

2022 Key Studies

Loss of Human
Touch

Nursing
Intervention
Strategies For
Patient
Engagement

Immunotherapy
Patient
Experience

Infusion
Reaction
Management

What can be done to mitigate the impact of the loss of human touch?

Study Title:

Dealing with the loss of human touch during the pandemic for oncology patients

Impact of the pandemic on inpatient oncology patients At Cedars-Sinai Medical Center

Newly diagnosed or relapsed patients admitted through emergency department to the oncology unit

Patients are vulnerable; spiritually, emotionally, and physically

Patients are missing human touch when they need it the most

Study Objective: To increase touch, comfort, and warmth for oncology patients



- Recognize the challenges faced



- Identify and discuss losses, personally, and in healthcare



- Provide a supportive and comforting environment

Personal and Healthcare Pandemic Related Losses

Touch

Hugging, holding hand, shaking hands

No visitors

Faith

Hope

Connection

Staff, Medical Team

Friends and Family

Unable to see their face

Unable to see their smile

Loss of Human Touch

Identified newly diagnosed patients

Oncology patients
Stem cell transplant patients
Solid organ transplant patients
Oncology patients requiring surgical intervention

**March 2021 – February 2022**

Nursing leaders delivered specialty made blankets and beanies to 228+ patients

Handwritten cards with a personal message signed by the staff

**Patients expressed gratitude**

Tears
Words of thanks
Taking pictures
Social media posts

**2nd Quarter of FY2022**

Highest inpatient patient experience scores

- The loss of touch as a part of human caring in nursing has been a struggle for patients and nurses during the pandemic
- Gifting of a blanket, beanie, and personalized card introduced warmth, comfort, and touch back into the care of oncology patients

Implementing initiatives that can bring warmth, comfort, and touch back into the care of oncology patients will improve the patient experience, create a rewarding work environment, and strengthen the community

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Do nursing intervention strategies promote patient engagement and improve patient outcomes?

Study Title:

Nursing intervention strategies to promote patient engagement (PE) in cancer patients: a qualitative study

Study Objective:

- To explore patients' experiences of care regarding nursing behaviors/strategies
- To explore nurses' perceptions of behavior that they viewed as engaging for patients

Study Design: A qualitative study was performed during April – May 2021

Semi-structured interviews with patients
N=6

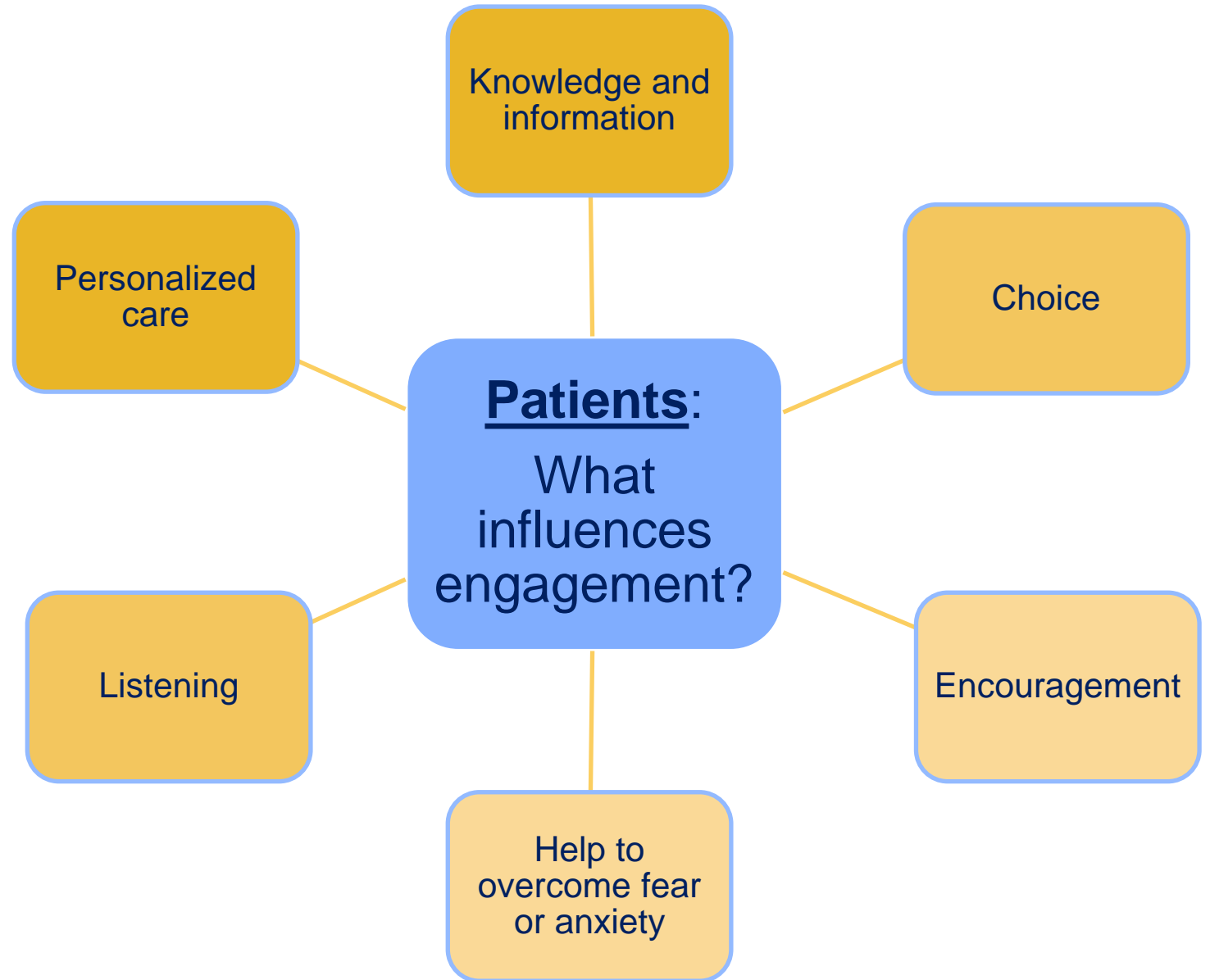
Two focus groups with oncology nurses
N=17

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graph TD; A[Semi-structured interviews with patients N=6] --- B[Two focus groups with oncology nurses N=17]; B --- C[Interviews and focus groups were digitally recorded and transcribed verbatim]; B --- D[A thematic analysis was conducted (by independent researchers)];
```
- Interviews and focus groups were digitally recorded and transcribed verbatim
  - A thematic analysis was conducted (by independent researchers)

# Nursing Intervention Strategies

## Six patients were interviewed

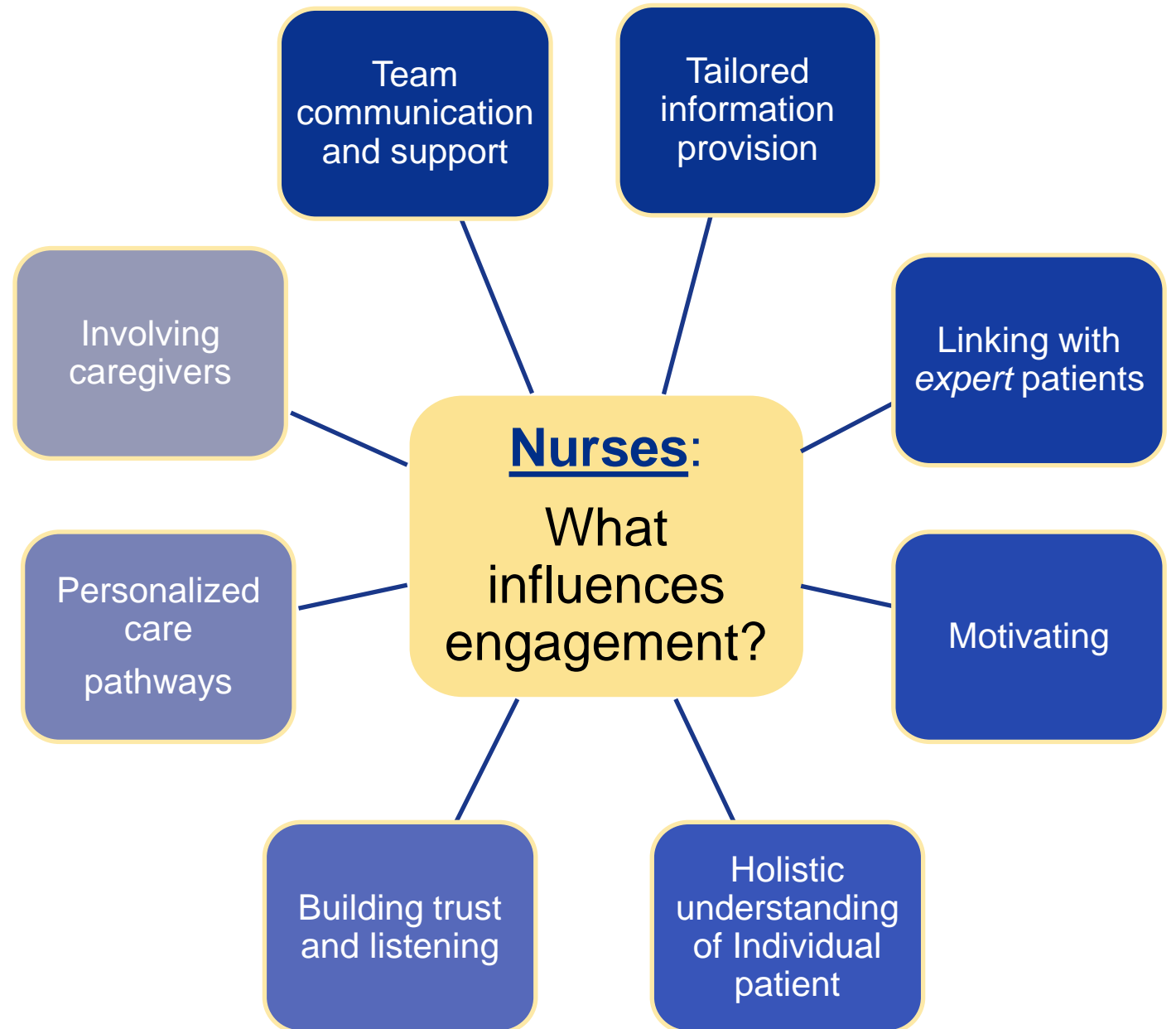
- Age range 43 -84 years
- 3 male / 3 female patients
- 4 patients with hemato-oncological disease

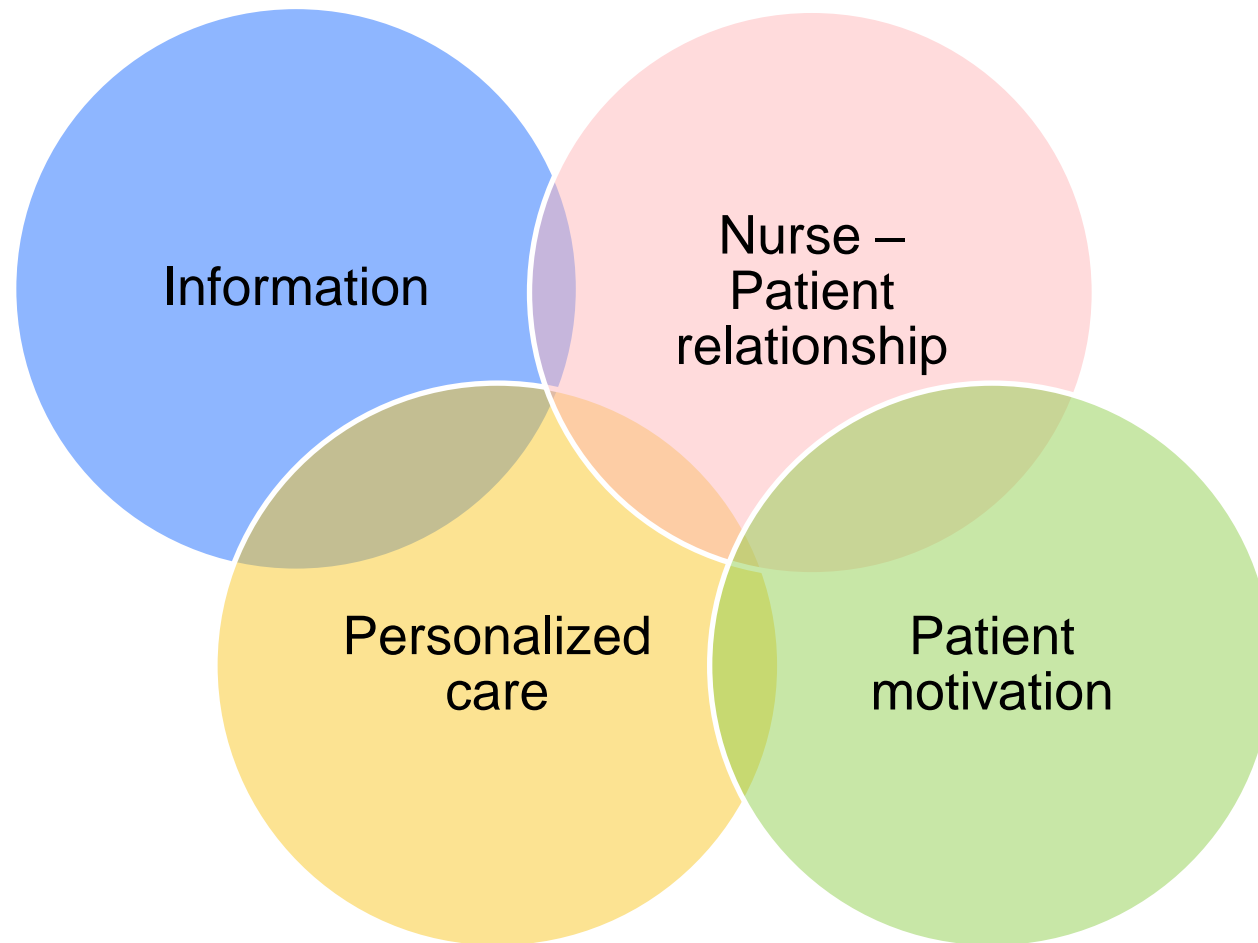


# Nursing Intervention Strategies

## Two focus groups, 17 nurses

- Age range 29 – 51 years
- 5 – 21 years total nursing experience
- 5 – 17 years oncology nursing experience



Four Common Themes Identified

Reflect the cognitive, emotional, and behavioral component which when activated give rise to the engagement process

- The use of several behaviors by nurses are perceived by both nurses and patients as promoting patient engagement
- Engaged patients are more actively involved in their care, informed and involved in decisions, and participate in self-care
- Engaged patients assume responsibility for the impact of their behavior on outcomes of care

*Applying key strategies effective in promoting patient education and engagement results in engaged patients with positive effects on health outcomes, cost of care, and quality of life*



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*Does patient education improve the management of immunotherapy related side effects and the patient experience?*

Immunotherapy extends the promise of longer life to cancer patients with severe disease

Immunotherapy is approved for more and more cancers e.g., melanoma and NSCLC since 2011

More patients eligible

More immune-related adverse events which can seriously compromise quality of life

# Immunotherapy Patient Experience

## Study Title:

*Immunotherapy Patient Experience: A Cross-sectional Survey of Patient Knowledge, Expectations, and Information Seeking Strategies*

## Study Objective:

- To characterize the experience of persons with cancer who have been treated with immunotherapy from the perspective of the patient

## Study Design:

A cross-sectional survey addressed the range of patient experiences with immunotherapy side effects

1) Knowledge about treatment

2) Expectations about treatment

3) Experience with side effects

4) Information seeking strategies

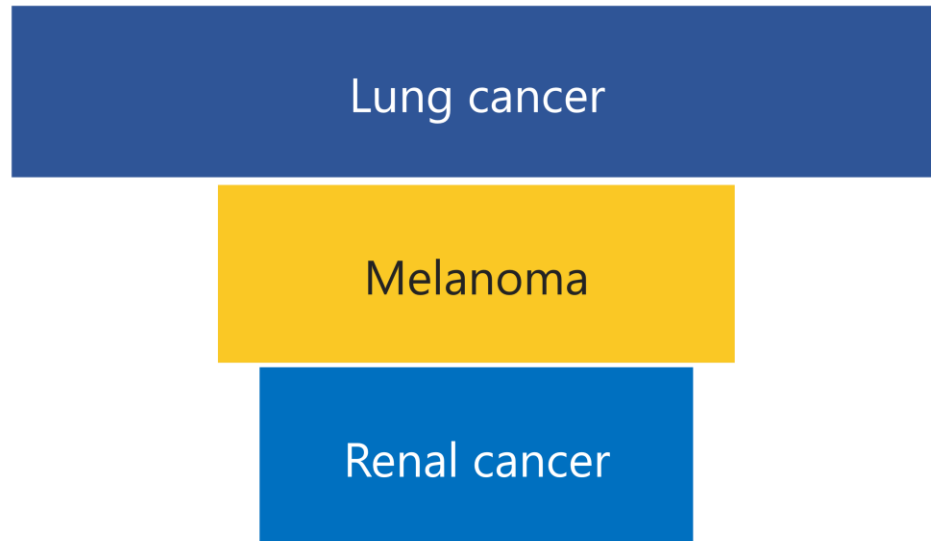
Patients receiving immunotherapy for cancer, age  $\geq$  18 years, not on hospice

Data analysis includes descriptive statistics; free text responses will be analyzed with content analysis

# Immunotherapy Patient Experience

- 364 out of 940 (31%) potential participants responded to the survey
  - ¼ had a bachelors degree; ¼ had some college education
  - 35% 66-75 years old
  - 24% 56-65 years old
  - 12% 46-55 years old

## Top 3 reported cancers from participants



## Immunotherapy

- 34% reported taking Keytruda
- 22% answered not applicable
- 9% answered not sure

*52% believed treatment would be effective/very effective*

## Top treatment expectations



# Immunotherapy Patient Experience

64% of participants experienced side effects



- Most participants did not experience a side effect serious enough to affect sleep, eating, daily activities, or caring for another
- Tiredness was the most common side effect
- 67.2% relied on their spouse or partner for support
- 13.6% had no one to rely on when not feeling well from treatment

## Side Effects Management

Call their oncologist

Call the cancer center nurse

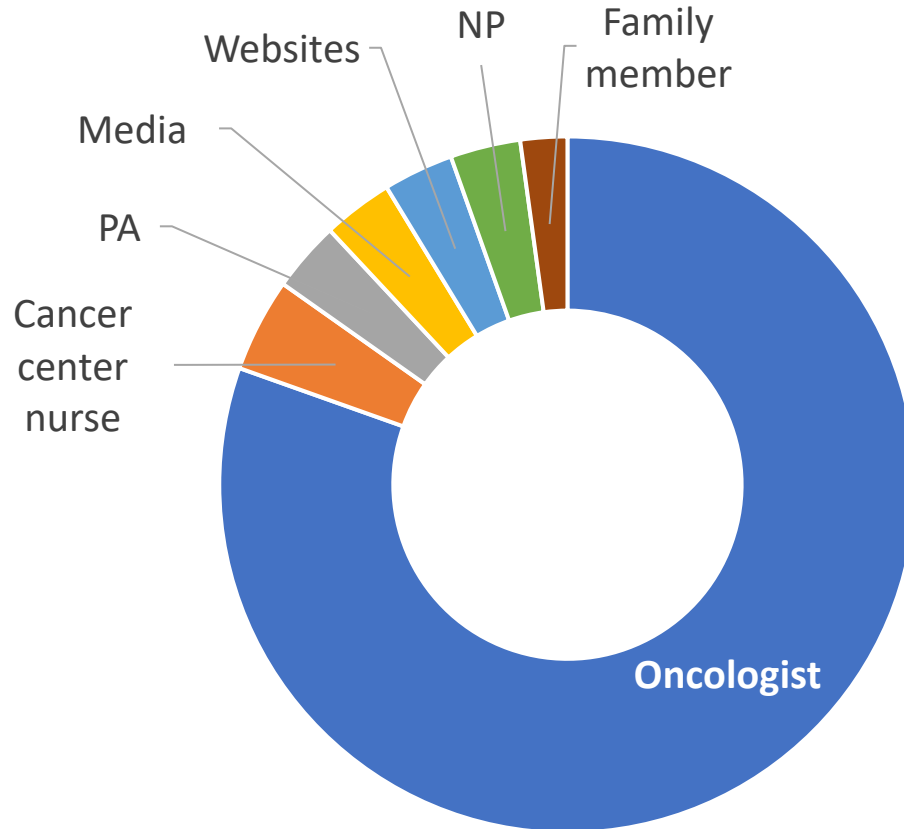
Discuss with family

Self-treat

Ignore side effect

- Early intervention is key to the management and treatment of side effects
- Patients are urged to contact their HCP for any symptom, no matter how minor

## Source of information about immunotherapy



- Most patients learn about immunotherapy from their oncologist
- HCPs educate patients and caregivers about identifying and reporting side effects

Media: TV, cancer websites, webMD, American Cancer Society and FaceBook



- Good expectations of treatment similar to patients in clinical trials
- Tiredness was reported as the most frequent side effect
- Received satisfactory information from HCPs on reported side effects

Highlights the importance of relationship with an available and knowledgeable HCP

*Proactive patient education will increase the early identification of side effects, improve management, and enhance the immunotherapy patient experience*

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*Does an interdisciplinary team with a developed, evidence-based approach to management and care of cancer treatment related infusion reactions benefit patients?*

# Infusion Reaction Management

**Study Title:**

*Implementation of an Evidence-Based Hypersensitivity Algorithm Revision in an Adult Ambulatory Oncology Clinic (at the Dana-Farber Cancer Institute)*


**Study Objective:**

To share one institution's approach in reviewing and updating a hypersensitivity treatment algorithm in an adult ambulatory oncology clinic

**Study Design:**

An interdisciplinary team from Dana-Faber (nursing, pharmacy, allergy service) met to review current practice and outcomes associated with acute infusion reaction management

Literature search was conducted to define best practices

- 
- Existing algorithm was updated/implemented with current evidence-based interventions
  - Clinicians, NPs, PAs, and pharmacists were educated

# Infusion Reaction Management

Patients at risk for infusion related reactions require prompt identification and immediate emergent treatment to minimize morbidity and mortality

*Are HCPs following established infusion hypersensitivity treatment guidelines?*



- Update hypersensitivity reaction treatment algorithm
- Implement education process to update HCPs on revised and standardized approach

*Do in-practice variations need to be updated?*



- Identify interdisciplinary roles and processes required to manage practice changes

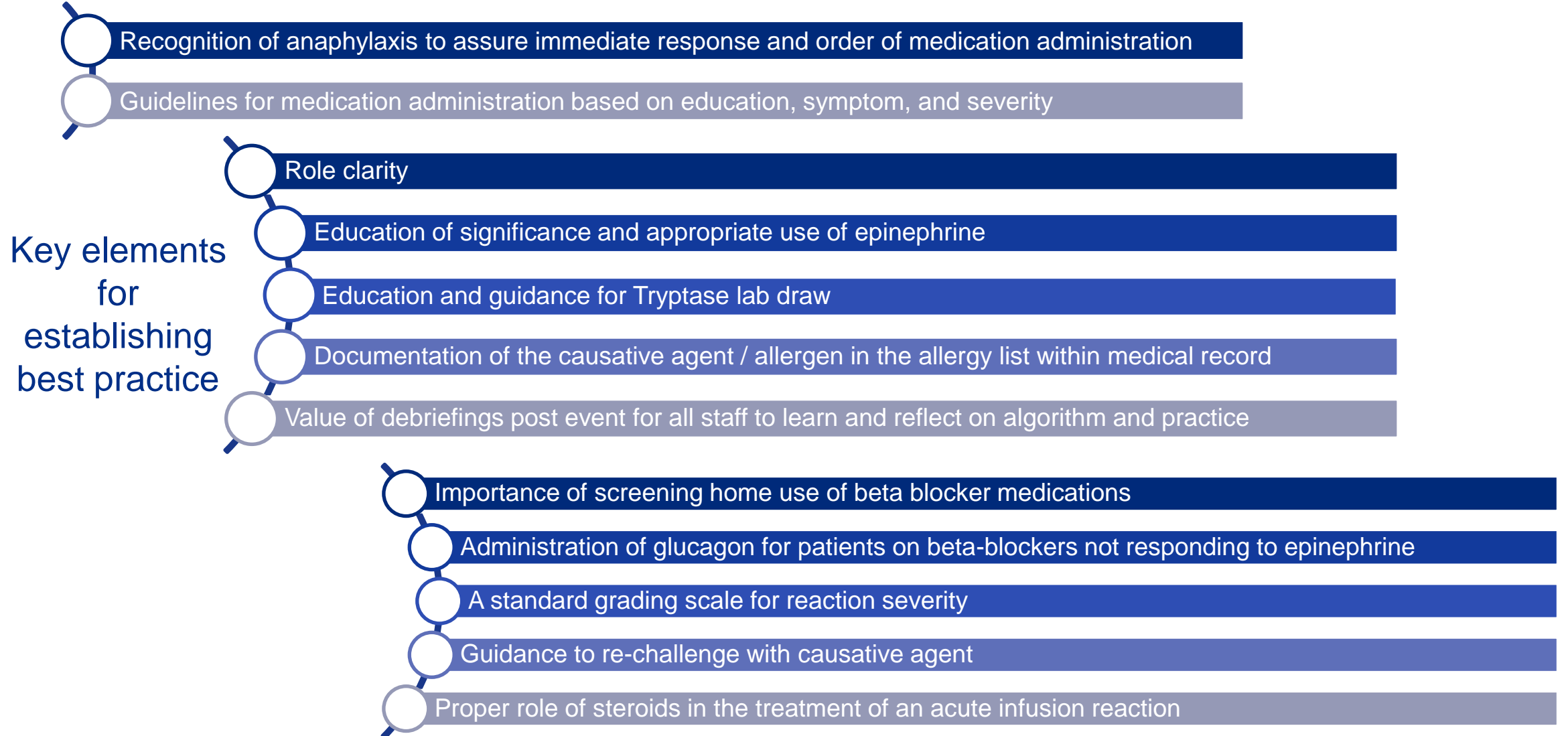
*Is the latest evidence embedded into practice standards and in actual practice?*



- Implement critical interdisciplinary clinical team practice changes

# Infusion Reaction Management

## Interdisciplinary literature review and gap analysis: Focused needs in clinical practice



# Infusion Reaction Management

Established standard grading scale for reaction severity

| Grade         | Broad clinical features                                     | Defining signs and symptoms                                                                                                                               |
|---------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1<br>MILD     | Cutaneous and subcutaneous only                             | Generalized erythema, periorbital edema, urticaria, or angioedema                                                                                         |
| 2<br>MODERATE | Cardiovascular, respiratory or gastrointestinal involvement | Dyspnea, stridor, wheeze, nausea, vomiting, dizziness, diaphoresis, chest or throat tightness, or abdominal pain                                          |
| 3<br>SEVERE   | Hypoxia, hypotension, or neurologic compromise              | Cyanosis or SpO <sub>2</sub> ≤ 92% at any stage, hypotension (systolic BP < 90mmHg in adults), confusion, collapse, loss of consciousness or incontinence |



# Infusion Reaction Management

## HSR Algorithm

### Concern for hypersensitivity reaction

**STOP and DISCONNECT** infusion, take vital signs, start normal saline; Place patient in supine position, elevate legs if able, verify allergies; **CALL** for help – notify MD/NP/PA; Contact pharmacy and or respiratory as needed

**YES**

### Assess for anaphylaxis

**NO**

**ACTIVATE** medical response and/or 911

Non-anaphylactic allergic reaction

Epinephrine (Epi-Pen) 0.3 mg IM, into lateral thigh; may repeat x 2 at 5 min intervals  
Glucagon 1 mg IV over 5 min if taking beta blocker; may repeat up to 5 mg

1-2 L normal saline; Oxygen 2 L/min as needed  
Diphenhydramine 25-50 mg IV push; Famotidine 20 mg IVB

1-2 L normal saline; Oxygen 2 L/min as needed;  
Diphenhydramine 25-50 mg IV push; Famotidine 20 mg IVB

Monitor vital signs; **Ongoing assessment for anaphylaxis**  
Epinephrine 0.3 mg IM if meets anaphylaxis criteria or not responding to above therapy after 20 mins; **ACTIVATE** medical response and/or 911

### Respiratory distress

**OR**

### Fever, chills, rigors, pain

Albuterol 2.5 mg (3mL) by nebulizer over 5-15 minutes for wheezing, coughing, and shortness of breath  
Montelukast 10 mg prn wheezing cough, hives or flushing

Acetaminophen 650 mg PO if not given as pre-med prn fever/chills  
Meperidine 12.5 – 25 mg IV push prn rigors  
Ketorolac 15 mg IV push prn pain

Methylprednisone 40 mg (80 mg for >120 kg) IV push to prevent biphasic reaction in patient experiencing Grade 2/3 reaction

Monitor vital signs until resolution (60-90 minutes post-reaction); Obtain Tryptase level within 30-60 min after HSR and 1 hr after the first level for suspected anaphylaxis. At least one tryptase required @ DFCI prior to transfer; Evaluate for resuming infusion; Document and enter allergy into EMR; Consider allergy consultation

# Infusion Reaction Management

- 609 clinical staff completed mandatory online education requiring a passing score of 100%
- Resulted in:
  - Increased confidence and comfort
  - Greater understanding /knowledge in managing HSR and anaphylaxis, and use of Epinephrine sooner and more frequently
  - Clarified standard of care and expectations
  - Improved patient care

*Providing a standardized up-to-date algorithm for the management of infusion related reactions will ensure a coordinated response and will ultimately benefit the patient*