

Application for PatientLeaf For the John Perry Prize

What is PatientLeaf?

PatientLeaf is Bloomberg for GPs. It is a Line of Business Application desktop application which data mines the medical records and presents this window into the notes in a UX format which is user friendly and informative and based on the condition the clinician is querying. For example, the Hypertension Leaf gives a Hypertension only view of the medical records to the user. See this link for a quick video <u>https://vimeo.com/256780630</u>

History of PatientLeaf?

PatientLeaf has been in development from concept to release for the last 8 years. Whenever I'm in clinic I always feel the current UI doesn't help me get to the information I need quickly and have to churn through reams and reams of text and documents before I can make a decision about the patient in front of me within the 10 minutes we have. Since we normally only deal with one compliant at one time I thought there was a need to use modern UX techniques to slice the patient notes and present this window to the user. As the current medical software companies out there are paid to manage simpler requirements, I felt there was a gap to help clinicians make a better more informed decision quickly during the consultation.

How does PatientLeaf Work?

See my Blog around the vision of PatientLeaf <u>https://razatoosy.com/2018/06/01/patientleaf/</u> PatientLeaf has 3 basic views

1. A timeline of value to view in a graph with drugs affecting the value for example Blood Pressure on Anti-Hypertensives

2. The full medical history of the patient for you to quickly navigate based on the timeline above

3. Associated entries linked to the condition in question eg Echos, ECGs Qrisks for the Hypertension Leaf.

From these controls, you can quickly answer that difficult decision in the pressure of clinic which is "What do I do next?"

Benefits

The clinician saves precious time and eases pressure during the consultation and makes better decisions on the management of the patient. They also avoid revisiting the same mistakes with the patient's clinical care again. PatientLeaf is also very useful to quickly familiarise yourself with the patient whilst improving your knowledge of the patient's issue. It also reminds you of current guidelines eg for Blood pressure we display the target Blood Pressure based on NICE guidance depending on if the patient has diabetes, stroke, ckd etc

Future Development

PatientLeaf is highly extensible and we have a road maps to increase the number of leafs eg CKD, IHD, DM, Asthma, COPD etc We also plan to develop other controls eg attachments control to view documents and are looking to extract data from other sources to present to the clinician in clinic eg secondary care data. The idea is for the clinician to make an informed decision about the patient using the power of UX.



Screenshot Of PatientLeaf

If a picture paints a 1000 words..

🕕 Blood Pre	essure	Patientiavers
Mr/Michael Ad	ams Born 17-Aug-1966 (51y)	84 St. John's Road, Tinshill, S7
200 - 180 - 160 - 160 - 130 - 130 - 110 -		
90 80 70 50		
Angiotensin-convertin Lisinopril Zestril Angiotensin-II recepto Candesartan		
Beta-adrenocaptor bl Bisocorolo Other Groups	1.25 Calcium-channel blockers e.g. Cardene SR ,Dilzem SR ,Molap ,Valni XL ,Valni Vasodilator antihypertensive drugs e.g. Sodium nitroprusside ,Trackeer ,Ventavis ,Hydralazine ,Apres Potassium-sparing diuretics with other diuretics e.g. synuretic ,Triamaxco ,Co-amilozide ,Kalspare ta Potassium-sparing diuretics and aldosterone antagonists e.g. Inspra ,Spironolactone ,Spirospare ,Ar Centrally acting antihypertensive drugs e.g. Methyldopa ,Catopres ,Moxonidine ,Aldomer ,Physioten Alaba adrenasentor blocking dauge e.g. Phenoretheoramine. Cardura VI , Dovadura , Dovadura VI	iblets,Frusene miloride ,Amilamont is
 Medical Histor 		
~0	E: 10g monofilament sensation absent E: 0/E = Leg pulses all present E: 0/E = Lileg pulses all present E: 0/E = Right diabetic foot at low risk E: 0/E - Left diabetic foot at low risk E: 0/E - height, 187 cm E: 0/E - weight, 61 Kg E: Body mass index, 17.44	
15-Aug-2003	E: G: 120/75 P: Chest OK. Pretty good at the moment M: Omeprazole Oral suspension 10 mg/5 ml 75 ml 10MLOD	
12-Aug-2003	E: Telephone encounter H: Chest dear H: Stopped smoking C: Depression screening using questions M: Lansoprazole Capsules (Gastro-Resistant) 30 mg 28 capsule[s] TAKE ONE DAILY P: Tired generally, Needs to have bloods etc	
10-301-2003	E: Diarrhoea on and off for 3 weeks with abdo cramps. No blood and no recent travel M: Gaviscon Advance Oral suspension 150 ml(s) 10 MLS QDS M: One Touch Ultra Test strips 300 STRIP(S) AS REQUIRED	
27-May-2003	E: Tired all the time H: Follow up Medication Review H: Slime and diarrhoea continue E: Going to pain clinic C: Still feels like thick mucous from chest - causing choking C: Awaiting MRI scan to look at anatomy M: Candesartan Cilexetil Tablets 4 mg 28 tablet(s) TAKE ONE DAILY	
05-Apr-2003	 P: Bad night last night, SOB, productive of white frowthy sputurn, worse on lying flat P: Still feels like thick mucous from chest - causing choking E: GTT taken C: Combivent shaky and giddy E: G: 120/70 	
26-Mar-2003	E: Multiple symptoms H: Diarrhoea on and off for 3 weeks with abdo aramps. No blood and no recent travel E: Indigestion still very bothersome C: Erythroped A Tablets 500 mg 1 qds 28 tablets M: Fluticasone Propionate Aqueous nasal spray 0.05 % (150 dose spray) 1 spray 1-2 SPRAYS EACH M: Levocettrizine Tablets 5 mg 30 tablet OD	I NOSTRIL BD
05-Feb-2003	E: C/O: a rash E: Mole of skin H: Reversibility with Salamol EB 200mcgs H: Scanty coase creps E: Erythrocyte sedimentation rate, No action E: SOB in the morning, somewhat lightheaded C: Awaîting MRI scan to look at anatomy C: BT token	
	11. Destructure Medicantes / Control - 0.076 % 20 control - 0.078 % 20	
Associated Entry		
28-Aug-2003 10-May-2003	Ex smoker Echocardiogram Needs bloods etc	
02-Aug-2003	Canocaraiogram Needs bloods erc Cigarette smoker	
18-Jan-2001	Current smoker	
22 Mar 2000	Stannad making	