PROJECT FOR EARLY IDENTIFICATION OF PATIENTS WITH CKD AIMED TO AVOID PREVENTABLE ESRD

Nick Richards[1], Mohamed Hassan[2], Abdul K. Saleh[2], Hormazdiar Dastoor[3], Bassam Bernieh[4],Samra Abouchacra[4], Omar Al Jabri[5], Alan Fleischmann[5], Marie Richards[1], Daniele Marcelli[6]
[1]SEHA Dialysis Services, [2]Sheikh Khalifa Medical City, [3]Al Mafraq Hospital, [4]Tawam Hospital, Medicine, [5]Ambulatory Health Services, Abu Dhabi, United Arab Emirates, [6]Fresenius Medical Care, Epidemiological Research, Bad Homburg,

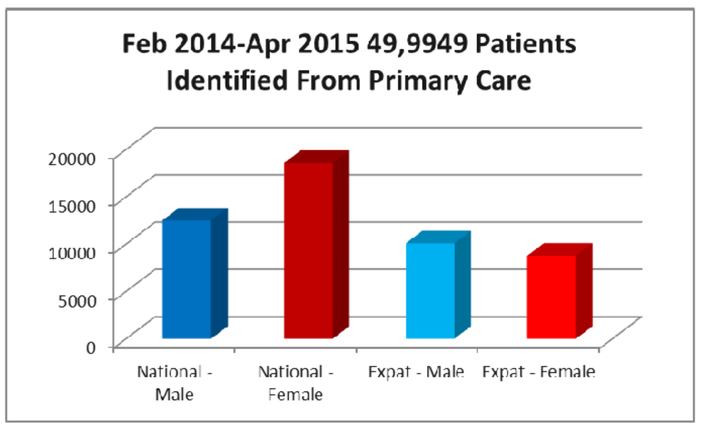
OBJECTIVES

Many factors such as uncontrolled hypertension, diabetes, proteinuria and abuse of non-steroid anti-inflammatory drugs are well known to accelerate the renal deterioration rate. Patients with CKD are often not detected by primary health care, so missing the option to delay or stop the progression of renal disease at an early stage. The aim of this study is to evaluate a systematic approach to identifying patients with CKD in the general population and to promptly apply basic recommendations to decrease the burden of ESRD.

METHODS

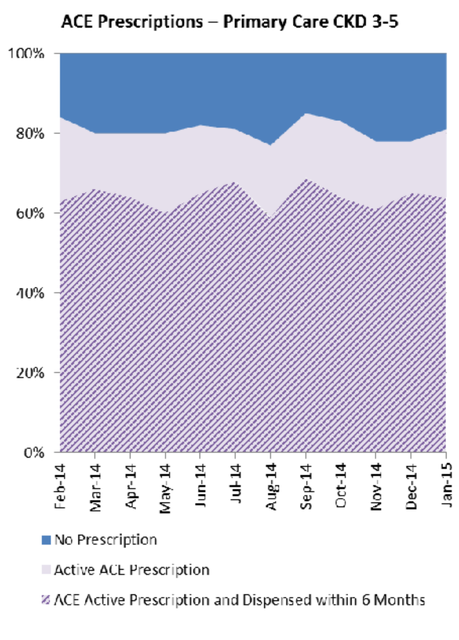
This project was lunched in Abu Dhabi on February 1, 2014 it is based on an integrated follow-up of demographics, presence of diseases (codified by ICD9), blood pressure detected during visits, labs and prescriptions. SEHA, the Abu Dhabi health service delivery company, has a single unified IT system containing all clinical measurements made in its laboratories and clinical data recorded at any contact with primary or secondary care. The system automatically estimates renal function according to the CKD EPI equation for any creatinine estimation. An imbedded algorithm (based on the 2013 KDIGO guidelines for CKD) and on line decision support suggests, in the case of patients with CKD 3-5, the discontinuation of NSAIDs, the prescription of ACE inhibitors or angiotensin receptor blockers, strict blood pressure control and strict glucose control in diabetics. Lipid-lowering therapy is recommended in patients over 50 years of age or in younger patients with diabetes or vascular disease. Referral to nephrology care is suggested based on a number of criteria.

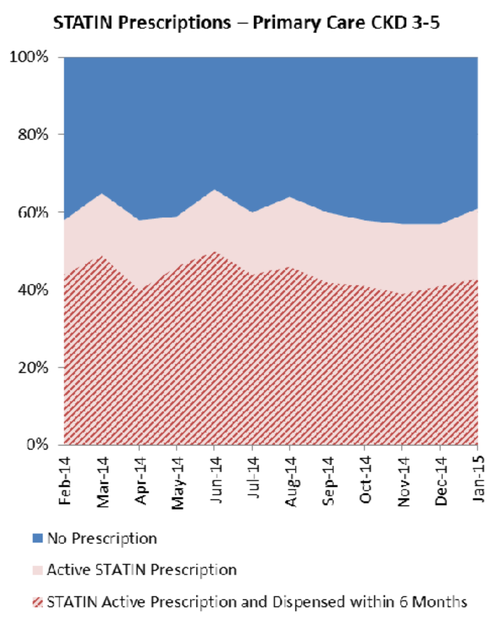
RESULTS

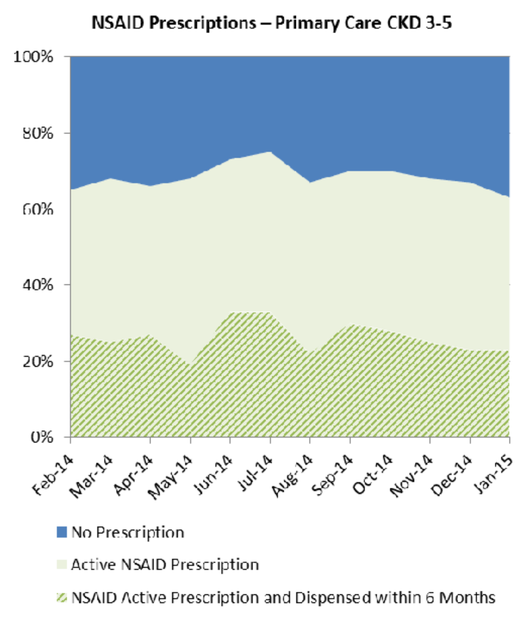


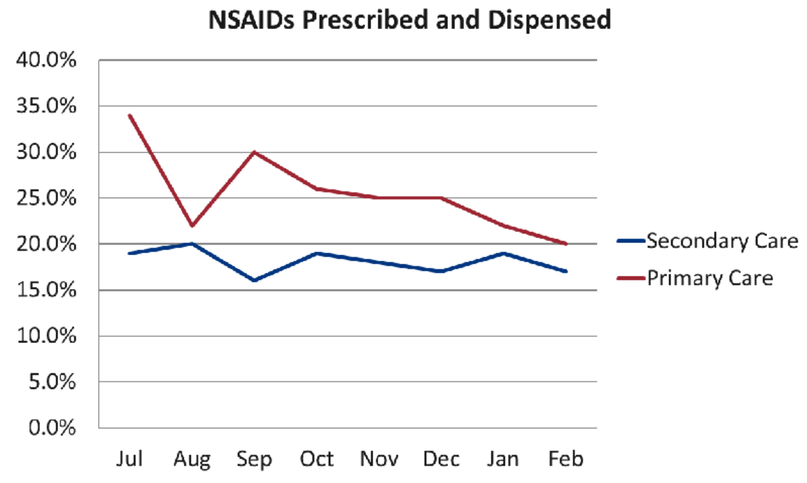
Primary Care Patients (Feb-14 - Apr-15) Risk Stratification - >25% at high risk for progression

	EGFR/ACR	< 3	3-30	> 30	Grand Total
Normal/CKD	≥ 90	519	8853	2555	11927
CKD 2	60-89	131	3589	1359	5079
CKD 3a	45-59	20	469	308	797
CKD 3b	30-44	2	101	152	255
CKD 4	15-29	1	10	73	84
CKD 5	< 15			26	26
	Grand Total	673	13022	4473	18168









CONCLUSIONS

Current technology allows the automated integration of healthcare information from different sources and automated, algorithm based decision support, makes possible the implementation of a systematic approach which potentially may decrease the burden of CKD. We have demonstrated that such a system has the ability to automatically identify and risk stratify patients leading to appropriate management with the ability to influence physician behavior with respect to drug prescription and patient referral.

317--SP
J3) Chronic Kidney Disease. Clinical Epidemiology.
Nick Richards
DOI: 10.3252/pso.eu.52era.2015
ePosters supported by F. Hoffmann- La Roche Ltd.