**Conclusions:** This study suggests that our learning management system, using Facebook network, has been well adopted by the medical students with a high rate of daily participation. Despite the short time spent on the formation (50 seconds per MQC), the program already showed its educational efficiency, especially for the most diligent students. Modernization of medical students' formation using social networks should be explored and considered.

### P284

#### Can digital pre-consultation save medical time and improve outcome in cardiology?

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Waiting time for cardiology consultations is constantly increasing and can compromise the diagnosis and treatment of urgent cases. Pre-entering patient data using digital e-health tools may optimize and modify the care path and potentially increase the available medical time.

**Objectives:** Our goal was to analyze the patient's information before the medical appointment (symptoms, cardiac risk factors, previous cardiac tests results – Figure). In addition to the feasibility assessment, we aimed: (1) to estimate the average time saved for each consultation, (2) to test whether this digital data could modify the medical decisions.

**Methods:** We used a web-based interface allowing patients to report their data and calculate a risk score. 75 consecutive new patients scheduled in our outpatient clinic were included. The total list of questions was composed of 48 items (Figure). For this study, the referent cardiologist: (1) timed the duration of each questionnaire, (2) marked the number of answered questions, and (3) reported if the early analysis of patient's information would change the healthcare path (identification of a possible urgent case or prescription of an additional test prior to the scheduled consultation).

**Results:** Patient age averaged 54 years (SD ±9 years) and 63% were men. Data availability is summarized in Figure. For each patient, an average of 27 questions was reported ( $56\pm9\%$  of total). The time necessary for each patient's questionnaire was 5 min 10 sec ( $\pm1$  min 06 sec). For an average of 1800 consultations/year/cardiologist, this potentially represents 160 hours of extra medical time, and 320 extra consultations per year and per cardiologist.

Furthermore, the early data analysis allowed the referent cardiologist to identify in this population 20 patients (27%) who would benefit from an additional test prior to consultation, including 5 high risk patients with suspected coronary disease. However, the majority of patients needed assistance to complete the requested

DATA	Questions (N)	Data available (%) 100 %	
SYMPTOMS	3		
SMOKING	3	100 %	
HYPERTENSION	3	100 %	
CHOLESTEROL	4	98 %	
DIABETES	4	100 %	
WEIGHT	2	97 %	
FAMILY History	3	98 %	
PERSONAL History	4	97 %	
SLEEP APNEA	2	89 %	
RENAL Failure	2	66 %	
STRESS	1	59 %	
EXERCICE	1	95 %	
FOOD	1	95 %	
ALCOHOL	2	97 %	
ERECTILE Dysfunction	1	2 %	
RHEUMATIC Disease	1	75 %	
HIV	1	52 %	
GEOGRAPHY	2	87 %	
ECHOCARDIOGRAPHY	3	77 %	
STRESS Test	3	89 %	
ARTERIAL DOPPLER	2	67 %	

**Conclusions:** (1) Digital pre-consultation can significantly reduce each medical examination and increase the available medical time. (2) If analyzed beforehand, this data combined with artificial intelligence algorithms can change the care path and may influence prognosis. (3) Improved ergonomics, interface and user experience are important issues to ensure effective use of e-health platforms and data quality. (4) the pre-consultation process may be coupled and enhanced using complementary teleconsultation.

## ATRIAL FIBRILLATION, STROKE AND CARDIOVASCULAR RISK

#### P285

Comparison of analysis methodologies for net outcome with edoxaban vs warfarin in patients with atrial fibrillation in the ENGAGE AF-TIMI 48 trial

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**Background:** Trials comparing vitamin K antagonists (VKAs) with non-VKA oral anticoagulants (NOACs) have evaluated efficacy and safety separately; there is no consensus on how to weigh components of a net clinical outcome (NCO).

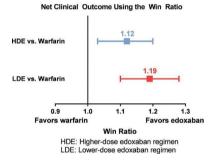
**Methods:** We compared higher-dose (HDE) and lower-dose (LDE) edoxaban regimens with warfarin using the Win Ratio approach of a NCO consisting of death, efficacy, and safety endpoints in 21,105 patients enrolled in ENGAGE AF-TIMI 48. The priority of endpoints was assigned by the fatality rate of 4 groups of events: death (100%); hemorrhagic stroke (45%); ischemic stroke, subdu-ral/epidural hematoma, systemic embolism (18%); other major bleed (5%). All possible patient pairs between treatment groups were compared (>49 million per treatment-group comparison), and a "loss" was defined as the patient who first had an event, starting with death and if neither died, then moving on to the other events sequentially. The Win Ratio was calculated as wins/losses, with a Win Ratio to >1 favoring the edoxaban regimen and a Win Ratio of <1 favoring the warfarin regimen.

**Results:** Both HDE and LDE were significantly better than warfarin with Win Ratios of 1.12 for HDE and 1.19 for LDE vs warfarin (Figure). There was no significant difference between HDE and LDE. The endpoints that contributed the most to the favorable Win Ratios were death (for both HDE and LDE) and other major bleeds (LDE, Table).

#### Contribution Indices

Comparison	HDE vs. Warfarin		LDE vs. Warfarin	
	Win index	Loss index	Win index	Loss index
Death	0.31	0.28	0.32	0.27
Major bleed	0.14	0.13	0.14	0.09
Other*	0.07	0.06	0.07	0.09
Hemorrhagic stroke	0.02	0.01	0.02	0.01

\*Other = Ischemic stroke, SEE, or subdural/epidural bleed. Win or Loss index = total wins or total losses due to event/total wins and losses.



**Conclusions:** Using a hierarchical approach to evaluate a NCO that combined death, efficacy, and safety events in ENGAGE AF-TIMI 48, both regimens of edoxaban were superior to warfarin.

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#### P286

# Safety and effectiveness of dabigatran relative to warfarin in routine care: final results from a long-term monitoring program

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**Introduction:** Randomized controlled trials (RCTs) are considered the goldstandard study design and form the basis for approval of prescription drugs. However, RCTs often include a selected study population and may not be reflective of routine care

**Purpose:** To demonstrate the utility of a continuous long-term monitoring program to study the safety and effectiveness of dabigatran compared to warfarin in routine care after its US market approval in October 2010 using 2 US healthcare insurance claims databases (MarketScan and Clinformatics) in patients with non-valvular atrial fibrillation

**Methods:** We implemented a cohort design with propensity score (PS) matching to compare initiators of dabigatran and warfarin between October 2010 and September 2015. The first analysis covered the interval October 2010- December 2012 with subsequent analyses covering 6-month intervals accumulating additional data each time. We used proportional hazards regression to monitor the primary outcomes of hospitalization for hemorrhagic and ischemic stroke, and hospitalization for major bleeding (intracranial and extracranial bleeding). Patients were followed until switch or discontinuation of the anticoagulant, occurrence of an outcome event, or disenrollment. Numerous subgroup and sensitivity anal-