

answers will be presented in suitable formats, which may include charts, tables, numerical cards, or any other relevant formats based on the given questions.

CONCLUSIONS: By utilizing a collection of software services, apps, and connectors, we were able to translate 8 years of clinical information into visually engaging, interactive, and coherent information. This information can be easily assessed by end users, including administrators, providers, and clinical staff. When combined with AI core technology and interface, these modules enable the user to easily uncover data-driven insights to improve patient care quality and transform operations and outcomes.

IMPACT STATEMENT: To our knowledge, this is the first model to leverage generative AI like ChatGPT into Power BI for IVF clinic. The model creates a user-friendly interface that allows administrators and providers to easily gain insights into operations and performance using natural language, without having to manually compile codes or create data analytics.

SUPPORT: No financial support was obtained for this project.

REFERENCES:

1. The OpenAI Api. Greg Brockman. <https://openai.com/blog/gpt-3-ai-language-model/>
2. Microsoft Power BI 2023 Release Note. What's new in the latest Power BI update - Power BI | Microsoft Learn.

P-50 11:50 AM Monday, October 16, 2023

FROM FRUSTRATION TO FERTILITY: A LOOK AT HOW PATIENTS' ACTIVE ENGAGEMENT TRANSFORMS THEIR FERTILITY CARE JOURNEY.



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OBJECTIVE: The purpose of this study was to determine the differences in parameters of patient engagement in care comparing patients who are discharged to obstetrical care with an ongoing pregnancy to patients who discontinue treatment without achieving a pregnancy.

MATERIALS AND METHODS: A retrospective cohort study of all new patient visits at a single university-affiliated IVF center from 2019 to 2021 was performed assessing the time it takes from patients' first visit to various milestones in care including diagnostic work up (first physical exam where body mass index (BMI) is measured, anti-mullerian hormone (AMH) testing, measurement of antral follicle count (AFC), partner's semen analysis (SA), hysterosalpingogram (HSG), and saline sonogram (SIS)), and proceeding to treatment with intrauterine insemination (IUI), vaginal oocyte retrieval (VOR), and/or frozen embryo transfer (FET)). Comparison was made between those who were discharged to obstetrical care with an ongoing pregnancy of gestational age >8 weeks (n=7824) and those who discontinued care without achieving a pregnancy and were not seen for at least six months (n=7311). Patients who were seen in the six months prior to data collection were not included in either group as they were considered still to be engaged in care (n=966).

RESULTS: There were significant differences between those who were successful vs those who discontinued care regarding patients' age (33.6±4.2 vs 36±5.2 p<0.001), BMI (26.7±6.1 vs 28.6±7.5; p<0.001), AMH (4.4±4.7 vs 3.1±3.9; p<0.001), AFC (22±14.2 vs 17±13.1; p<0.001), partner's age (35±5.4 vs 37.9±6.7; p<0.001), and total motile sperm count (131M±124M vs 112M±115M; p<0.001), which were all controlled for in the subsequent linear regression analyses. When controlling for these variables, successful group had shorter time until patient's diagnosis (10.5 +/- 54.4 days vs 13.9 +/- 57.1 days; p = 0.03), and until partner's diagnosis (19.4 +/- 59.7 days vs 23.4 +/- 58.4 days; p = 0.03). However, time (days) until first physical exam, AMH and AFC testing, HSG, SIS, SA, IUI, VOR, or FET were not significantly different between the groups. On average, patients who reached successful discharge to OBGYN were in care for 277 days (SD±198 days). Their partners had their SA on average after 47d (SD±114d), they went to IUI after 108 days (SD±141d) or had their retrieval after 181 days (SD±179d) and their FET after 265d (SD±190d).

CONCLUSIONS: The patient's intrinsic characteristics are important to completion of the fertility journey, however time to patient and partner's diagnosis also affect the likelihood of continued engagement in care to suc-

cessful completion of the journey. Patients should be scheduled as quickly as possible in order to complete their care, however the time it takes for them to move through care beyond diagnostics does not predict their likelihood of success.

IMPACT STATEMENT: Time lapse between initial visit and treatment does not predict disengagement of care, but time to diagnosis is important in continuing patient engagement.

P-51 11:55 AM Monday, October 16, 2023

DEFINING TELEMEDICINE MEDICAL APPROPRIATENESS IN REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY (REI) AND ASSESS UTILIZATION OF TELEMEDICINE WITH CONSIDERATION OF TOP DIAGNOSIS.



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OBJECTIVE: To compare diagnostic codes used for telemedicine versus in-person office visits and examine impact of telemedicine on infertility practice volume for specific diagnoses in a Reproductive Endocrinology and Infertility (REI) clinic.

MATERIALS AND METHODS: Data sets from all REI visits over 3 fiscal years (2020-2022) were extracted and divided into two groups: office and telemedicine. International Classification Diseases (ICD) 10 and Current Procedural Terminology (CPT) codes for each visit were analyzed. Top diagnoses, patient growth rate and visits frequencies were analyzed for each group.

RESULTS: 37,129 visits were analyzed, of which 6,845 were conducted via telemedicine. We excluded CPT code 91212 (established outpatient visit, 10-19 minutes), the code is used for ultrasound monitoring visits, due to high volume and all scheduled as in-person visits. Top codes included 99203 (new outpatient visit, 30-44 minutes), 99204 (new outpatient visit, 45-59 minutes), 99205 (new outpatient visit, 45-59 minutes), 21213 (established outpatient visit, 20-29 minutes), 21214 (established outpatient visit, 30-39 minutes) and 21215 (established outpatient visit, 60-74 minutes). Reviewing top codes in 11,791 total visits (6,704 were telemedicine) a continuous growth rate was seen in telemedicine visits compared to office visits (11%, 73%, 71%, in 2020, 2021 and 2022, respectively). A similar trend was noted for CPT 99205, which is used for new patient consultations, (5%, 72%, 70%, in 2020, 2021 and 2022, respectively). Overall, infertility counseling and evaluation, recurrent pregnancy loss, polycystic ovary syndrome (PCOS), fertility preservation and irregular menstrual bleeding were the top 5 diagnoses.

CONCLUSIONS: Telemedicine visits can be used for a variety of diagnoses in REI practice. In order to achieve an efficient and easy access to care, both modalities should be offered to the patients.

IMPACT STATEMENT: Similar diagnostic codes were used for telemedicine and office visits in this REI practice. Using telemedicine, the total practice volume, and quality of patient care was not negatively impacted and growth of clinical volume continued.

Top Visit Diagnosis		Fiscal Year 20-22	Office	Telemedicine	Total
N97, Z31*	Female infertility, testing, counseling	24915	5089		30004
N96	Recurrent pregnancy loss	198	254		452
E28.2	PCOS	267	219		486
Z31.62, Z31.84	Fertility Preservation	236	111		347
N92	Irregular menstrual cycle	201	119		320
N91	Amenorrhea/ Oligomenorrhea	189	118		307
E28.3, E28.8, E28.9	Ovarian failure/ dysfunction	136	122		258
D25	Uterine Leiomyoma	86	52		138
N84	Polyp/Hyperplasia of uterus/cervix	93	45		138
N80	Endometriosis	76	61		137
N83	Ovarian cyst	94	23		117
Total		22491	6213		32704

*Including Z31.41, Z31.5, Z31.61, Z31.69, Z31.7, Z31.81, Z31.83, Z31.89, Z31.9