Increasing the Efficiency and Accuracy of Tracking Multiple Procedures in Cardiovascular Disease Fellowship Program

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Introduction

Utilizing the EPIC EMR system that interfaces with the imaging, ECG, and cath lab databases, reports of performed procedures are generated in a dashboard format on a monthly basis. These reports are then incorporated into a physician specific procedural log called a 'Procedural Tracking Report', an Excel worksheet that records the cardiovascular procedures performed by each fellow as required by the Accreditation Council for Graduate Medical Education during their three years of training.

Methods

XIM is the source for the cardiac cath lab and cardioversion information (A). Xcelera is the program and data source used for non-invasive imaging (B). Tracemaster is the source of the ECGs report (C). EPIC EMR is the parent database that contains the patient medical information. This is the data source for stress tests (D) (Figure 1). Utilizing Crystal Reports, the informational technology administrator designs the fields and reports structure. Utilizing the Business Objects program, the informational technology administrator implements the command to email the dashboards on a monthly basis to the program director, program administrator and fellows. The program administrator inputs the totals of procedures shown on the dashboard reports into an Excel worksheet designated for each fellow named the Fellow's Procedure Tracking Report (Figure 2).

Conclusion

The benefits are (1) patient information is attainable, measurable and documented within an EMR database, (2) information on the procedures is accurate and concise as well as searchable, (3) HIPPA patient confidentiality is maintained, and (4) considerable amount of time is saved by the fellows in recording and tracking their procedures.
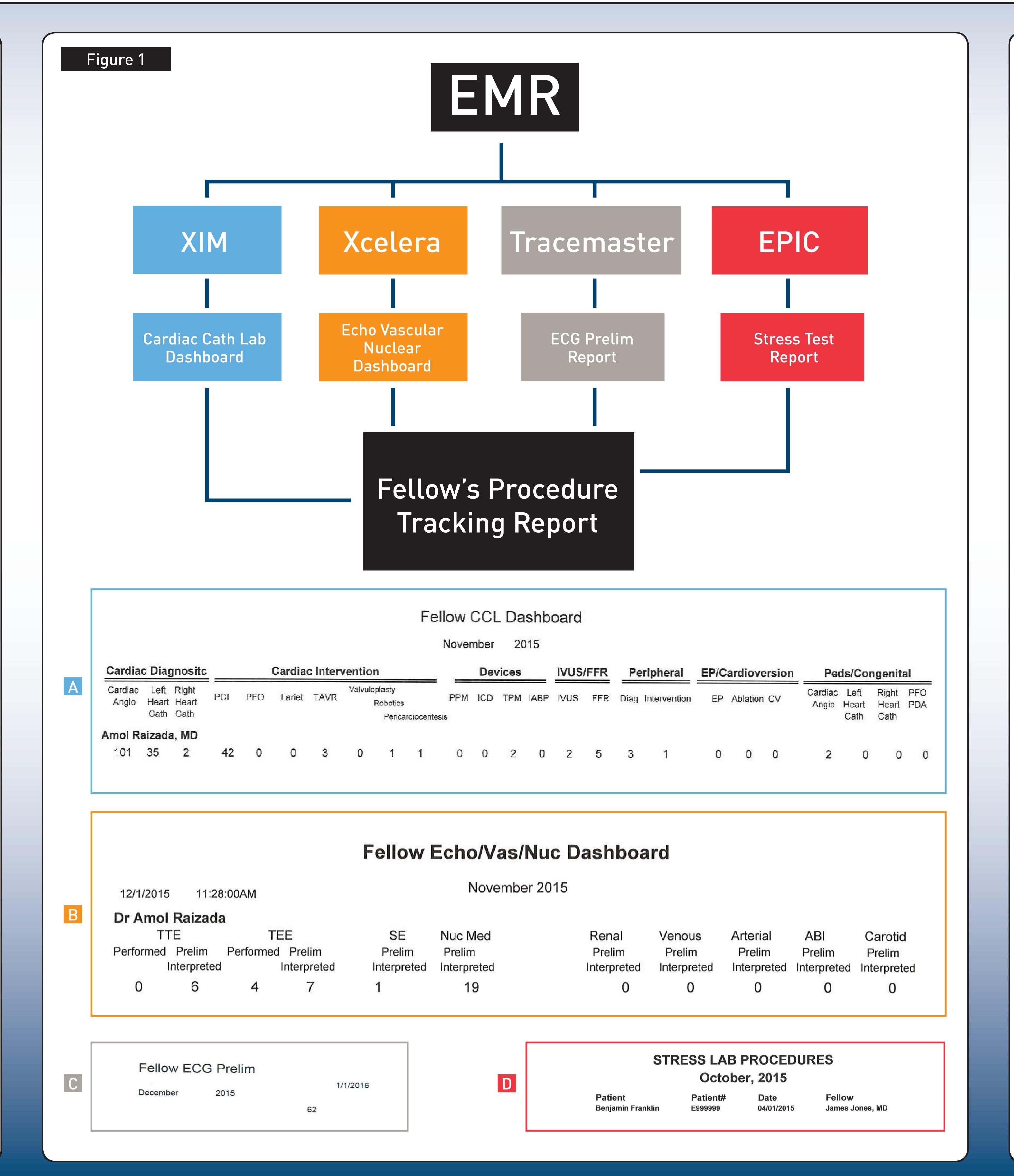
Figure 1

Figure 2

CARDIOVASCULAR DISEASE FELLOWSHIP PROGRAM – PROCEDURE TRACKING REPORT for Individual Fellow

FELLOW: James Jones, MD	TOTAL 2013-2014	TOTAL 2014-2015	TOTAL 2015-2016	TOTAL 2013-2016	ACGME REQUIRED	To Fulfill ACGME	Percentage Complete	CVDFP GOALS
Stress Test (Sanford ONE REPORT)		736	93	829	50	-779	1658%	200	***
TTE Performed	104	31	7	142	75	-67	189%	100
TTE Prelim Interpreted	475	440	88	1003	150	-853	669%	600
TEE Performed	70	93	21	184				100
TEE Prelim Interpreted	59	111	40	210				100
Stress Echo Prelim Interpreted	6	28	24	58				30
Nuclear Med Prelim Interpreted	194	287	72	553	100	-453	553%	300
Vascular -Renal Prelim Interpreted	0	0	12	12				
Vascular - Venous Prelim Interpreted	0	0	19	19				
Vascular- Arterial Prelim Interpreted	0	0	11	11				
Vascular - ABI Prelim Interpreted	0	0	5	5				
Vascular - Carotid Prelim Interpreted	0	0	30	30				
Stress ECHO (NI)	0	17	29	46				
Stress Test Perform (NI)	72	306	0	378				***
Holter Monitor (NI)	8	1	0	9	20	10	50%	20
Cardiac Event Recording (NI)	1	0	0	1				
Cardioversion (NI)	8	12	0	20	10	-10	200%	20	***
Coronary CT Angiogram (NI)	7	36	9	52	30	-22	173%	30
Coronary CT Angiogram Performed (NI)								50
Cardiac MRI (NI)	1	0	0	1				10
MUGA (NI)	0	0	0	0				
Vascular -Renal Artery Dopper (NI)	0	3	0	3				
Vasular - Lower Extremity Venous Doppler (NI)	0	5	0	5				
Vascular - Upper Extremity Arterial Unltrasound (NI)	0	0	0	0				
Vascular- Lower Extremity Arterial Ultrasound (NI)	0	5	0	5				
Vascular - ABI (NI)	0	2	0	2				
Vascular - Carotid Ultrasound (NI)	0	18	0	18				
EKG (Preliminary Interpretation) Clinic and Hospital	183	534	551	1268	3500	-6	100%	3500
EKG Heart Screening Interpretations-SHH (sheets)	1094	409	735	2238				
Coronary Angiogram	313	460	334	1107	300	-807	369%	300
Left Heart Cath	144	149	118	411				300
Right Heart Cath	18	12	11	41				50
PCI	106	157	119	382				
PFO	3	2	1	6				
Lariet	0	0	0	0				
TAVR	4	9	5	18				
Valvuloplasty	1	0	0	1				
Robotics	5	11	1	17				
Pericardiocentesis	8	2	1	11				
PPM (programming and follow-up surveillance)	2	1	1	4				
ICD	2	0	0	2				50
TPM	12	13	7	32				10
IABP	3	0	2	5				
IVUS	5	12	7	24				
FFR	7	11	16	34				
Peripheral Diagnostic	1	5	6	12				
Peripheral Intervention	2	2	3	7				
EP Studies	8	19	3	30				
Ablation	2	5	1	8				
Cardioversion	14	6	0	20	10	-10	200%	20	***
Cardio Angiogram	5	7	5	17				
Left Heart Cath	0	0	1	1				
Right Heart Cath	0	0	1	1				
PFO PDA	1	0	1	2				

Disclosure Information

None of the authors have any conflicts of interest to report.