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The Permanente Medical Group

Multidisciplinary, Prospective Review in Testicular Cancer

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Agenda

- Clinical need
- How do we do it?
- What have we learned?
- When to consider this approach?
- How can we harness this work for research?

Clinical need led to next steps

- Recognition of a clinical gap
- Rare cancer (150 cases/yr across KP NCAL)
- Young, curable patients with niche management
  - Death by 1,000 cuts

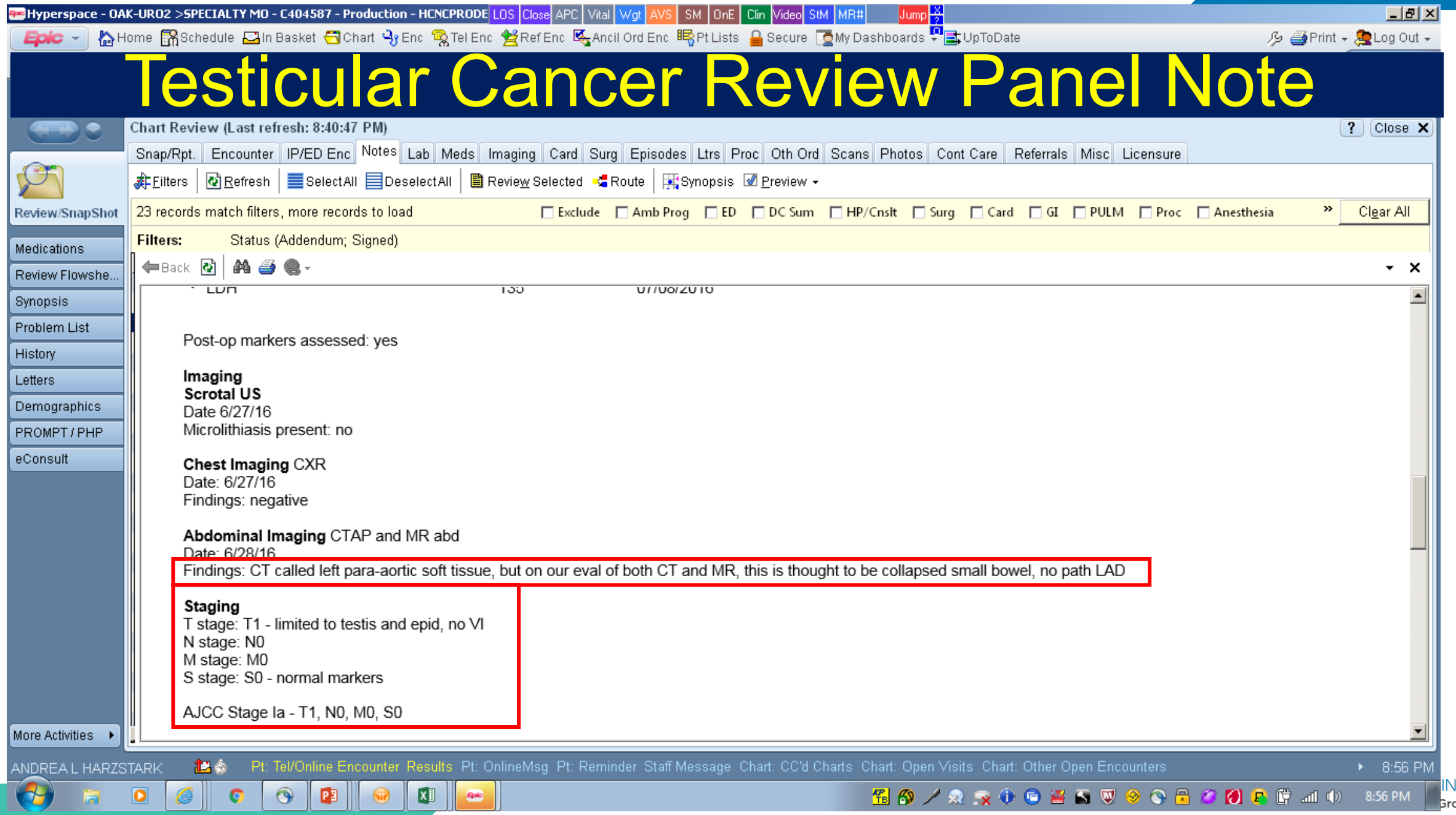
Goals (2015):

- Need to improve care for this young, highly curable patient population
- Catch cases early
- Provide expert review
- Consolidate care
- Re-evaluate, performance improvement

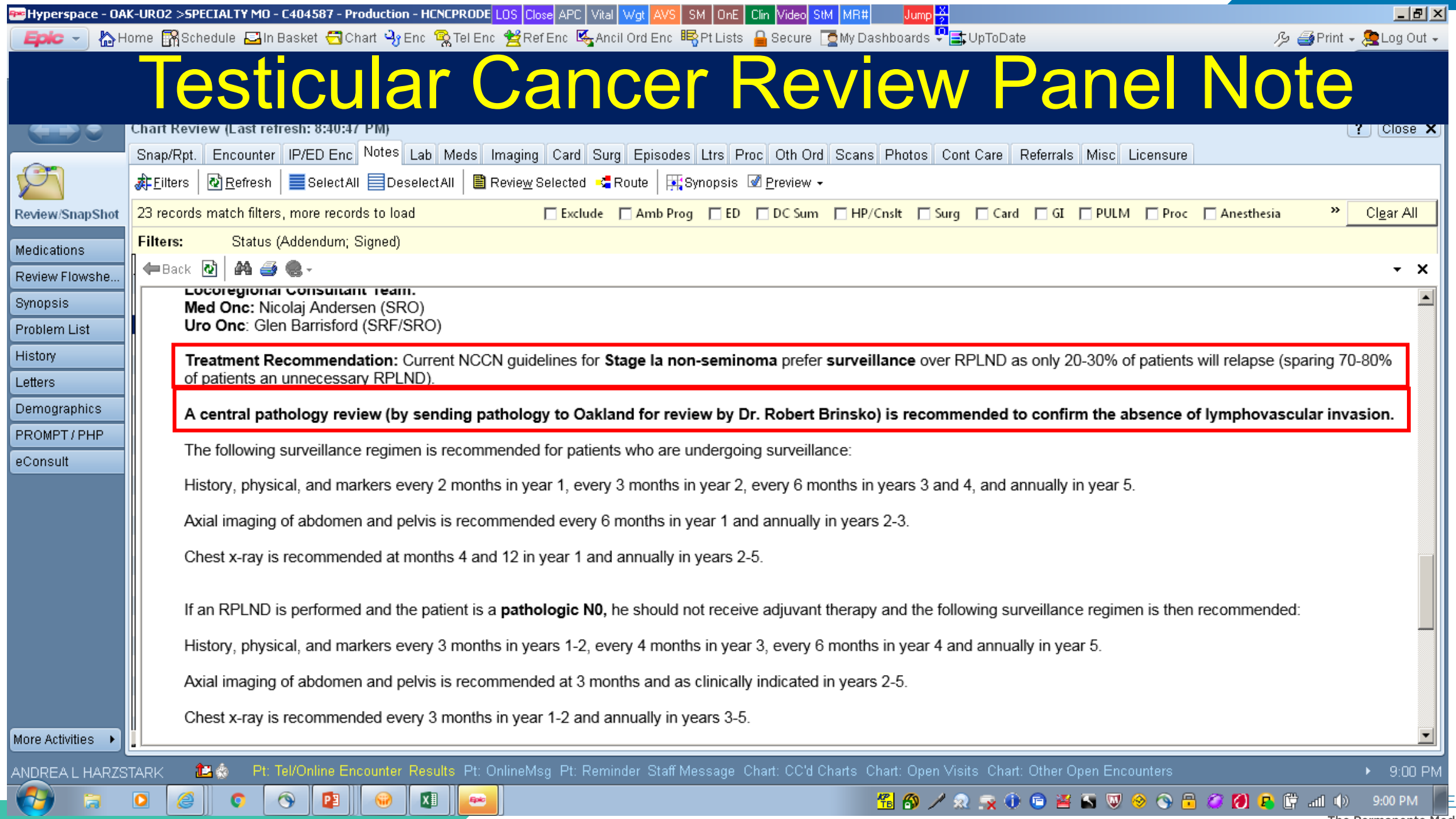
How we do it: the nuts and bolts

- Rapid case ascertainment
- Case conference (twice monthly, during clinic hours) launched 2016
- Templated note allows natural language processing
- Uniform staging, dotphrases
- Direct review of films (no radiologist, referee radiologist is available)
- Small core team of participating urologic oncologists and medical oncologists, rotating group of participating urologic oncologists and medical oncologists
- Review of all new diagnoses, re-review of complex cases

Testicular Cancer Review Panel Note



Testicular Cancer Review Panel Note

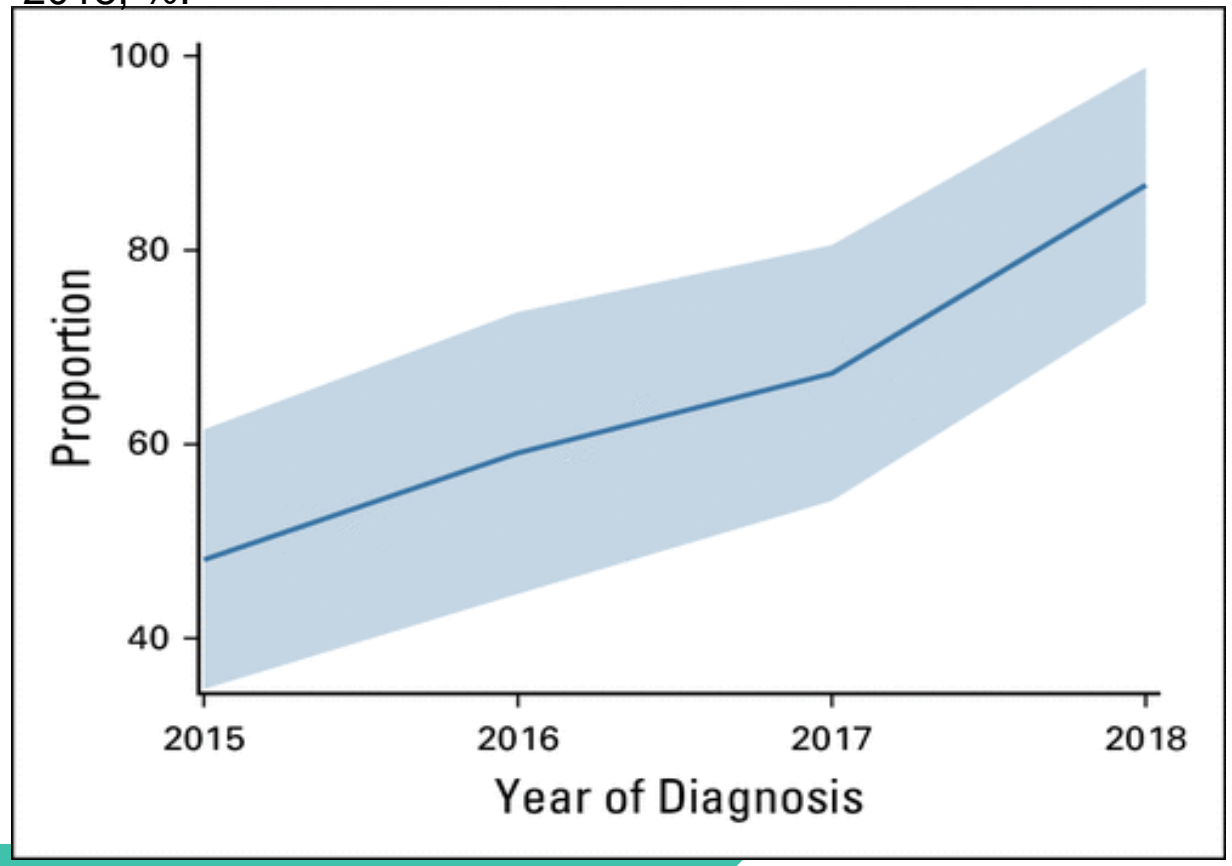


How we do it: critical components

- Co-location facilitated opportunity to do multi-disciplinary work (partnership with Joe Presti, MD!)
- Chief(s) willing/able to support the work
- Early ascertainment list
- Delivery science grant and partnership with DOR (Lisa Herrinton, PhD) critical to initiate the work
- Administrative support needed for sustainability (technology helps but can't substitute)
- Publication facilitated a "seat at the table" beyond KP

What have we learned?

Proportion of 177 patients with stage I seminoma who, after orchiectomy, underwent observation (preferred) rather than adjuvant chemotherapy or radiation therapy by year of diagnosis, Kaiser Permanente Northern California, 2015-2018, %.



Harzstark et al, JCO CCI 2021

- Review altered care based on pathology and radiology re-review in 14.5% of cases
  - Example: GU pathology review of all patients with embryonal predominant IA nonseminoma (not previously reviewed by GU path)
  - 14 patients re-reviewed, 8/14 increased from T1 to T2 based on re-review, changing recommendations from observation to chemo vs. RPLND
- More accurate staging impacts quality of care for individual patients and KP outcomes

When do we consider this approach?

- Where does it offer value?
  - Management complex and/or niche
  - Can the recommendations be specific enough to be useful?
  - One size does not fit all
    - Bladder cancer work supported by Delivery Science grant and co-led by Marilyn Kwan, PhD (with vital input from many partners in Urology, Oncology and DOR)
- Where is it feasible?
  - High volume vs. low volume disease
- How to be judicious with resources?
  - Example: GU path review in non-seminoma

How can we harness this work for research?

- Capitalize on our size for rare diseases (KP nationally=same size as SWENOTECA)
- Vehicle for clinical trial enrollment
  - We prospectively touch every single patient with a rare diagnosis
    - Dotphrase with trial information, talking points
  - KP NCAL enrolled 107 patients, 11% of all patients to S1823 (a large international cooperative group trial evaluating role of miRNA-371 in germ cell tumors)- **central identification of patients has been critical**
  - Increases diversity/generalizability of entire study

How can we harness this work for research?

- Templated note and natural language processing facilitate retrospective studies
  - Eg evaluation of microlithiasis in 1300 patients with testicular cancer
- How do we support investigators who spend most of their time on patient care?
  - Resources to ask questions: programming, statistical, administrative support
  - Building cancer-specific study teams
  - Clear, stream-lined processes

Thank you!

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