Risk Stratification Tool: LACE Index

L= Length of StayA=Acuity of admissionC: Charlson Index (modified)E= Number ER visit in prior 6 months

Lace index Calculator Built into EMR

Epic -	1999 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			an and a second second	
En (TR) 1551	Healthconnect,Eleven ×				
- Healthconi	mect, Eleven 181288521 56 Yr	Sex M Unspec	PCP ified-mas (R.*	PCP Loc Shady Grove	Allergies Pon Class, Naproxen So
	Flowsheet Report				
in and in such that is a sub-	Select Flowsheets to View				
	LACE SCORE, MAS [931]				
	LACE SCORE, MAS	7/15/2011	7/26/2011		
	Admit date:	7/15/2011	7/26/2011		
	Discharge date:	7/30/2011	8/1/2011		
Flowsheets	LOS	15	6		
Receipt (Receipt)	LOS Score	7	4		
	Emergent admission?	Yes	Yes		
	Acuity of Visit Score	3	3		
	Previous myocardial infarction?	No	No		
	Cerebrovascular disease?	No	No		
	Peripheral vascular disease?	No	No		
	Diabetes without complications?	No	No		
	Congestive heart failure?	Yes	No		
	Diabetes with end organ damage?	No	No		
	Chronic pulmonary disease?	No	No		
	Mild liver disease?	No	No		
	Any tumor (including lymphoma or leukemia)?	No	No		
	Dementia?	Yes	No		
	Connective tissue disease?	No	No		
	AIDS?	No	No		
	Moderate or severe liver disease?	No	No		
	Metastatic solid tumor?	No	No		
	Charlson index	5	0		
	Comorbidity Score	5	0		
	Number of emergency department visits	2	2		
	ED visit score	2	2		
	ACE Score	10	5		
	LACE Index Score	17	9		

© 2015 Epic Systems Corporation. Used with permission.

Interventions delivered based on LACE

• High Risk patients (LACE greater than 10)

-Meeting with case manager pre discharge
-Follow up appt within 3 business days
-Pharmacist call within 2 business days
-Case Manager call within 2 business days
-Palliative Care consult if LACE 17-19

Interventions based on LACE

Moderate Risk Patients (LACE 6-9)

Pharmacist Call within 2 business days
Case Manager call within 2 business days
Follow up appt within 7 business days

Low Risk Patients (LACE under 6)

-Follow up appt within 14 business days

Tracking delivery of interventions



Hospital Re-Admissions Report

Members Discharged to Home with a LACE Score in Dec 2013

		н	OSPITA	L REA	DMISSS	IONS	WITHIN	30 D/	YS OF I	DISCH	IARGE E	BY LA	CE INDE	x sco	DRE		
LACE	ACE INDEX SCORE GROUP 1-5																
ST AG	NES HOSP	FFX	(HOSP	GBM	C HOSP	HC	HOSP	RES	6 HOSP	SUE	3 HOSP	1	VHC	\ \	NHC	ALI	L HOSP
DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS
6	0			24	2	31	0	2	0	22	0	47	1	47	2	179	5
LACE	LACE INDEX SCORE GROUP 6-9																
ST AGNES HOSP FFX HOSP GBMC HOSP HC HOSP RES HOSP SUB HOSP VHC WHC ALL HOSP																	
DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS
25	1			30	2	103	10	12	1	20	1	111	11	102	7	403	33
LACE	INDEX S	CORE	GROUP	10+													
ST AG	NES HOSP	FFX	(HOSP	GBM	C HOSP	HC	HOSP	RES	6 HOSP	SUE	3 HOSP	1	VHC	\ \	NHC	ALI	L HOSP
DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS
3	0			7	2	28	1	9	1	7	3	24	1	29	1	107	9
LACE	INDEX S	CORE	GROUP	1-10+													
ST AG	NES HOSP	FFX	HOSP	GBM	C HOSP	HC	HOSP	RES	S HOSP	SUE	3 HOSP	1	VHC		NHC	ALI	LHOSP
DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS	DISCH	READMITS
34	1			61	6	162	11	23	2	49	4	182	13	178	10	689	47
PER	CENT OF	HOSP	ITAL RE		SSIONS	WITHIN	1 30 DAY	S OF		F	PERCENT	OF F	OLLOW-U	JP EN	COUNTE	R	

DISCHARGE BY LACE INDEX SCORE

COMPLIANCE AFTER DISCHARGE

LACE I	NDEX S	CORE (GROUP	1-5										
AGNES	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOTAL						
0.0%		8.3%	0.0%	0.0%	0.0%	2.1%	4.3%	2.8%						
LACE INDEX SCORE GROUP 6-9														
AGNES	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOTAL						
4.0%		6.7%	9.7%	8.3%	5.0%	9.9%	6.9%	8.2%						
LACE INDEX SCORE GROUP 10+														
LACE I	NDEX S	CORE (GROUP	10+										
LACE I AGNES	NDEX S	GBMC	GROUP HCH	10+ RES	SUH	VHC	WHC	TOTAL						
					SUH 42.9%	VHC 4.2%	WHC 3.4%	TOTAL 8.4%						
AGNES 0.0%	FFX	GBMC	HCH 3.6%	RES 11.1%										
AGNES 0.0%	FFX	CBMC 28.6%	HCH 3.6%	RES 11.1%										
AGNES 0.0% LACE I	FFX NDEX S	GBMC 28.6% CORE (HCH 3.6% GROUP	RES 11.1% 1-10+	42.9%	4.2%	3.4%	8.4%						

LACE GROUP 1-5			
FOLLOW-UP GOAL	GOAL MET	NO. OF APPTS	PCT OF TOTAL
FOLLOW-UP APPOINTMENT WITHIN 14 DAYS	YES	133	74.3%
FOLLOW-UP APPOINTMENT WITHIN 14 DAYS	NO	46	25.7%
LACE GROUP 6-9			
FOLLOW-UP GOAL	GOAL MET	NO. OF APPTS	PCT OF TOTAL
FOLLOW-UP APPOINTMENT WITHIN 7 DAYS	YES	285	70.7%
FOLLOW-UP APPOINTMENT WITHIN 7 DAYS	NO	118	29.3%
LACE GROUP 10+			
FOLLOW-UP GOAL	GOAL MET	NO. OF APPTS	PCT OF TOTAL
FOLLOW-UP APPOINTMENT WITHIN 3 DAYS	YES	50	46.7%
FOLLOW-UP APPOINTMENT WITHIN 3 DAYS	NO	57	53.3%



Hospital Re-Admissions Report

Members Discharged to Home with a LACE Score in Dec 2013

	PERCENT OF TOTAL DISCHARGES IN-HOSPITAL INTERVENTIONS														
CASE MANAGERS															
LACE INDEX SCORES 10+ DISCHARGE PLANNING CONSULT															
AGN FFX GBMC HCH RES SUH VHC WHC TOT															
ATTEMPTED				3.6%				3.4%	1.9%						
COMPLETED	100.0%		57.1%	78.6%	66.7%	85.7%	70.8%	86.2%	77.6%						
INCOMPLET			42.9%	17.9%	33.3%	14.3%	29.2%	10.3%	20.6%						
			Р	HARMA	CIST										
LACE INDEX	SCORES	10+	MEET	& GREET	F OR MED	D REC									
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT						
INCOMPLET	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						

PERCENT OF TOTAL DISCHARGES OUT-PATIENT INTERVENTIONS

			CAS	SE MAN/	AGERS									
LACE INDEX	SCORES	6-9	POST	DISCHAR	RGE FOLI	LOW-UP	CALL							
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT					
ATTEMPTED	16.0%		13.3%	24.3%	16.7%	20.0%	17.1%	8.8%	16.6%					
COMPLETED	16.0%		36.7%	68.0%	58.3%	50.0%	68.5%	84.3%	65.5%					
INCOMPLET	68.0%		50.0%	7.8%	25.0%	30.0%	14.4%	6.9%	17.9%					
PHARMACIST														
LACE INDEX SCORES 6-9 ATTEMPTED POST-DISCHARGE MED RECON PHONECALL														
AGN FFX GBMC HCH RES SUH VHC WHC TOT														
ATTEMPTED	12.0%		13.3%	18.4%	41.7%	20.0%	18.9%	16.7%	18.1%					
COMPLETED	72.0%		80.0%	73.8%	41.7%	75.0%	71.2%	75.5%	73.0%					
INCOMPLET	16.0%		6.7%	7.8%	16.7%	5.0%	9.9%	7.8%	8.9%					
			CAS	SE MAN/	AGERS									
LACE INDEX	SCORES	10+	POST	DISCHAR	RGE FOLI	LOW-UP	CALL							
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT					
ATTEMPTED				25.0%		42.9%	16.7%	3.4%	14.0%					
COMPLETED			71.4%	60.7%	88.9%	57.1%	66.7%	79.3%	68.2%					
INCOMPLET	100.0%		28.6%	14.3%	11.1%		16.7%	17.2%	17.8%					
			P	HARMA	CIST									
LACE INDEX	SCORES	10+	ATTE	IPTED P	OST-DISC	HARGE	MED REC	ON PHO	NECALL					
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT					
ATTEMPTED				14.3%	22.2%	28.6%	8.3%		9.3%					
COMPLETED	100.0%		85.7%	78.6%	66.7%	71.4%	83.3%	89.7%	82.2%					
INCOMPLET			14.3%	7.1%	11.1%		8.3%	10.3%	8.4%					

		IN-HO	SPITA	l inte	RVEN	ITION	S								
	CASE MANAGERS														
LACE INDEX SCORES 10+ DISCHARGE PLANNING CONSULT															
AGN FFX GBMC HCH RES SUH VHC WHC TOT															
ATTEMPTED				1				1	2						
COMPLETED	3		4	22	6	6	17	25	83						
INCOMPLETE			3	5	3	1	7	3	22						
			PH	ARMAC	IST										
LACE INDEX S	SCORES 1	0+ 1	MEET & G	REET OF	R MED R	EC									
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT						
INCOMPLETE	3		7	28	9	7	24	29	107						

DISCHARGES

DISCHARGES OUT-PATIENT INTERVENTIONS

			CASE	E MANA	GERS								
LACE INDEX S	CORES 6	-9	POST-DIS	CHARGE	FOLLO	W-UP C	ALL						
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT				
ATTEMPTED	4		4	25	2	4	19	9	67				
COMPLETED	4		11	70	7	10	76	86	264				
INCOMPLETE	17		15	8	3	6	16	7	72				
PHARMACIST													
LACE INDEX SCORES 6-9 ATTEMPTED POST-DISCHARGE MED RECON PHONECALL													
	AGN	FFX	GBMC	нсн	RES	SUH	VHC	WHC	TOT				
ATTEMPTED	3		4	19	5	4	21	17	73				
COMPLETED	18		24	76	5	15	79	77	294				
INCOMPLETE	4		2	8	2	1	11	8	36				
			CASE	E MANA	GERS								
LACE INDEX S	SCORES 1	0+ 1	POST-DIS	CHARGE		W-UP C							
	AGN	FFX	GBMC	HCH	RES	SUH	VHC	WHC	TOT				
ATTEMPTED				7		3	4	1	15				
COMPLETED			5	17	8	4	16	23	73				
INCOMPLETE	3		2	4	1		4	5	19				
			PH	ARMAC	IST								
LACE INDEX S	SCORES 1	0+ /	ATTEMPT	ED POST	-DISCH	ARGE M	ED RECO	N PHON	ECALL				
	AGN	FFX	GBMC	нсн	RES	SUH	VHC	WHC	TOT				
ATTEMPTED				4	2	2	2		10				
COMPLETED	3		6	22	6	5	20	26	88				
INCOMPLETE			1	2	1		2	3	9				

MAPMG Mid-Allantic Permanente Medical Group Medical Group Operations Support

Hospital Re-Admissions Report

Members Discharged to Home with a LACE Score in Dec 2013

PERCENT OF FOLLOW-UP FIRST APPOINTMENT BOOKED BEFORE OR AFTER DISCHARGE

LACE GROUP 1-5			LACE GROUP 6-9			LACE GROUP 10+			
BOOKING STATUS	APPTS	PCT	BOOKING STATUS	APPTS	PCT	BOOKING STATUS	APPTS	PCT	
APPOINTMENT BOOKED	134	74.9%	APPOINTMENT BOOKED	332	82.4%	APPOINTMENT BOOKED	85	79.4%	
NO APPOINTMENT BOOKED	45	25.1%	NO APPOINTMENT BOOKED	71	17.6%	NO APPOINTMENT BOOKED	22	20.6%	

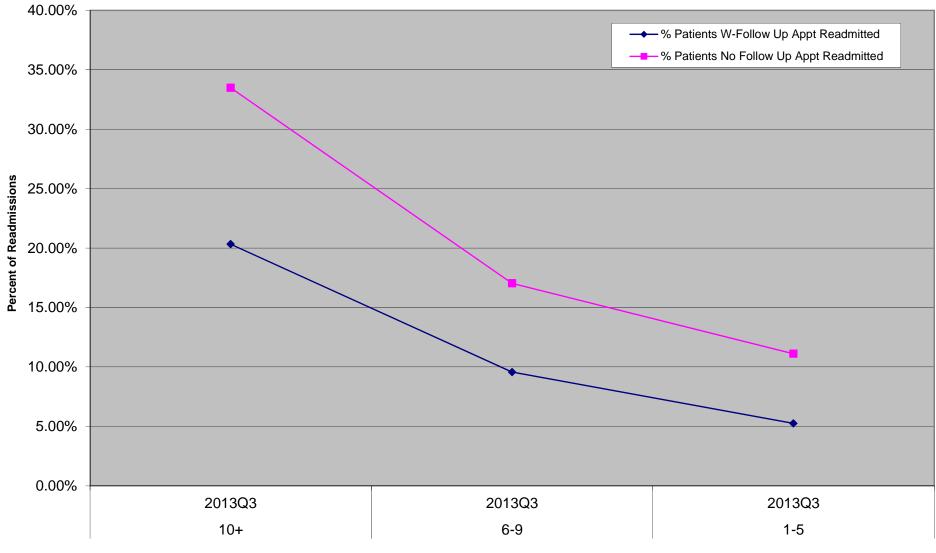
PERCENT OF FOLLOW-UP FIRST APPOINTMENT BOOKED STATUS

LACE GROUP 1-5			LACE GROUP 6-9			LACE GROUP 10+		
FOLLOW-UP APPOINTMENT MADE W	ITH IN 14 DAYS	5	FOLLOW-UP APPOINTMENT MADE WITH	IN 7 DAYS		FOLLOW-UP APPOINTMENT MADE WITH	I IN 3 DAYS	
APPOINTMENT STATUS	APPTS	PCT	APPOINTMENT STATUS	APPTS	PCT	APPOINTMENT STATUS	APPTS	PCT
Completed	131	73.2%	Completed	285	70.7%	Completed	49	45.8%
Canceled			Canceled			Canceled		
No Show	3	1.7%	No Show	1	0.2%	No Show	1	0.9%
Scheduled			Scheduled			Scheduled		
FOLLOW-UP APPOINTMENT MADE AF	TER 14 DAYS		FOLLOW-UP APPOINTMENT MADE AFTE	R 7 DAYS		FOLLOW-UP APPOINTMENT MADE AFTE	ER 3 DAYS	
APPOINTMENT STATUS	APPTS	PCT	APPOINTMENT STATUS	APPTS	PCT	APPOINTMENT STATUS	APPTS	PCT
Completed			Completed	46	11.4%	Completed	34	31.8%
Canceled			Canceled			Canceled	1	0.9%
No Show			No Show			No Show		
Scheduled			Scheduled			Scheduled		

Analyzing Effectiveness of Interventions

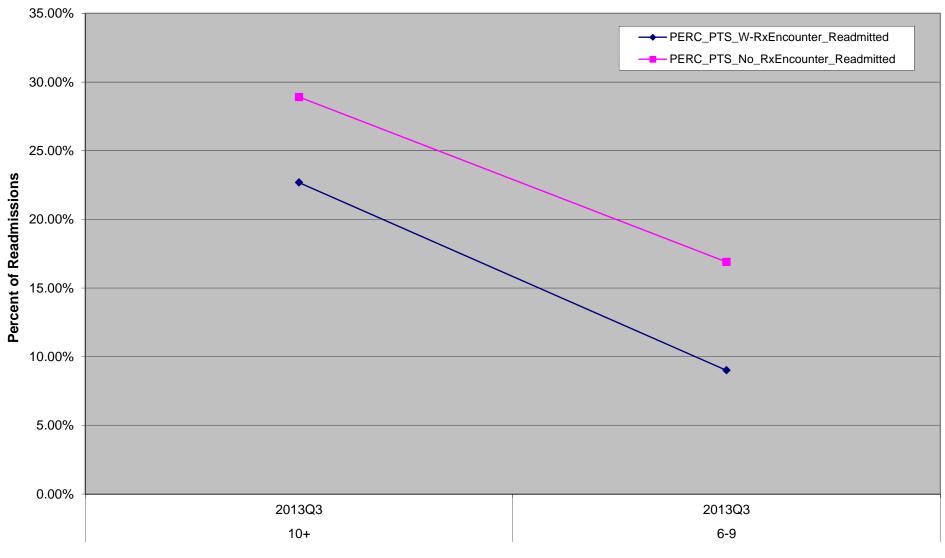
(The distance between lines on the following grafts indicates power of interventions)

Percent of Readmission by Follow-Up Appointment Status

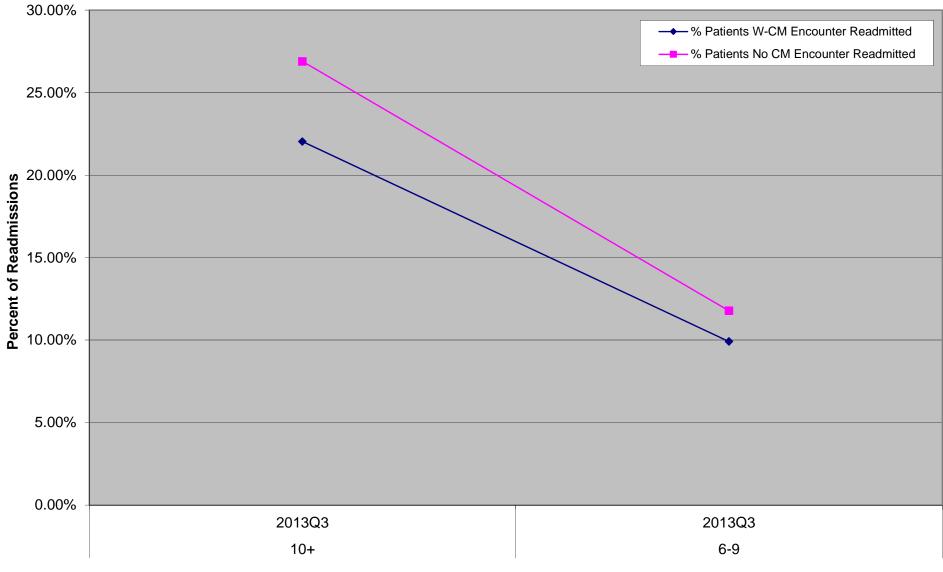


LACE Category - 2013 Quarter 3

Percent of Readmission by Pharmacy Encounter Status



LACE Category - 2013 Quarter 3



Percent of Readmission by Case Management Encounter Status

LACE Category - 2013 Quarter 3