intended drug to treat this syndrome.

**Purpose** To analyse the clinical impact of the directed risk-stratification therapy and to evaluate the clinical benefit associated with the discontinuation of the Lenalidomide treatment due to side effects or intolerance.

**Material and methods** Three-year prospective observational study on 69 cases of MDS in a third-level hospital, 17 of them with del(5q). Mutational profile analysis using a Next Generation Sequencing (NGS) on a panel of 28 genes mutated in haematologic malignancies prior to Lenalidomide treatment decision-making, with TP53 mutation as ultra-high-risk profile for discouraging its use. Variables considered: beginning of treatment, Lenalidomide mean dose, ending of treatment and beginning of discontinuation, side effects, time after

discontinuation, evaluation of the drug withdrawal response and cost savings.

**Results** Sixty-nine MDS cases were analysed by NGS. Mutational risk profile: high (six), low (21), intermediate (18), very high (seven) and very low (17). Seventeen cases were detected as MDS associated with del(5q) and five of them showed positive TP53 mutation and were treated with hypomethylating agents instead of Lenalidomide. Seven of them showed DNMT3A, ASXL1, SF3B1 and TET2 mutations. Eleven patients were treated with Lenalidomide, the treatment was discontinued in six of them due to side effects and the dose reduced in three cases due to intolerance. Reported side effects: Grade 4 neutropaenia, rhabdomyolysis, erythematous reactions and haemolytic crisis. All patients in which Lenalidomide was discontinued, maintained complete haematological and cytogenetic response, reaching a mean monitoring time of 12 months since the withdrawal of Lenalidomide. The cost saving associated with the discontinuation of Lenalidomide 10 mg was € 48 000 per patient per year.

**Conclusion** The use of NGS permits the selection of the mutational profile of each patient, resulting in a change in therapeutic decision-making, the selection of more cost-effective drugs and a directed and personalised treatment. Discontinuation of Lenalidomide, due to side effects or intolerance, involves a clinical benefit to those patients who maintain a complete haematological response after interruption of the treatment.

## REFERENCE AND/OR ACKNOWLEDGEMENTS

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4CPS-195

#### PHARMACIST INTERVENTIONS: THE SUCCESS OF AN ANTIMICROBIAL STEWARDSHIP TEAM

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**Background** Pharmacist involvement in antibiotic stewardship helps to ensure compliance with the standards set by the National Health Service. Collection and evaluation of antimicrobial utilisation data are important for assessing the impact of antibiotic stewardship intervention in hospitals.

**Purpose** Reduce number of inappropriate prescriptions, duration of antibiotic therapy and, therefore, decrease the antimicrobial resistance.

**Material and methods** Prospective study in a single centre. The antibiotics prescriptions between June 2015 and February 2017 were screened by a pharmacist who checked all prescriptions and sent to the antimicrobial stewardship physicians the ones without approval of therapeutic protocols or analytical results. Statistical analysis was performed using R Studio 3.5.1 (5% significance level).

**Results** We identified 1242 patients with mean (SD) age of 67.9 (16.6) years and 54.5% males, resulting in 1027 prescriptions of carbapenems (67.2%) and 502 prescriptions of quinolones (32.8%). The most common site of infection was the urinary tract, accounting for 28% of prescriptions. According to the prescribed therapeutic intervention, 261 (17%)

were empirical prescriptions, 518 (33.9%) inappropriate prescribing, 489 (31.9%) documented and 258 (16.8%) were according to the protocol approved by the institution. The physician's acceptance of pharmacy interventions was 52.5%. The mean treatment duration varied according to type of prescription: 9 days for documented prescription; 8.1 days for empirical prescriptions; 6.3 days for prescriptions according to protocol; and 5.5 days for inappropriate prescriptions ( $p=0.0001$ ). The interventions reduced the mean duration of therapy: 5.5 days for prescriptions with intervention and 7.6 days for the ones without ( $p<0.0001$ ). It was found that in 652 prescriptions with microbial isolates, 369 were multidrug-resistant microorganisms (24.1%). Patients who were discharged early with antibiotics for ambulatory care (21.7%) had lower mean duration of treatment (5.8 days) and a lower proportion of multidrug-resistant strains (42.5%) than patients who were discharged without antibiotics (56.6%; 7.7 days and 62.9%) or patients who died (14.6%; 7.1 days; 52.2%) ( $p=0.0001$ ).

**Conclusion** Pharmacy-driven interventions could be a strategy for decreasing costs with human resources associated with antimicrobial stewardship due to the effective screening of antibiotics prescriptions. Investment in the surveillance results in early hospital discharge with a shorter length of antibiotic treatment with a consequent decreasing of multidrug-resistant strains.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Exigo Consultores.

No conflict of interest.

#### 4CPS-196 ABSTRACT WITHDRAWN

#### 4CPS-197 DETERMINING THE NECESSARY COMPONENTS OF A PHARMACEUTICAL CARE COMPLEXITY SCREENING TOOL: AN E-DELPHI STUDY

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**Background** With increased pressure on clinical pharmacy services there is a demand for reliable screening tools to appropriately allocate pharmaceutical care to those patients with most urgent and/or complex needs. Several such tools have been developed, however, they are often locally developed with a lack of agreement on their components. To date, no broad consensual agreement of experts exists on valid components of a pharmaceutical care complexity screening tool in the adult hospital setting.

**Purpose** To obtain consensus on the necessary components of a pharmaceutical care complexity screening tool for use on admission to hospital.

**Material and methods** Complexity tool components were identified and refined in three phases: first, a systematic literature review was conducted to identify existing tools and their components. Second, a national survey and semi-structured telephone interviews identified non-published tools and their components. The obtained components from phase I and II were reviewed by the research team and an expert reference group to remove non-clinical factors and duplicates. Third, an expert Delphi panel, including international leading pharmacists, researchers and clinicians, was recruited by email to take part in a two-round Delphi study. Items were scored. The panel were asked to rank each component according to importance via a web-based anonymised electronic questionnaire using a nine-point Likert-scale. Consensus was set at 67%: items that 67% of people deemed to be important were listed. Ethical approval was not required.

**Results** Forty-one invited experts joined the panel and completed round one, and 33 of them completed the second round. One-hundred and nine of the complexity tool components were initially identified and validated by the panel. After two Delphi rounds, 92 components (84.4%) achieved the limit of agreement for importance. These were grouped into three component types (demographic, clinical-related and medication-related) and reduced to 31 items for inclusion into a screening tool.