

*Cancer Education Day*  
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# Shared Care: Breast Cancer

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# Disclosures

- **Dr. Dema Kadri:** None to declare
- **Dr. John Mathews:** Participated in Advisory Boards
  - Novartis
  - Bayer

# Objectives

- Define role of Primary Care Physician and Oncologist in the Cancer Journey in Early Breast Cancer
- Familiarize the new tools in decision making for adjuvant chemotherapy
- Monitoring patients on Endocrine therapy
- Early discharge with follow-up care by Primary Care team

# Expectations in Shared Care Model

- Cornerstone of shared care: Good communication and information transfer
- Specialist → Written information about roles and what to expect
- Primary Care Physician → Easy access to specialist to discuss concerns



# Breast Cancer Types

- **Invasive:** Cancer has left ducts or lobules and has invaded surrounding tissue
- **Non-invasive:** Cancer not spread beyond the ducts or lobules

# Breast Cancer Signs and Symptoms

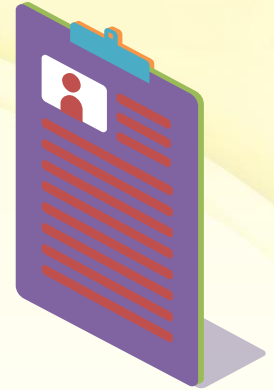
- **Early Stages:** None
- **Ductal carcinoma:** Most commonly a palpable mass.
- **Lobular carcinoma:** Often does not form a lump. Tissue in the breast is getting thicker or harder.
- A mass in the axilla
- Changes shape and size of breasts
- Changes to the nipple
- Nipple discharge


# Case

- A 50 year old female presents to your office, for an Annual Health Exam
- She has no concerns, she does not report noticing any lumps in her breasts, she denies any skin changes or nipple discharge.



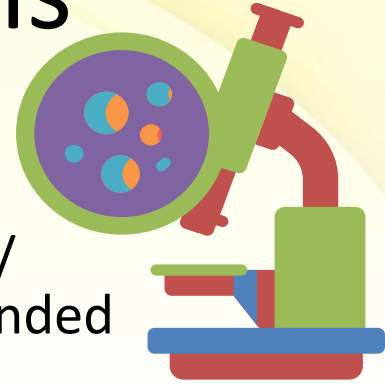
# Case



- **Past Med Hx:** Hypothyroidism
- **Medications:** Synthroid
- **Menarche:** Age 11/12
- **Menses:** Still occurring monthly, (some perimenopausal bleeding)
- No pregnancies **GOPO**
- No breastfeeding
- Healthy and active
- **No smoking** 
- **Rare ETOH**
- **Family Hx:** 2 maternal great aunts – breast CA, cousin breast CA, Father Type II DM
- **You order a screening mammogram-her first ever.**



# Case: Timeline of Diagnosis



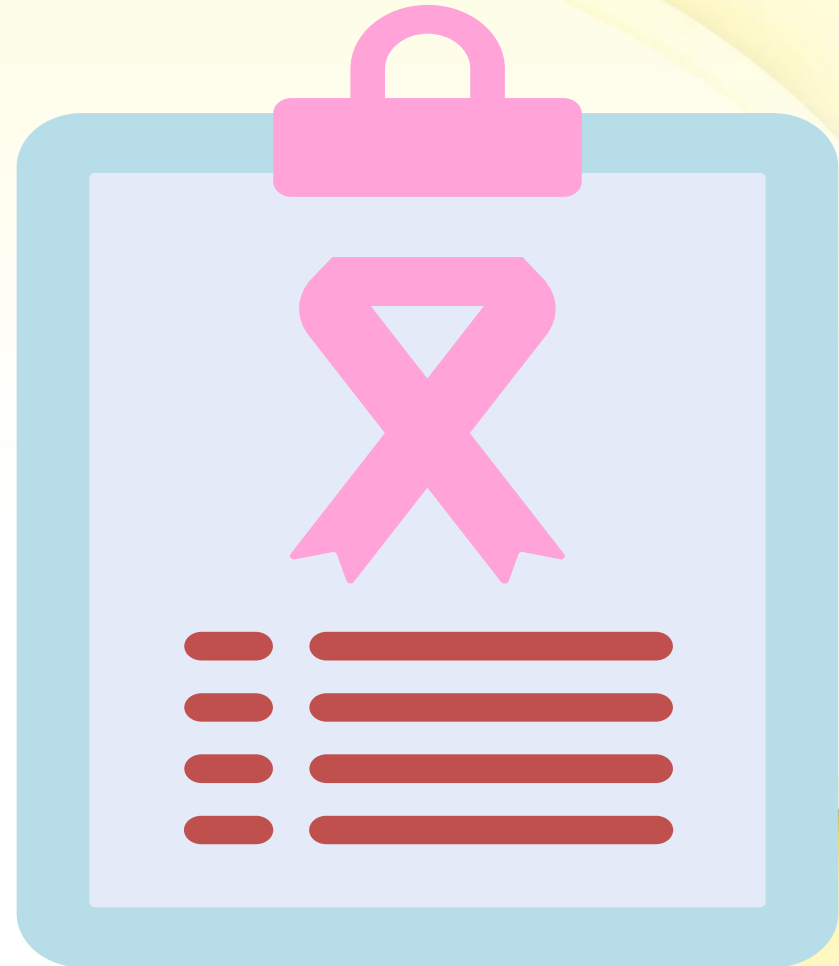
- **1 week later:**
  - Mammogram results: Area of architectural distortion/spiculated mass-mag views and ultrasound recommended
- **13 days later:**
  - Mammogram with mag views-> lesion is still present
  - Ultrasound: Right breast –several oval shaped lesions likely cysts, At 11:00 o'clock there is a lesion 1.4 x 1 x 1.1 cm with spiculated margins. Biopsy recommended.
- **10 days later:** Ultrasound guided biopsy
- **14 days later:** Pathology shows Invasive Ductal Carcinoma
  - ER + , PgR+, Her2 -
- Patient is contacted by Breast Assessment Program and offered an appointment in the same week.

# Case: Breast Cancer Diagnosis

- You call her back into your office to discuss the results with her
- She has some questions for you:
  - **What does this mean?**
  - **What caused this?**
  - **What are the next steps?**
  - **What are my options for treatment?**

# Risk Factors for Breast Cancer

- Personal Hx of Breast Ca
- Family Hx of Breast Ca
- BRCA gene mutation
- Genetics (some genetic conditions)
- Ancestry (i.e. Ashkenazi Jewish)
- Nulliparity or late pregnancy
- Hormone Replacement Therapy
- Oral Contraceptive Pills
- Exposure to ionizing radiation
- Obesity
- Physical Inactivity
- Dense breast tissue
- Early Menarche



# Breast Cancer Treatment Options

Treatment options presented to the patient depend on:

- The tumor subtype and hormone status, ER, PR and HER2
- The tumor stage
- The age of the patient
- General health of the patient
- Menopausal status
- The patient preferences and values
- The presence of known mutations (*BRCA1* or *BRCA2*)

# Breast Cancer Treatment Options

- For Ductal Carcinoma In Situ and early stage Invasive Carcinomas → Surgery usually recommended
- **Surgery types:** Lumpectomy, Mastectomy, Mastectomy with reconstruction

The following are types of neoadjuvant therapies that may be offered:

- Radiation
- Systemic Chemotherapy
- Hormonal therapy



# Do I Need Chemotherapy?

## Previously looked at high risk features:

- Lymph node involvement
- Size of tumor
- Grade
- Lymphovascular invasion
- **Online Calculators:**
  - *Predict* (created by NHS):  
<https://breast.predict.nhs.uk/>
  - Based on database observations – risk factors entered into online tool. Did not take into consideration Her-2-neu and other tumor specific factors

# Do I Need Chemotherapy?

- **Triple Negative:** High risk
- **HER2/neu Positive:** Benefit from chemo and Herceptin
- **ER/PR Positive ; HER2/neu Negative:**
  - Role of molecular profiling (Oncotype DX / EndoPredict)
    - Check tumor biology
    - Tumor sample sent out for testing. No additional biopsies.
    - Covered by OHIP – out-of-country
    - 2 to 3 week delay
    - Recurrence score provided

# How to Interpret Recurrence Scores

- Prognostic and predictive score: Based on NSABP B-14 study
- Values 0 to 100
- Higher the score, higher the risk
- TAILORx – Study in mid range scores (11-25 score):  
Endocrine therapy not inferior to Chemo + Endocrine therapy in some people:
  - 85% of women > 50 years can be spared adjuvant chemo
  - Some benefit in women < 50 years
  - Adjuvant chemotherapy recommended if score > 25



# Case: Treatment

- She has been seen by the Breast Assessment Program and opted for a bilateral mastectomy with reconstruction
- She has been started on chemotherapy

**“What are the side effects?”**

**“Is there anything we should be looking out for?”**

**“Do I need to change my diet?”**

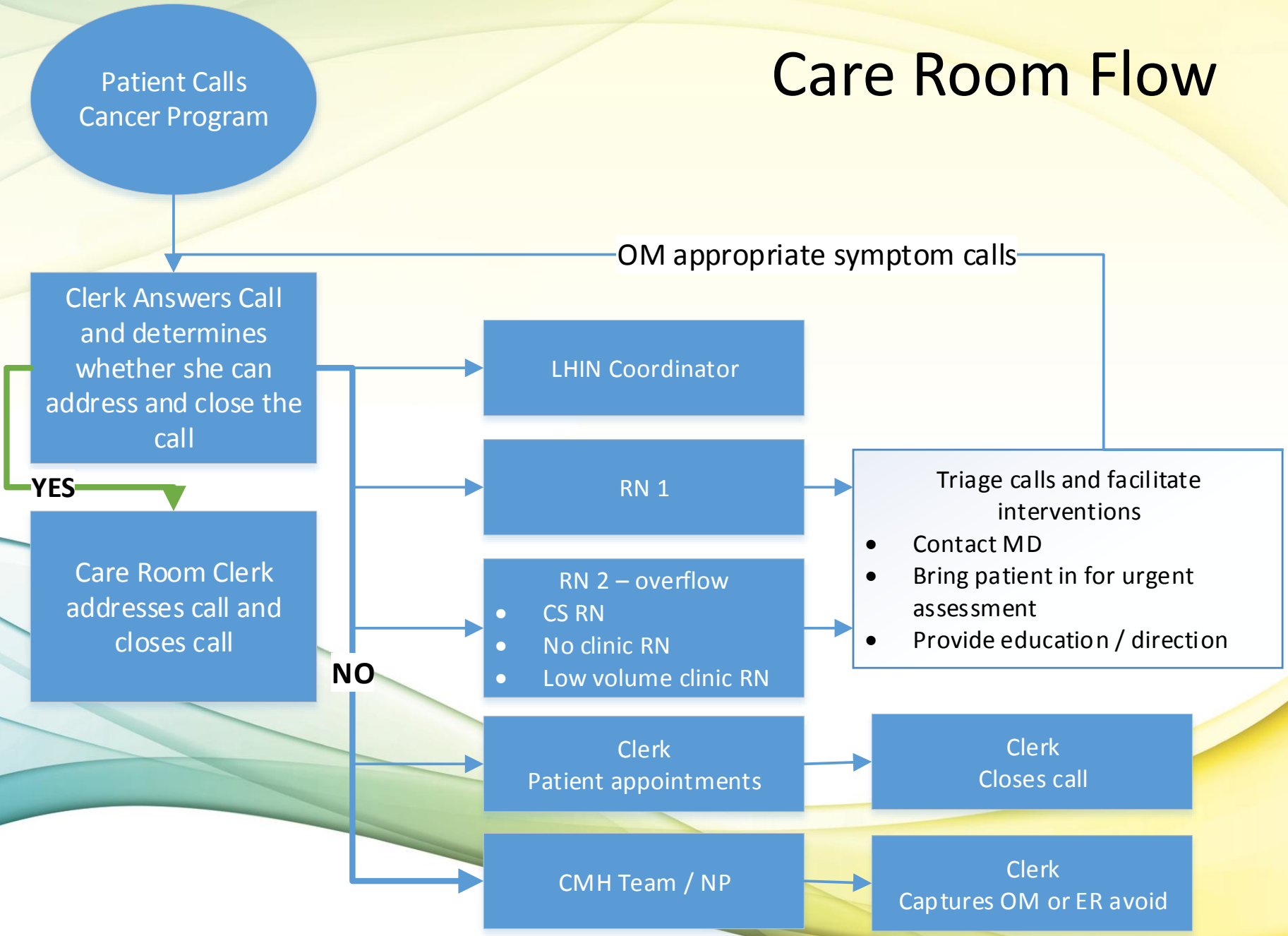
# Role of Diet

- No evidence that specific diet or certain foods reduce risk
- Well balanced, plenty of fruits and veg., limit meat and fat
- Limit alcohol intake
- *Underweight*: increased risk of complications of chemotherapy
- *Overweight*: less positive prognosis
- Large doses of vitamins and herbal supplements do not decrease risk of recurrence
- Soy products contain phytoestrogens. Unlikely to be harmful. Can have 3 servings/day.
- Antioxidants – Vitamin C & E: Best to supplement with diet rather than medications.

# Side Effects During Chemotherapy

- Patients are told to call Cancer Program during working hours for severe or unexpected side effects (519-253-5253)
- Calls directed to Care Room during the day:
  - Clerk
  - Registered Nurse
  - CCAC Coordinator
  - Input from NP/Oncologist
  - Urgent clinic assessment, if indicated (ER avoidance)
- After hours, patients given number for CAREpath

# Care Room Flow



# Side Effect Management

- **By Oncology team:**
  - Nausea, vomiting, dehydration
  - Mucositis
  - Fever – neutropenia
- **By Primary Care:**
  - Diabetes/hyperglycemia
  - Cardiotoxicity, agents to optimize cardiac function
  - Bone health
  - Lipids
- **By both:**
  - Sexual health
  - Psychosocial issues

# Case: Follow-up Chronic Disease

- You are now seeing her for an Annual Health Exam
- Labs: HgA1c- 6.8
- She took steroids for a short period of time while on chemotherapy to help with nausea - no longer on this since 6 months
- You diagnose her with Type II Diabetes, but she is still under the care of Medical Oncology at the WRCC. She wonders: **“Who will follow me for the new diagnosis of diabetes?”**
- **Are there any implications?**

# Case

- You advise her to change her diet and discuss lifestyle modifications, no need for antihyperglycemics at this time
- You refer her to weCHC Diabetes Wellness Site (Lauzon location)
  - Referral form can be found at <https://wechc.org/medical-nutrition/client-referral-form/>
- You assure her that you will continue to monitor her for Type II Diabetes

# Case: Breast Cancer Treatments and Side Effects

- She has completed chemotherapy and has been started on Tamoxifen
- She wonders: **“Is there anything I should be on the look out for while on this medication? What are the side effects?”**



# Monitoring During Tamoxifen Use

- *Common side-effects:* Menopausal symptoms, nausea, mood-swings, weight gain.
- *Risk of DVT:* 2.5 times as high as normal controls. 1.5-2% risk of event.
- *Risk of Endometrial Cancer:* 2-3 times risk of age-matched controls. 1.5% risk @ 5 years. Mainly in post-menopausal. Told to report risks of vaginal symptoms: spotting/bleeding.
  - PCP to refer to Gynaecology



# Monitoring Patients on Aromatase Inhibitors

- Menopausal symptoms
- Bone/joint ache
- Risk of osteopenia: Patients asked to take Calcium and Vitamin D.
- Check BMD every 1-2 years and watch for osteopenia.
- Osteoporosis or worsening osteopenia – treat with bisphosphonates.



# Discharge/Transfer of Care

- Advise patients that care is being transferred
- Patient to call PCP to make follow-up appointment
- Discuss standard recommendations
- Watch for complications of therapy
- Discharge package given
- *More to be discussed during presentation this afternoon*

# Is it Easy to Contact Specific Oncologists?

- **Main number for Cancer Program (patients):** 519-253-5253
- **Dedicated line for providers:** 519-255-6757 (please **do not** share widely)
- *Active patients in Cancer Program – patient at home:* Speak to Oncologist
- *Active patients admitted to hospital:* Oncologist on call
- *New referral:* Can speak to Oncologist on call/fax referral
- *Discharged patient/same diagnosis:* Send re-referral



# References

- Cancer Care Ontario-Breast Cancer:  
<https://www.cancercareontario.ca/en/types-of-cancer/breast-cancer>
- Canadian Cancer Society-Breast Cancer:  
<http://www.cancer.ca/en/cancer-information/cancer-type/breast/treatment/?region=on>
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- American Society of Clinical Oncologists:  
<https://www.cancer.net/cancer-types/breast-cancer/types-treatment>