Improving Neuropathy Outcomes among Adult Cancer Patients

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In recognition of the ancestral lands of the Muwekma Ohlone Tribe where our academic institution sits, we offer our grateful appreciation for the opportunity to live and work here and we celebrate the culture and perseverance of the Muwekma Ohlone people, and their strong identity.
Outline

• Who we Are
• Motivation for this Study
• Preliminary Studies
• Our Approach
• Discussion
# Who We Are

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Motivation

• 2/3 Patients treated with chemotherapy will experience peripheral neuropathy side effects
  – Dose limiting neuropathy
  – Long term disability related to neuropathy

• We do not know who is at greatest risk for chemo-induced neuropathy

• Patients and providers must weight the potential risks of neuropathy against the potentially life saving benefits of cancer therapy

Preliminary Studies: Diabetic Peripheral Neuropathy

• In diabetes, neuropathy
  – affects an estimated 50% of adults with diabetes
  – is incurable
  – symptoms are frequently undertreated

• Our prior studies identified
  – Unmet patient needs
  – Lack of real time data on patient needs

• Yet, intervention to provide data to inform practice did not change provider behavior

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Why didn’t physicians respond to data?

• Information overload

• Concerns about whether the information was actionable due to limitations of available treatments

• Concerns about the relative importance of treatment of symptoms vs. life-threatening illness
  – There is less clinical uncertainty: “when answers are black and white”
  – There are ‘serious’ side effects (e.g., coumadin)

What is Important to Me: Perspective of Adults with Diabetic Peripheral Neuropathy

- It costs more than $20 per month.
- It costs less than $20 per month.
- Four out of 10 people feel sleepy during the first 2 to 3 months.
- Two out of 10 people feel dizzy during the first 2 to 3 months.
- I have to take one pill every day.
- My doctor and I do not discuss my concerns about this medication.
- One out of 10 people feel dizzy while taking it for as long as 2 to 3 years.
- Five out of 10 people feel sleepy while taking it for as long as 2 to 3 years.
- One out of three people have less pain when taking it.
- Two out of 3 people who take it have no pain relief.
- When taking it, I can't do the things that I usually do.
- When taking it, I can do the things that I usually do.

Our Approach to CIPN

• Understanding and informing decision-making about CIPN risk requires evaluating **objective information** about risks and benefits, as well as **how patients and providers process and act upon that information** in real-world contexts.

• Focusing on more than 8,500 insured adults (18+) diagnosed with invasive, stage I-III breast and II-IIIA colorectal cancers (2013-2021) who received adjuvant chemotherapy treatment with known risk for CIPN, we are:
  – developing and validating predictive algorithms to quantify the risk of severe CIPN and incident chronic CIPN
  – evaluating how CIPN risk information might be used to inform clinical decision-making about cancer treatment and survivorship care planning

Source: NCI 7R01CA249127
• When & how might such information be used?
• Who would find this risk information useful?
• What are the benefits and risks?
• What are the barriers to improving care?
• What are the ethical considerations?
Thank You!

ANY QUESTIONS?

You can find me at @alyceadamsPhD
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