

Demonstrating Impact and Value of Patient Navigation Programs

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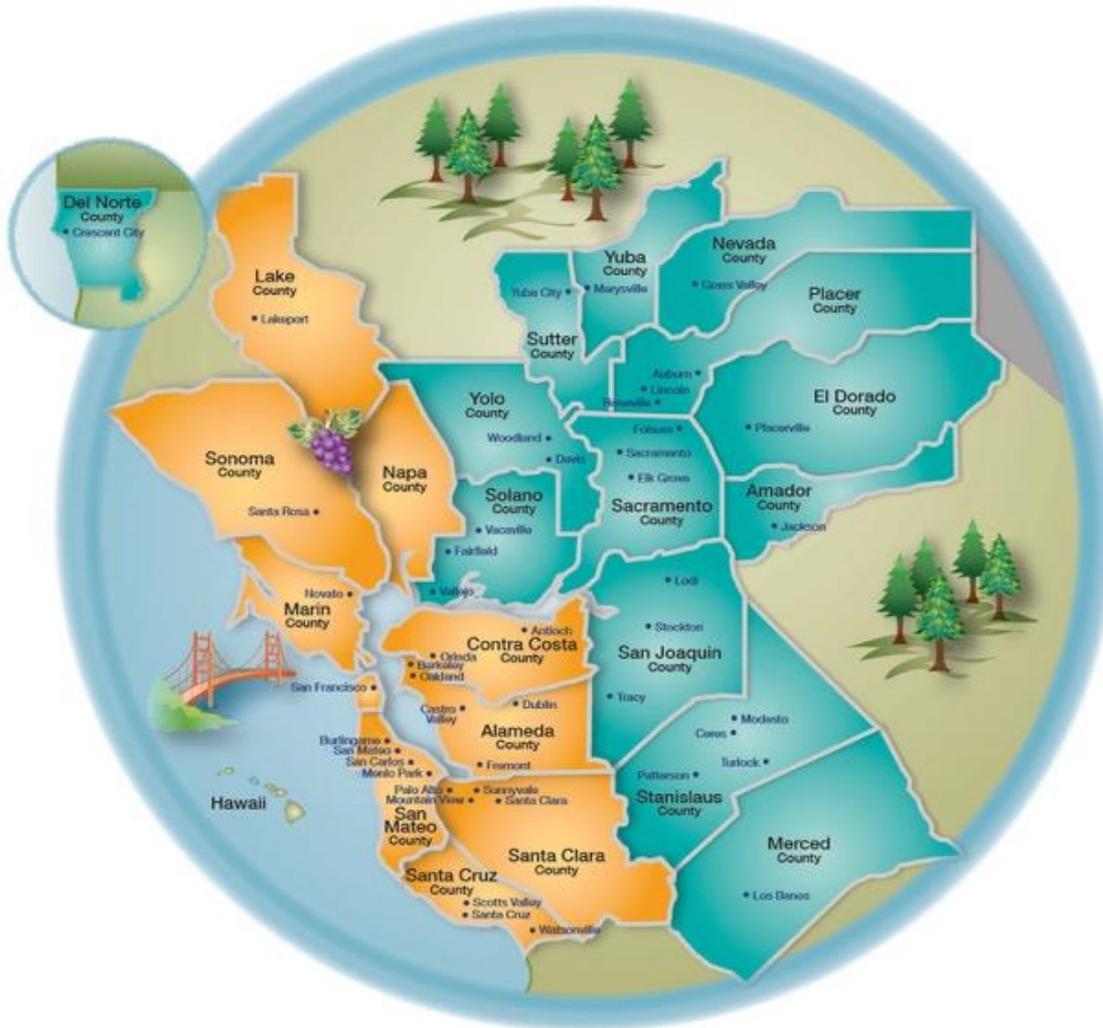
Goals for This Presentation Include

- Variation in Nurse Navigation Practice
- Provider Experience of Navigators
- Patient Experience and Preferences for Navigation
- Impact of Navigation and Relative Return on Investment (ROI)



Sutter Health

- Serves 27% of population in 22 Northern California Counties
- 13,000 new cancer cases per year



*A Sutter Priority: Standardizing Oncology Nurse Navigation

Ideal State:

- To offer uniform, comprehensive and integrated care using nurse navigation through the diagnostic, treatment and post treatment phases of cancer
- To offer meaningful and affordable psychosocial support to patients and families throughout the care trajectory using peer support volunteers
- To craft a Sutter template, establishing exemplary, replicable standards and metrics with applicability to entire Sutter Health system thus decreasing variations in practice and prevent or reduce outmigration

**Navigation has become a national movement and standard of care.*

Without Nurse Navigators:

- More days of treatment interruption ¹
- Diminished timeliness (Longer times to diagnostic resolution) ²
- Increase in time to first provider visit/treatment ³
- Higher anxiety scores ²
- Lower levels of patient satisfaction ²
- Dissatisfaction with information ⁴
- Loss of trust in healthcare teams ⁴
- Lack of guidance resulting in higher levels of anxiety and distress ⁴
- Increased length of time between procedures ⁴
- Loss of and/or missing test results ⁴
- Impressions of a dehumanizing experience ⁴

¹ Krebs et al, 2013, ² Basu et al, 2013, ³ Gordils-Perez, J, Schneider, S, et al, 2017, ⁴ Harding & McCrone, 2013

Why Start With Breast Cancer Services?

- ❖ Is a large percentage of Sutter's cancer patient population – nearly 3,000 new cases per year
- ❖ Breast cancer is highly emotionally charged and often shocking
- ❖ Patients can feel “lost in a system”
- ❖ Regulatory and accrediting entities require navigation and survivorship components of care



Nurse Navigation

Step 1: Analyze Current State



Navigator survey, 2017:

- Sent to 68 reported navigators, hospital and ambulatory based
- 28 completed surveys received (42% return rate)
- Survey questions addressed education, job description, certification(s), reporting structure, role and practice

Results:

- Among ALL navigators, wide variety tasks, titles, experience, responsibilities and scope (variation in scope of practice)
- Staffing and workload an issue
- Too much time tracking patient care and limited resources an issue



System-wide patient navigation committee recommends that any new navigator hired into the system must possess a certification through the Oncology Nursing Certification Corporation.



Provider Survey, 2017:

Sent to 98 oncology physicians, NP's and PA's at 5 different Sutter locations (geographically varied); received 19 completed surveys (19% response rate).

Results:

Answers were mixed; no strong or conclusive results

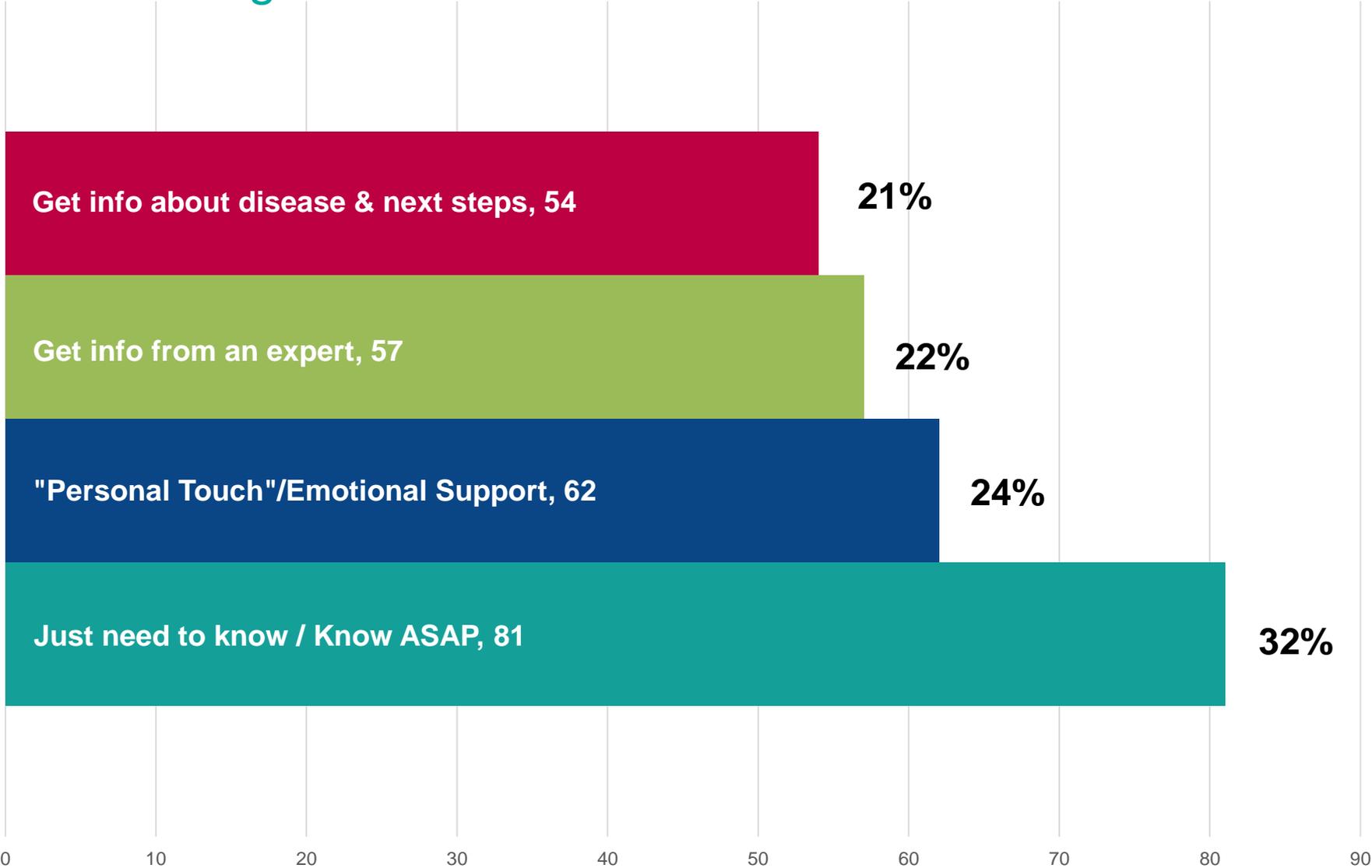
Notes

- Overall, satisfaction with navigators is high
- 63% said they would like navigator to become involved at time of diagnosis
- Lack of clarity about the navigator role
- Care coordination seen as most important

Where patients have reported being told their breast cancer diagnosis



What patients value when they are told their breast cancer diagnosis:



Statistical Analysis

- Those people who heard in person were more satisfied than those who heard on the phone (p = .006)
- Nurse Navigator informing patients most likely to give what patients valued: right amount of time, resources, emotional and educational *support...more than other types providers* (PCP, radiologists).
- People who value “personal touch” were more likely prefer in person; people who value “just want to know” were more likely to prefer phone; people who “want info about disease next steps” were more likely to prefer in person.

Additional analysis in progress.....

The Impact of Nurse Navigation



Improved Patient Wait Times

Via analysis and intervention with Navigator work flow at Sutter Pacific Medical Foundation, justified hiring an additional medical oncologist. Paired with navigator work flow changes, this decreased average wait times between *patient hearing their diagnosis* and:

	Reduction in wait time until appointment (in days)	Calendar Days
First surgical oncology appointment	0%	7-8 days
First medical oncology appointment	29%	48.5 to 34.5 days
Time between surgical and medical oncology appointments	37%	38 to 24 days

Outmigration

Patients newly diagnosed with breast cancer within Sutter and treated elsewhere:

- Outmigration varies across our system, from 13% at some affiliates and up to 74% or higher at others.



A Study on the Effect of Nurse Navigation on Outmigration Rate

SUTTER HEALTH NAVIGATION MODELS	
Location A	Location B
Navigator reaches out to patient <u>after</u> patient has received breast cancer diagnosis (i.e., after imaging, biopsy, waiting for path, hearing news, receiving referral)	Navigator becomes involved <u>at time of</u> suspicious finding (i.e., when patient receives imaging at Breast Center)
<u>PCP</u> informs patient of diagnosis, significant variability of time	<u>Nurse Navigator</u> informs patient of pathology results within 3 days
Patient referral to their initial oncology MD <u>made by PCP</u>	Patient referral to their initial oncology MD <u>facilitated by Nurse Navigator</u>
Outmigration rate: 74% (<i>outmigration = was initial referral made to Sutter MD</i>)	Outmigration rate: 13%-16% (<i>outmigration = was treatment provided by Sutter MD</i>)

Pilot program: Apply parts of Location B Model to Location A Program. Would it decrease outmigration at Location A?

A Study on the Effect of Nurse Navigation on Outmigration Rate (Continued)

Location A: General Comparison, Pilot Program Outmigration Rates

	Outmigration rate before pilot	Outmigration rate during pilot
Overall pilot program results	74% Jan 2016-Feb 2017, N=410	64% Mar 2017-Aug 2017, N=120

A Deeper Dive Into Pilot Program, March 2017-Aug 2017

	Outmigration rate	N	
Patients who were not in pilot program	72%	111	
Patients who were in pilot program	36%	25*	
		% outmigration	N
Patients who were in the pilot program but were given their diagnosis <i>by their PCP</i>		50%	16
Patients who were in the pilot program and were given their diagnosis <i>by the Nurse Navigator</i>		22%	9

A Study on the Effect of Nurse Navigation on Outmigration Rate: Summary

- Applying the model of Location B to Location A resulted in a significant reduction in outmigration.
- Nurse Navigation involved at the time of suspicious finding helped to decrease the outmigration rate to 50%. Nurse Navigator *also* disclosing the pathology results dropped it further to 22%.
- Small sample size, further exploration ongoing



Return on Investment Discussion

Sutter Pacific Medical Foundation in Santa Rosa, analysis of charges and collections per phase of treatment.

- 7-9 patients billing analysis at Hospital & Ambulatory setting
- Payer diversity (Medicare, MediCal, Commercial)
- Most received multi-modal therapy (surgery, chemo, radiation)
- Representative of patient age and ethnicities in community
- Stages I-III
- Adjuvant and Neoadjuvant
- Her2 positive and Her 2 negative
- All female
- Due to a number of factors, our findings are thought to be conservative

Covering the Cost of a Navigator Based on Revenue

Billing v Collections Per Patient From Diagnosis – Therapy (Through 20 months)		
Billed	Collected	Notes
\$217K	\$125K	<i>Conservative calculations</i>
Average annual cost of OCCN® certified Nurse Navigator (North Bay, Northern CA)		
Salary	Benefits	Total
\$125K	\$44K	\$169K
Number of patients navigator to be retained in system to cover cost of navigator <u>based on revenue</u>		
2 patients		

Covering the Cost of a Navigator Based on Contribution Margin

Average Revenue Per Breast Cancer Patient From Diagnosis – Therapy (Through 20 months)

Revenue		Notes
125K per case	\$125K	<i>Conservative calculations</i>
Contribution Margin	12 to 15%	<i>Conservative estimate</i>
Average annual cost of OCCN© certified Nurse Navigator (North Bay, Northern CA)		
Salary	Benefits	Total
\$125K	\$44K	\$169K
Number of patients retained in system to cover cost of navigator (includes contribution margin)		
7 to 10 patients		

Potentially Retained Revenue

Sample calculation:

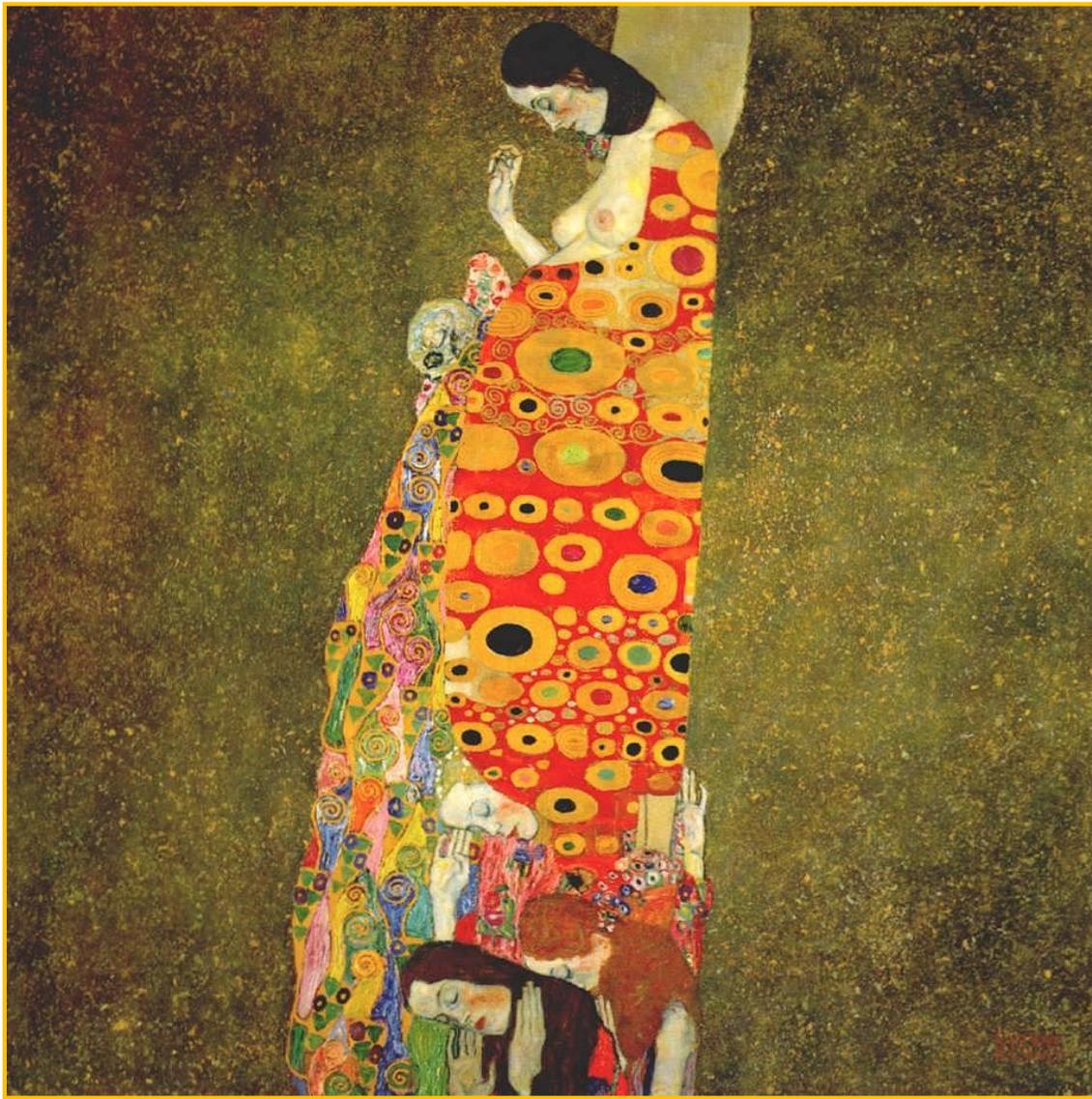
-140 breast cancer patients diagnosed at Sutter facility

-Assuming conservative calculation of \$125K collected per patient retained

Outmigration rate	Amount retained in system
72%	\$4.7 Million
36%	\$11 Million
16%	\$14.5 Million



October 2016



Thank you all for being here.
Collective gratitude to the patients we are
honored to serve.