

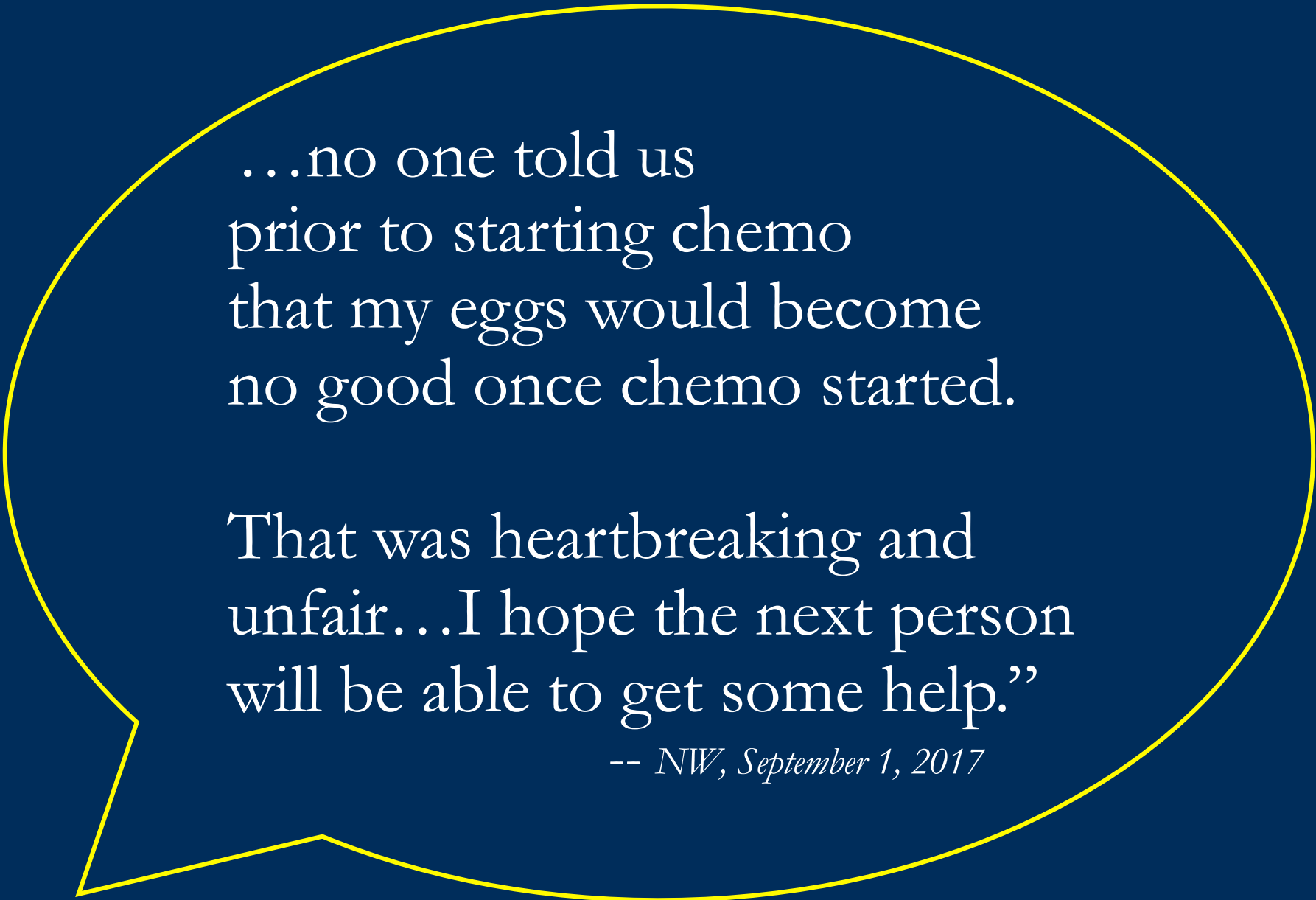


University of California
San Francisco

Fertility Preservation at UCSF



Eve Harris, patient navigator
University of California, San Francisco
November 14, 2017



...no one told us
prior to starting chemo
that my eggs would become
no good once chemo started.

That was heartbreaking and
unfair...I hope the next person
will be able to get some help.”

-- *NW*, September 1, 2017

Program goals

Learn

Educate

Human Reproduction, pp. 1–7, 2017
doi:10.1093/humrep/dex276

human
reproduction

ORIGINAL ARTICLE *Reproductive endocrinology*

Random start ovarian stimulation for fertility preservation appears unlikely to delay initiation of neoadjuvant chemotherapy for breast cancer

Joseph M. Letourneau^{1,*}, Nikita Sinha¹, Kaitlyn Wald^{1,2}, Eve Harris¹, Molly Quinn¹, Tal Imbar⁴, Evelyn Mok-Lin¹, A. Jo Chien³, and Mitchell Rosen¹

¹Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, 499 Illinois Street, 6th Floor, San Francisco, CA 94158, USA ²Department of Obstetrics and Gynecology, University of Washington, Health Sciences Building, 6th Floor, BB Wing, 1959 NE Pacific St, Seattle, WA 98195, USA ³Department of Medicine, Division of Hematology and Oncology, University of California, 1600 Divisadero St., Second Floor, San Francisco, CA 94115, USA ⁴Department of Obstetrics & Gynecology, Hadassah-Hebrew University Medical Center, P.O.Box 12000, Jerusalem 91120, Israel

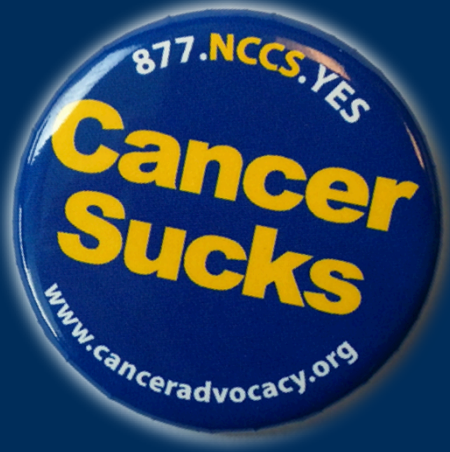
*Correspondence address. Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco, CA, USA. Tel: +1-415-353-7475, E-mail: joseph.letourneau@ucsf.edu

Program goals

Learn

Educate

**Optimize
patient care**



Men

Average week: male referrals



- 3 patients are referred
 - most schedule banking to occur within 2 weeks
- Urologist consultations are rare
- We accommodate carry-in specimens from UCSF patients

Available to men/boys

Banking: M-F, 8am – 1 pm

Male reproductive health consultation

TESE / TESA (extraction; aspiration)

Testicular tissue cryo (pre-pubertal)

Women

Average week: female referrals based on 2015-16



3-4 patients are referred;
all will be triaged within 2 business days

Average week: female referrals based on 2015-16



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33 will get medical consultation

Average week: female referrals based on 2015-16



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2 of those will be seen urgently

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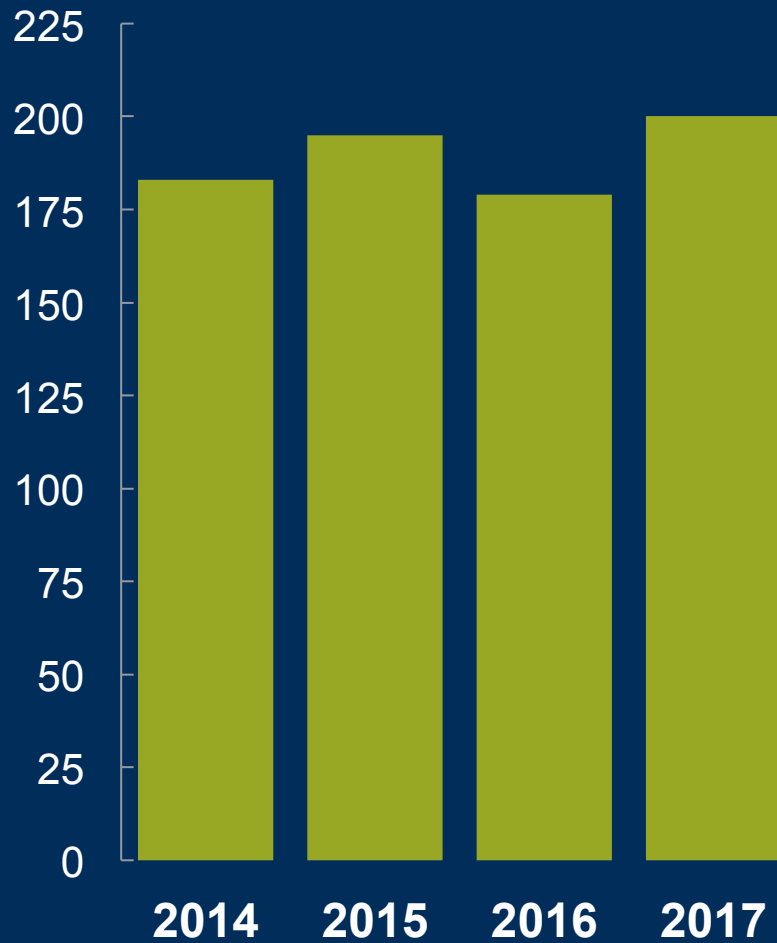


2 of those will be seen urgently

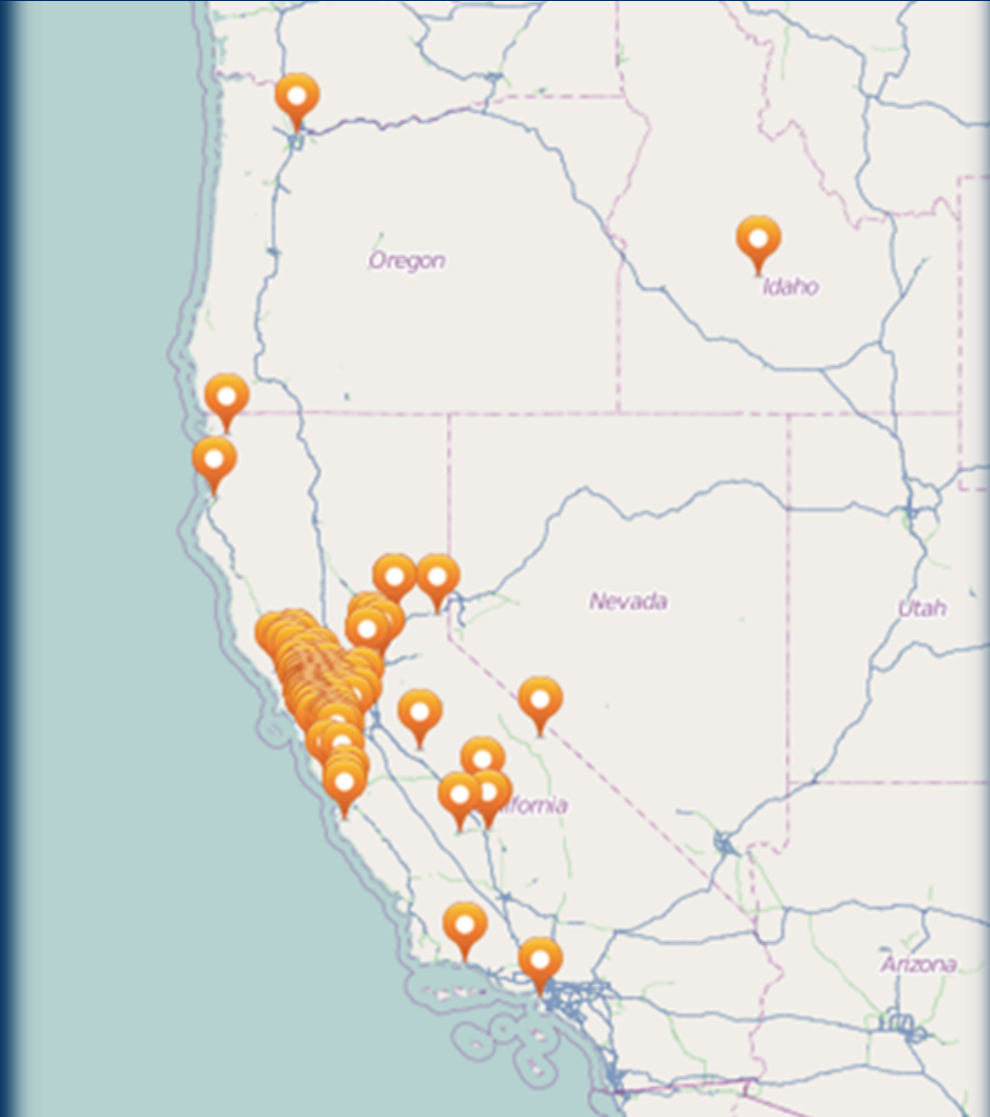


1 will cryopreserve urgently

Unduplicated female referrals, 2014-2017



Where patients come from



Plus:

Arkansas
Illinois
New York

China
Alaska
Hawaii
Japan
Thailand

Available to women/girls

- Egg and/or embryo cryopreservation
- Ovarian tissue cryopreservation
 - Mostly post-pubertal

We help coordinate but *do not perform tissue harvest surgery (or oophoropexies)*

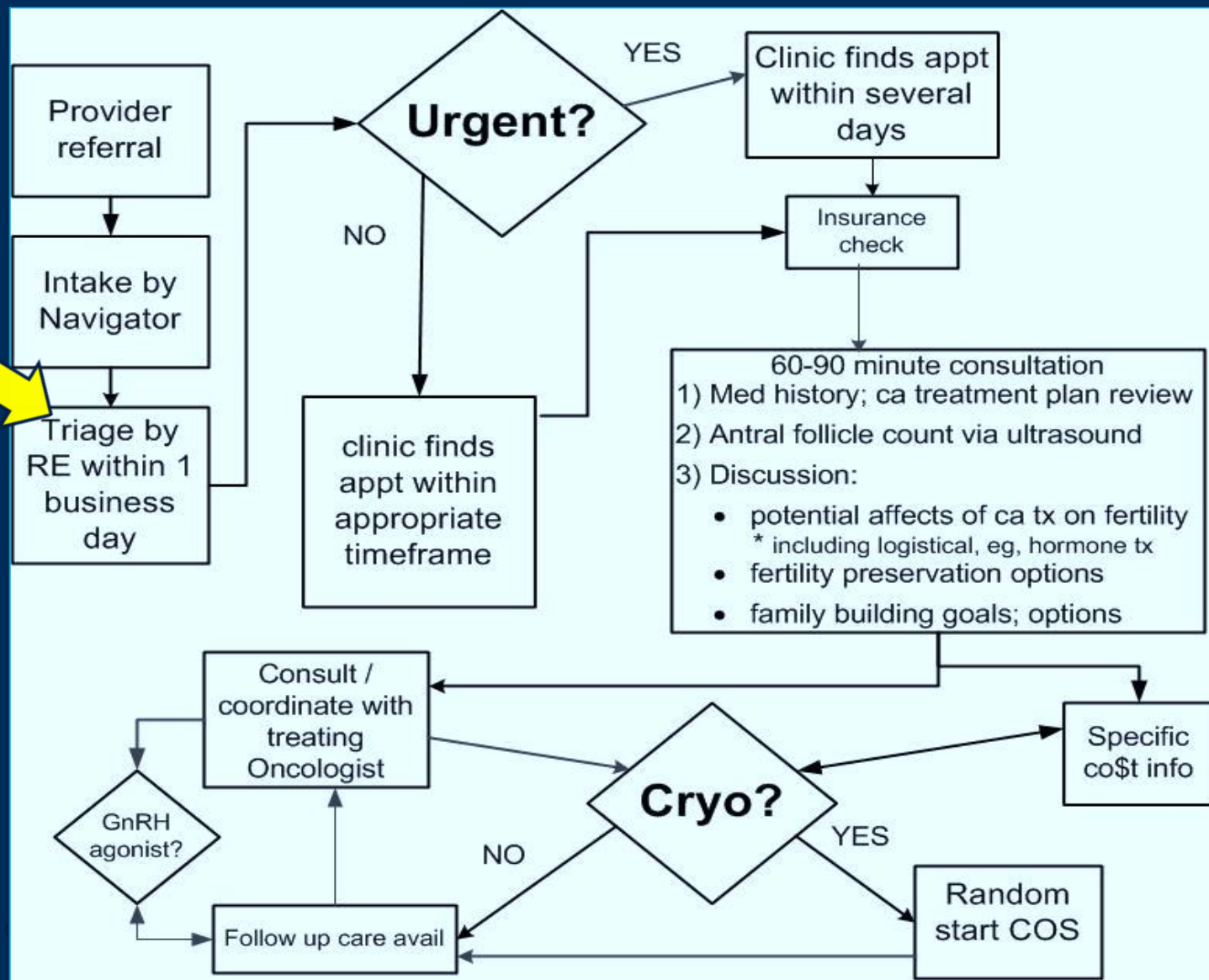
Available to women post-cancer:

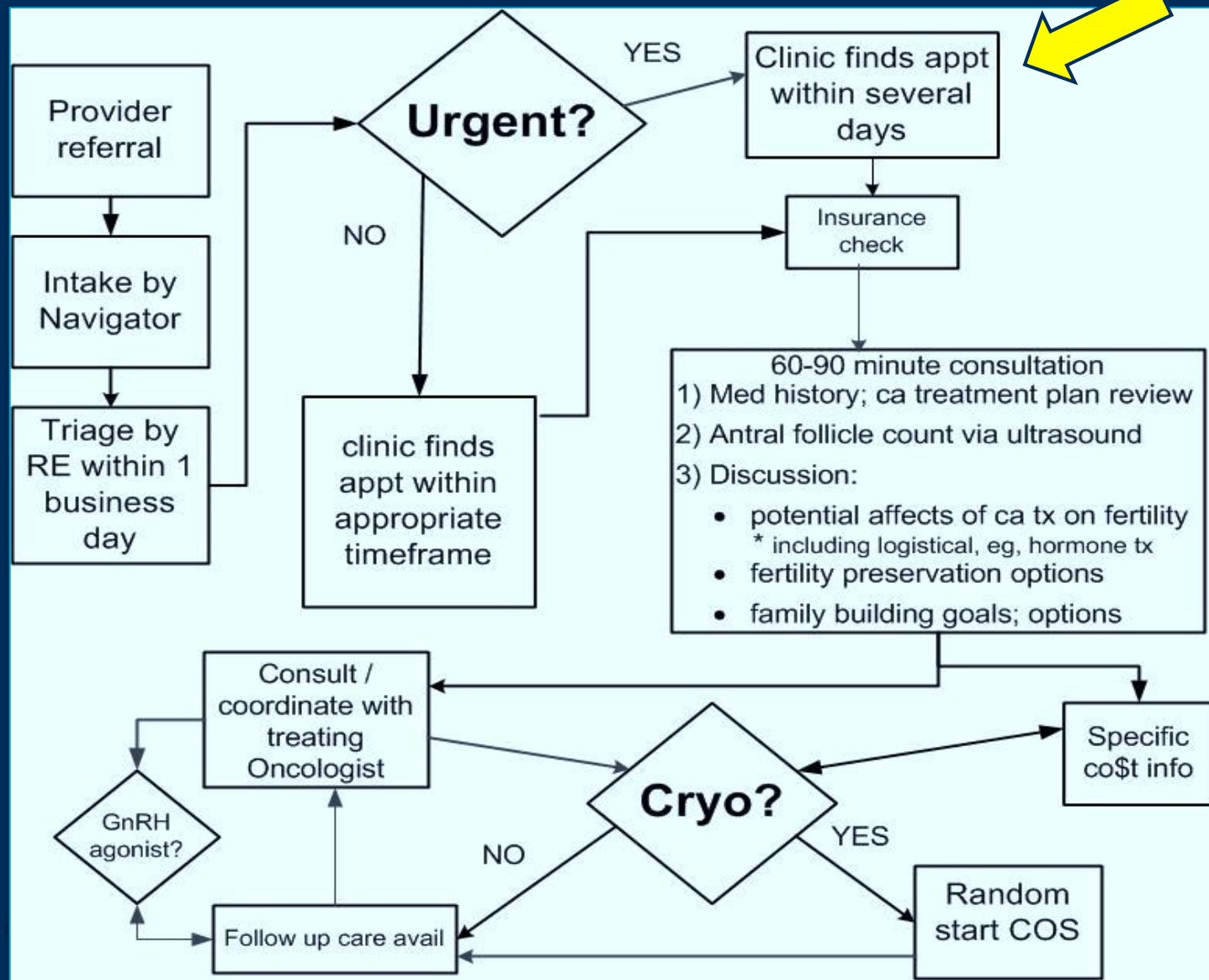
Full range of ART including

Egg donation

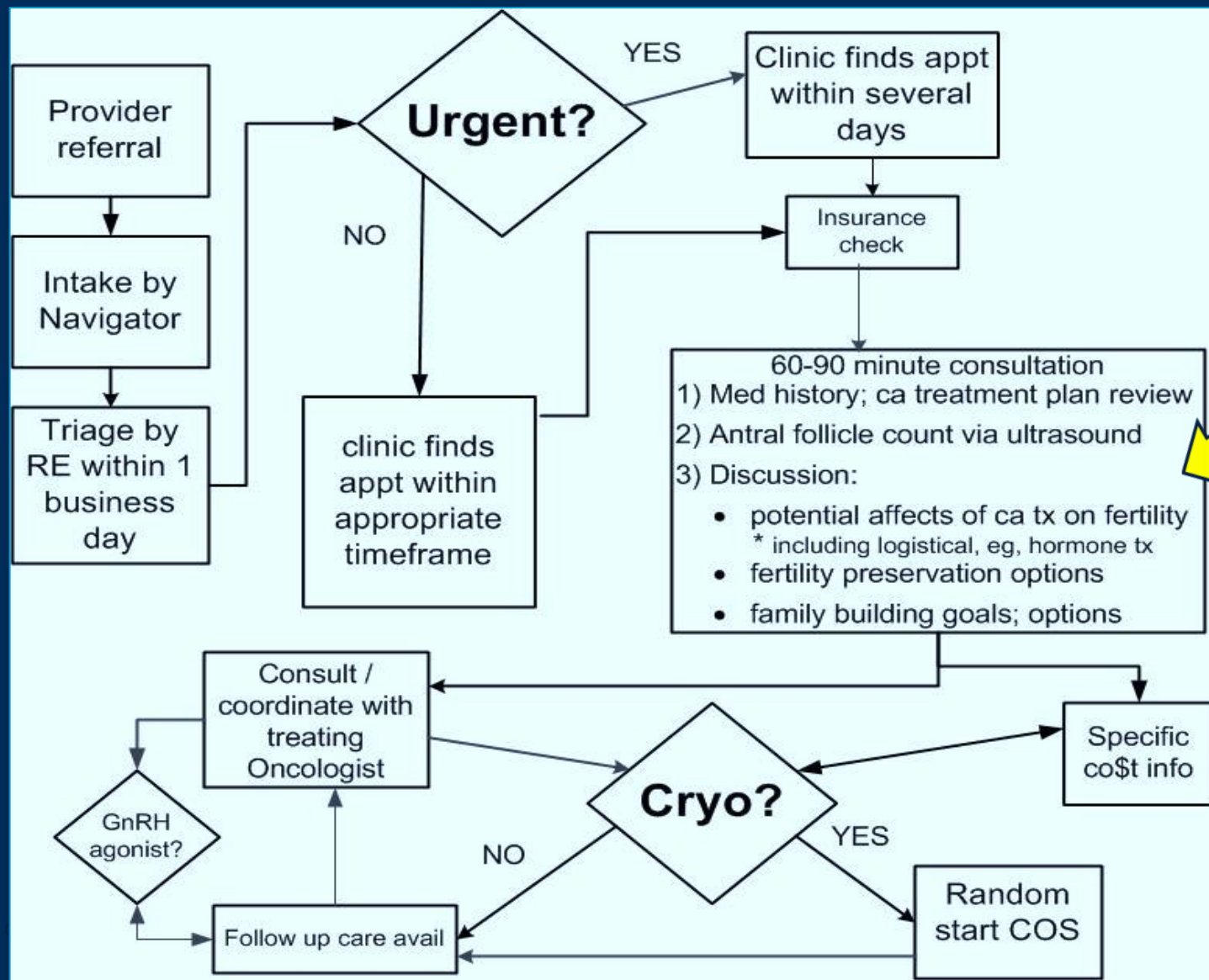
Gestational carriers

PGD / PGS

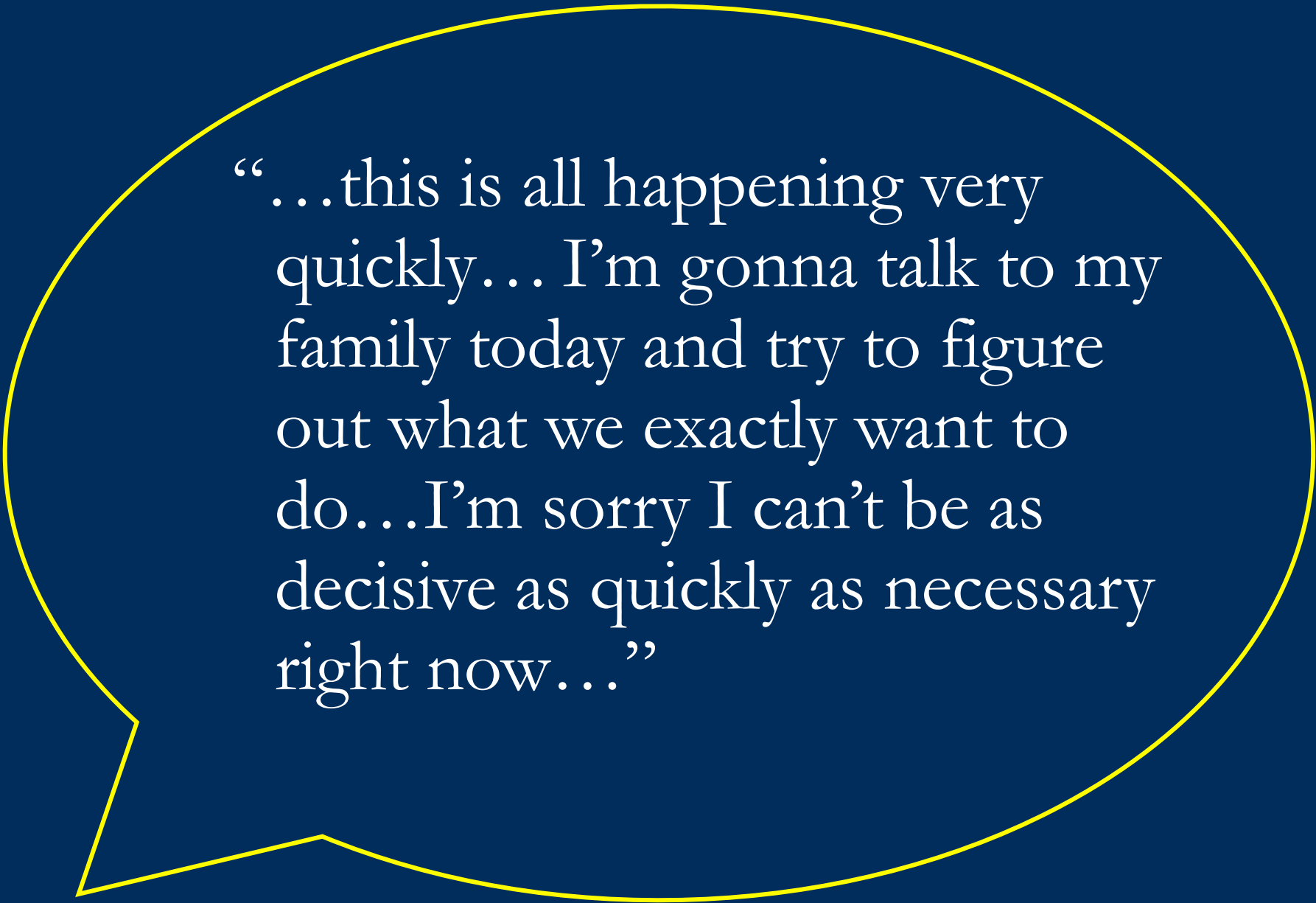




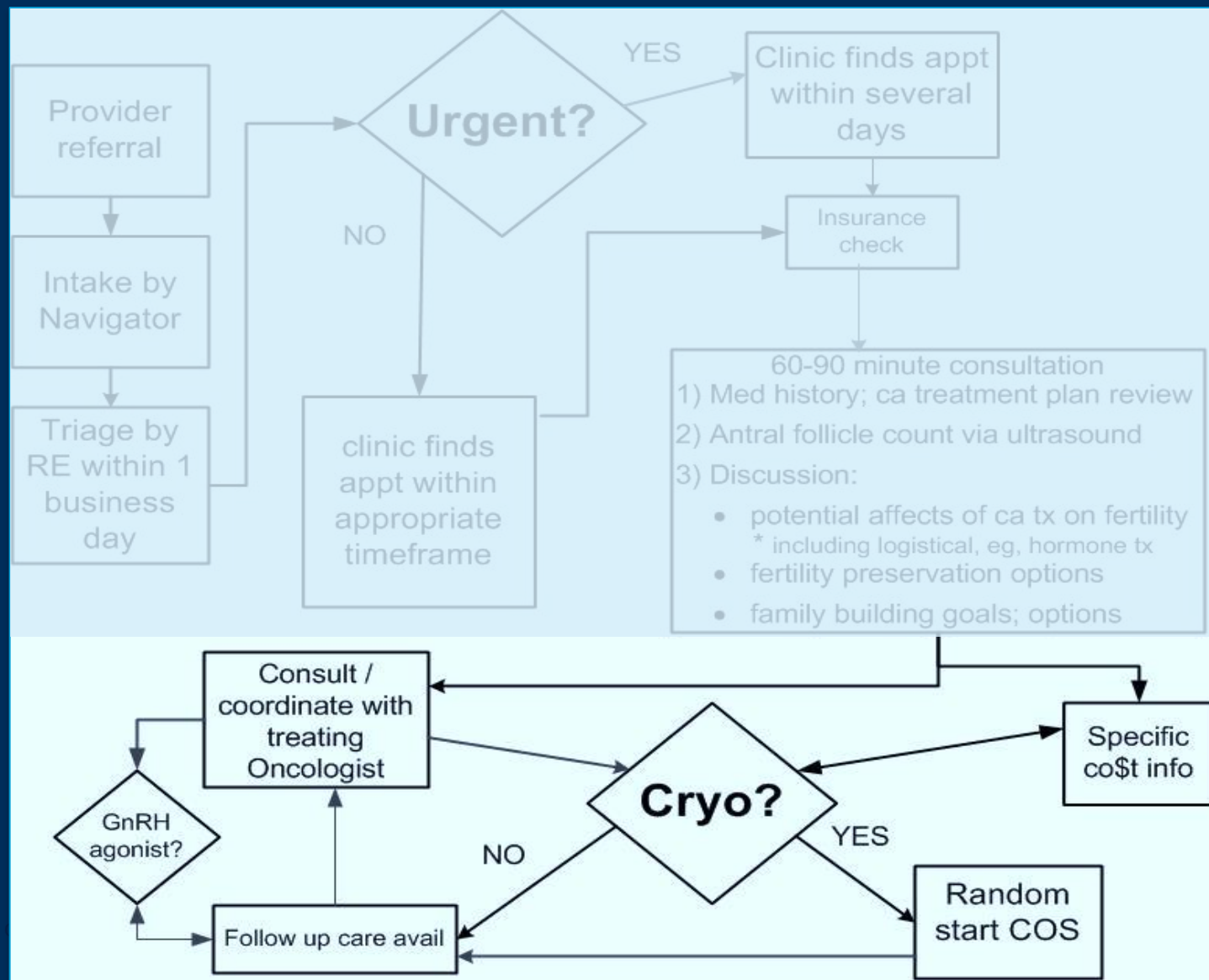
Source:



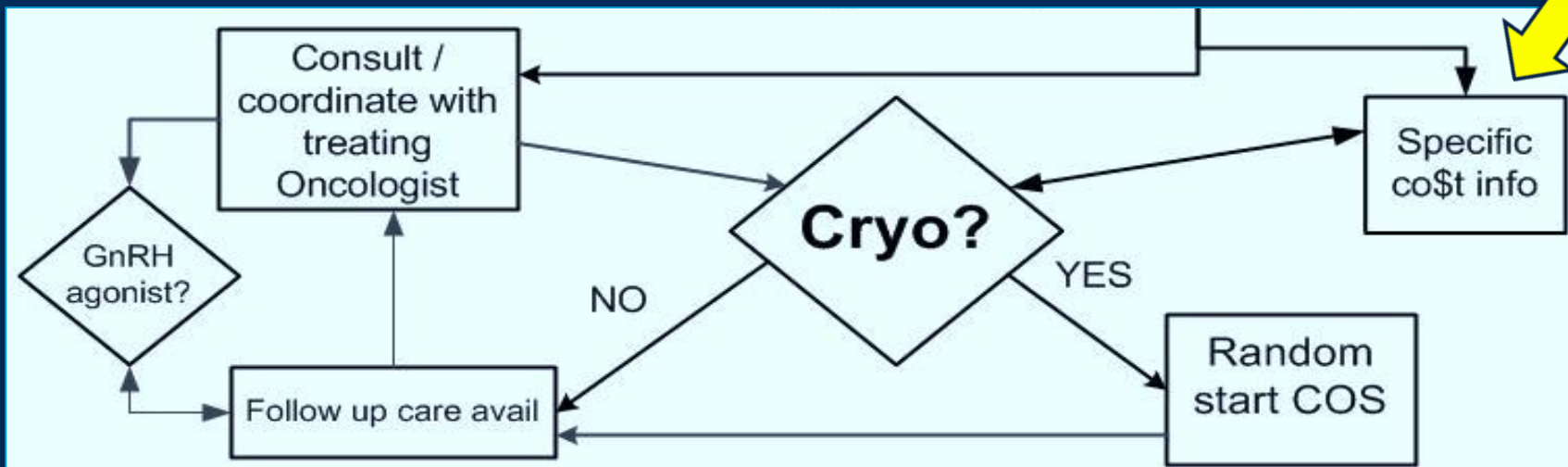
Source:



“...this is all happening very quickly... I’m gonna talk to my family today and try to figure out what we exactly want to do...I’m sorry I can’t be as decisive as quickly as necessary right now...”



Source: [illegible]



*Overall, healthcare costs for the typical San Franciscan are about 20% higher than the U.S. average [*SmartAsset* 2015](#)

Source: Citation Here

A busy week for new patient appointments

9/11/17 s/p Hodgkins

9/11/17 s/p Retinoblastoma

9/11/17 BRCA1

9/11/17 IDC

9/12/17 Hodgkins

The most diverse diagnoses during one week

IDC

BRCA

Cutaneous lymphoma

Rhabdomyosarcoma

ALL | SCT candidate

Sickle-cell disease | SCT candidate

Cervical ca; s/p trachelectomy

s/p Mucinous adenocarcinoma: RSO; chemo

To-date, the most patients cycling at once
and who referred them *Feb 12, 2017*

IDC	Community
IDC	Kaiser
IDC	UCSF
Hodgkins	UCSF
Hodgkins	Stanford
Endometrial	International

Some issues for the future of FP

- Costs
 - Disparities
- Technology changes
 - ART
 - Communications
- Changes in oncology
 - Practice
 - Culture
- Medical ethics & norms
 - OD, surrogacy, etc



University of California
San Francisco

Oncofertility Program Overview

Kyle Stimpert, MSN, RN, ACNP

Breanne Roche, MSN, RN, CPNP

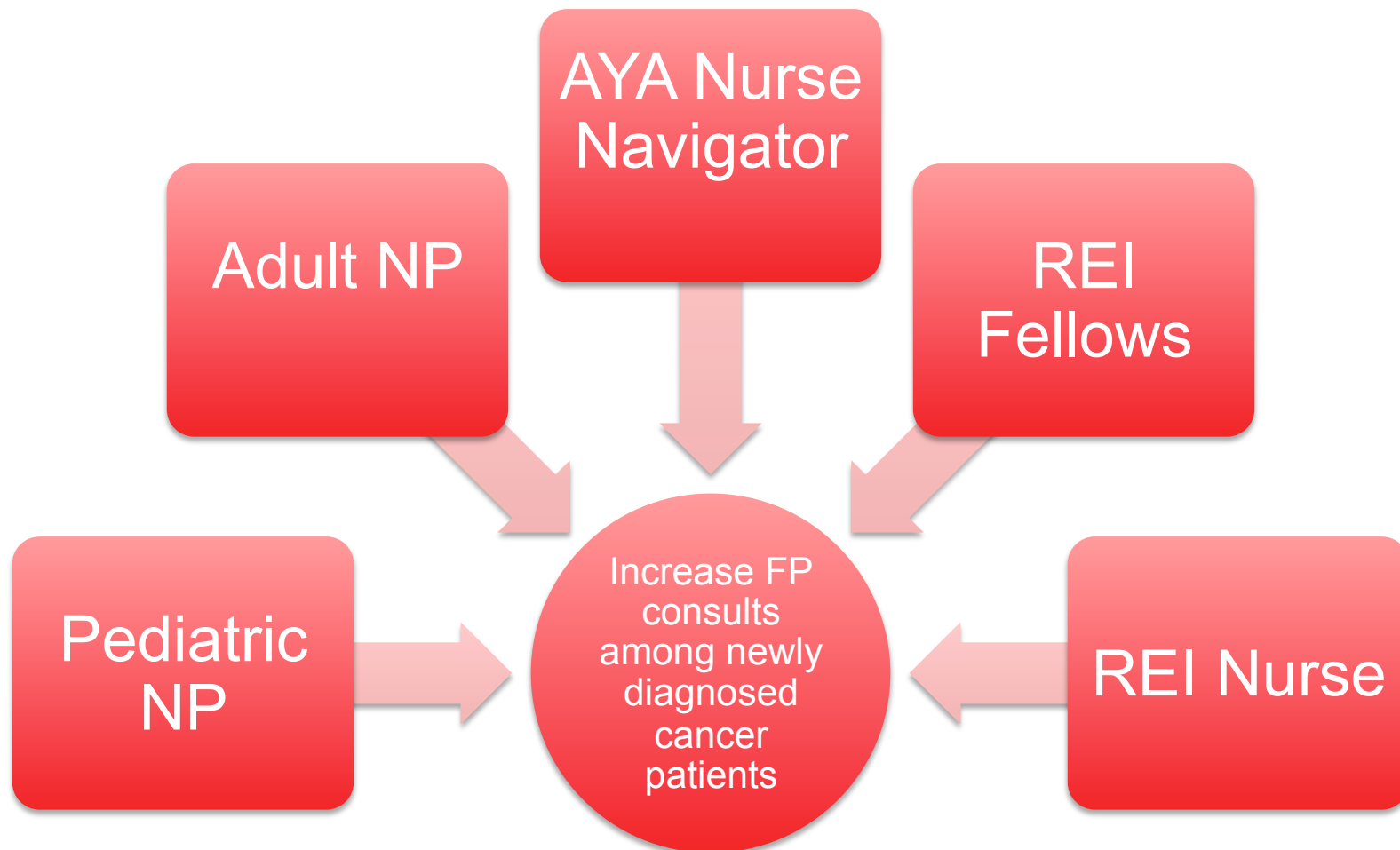
Our Timeline

- 2013
 - ONS Chapter meeting on Oncofertility
 - Bre- DNP in Oncofertility
- 2014
 - ENRICH/ECHO
 - Collaborate within our organization
- 2015
 - Annual Oncofertility Consortium Conference
- 2016
 - Business plan presentation
 - Oncofertility Service Line
 - Annual Oncofertility Consortium Conference
- 2017
 - Funding issues

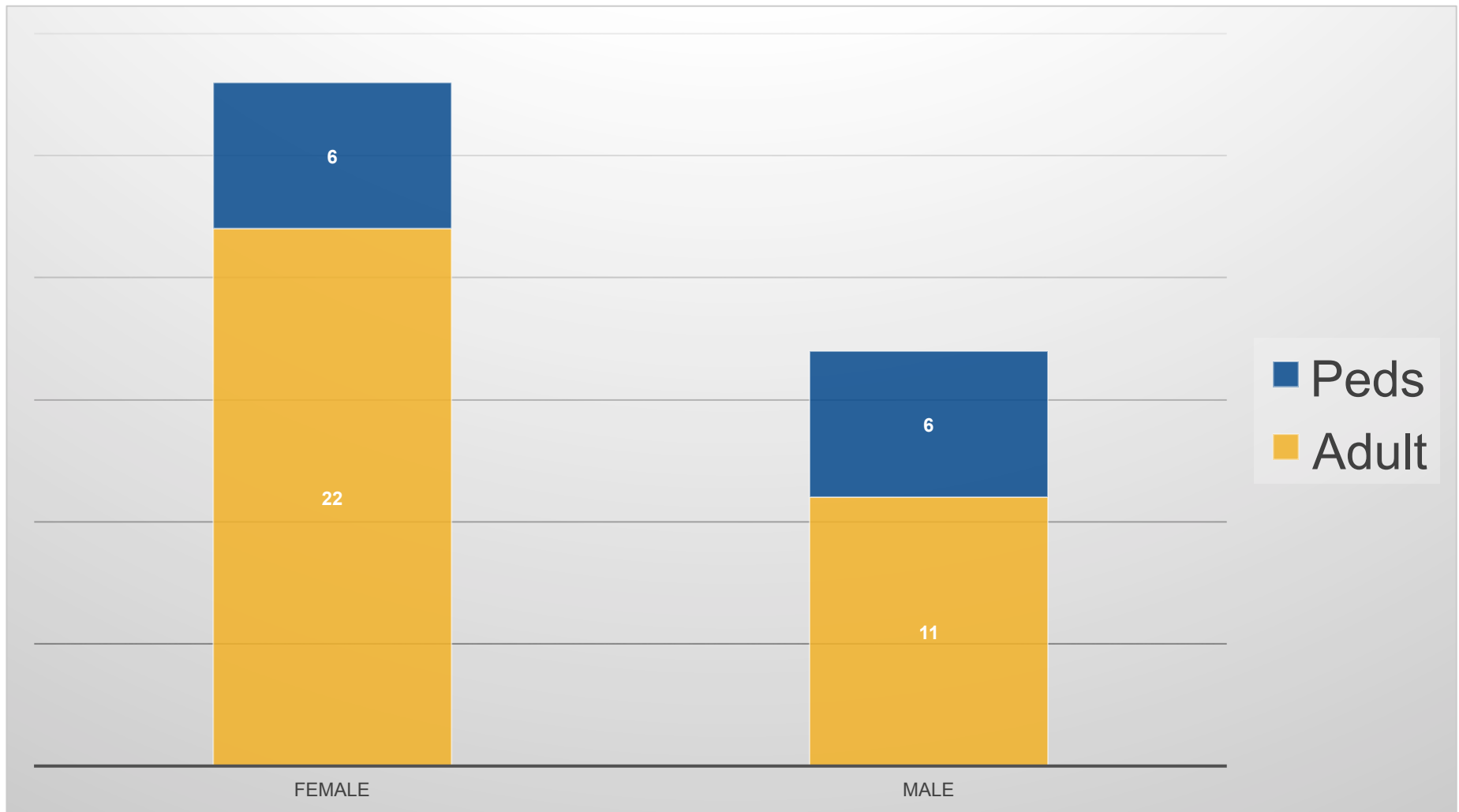
Business Plan Development

- Executive Summary
- Current National Environment
- Overview of Oncofertility
- Current State at Hospital
- Differentiating
- Fertility Risk
- Program consult goals
- Define Navigator role
- Proposed Staffing Model
- Programmatic Components
- Procedural Costs
- Collaborative Funding Support Needs
- Challenges and How to Address
- 6 month pilot -Measures of Success
- Follow Up/Action Items

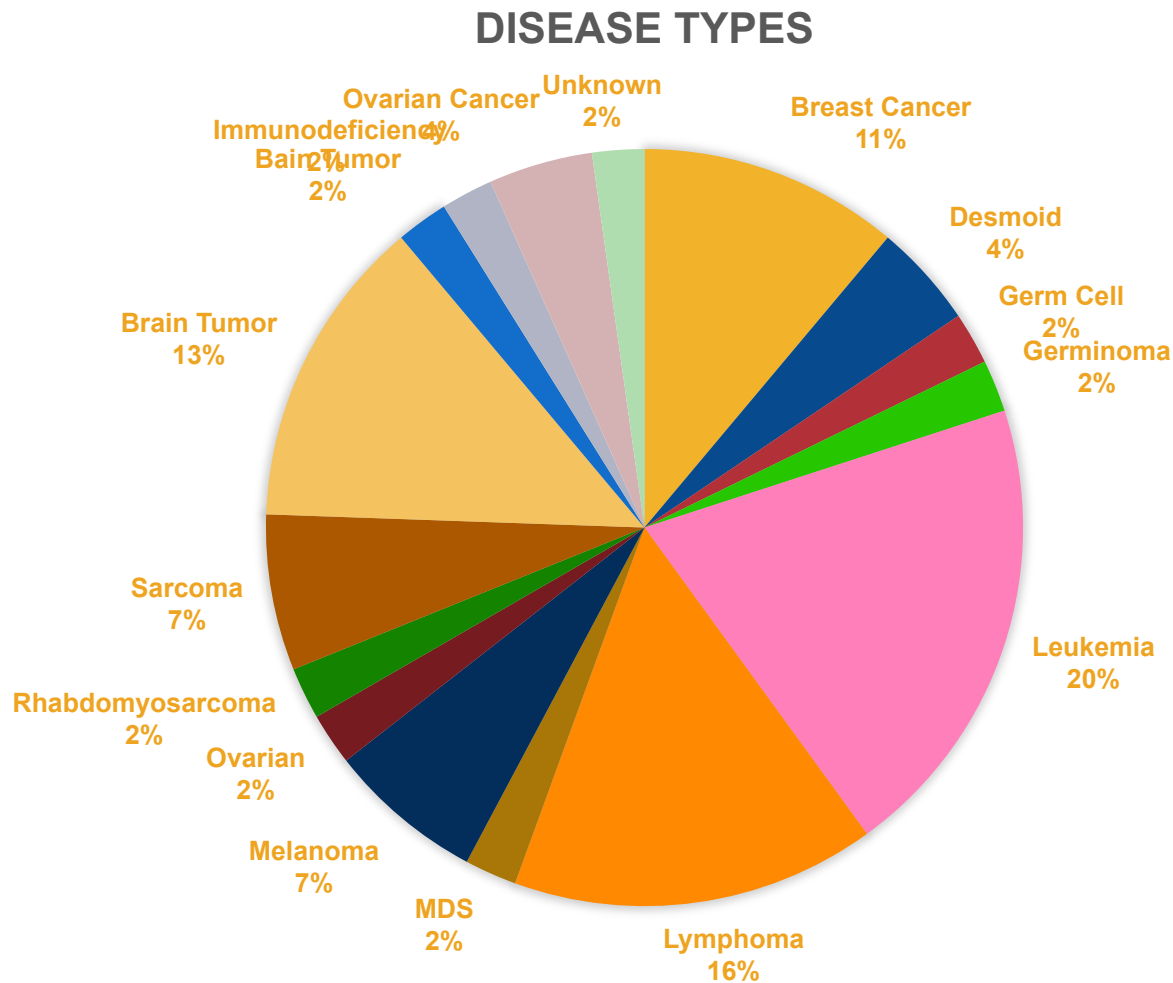
Oncofertility Service Line



Oncofertility: 2016 Patient Population at UHCMC and RB&C



Oncofertility: 2016 Referrals: Disease Type



Oncofertility Services Provided- Females

- Initially seen/triaged by:
 - Oncofertility Service Line
 - REI team
 - Consult within 24 hours
 - Dr. Liu, Dr. Goldfarb, Dr. Rossi. Dr. Weinerman
 - Offices at UHCMC, satellites on east and west side of Cleveland
- Discuss family building options
- Oocyte cryopreservation, embryo cryopreservation
 - Communication with the oncology team regarding treatment and fertility preservation window
 - Ovarian Tissue Freezing (not available at UHCMC)- Refer to University of Pittsburgh Medical Center or Cincinnati Children's Hospital Medical Center
 - Preimplantation Genetic Diagnosis (PGD) for heritable cancers

Oncofertility Services Provided- Males

- Initially seen/triaged by:
 - Urology
 - Dr. Kiranpreet Khurana (Urology)
 - Semen cryopreservation
 - Sperm banking available at Ahuja or Westlake
 - Testicular sperm extraction
 - Sexual health management
 - Testicular Tissue Cryopreservation- Refer to University of Pittsburgh Medical Center or Cincinnati Children's Hospital Medical Center
 - Oncofertility Service Line for urgent consults
 - Discuss family building options

Oncofertility Services Provided-Pediatrics

- Initially seen/triaged by
 - Peds team: PNP, AYA RN Navigator, oncologist
 - Discuss infertility risk & fertility preservation options
- Refer to REI team as indicated

Referring Patients/Workflow

- Email oncofertility DL with treatment plan and estimated start date
 - Females
 - Oncofertility team
 - REI
 - Males
 - Dr. Khurana- urology
 - Oncofertility Service Line
- For urgent consult, page Oncofertility pager
- Coordination of care with oncology, REI, surgery

Oncofertility Ambulatory EMR Update

- Goal is early referral to REI/Urology- at diagnosis
- Oncofertility check box in all new patient clinic notes to prompt oncologist to ask the patient if they have been informed of the impact their treatment may have on fertility
- Lab order set build into note to allow ease in ordering

Oncofertility Ambulatory EMR Update

Structured Notes Entry - TESTIT, FOUR - Clinic Note - Heme Onc

CREATE Preview Date of Service: 02 - Nov - 2017 Time: 11 : 26

Sections

- Patient Visit Information
 - Onco-Fertility
 - Admission Information
- Cancer History
- History of Present Illness
- Pain Screening
- Health Screening
- Review of Systems
- Allergies and Outpatient Medication
- Problem List
- Social History
- Performance Assessments, Vitals and
- Physical Exam
- Images
- Health Maintenance
- Results
- Acute GVHD Staging - Grading
- Assessment and Plan
- Patient Instructions
- To Send Document via Auto Fax
- Attestation

Copy Forward Refer to Note Preview Modify Template Acronym Expansion

Onco-Fertility

Visit Type ☒ New Visit ☐ Benign Heme New Visit ☐ Benign Heme Follow-up ☐ Supportive Care ☐ Integrative Medicine ☐ Follow Up Visit ☐ Consult

☒ Fertility Risk Tool ☐ Oncofertility Seidman Site

Risk Stratification Female ☐ High Risk > than 70% of women develop amenorrhea post-treat... ☐ Intermediate / Moderate Risk Approximately 30-70% of women... ☐ Lower Risk < than 30% of women develop amenorrhea post-treat...
☐ Very Low/No Risk No effect on menses / Unknown.

Risk Stratification Male ☐ High Risk Prolonged azoospermia post-treatment. ☐ Lower Risk Temporary azoospermia post-treatment. ☐ Intermediate Risk Prolonged azoospermia not common at given dose ☐ Very Low/No Risk No effects on sperm production.

Has the patient been informed about the impact their treatment may have on fertility? ☐ Yes ☐ Does not have a cancer diagnoses. ☐ Did not address at this visit

Is the patient interested in Fertility Preservation and were they referred for an Oncofertility Consult? ☐ Yes (Page Oncofertility @ 34566 for an appointment) ☐ No

Notes

Admission Information

☒ Admission Since Last Visit ☐ Yes ☐ No

☒ Admission Date 02 - Nov - 2017

☒ Admission Reason/Details

Assigned Clinic Room #

Retrieve Last Charted Values Insert Default Values Clear Unsaved Data

Need Help? Mark Note As: ☐ Results pending ☐ Priority ☐ Incomplete

☐ E&M Calculation ☐ Charge Capture SuperBill

Save/Forward Save Cancel

Oncofertility Site on SCC Intranet

UH Seidman Cancer Center

Benign Hemat.	Bone/Soft Tissue	Breast	CBCP	GI	GU	GynOnc	Head/Neck	Liver	Malig. Hemat/BMT	Melan.	NeuroOnc	PED	Thoracic
Unkwn													

Welcome to the UH Seidman Cancer Center Intranet

MENU

- Announcements
- Chemotherapy ▶
- Radiation Therapy
- Disease Teams & Tumor Conf. ▶
- Clinical Trials ▶
- Pol., Proc., and Clin Guidelines ▶
- Patient Education ▶
- PI Sheets - Patient Information
- Pharma Eval Form - Patient Ed ▶
- End of Treatment / Survivorship
- Staff Education & Development ▶
- Quality and Accreditations ▶
- Library Resources
- Community Sites
- Departments ▶
- UHCare for Oncology
- Patient Experience

UH Intranet	UHCare for Oncology	Medical Staff Directory	Corporate Directory	UHSCC Newsletter	AJCC 7th Edition
CASE	Physician Portal	IDX Rad	Events Calendar	UHSCC Nursing Newsletter	Frequent Forms
CASE CCC	Community Record	Core Library	Directions to Seidman	UHSCC Marketing Videos	End of Treatment Summary
	MModal Clarity (Spheris)	Pharmacy		Celebrating Our Care	
	Caisis	eSecurity			
	Explorys	Cancer Links			



Forms on Cancer Center Intranet

Oncofertility

UH Community >> UH Seidman Cancer Center >> **Oncofertility**

Benign Hemat.

BoneSoft Tissue

Breast

CBCP

GI

GU

GynOnc

HeadNeck

Liver

Malig. HematBMT

Melan.

NeuroOnc

PED

Thoracic

Unkwn

Announcements

Oncology Care Model

This page contains information for the Oncofertility group. Please contact the following people for any questions:

Amelia Baffa	Amelia.Baffa@UHhospitals.org	(216) 844-1969
Kyle Stimpert	Kyle.Stimpert@UHhospitals.org	(216) 286-3466
Breanne Roche	Breanne.Roche@UHhospitals.org	(216) 844-3345
Leslie Whalen	Leslie.Whalen@UHhospitals.org	(216) 285-5028

Announcements

Check here for new announcements - This page will be going live soon!

Forms

- [Andrology Cryopreservation Fert Pres](#)
- [Andrology order form](#)
- [Clinician instruction](#)
- [Lab E- Req](#)
- [Off site collection](#)
- [Patient Instructions for Semen Collection](#)
- Clinical Practice Forms (*need documents or new document list*)

Challenges

Funding

- No consistent funding
- Hospital budget constraints
- Not 'owned' by one department (REI, pediatrics, oncology, urology)
- Unable to start ovarian/testicular tissue protocols

System Implementation

- Kids are not “mini adults”
- Educating oncologists, RN, APP, SW
- Unable to fully implement program without funding
- Raising awareness of oncofertility and our program

Data Tracking

- No centralized software
- EMR ambulatory update not applicable to all peds patients
- Keeping up with the database

Sustainability

- Dedicated time specific to Oncofertility
- Cross coverage
- Satellite and community outreach

Funding

- AYA Navigator
 - Position funded through Pediatric Nursing (AYA care and Fertility Preservation)
- Acute Care Nurse Practitioner
 - Initial funding from Cancer Center after business plan presentation
 - Attempt to gain funding from grant or donor
- Pediatric Nurse Practitioner
 - Intermittent office time
- REI Nurse
 - Point person in fertility clinic, allotted time from office manager

Next Steps for the Oncofertility Program

- Continue to build the oncofertility program and service line
- Explore funding opportunities
- Identify champions at community sites
- Develop a standardized data tracking system
- Market our service line and raise awareness
- Continue to coordinate oncofertility education within the system

Our Team

Amelia Baffa, RN

AYA Cancer Nurse Navigator

UH Rainbow Babies & Children's Hospital

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Deborah.Persin@UHhospitals.org

