diagnostics and therapies, local availability of medical, surgical and radiological treatment as well as a stable online video connection. The iMDTB has a significant impact not only on multidisciplinarity of cancer management in the cooperating institutions but also on social values and education of the participants.

Disclosures None.

| 139	**CENTRE OF HEREDITARY BREAST AND OVARIAN CANCER AT CHARITÉ – WHO PRESENTS FOR COUNSELING AND WHY?**

Malina Helms, Nanette Kalmbach, Caroline Neeb, Julia Kussmaul, Dorothee Speiser. *Charité – Universitätsmedizin Berlin*

Introduction/Background Since the discovery of the BRCA-genes the knowledge about genetic risk factors for breast and ovarian cancer has multiplied. About 5–10% of all breast cancers and 15–20% of all ovarian cancers are caused by pathogenic mutations in different risk genes. Therefore, the Centre of Hereditary Breast and Ovarian Cancer at Charité offers as one of 20 centres in Germany genetic counseling. The extensive data of the counselees was now evaluated for the first time. The aim of this study was to ease the preparation for counseling sessions and gather information for more individualized counseling.

Methodology Data from 2531 counselees at the Charité-Centre from 2016 and 2017 were evaluated retrospectively. Special emphasis was laid on sociodemographic data and the results of genetic testing. Finally, the mutation frequencies were analyzed in different subgroups.

Results The 2531 counselees were almost exclusively female (n = 2493; 98.5%), 42.9 years old on average and came to the centre for the first time (n = 2198; 86.8%). 2287 (90.4%) counselees met the inclusion criteria for genetic testing. Of these, 863 (37.7%) were already diagnosed with breast or ovarian cancer. 1367 (59.8%) were genetically tested, 918 (67,2%) as index patients and 449 (32,8%) predictively. Mutations were detected in 545 (39.9%) tested persons. Most mutations were detected in BRCA1, BRCA2, CHEK2 and ATM. The highest mutation frequency was found among persons from families with both breast and ovarian cancer and in
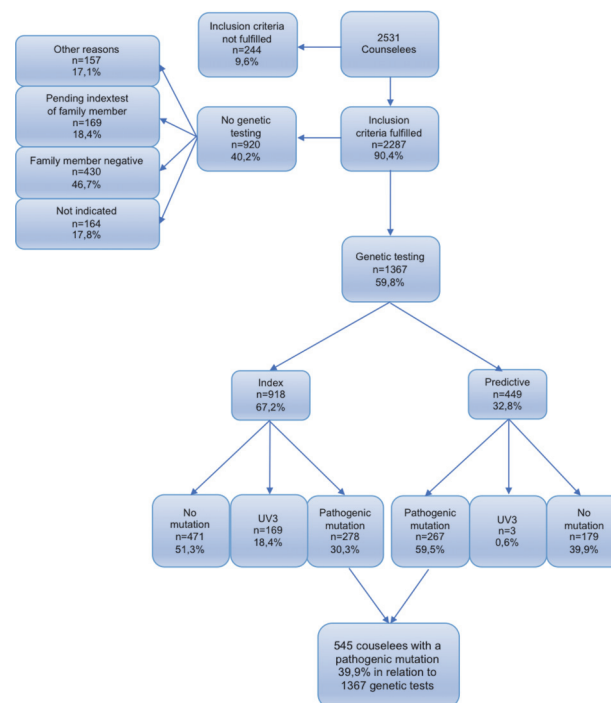
Abstract 139 Figure 1 Flow chart of the results of the genetic testing

patients with TNBC. A significant correlation was found between mutation frequency in TNBC and age at first diagnosis (figure 1).

Conclusion In summary, the collective of counselees at the Charité- Center was described for the first time. The results provide doctors with a comprehensive overview of the counselees, enabling by that an even more individualized counseling and more focused preparation for the consultation.

The findings contribute to maintaining the high quality of the genetic counseling at the Centre for Familial Breast and Ovarian Cancer at the Charité (table 1).

Disclosures No conflict of interest.

Abstract 139 Table 1 Cancer specifics and age at first diagnosis

	Counselees who met the inclusion criteria	
	n=2287	(100%)
Malignant tumor disease		
No tumor	1387	(60,6%)
Breast cancer	787	(34,4%)
ER/PgR/HER2-positive	562	(24,6%)
triple-negative	180	(7,9%)
DCIS	41	(1,8%)
male breast cancer	4	(0,2%)
Ovarian cancer	76	(3,3%)
Other malignant tumor disease	37	(1,6%)
Age at first diagnosis, mean in years		
Breast cancer	44,4	(24-83 years)
Ovarian cancer	50,8	(17-75 years)

241	**WHEN MDT INTERDISCIPLINARITY ENHANCES STRINGENCY AND PROFESSIONAL QUALITY; AN ANALYSIS OF MULTI-DISCIPLINARY TEAM CONFERENCES**

[1]Sigrid Kasper Fog, [1]Lene Lundvall, [2]Rikke Hagemann-Madsen, [3]Pernille Dehn, [4]Jens Hillingsø, [5]Lone Nørgård Petersen, [6]Jon Asmussen, [7]Michael Borre, [8]Torben Riis Rasmussen, [9]Merete Watt Boolsen. [1]*Copenhagen University Hospital; Gynecological Department;* [2]*Lillebaelt Hospital; Department of Pathology;* [3]*University Hospital of Copenhagen; Gynecological Department;* [4]*University Hospital of Copenhagen; Surgical Gastroenterological Department C, Abdominal Center;* [5]*University Hospital of Copenhagen; Department of Oncology;* [6]*University Hospital of Odense; Radiology Department;* [7]*University Hospital of Aarhus; Urology Department;* [8]*University Hospital of Aarhus; Pulmonary Medicine Department;* [9]*University of Copenhagen; Department of Political Science*

Introduction/Background In 2016 the Danish Multidisciplinary Cancer Group's (DMCG) national Multidisciplinary Team (MDT) working committee established recommended quality standards in Danish healthcare.

This current study investigates the status of implementation of the guideline published in 2016 amongst the clinicians who

now manages and carry out the developed guideline at the MDT conference. The aims are to identify challenges and successful initiatives based on individual experiences and to point out areas of development within the MDT conference.

Methodology The study is conducted as a social scientific questionnaire using the complexity theoretic model by Ralph Stacey, designed using MSC (Most Significant Change technique) which focusses on development and dynamics in organizations that are constantly and rapidly changing. 618 participants were identified and invited by either their own MDT leader or by a contact person appointed by the chairman of the cancer group.

Results Answers were calculated using selective coding resulting in themes leading to the following outcome: The MDT conference is a well-established part of clinical practice, and are perceived as significant, qualified and qualifying; Measures that can further qualify the conference decision include more time for the task; A spinoff effect is identified on the conference participants' social and professional relationship, which are developed, valued and supported in relation to the meetings

Conclusion Multiple opportunities for improvement and future development potentials are presented in this article

Disclosures The authors have nothing to disclose. ICMJE forms signed.

Funding and Trial registration

Funding by the Danish Multidisciplinary Cancer Group (DMCG) and the Danish Cancer Collaboration Center (DCCC)

334	**TESTING PREDICTION ACCURACY OF IDEAL AND PROLONGED LENGTH OF HOSPITAL STAY FOLLOWING OVARIAN CANCER CYTOREDUCTION USING MACHINE LEARNING METHODS**

[1]Alexandros Laios, [2]Camilo De Lelis Medeiros-de-Morais, [1]Yong Tan, [3]Gwendolyn Saalmink, [1]Mohamed Otify, [1]Amudha Thangavelu, [1]Richard Hutson, [1]David Nugent, [4]Kassio Michell Gomes de Lima, [1]George Theophilou. [1]*St James's University Hospital; Leeds Teaching Hospitals; Gynaecologic Oncology*; [2]*School of Pharmacy and Biomedical Science; University of Central Lancashire*; [3]*St James's University Hospital; Research and Innovation Centre*; [4]*Federal University of Rio Grande Do Norte; Chemistry*

Introduction/Backgroun Cytoreductive surgery for advanced high grade serous ovarian cancer (HGSOC) patients to achieve complete removal of all visible disease often requires prolon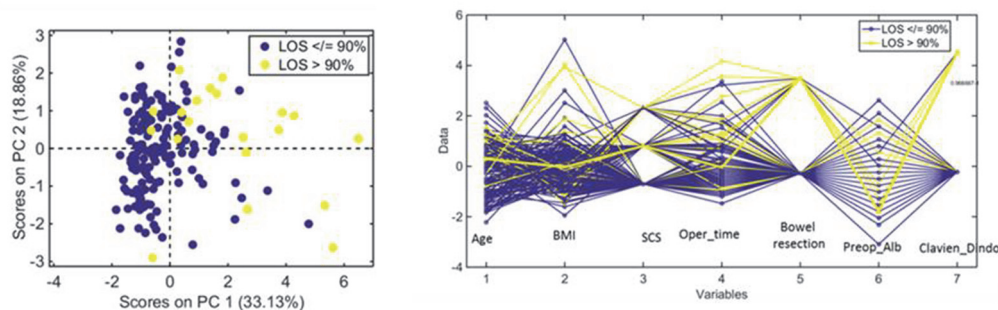ged surgical time and possible multi-visceral resection potentially necessitating HDU support and prolonged hospitalisation. Length of stay (LOS) has been suggested as a marker of quality or effectiveness of short-term care. Identifying modifiable risk factors at admission predicting LOS could lead to appropriately targeted interventions to improve the delivery of care. Modern data mining technologies such as Machine Learning (ML) could be helpful in monitoring hospital stays to improve standards of care. We aimed to improve the accuracy of predicting both ideal and prolonged LOS, by use of ML algorithms.

Methodology A cohort of 176 HGSOC patients, who underwent surgical cytoreduction, from Jan 2014 to Dec 2017 was selected from the ovarian database. They were randomly assigned to 'training' and 'test' subcohorts. ML methods including Linear Discriminant Analysis (LDA), Support Vector Machine (SVM), Decision-Tree-Analysis, and K-Nearest Neighbors were employed to derive predictive information for LOS from selected variables including age, BMI, Surgical Complexity Score (SCS), operative time, preoperative albumin and morbidity score (Clavien-Dindo 3–5). These methods were tested against conventional linear regression. The accepted 'ideal' LOS was deemed to be 5 days or fewer. Prolonged LOS was defined as time spent in the hospital beyond the 90th percentile. Through the introduction of the Enhanced Recovery after Surgery (ERAS) pathway in 2015, effort was made to shorten the LOS for patients following major surgery, whilst still assuring they received effective treatment and high-quality care.

Results Mean and median LOS was 4.6 and 4.0 days (IQR 0–38), respectively. The delayed LOS group consisted those staying 10 days or longer. The rate of ideal LOS continuously improved for every year from 32% in 2016 to 73.5% in 2019 despite increasing mean SCS. For ideal LOS prediction accuracy, ML slightly outperformed conventional logistic regression, with no bowel resection and operative time been the most predictive variables. For prolonged LOS, LDA and SVM were more accurate to predict prolonged LOS than conventional regression. Bowel resection and Clavien-Dindo complications were most importantly contributing to the improved accuracy of the model (figure 1).

Conclusion Predictive ML algorithms may facilitate quality improvement of modern care by improving prediction accuracy for ideal and prolonged LOS. They more accurately identify potentially modifiable factors delaying hospital discharge, which may further inform services performing root cause analysis of LOS.

Disclosures No disclosures.

Abstract 334 Figure 1