

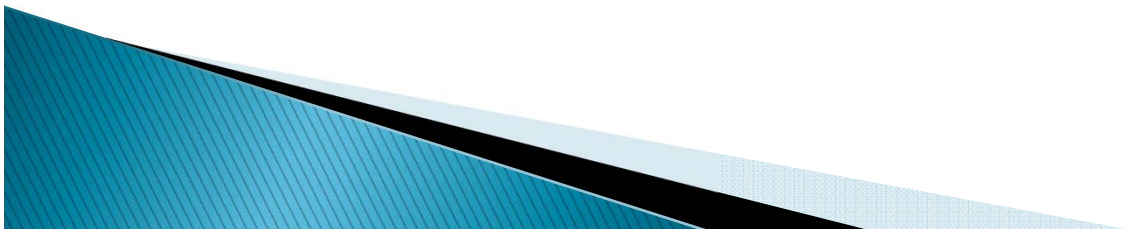
Boston University Patient Navigation Research Program

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Boston University PNRP

1. Rationale for study design
2. Methods
3. Additional analyses
 - Task and Social Network Analysis
 - Navigator–Patient Congruence
 - Primary analyses
4. Interim findings



Rationale for Study Design

1. Findings from our Pilot Intervention study*
2. Results of our Community Based Participatory Research Process

** Battaglia, Cancer 2007*



Patient Navigator Intervention Pilot Factors Associated with Timely Breast Follow-up

Factor	OR	95% CI
Overall Effect: (Adjusted for age, race, insurance and referral site)	1.7	1.2-2.2
Referral Site:		
CHC (ref)	1.0	xxx
Hospital	1.4	1.0-2.0
Other	1.5	0.8-2.7

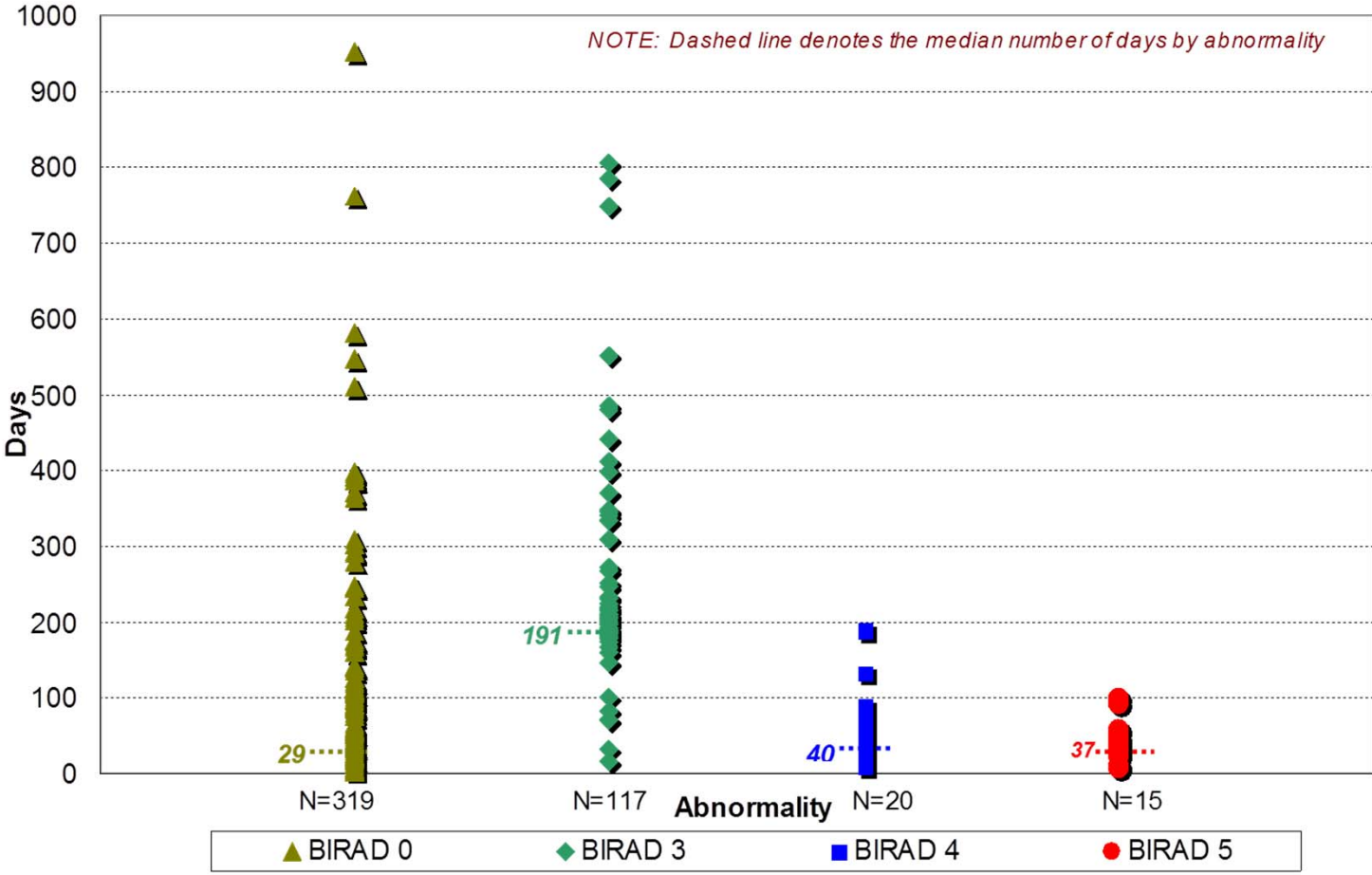
N = 1332

Patient Navigator Intervention Pilot Conclusions

- ▶ Patient Navigation improves rates of timely follow-up for abnormal breast cancer screening among urban women in all subcategories
- ▶ Those referred from Community Health Centers continue to lag behind
- ▶ Need for multi-center trial with continuous control group



Baseline Delays in Diagnostic Resolution in Six Community Health Centers (CHCs)



N = 471

Battaglia, et al, Cancer 2010

Patient Navigation as a Systems Intervention

1. Organized within the sites of primary care
2. Located within the clinical setting
3. Care Management Model
 - Case identification
 - Assessment of individual barriers to care
 - Development of individual care plan
 - Tracking through diagnostic resolution



Patient Navigator Template

Reason for Tracking - Eligibility	<input type="checkbox"/> Phone Call #1	
Date <input type="text"/>	Date <input type="text"/>	
Reason <input type="text"/>	Staff <input type="text"/>	
See More Details	Outcome <input type="text"/>	
Results	Caller Name spoke with	
Mammo	Breast US	From / Relationship Left message with
Biopsy	Breast MRI	message on machine
Surgery	Clinic	Comment no answer / busy
Contact with Patient		disconnected
Phone	Letter	
In Person	Internal	
Contact with Other		
Pt Family Friend	Medical	
Non-Medical		
Appointment Info and Plan	<input type="checkbox"/> Phone Call #2	
Previous Appt Info	Date <input type="text"/>	Staff <input type="text"/>
Appointment Info and Plan	Outcome <input type="text"/>	Caller Name <input type="text"/>
Next Appt Info and Plan	From / Relationship <input type="text"/>	Comment <input type="text"/>
Actions and Barriers		
Actions and Barriers		
Time Spent		
With Patient <input type="text"/>		
Coordinating Care <input type="text"/>		
End Navigation		
End Navigation		

Reasons to Start with Telephone Encounters

1. Efficient use of resources
 - 50–100 active cases per FTE/site
2. Pilot data suggested many barriers identified by phone
3. Focused resources for specific patients
 - Cases with delays
 - Problems identified
 - Phone contact unsuccessful
 - Cancer diagnosis




Task and Social Network Analysis

Tasks/Network	Patient	Provider	Non-Clinical Staff	Support	EMR
Navigate <u>with</u> specific pt					
Facilitate <u>for</u> specific pt					
Maintain system for all					
Document/ Review					

Effect of Navigator–Patient Concordance

Christina Santana, MPH – Diversity Supplement Awardee

Patient Race and Ethnicity	Concordant with Navigator	Discordant with Navigator
	N (%)	N (%)
White non-Hispanic	166 (59)	117 (41)
Black non-Hispanic	159 (65)	87 (35)
Asian non-Hispanic	17 (17)	84 (83)
Hispanic	191 (60)	129 (40)
Total N = 950	533 (56)	417 (44)



Effect of Race–Ethnicity on Barrier Identification

Christina Santana, MPH – Diversity Supplement Awardee

	White	Non-White	Total
	N (%)	N (%)	N (%)
No Barrier	105 (50)	61 (21)	166 (33)
1+ Barriers	106 (50)	232 (79)	338 (67)
Total	211	293	504

▶ $p < 0.0001$

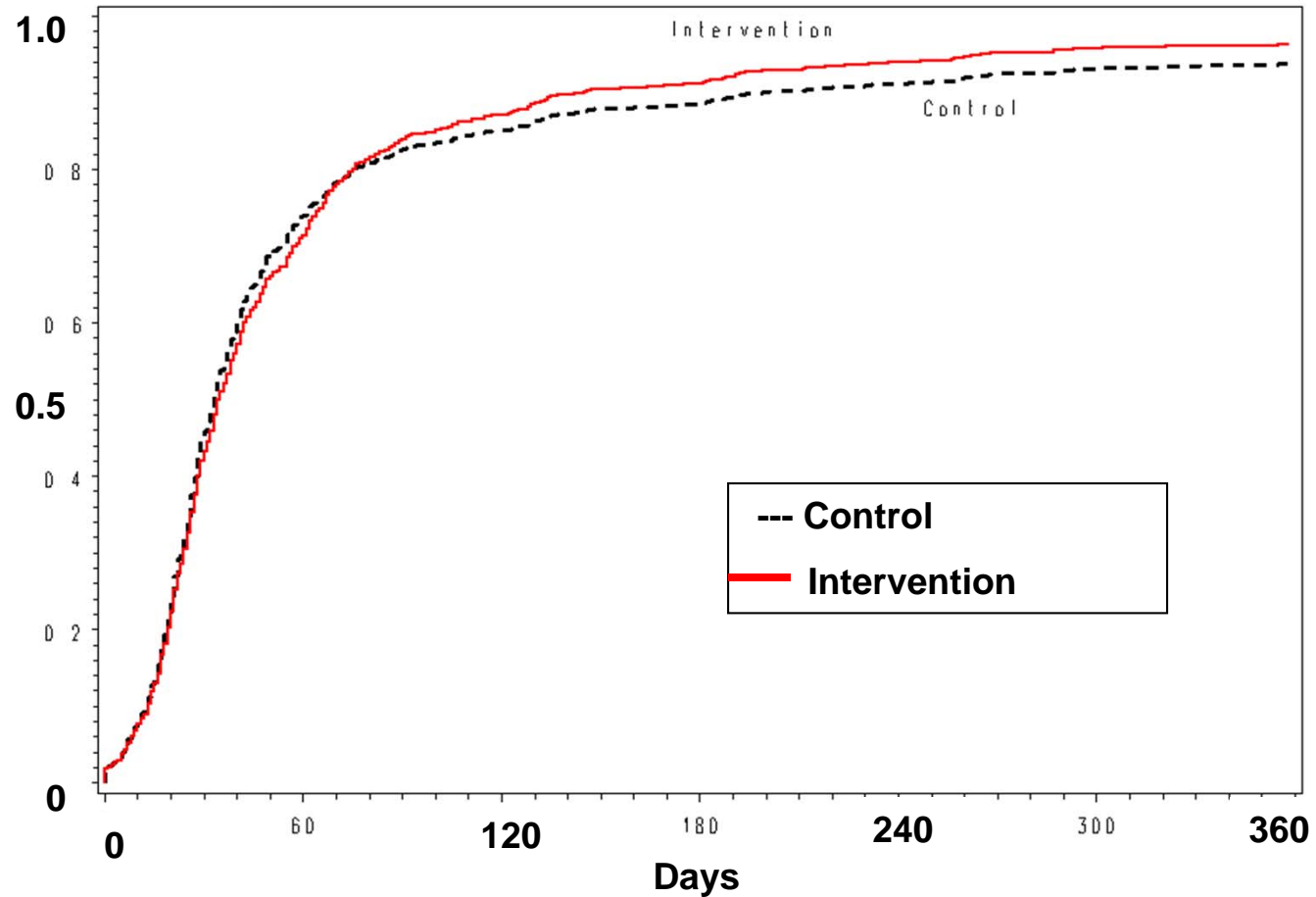
Time to Resolution for Breast Patients with Resolution 60+ Days

Hazards Ratio from Proportional Regression

	HR	95% CL
After vs. Before Patient Navigator		
Intervention Group	2.82	1.97, 4.05
Abnormality		
Clinical Breast Exam	1.00	---
Birads 0	1.83	1.15, 2.91
Birads 3	0.85	0.50, 1.43
Birads 4 or 5	3.01	1.51, 6.00

Diagnostic Time Resolution Comparing Breast Intervention and Control Sites

% Resolution



N = 1759